Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No: 131457-SN

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM DOCUMENT FOR A

PROPOSED CREDIT

IN THE AMOUNT OF EURO 158.8 MILLION
(US$180 MILLION EQUIVALENT)

TO THE REPUBLIC OF SENEGAL

FOR THE

SECOND MULTI-SECTORAL STRUCTURAL REFORMS DEVELOPMENT POLICY FINANCING

November 16, 2018

Macroeconomics, Trade and Investment Global Practice
Africa Region

Republic of Senegal

GOVERNMENT FISCAL YEAR

July 1 – June 30

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of October 31, 2018)

Currency Unit = CFAF

US$1.00 = CFAF 579

US$1.00 = EURO 0.88195088

ABBREVIATIONS AND ACRONYMS

ADIE	*Agence de l'Informatique de l'État* (State Digital Agency)
ADSL	Asymmetric Digital Subscriber Line
AfDB	African Development Bank
AfriSTAT	*Observatoire économique et statistique d'Afrique subsaharienne* (Economic and Statistical Observatory of Sub-Saharan Africa)
ANSD	*Agence Nationale de Statistique et de la Démographie* (National Agency of Statistics and Demography)
ARTP	*Autorité de Régulation des Télécommunications et des Postes* (Regulatory Authority of Telecommunications and Posts)
BCEAO	*Banque Centrale des Etats de l'Afrique de l'Ouest* (Central Bank of Western African States)
BoM	Bureau of Operations and Method
BoP	Balance of Payments
CAD	Current Account Deficit
CASE	*Cadre Harmonisé de Suivi-Evaluation* (Harmonized Monitoring and Evaluation Framework)
CdC	*Cahier de Charges* (Specifications)
CER	*Concessionaire d'Electrification Rurale* (Rural Electricity Concessionaire)
CFA	*Communauté Financière Africaine* (African Financial Community)
CFAA	Country Financial Accountability Assessment
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
CRSE	*Commission de Régulation du Secteur de d'Electricité* (Electricity Sector Regulation Commission)
DE	Digital Economy
DEEC	Directorate of Environment and classified establishments
DPF	Development Policy Financing
DPO	Development Policy Operation
DSA	Debt Sustainability Analysis
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
EPAF	*Entité Publique avec Autonomie Financière* (Public entity with financial autonomy)
EU	European Union
FCFA	Franc of the African Financial Community
FDI	Foreign Direct Investment

FSE	*Fonds Spécial de Soutien au Secteur de l'Energie* (Special Energy Fund)
FY	Fiscal Year
GDP	Gross Domestic Product
GEP	Global Economic Prospects
GHG	Greenhouse Gas
GNP	Gross National Product
GWh	Giga Watt Hour
GRS	Grievance Redress Service
HFO	Heavy Fuel Oil
IAS	International Accounting Standards
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technology
IDA	International Development Association
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contribution
IPP	Independent Power Producers
IPTV	Internet Protocol TV
ISPs	Internet Service Providers
ITU	International Telecommunication Union
kWh	Kilowatt-hour
LESDP	Letter of Energy Sector Development Policy
M&E	Monitoring and Evaluation
MCTPEN	*Ministère de la Communication, des Télécommunications, des Postes et de l'Economie numérique* (Ministry of Communication, Telecommunications, Posts and Digital Economy)
MDGs	Millennium Development Goals
MEFP	Ministry of the Economy, Finance and Planning
MFD	Maximizing Finance for Development
MIGA	Multilateral Investment Guarantee Agency
MoU	Memorandum of Understanding
MPE	Ministry of Oil and Energy
MPIPDTE	*Ministère de la Promotion des Investissements, des Partenariats et du Développement des Téléservices de l'Etat* (Ministry of Investment Promotion, Partnerships and Development of Teleservices of the State)
MPTEN	*Ministère de la Communication, des Télécommunications, des Postes et de l'Economie Numérique* (Ministry of Communication, Telecommunications, Posts and the Digital Economy)
MSMEs	Micro, Small and Medium Enterprises
MW	Megawatt
OHADA	*Organisation pour l'Harmonisation en Afrique du Droit des Affaires* (Organization for the Harmonization of Commercial Law in Africa)
OMVG	*Organisation pour la Mise en Valeur du Fleuve Gambie* (Organization for the Development of the Valley of River Gambia)
OMVS	*Organisation pour la Mise en Valeur du Fleuve Sénégal* (Organization for the Development of the Valley of River Senegal)
OPTIC	*Organisation des Professionnels des Technologies de l'Information et des Communications* (Organization of Professionals in the Information Technology and Communication Sector)
PAP	Priority Action Plan
PD	Program Document

PDO	Program Development Objective
PEFA	Public Expenditure Framework Assessment
PforR	Program for Results
PFM	Public Financial Management
PKI	Public Key Infrastructure
PNER	*Programme National d'Electrification Rurale* (National Program of Rural Electrification)
PNUER	*Programme National d'Urgence d'Electrification Rurale* (National Emergency Program of Rural Electrification)
PPAs	Power Purchasing Agreements
PPP	Public-private-partnership
PSE	*Plan Sénégal Emergent* (Plan for an Emerging Senegal)
PSI	Policy Support Instrument
SCD	Systematic Country Diagnostic
SDR	Special Drawing Rights
SENELEC	*Société Nationale d'Electricité du Sénégal* (National Electricity Company of Senegal)
SMEs	Small and Medium Enterprises
SOE	State-owned Enterprise
SONATEL	*Société Nationale des Télécommunications* (National Telecommunications Company)
SSA	Sub-Saharan Africa
TA	Technical Assistance
TTL	Task Team Leader
UN	United Nations
US$	United States Dollars
USF	Senegalese Universal Service Fund
VAT	Value-added Tax
VoIP	Voice over Internet Protocol
WAEMU	West Africa Economic and Monetary Union
WBG	World Bank Group
WEF	World Economic Forum

Regional Vice President: Hafez Ghanem
Country Director: Louise Cord
Senior Practice Director: John Panzer
Practice Manager: Lars Christian Moller
Task Team Leaders: Paolo B. Zacchia, Arthur Denis Pascal Foch, Manuel Luengo, Julio Ricardo Loayza

REPUBLIC OF SENEGAL

SENEGAL SECOND MULTI-SECTORAL STRUCTURAL REFORMS DPF

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF BOXES

Acknowledgments

The Second Multi-Sectoral Structural Reformss Development Policy Financing (DPF) for the Republic of Senegal was prepared by an International Development Association (IDA) team led by Paolo Zacchia (task team leader (TTL) and Program Leader, AFCF1), Julio Ricardo Loayza (co-TTL, Senior Economist, GMTA2), Arthur Foch (co-TTL, Senior ICT Policy Specialist, GTI11) and Manuel Luengo (co-TTL, Senior Energy Specialist, GEE07) under the guidance of Louise Cord (Country Director, AFCF1), Boutheina Guermazi (Director, GDDDR), Lars Christian Moller (Practice Manager, GMTA2), Charles Cormier (Practice Manager, GEE07), Consolate Rusagara (Practice Manager, GFCAW), and Mustafa Zakir Hussain (Lead Energy Specialist, GEE07). The core team included Manuel Berlengiero (Senior Energy Specialist, GEE07), Jerome Bezzina (Senior Regulatory Economist, GTI11), Laurent Corthay (Senior Private Sector Specialist, GFCAW), and Aneliya Muller (Consultant, GFCAW).

The team also included Alexandre Hugo Laure (Senior Private Sector Specialist, GFCAW), Jan Loeprick (Senior Economist, GGOGT), Maimouna Gueye (Senior Financial Sector Specialist, GFCAW), Sharmista Appaya (Senior Financial Sector Specialist, GFCAW), Marc Jean Yves Lixi (Senior Operations Officer, GDD11), Matina Deen (Senior Private Sector Specialist, GMTIM), Federica Marzo (Senior Poverty Economist, GPV07), Carlos Rodriguez Castelan (Lead Economist, GPV07), Africa Eshogba (Lead Environmental Specialist, GEN07), Fatou Fall Samba (Senior Financial Management Specialist, GGOAW), Lucienne M'Baipor (Senior Social Development Specialist, GSU01), Cedric Deguenonvo (Research Analyst, GMTA2), Alioune Fall (Consultant, GEE07), Christopher Tullis (Consultant, GDD11), Kamya Chandra (GDD12), Simon Pierre Jules Duchatelet (Consultant, GFCAW), Micky O. Ananth (Operations Analyst, GMTA2), and Ndeye Aissatou Diagne Diouf (Sr. Program Assistant, AFCF1).

International Finance Corporation (IFC) team included Simon Andrews (Chief Investment Officer, CTTDR), Alejandro Alvarez de la Campa (Practice Manager, GFCM1), Nicholas Felix Souche (Principle Investment Officer, CN3S6), German Cufre (Principle Investment Officer, CTTTT), Alan Townsend (Senior Industry Specialist, CNGPW) and Emmanuel Caroit (Associate Investment Officer, CTTTT). Multilateral Investment Guarantee Agency (MIGA) team included Yann Burtin (Senior Underwriter, MIGEA), Chloe Oliver Viola (Senior Infrastructure Economist, GWA08, Exchange Fellow at MIGA).

Valuable comments have been received from the following peer reviewers: Demetrios Papathanasiou (Practice Manager, GEE06), Pedro Antmann (Lead Energy Specialist, GEE08), Doyle Gallegos (Lead ICT Policy Specialist, GDD11), and Markus Kitzmuller (Senior Economist, GMTA2); and from Christine Richaud (Lead Economist, GMTA2).

SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

Project ID	Programmatic	If programmatic, position in series
P164525	Yes	2nd in a series of 3

Proposed Development Objective(s)

Support Government'™s efforts in (i) strengthening the governance and management of the energy sector to reduce costs, improve reliability and facilitate equitable access; (ii) enhancing the legal and regulatory framework of the ICT sector to promote competition, investment and equitable access, and (iii) reinforcing policy, institutional, and financial foundations of the emerging digital economy.

Organizations

Borrower:	MINISTRY OF ECONOMY, FINANCE AND PLANNING
Implementing Agency:	MINISTÈRE DU PÉTROLE ET DES ÉNERGIES, MINISTÈRE DE LA COMMUNICATION, DES TÉLÉCOMMUNICATIONS, DES POSTES ET DE L'ÉCONOMIE NUMÉRIQUE

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Financing	**180.00**

DETAILS

International Development Association (IDA)	180.00
IDA Credit	180.00

INSTITUTIONAL DATA

Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Overall Risk Rating

Substantial

Results

Indicator Name	Baseline	Target
SENELEC debt cover ratio (EBIDTA*/debt service)	0.54 (2016)	1.0 (2021)
Un-served energy (total) per year (GWh) as proxy of blackouts and brownouts	34.1 (2015)	13 (2021)
Overall electricity losses as percent of electricity produced	21 percent (2014)	15 percent (2021)
Mix of non-HFO based generation	10 percent (2015)	43 percent (2021)
Installed Capacity of Renewable Energy	0 percent (2015)	29 percent (2021)
Share of rural population with access to electricity	29 percent (2015)	60 percent (2021)
Ranking of Senegal with respect to the A.1.02 sub-index of the Network Readiness Index	81th (2015)	65th (2021)
Internet penetration rate	60 percent (June 2016)	75 percent (2021)
Number of facility-based Internet providers	1 (2015)	6 (2021)
Percentage of rural households reporting access to the Internet	23 percent (2016)	30 percent (2021)
Number of key decisions made by inter-ministerial steering committee	0 (2018)	5 (2021)
Increase by 10 percent of the number of MSME taxpayers registered with the DGID.	88,010 (2018)	96,811 (2021)
Number of tax payments (as measured by Doing Business).	58 (2018)	40 (2021)
Improvement in Senegal's score in the "Institutional Score" of the Global Entrepreneurship Index (GEI).	35 percent (2018)	45 percent (2021)

IDA PROGRAM DOCUMENT FOR A PROPOSED *CREDIT* TO THE *REPUBLIC OF SENEGAL*

1. INTRODUCTION AND COUNTRY CONTEXT

1. **The proposed Development Policy Financing (DPF), in the form of the International Development Association (IDA) credit of Euro 158.8 million (US$180 million equivalent), is the second in a series of three programmatic DPFs in support of Senegal's efforts to enhance governance, private sector participation and inclusive access in the electricity and broadband Internet sectors, as well as to boost the development of a currently nascent digital economy.** By supporting structural reforms in energy, Information and Communication Technology (ICT), and digital economy (DE), which have been widely identified as some of the most binding constraints to equitable growth and poverty reduction, the proposed DPF series aims to contribute critically to the development of a modern and inclusive economy in Senegal. The first operation under the series was approved by the Board in June 2017 for an amount of US$60 million equivalent. The proposed second DPF is fully aligned with the Government's Plan for an Emerging Senegal *(Plan Sénégal Emergent 2014-35* – PSE) priorities and the World Bank's FY2019-2024 Country Partnership Framework (CPF) under preparation.

2. **Since the approval of the first DPF of this series in 2017, Senegal has maintained one of the highest gross domestic product (GDP) growth rates in Africa, contrasting with its history of short-lived growth spurts in the past**. Since 2015, the growth rate has exceeded 6 percent – and 7 percent in 2017 – driven by stronger competitiveness of the economy deriving predominantly from structural factors, such as improved infrastructure and financial deepening. The higher growth has also benefitted from a favorable external environment, particularly improved terms of trade during 2014-2016 – due to low oil prices, higher growth in the European Union (EU) and favorable climatic conditions boosting agricultural production. This performance contrasts sharply with decades of low and volatile growth, when Senegal's per capita GDP, almost uniquely in Sub-Saharan Africa (SSA), remained below its level at Independence. Although robust, the recent economic expansion already falls short of the ambitious GDP growth targets set by the Government's Plan in the range of 7.6 and 8.0 percent for 2016 and 2017, respectively. Achieving these objectives, or even sustaining current high growth rates, will require leveraging all of the country's growth drivers simultaneously.

3. **The recent high growth rates are estimated to have led to tangible poverty reduction.** Since 2011, when it stood at 47 percent (or 38 percent based on the international poverty line of US$1.90/day), poverty is estimated to have decreased by 4-7 percentage points (p.p.). Agriculture appears to have been one of the main drivers, as it has registered low, but positive expansion with two exceptionally good years in 2015 and 2017. At the same time, rural areas have witnessed some job reallocation out of the primary sector, as households diversified their livelihoods, tapping into a growing rural non-farm economy. Other important poverty reduction drivers were expanding pro-poor urban sectors, such as low productivity services and construction, boosted by increased remittances and significant public investments.

4. **The macroeconomic framework is considered adequate for the proposed operation.** The macroeconomic framework is sustainable over the medium-term, as fiscal and monetary policies are consistent with macro-fiscal stability, while external balances are in line with projected balance of payments financing. Public debt remains on a sustainable path. The Sixth Review of the International Monetary Fund's Policy Support Instrument (PSI), approved in July 2018, underlined the country's high

growth and positive outlook. However, it also emphasized fiscal difficulties and a widening external deficit linked to higher oil prices and non-adjusted domestic energy prices. In line with the PSI, the Government implemented a package of measures to increase revenues and curtail spending pressures in 2018. Membership in the West Africa Economic and Monetary Union (WAEMU), continued implementation of the IMF program, and higher fiscal revenues from oil and gas (from 2021-2022) support the adequacy of the macroeconomic framework.

5. Despite Senegal's strong recent performance, accelerated growth and a transition towards a more diversified and competitive economy will be difficult to sustain, unless the country addresses remaining long-standing structural constraints. The macro-fiscal framework has been largely supportive of growth, despite recent fiscal constraints. As structural factors explain most of the differential between past high and low growth periods, consolidating the new trend will require moving beyond the first wave of punctual reforms and addressing particularly challenging remaining policy bottlenecks. As identified in the World Bank Group's Systematic Country Diagnostic (SCD[1]) as well as in the Government analysis (Priority Action Plan 2019-2023 - PAP2), persistent structural constraints, including in energy, ICT, agriculture, land and labor markets, still affect the efficiency of investment, competitiveness and private-sector led growth in the country. Energy and ICT emerge as two critical and cross-cutting constraint areas, where the Government demonstrates a willingness to engage and to take the ownership of the program, having sufficient political space for reforms. These infrastructure sectors, particularly Internet broadband, are instrumental to power the downstream development of a modern and digitally-enabled private sector, especially micro, small and medium enterprises (MSMEs), that can provide a country like Senegal with an important new driver of growth.

6. In this context, the program supported by the series keeps the focus on advancing structural reforms initiated in the energy and ICT sectors, while expanding the scope to include a focus on the digital economy. High energy costs and low access in rural areas are widely seen as the most binding constraints to accelerated and inclusive economic growth in Senegal. At the same time, the upstream provision of the ICT infrastructure and the digital economy that it enables, are increasingly central to the competitiveness of Senegal's traditionally most important sector - services. Moreover, in the global context of expanding technological innovation, a small, open and politically stable country like Senegal with historically strong institutions and a growing young population is uniquely positioned in Africa to take full advantage of the transformational potential of digital technologies. The latter can play a catalytic role in boosting competitiveness and productivity across all other sectors of the economy as well as in improving inclusion outcomes. Recognizing the strategic relevance of the DE potential, the Government has given it a much stronger emphasis in the latest phase of its development plan (PAP2).

7. The Program Development Objective (PDO) is to support Government's efforts in the following areas critical for building the foundations of a dynamic, innovative and inclusive economy:

i. Strengthening the governance and management of the energy sector to reduce costs, improve reliability and facilitate equitable access;
ii. Enhancing the legal and regulatory framework of the ICT sector to promote competition, investment and equitable access; and
iii. Reinforcing the policy, institutional, and financial foundations of the digital economy.

[1] Report Number 130660, October 4, 2018.

8. Under the program, Government reforms have already achieved some significant advances, fully in line with the World Bank Group's (WBG) approach to Maximizing Financing for Development (MFD). In the *Energy sector*, with an aim of reducing the electricity costs through a cheaper and cleaner energy generation mix, the first DPF in the series (DPF 1) supported the adoption of the Strategic Electricity Generation Master Plan implemented by Independent Private Producers (IPPs) and further operationalized, under the second DPF (DPF 2), through an ambitious mid- and downstream gas-to-power strategy, which includes competitively procured infrastructure and appropriate arrangements for third-party access. To further reduce costs and leverage private investment in the sector, the program promotes the institutional transformation of the state-owned utility into a commercially-oriented, financially resilient and credit-worthy company by establishing a focused performance contract with the Government and reinforcing its Board with independent directors. In parallel, to foster electricity access in rural areas, the program supports the Government's public-private partnership (PPP) model by way of a sustainable tariff reform and expansion of the rural concession coverage. In the *ICT sector*, with an ultimate objective of increasing Internet penetration rate and lowering costs, the reforms, under DPF 1, allowed the entry of three new Internet Service Providers (ISPs) and, under DPF 2, has led to the adoption of a new Telecom Law and accompanying legal provisions that significantly enhance and modernize the regulatory environment, rendering it conducive to fair competition and private sector investment. Under DPF 2, the Program further supports decisions to strengthen the regulation of market dominant players, the opening of the critical 4G market, and new PPP arrangements to facilitate access of private operators to the vast but underused state-owned fiber optic network. In the *DE sector*, the program aims to improve the enabling environment for a competitive private sector start-ups ecosystem by increasing pro-activeness of Government institutions in using digital technologies, including recent improvements in the coverage of e-taxation and e-payments, and a participatory process to create dedicated start-up regulation in Senegal.

9. Notwithstanding the overall progress, the pace of reforms has been slower than expected and some important issues will require further elaboration in the last phase of the program. Weak reform coordination, changing priorities and emerging fiscal difficulties have translated into a slower pace of execution of the second phase of the program. As a result, the timeframe of the series has been extended by one year and is now expected to finish in FY20. In the energy sector, the mechanisms to ensure the financial viability of the sector, in the context of high international oil prices, will need to be fully addressed under DPF 3, which leaves the sector exposed to a high level of risks. As the third phase of the program will now be completed after the presidential elections, the program has to retain a greater flexibility for DPF 3 triggers but is expected to benefit from the greater reform momentum of the new administration.

10. The proposed higher amount of this DPF reflects the need to match the scale of World Bank support to the scope of reforms and political economy risks in a more difficult fiscal environment. The proposed higher amount reflects the addition of the pillar on the digital economy, as well the depth of the reforms, particularly in ICT. In a context of the significant impact of sharply rising oil prices since the first operation, the higher amount for DPF 2 ensures that the operation has the political and financial clout to allow the Government to respect its financial commitments to SENELEC and to help focus the Government on the gas to power strategy, which provides the structural medium-term solution to the currently unaffordable energy sector in Senegal.

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

11. Economic growth has accelerated markedly since 2014 and remained steadily over 6 percent. Economic growth has exceeded 6 percent since 2014, reached 7.2 percent in 2017 and is projected at 6.2 percent in 2018. Higher growth has been driven by stronger competitiveness deriving predominantly from structural factors, such as improved infrastructure (including transport and energy) and financial deepening. Growth has also benefitted from favorable exogenous factors, including the external environment (improved terms of trade during 2014-2016, higher growth in the EU) and domestic conditions (favorable climate boosting agricultural production). Investment continued to grow rapidly, reaching 10.6 percent in 2017, with strong contribution from both the private and public sectors, though the latter moderated slightly due to increased fiscal pressures. An important share of capital goods is imported, reducing its direct contribution to GDP but boding well for potential GDP growth. Exports of goods and services increased by 8 percent on average over 2015-2017, driven by stronger performance, diversification towards higher-value products and dynamic external demand.

12. Growth is relatively broad-based with the primary sector demonstrating a strong performance and contributing to improved exports dynamic. In 2017, the services sector (58 percent of GDP) grew at a robust rate of 6.6 percent, accounting for the bulk of the GDP growth (56 percent), driven by financial and intermediation services, hotels, and transport. However, the primary sector grew even faster, explaining 29 percent of the total growth. This was largely driven by agriculture (+16.8 percent), benefitting from Government programs (particularly subsidies in rice, groundnuts and horticulture), favorable climatic conditions and strong external demand. Conversely, the secondary sector grew by a modest 4.5 percent.

Box 1. GDP Rebasing

This DPF is based on a new rebased GDP series released by the Government in May 2018. The national statistical agency (*Agence Nationale de Statistique et de la Démographie* - ANSD) changed the base year for its National Accounts from 1999 to 2014, updated the methodology, and included new data to better reflect the current economic structure. Methodology changes include the adoption of the 2008 United Nations (UN) National Accounts system and new national and international classification of activities and products; taking into account the structural evolution of the economy (in terms of consumption, production and commercialization), including new activities and eliminating others; and enhancing the quality of the National Accounts by way of reducing the cumulative errors given the distance with the old base year (1999).

According to the rebased GDP, the economy is around 30 percent bigger than previously measured. ANSD published a new GDP series for 2014-16 and estimates for 2017. The estimated 2017 GDP increased from US$17.2 billion to US$21.1 billion, while per capita GDP increased from US$936 to around US$1311. In the following months, ANSD will recalculate the National Account numbers for the past years to replace the old series[2].

[2] The rebasing process benefited from the support of international institutions, including AfriSTAT, AfDB and the IMF. The WB evaluated the results ex post, concluding to their robustness.

Table 1. Senegal: Key Macroeconomic Indicators (2014 – 2021)

Senegal: Key Macroeconomic Indicators, 2014-2021								
	2014	2015	2016	2017	2018	2019	2020	2021
				Est	Projections			
	(Annual percentage change)							
Real Economy and prices								
GDP at constant prices	6.6	6.4	6.2	7.2	6.2	6.9	7.5	7.1
Contributions :								
Agriculture	0.2	1.4	0.8	1.8	0.8	1.1	1.1	1.1
Industry	1.3	2.3	1.2	1.1	1.5	1.5	1.6	1.6
Services	4.4	1.8	3.3	3.4	3.3	3.6	3.8	3.3
Sectors growth :								
Agriculture	1.6	10.6	5.4	12.9	5.8	7.4	8.7	8.3
Industry	5.5	9.8	4.9	4.5	6.3	6.6	7.2	7.0
Services	8.3	3.3	6.4	6.6	6.3	6.9	7.3	6.6
Consumer prices								
Annual average	-1.1	0.1	0.8	1.3	0.7	1.3	1.5	1.5
End of period	-0.8	0.4	2.1	-0.7	1.5	1.9	1.5	1.5
External sector								
Export, f.o.b (CFA francs)	3.5	13.3	2.1	11.6	12.4	10.4	8.1	8.5
Import, f.o.b (CFA francs)	-1.1	2.7	-2.6	20.5	9.2	11.4	12.6	7.8
Current account balance (incl. official transfers) (% GDP)	-7.0	-5.4	-4.0	-7.3	-7.3	-7.9	-10.4	-10.5
Terms of trade ("-" = deterioration)	2.1	12.2	0.7	0.7	4.2	-3.3	2.5	0.9
WAEMU gross official reserves (Billions US$)	13.2	12.4	10.4	13.0	16.7	17.5	19.3	21.2
	(Percent of GDP, unless otherwise indicated)							
Government financial operations								
Revenue	19.2	19.3	20.7	19.4	18.7	19.1	19.5	19.6
Grants	2.6	2.2	2.2	2.2	2.1	2.0	2.0	2.0
Total expenditure	23.1	23.0	24.0	22.3	22.3	22.0	22.4	22.6
Overall fiscal balance	-3.9	-3.7	-3.3	-3.0	-3.6	-3.0	-3.0	-3.0
Primary fiscal balance	-2.6	-2.2	-1.6	-1.0	-1.6	-1.0	-1.1	-1.2
Total public debt 1/	42.4	44.5	47.7	60.6	63.5	61.0	59.5	58.7
Domestic public debt 2/	10.9	12.2	14.1	20.2	16.9	14.3	15.0	16.2
External public debt	31.5	32.3	33.7	40.4	46.6	46.7	44.5	42.5
Total public debt service								
Percent of government revenue	32.5	34.0	39.7	28.2	40.9	28.6	26.5	31.4
Memorandum item								
Gross domestic product (CFAF billions)	9775.0	10508.7	11251.7	12278.0	13340.0	14524.0	15924.0	17268.0
Nominal GDP per capita (USD)	1359.2	1186.3	1231.1	1329.3	..	..	..	..

Sources : Senegal authorities; IMF and WB staff estimates and projections. (As of October 2018)
1/ Starting in 2017 debt level, debt service and government revenue include preliminary data covering the broader public sector.
2/ Domestic debt includes government securities issued in local currency and held by WAEMU residents.

13. Despite a declining headline fiscal deficit, Senegal's fiscal stance deteriorated in 2017, with the accumulation of delayed payments. The fiscal deficit declined from 3.3 percent of the rebased GDP in 2016 to 3.0 percent in 2017, in line with the Government fiscal program under the IMF PSI. However, these headline numbers conceal substantial delayed payments to private and public suppliers, which may have exceeded 2 percent of GDP. This accumulation does not represent legal arrears, even though goods and service were delivered. Delayed payments include the tariff compensation owed to National Electricity Company of Senegal (*Société Nationale d'Electricité du Sénégal* – SENELEC), which is legally due when the Government decides not to adjust tariffs to the level defined by the independent energy regulator[3].

[3] Average cost of service is high in Senegal (US$F0.24/kWh), more than twice the global average, given that over 80 percent of energy is produced with Heavy Fuel Oil. This makes it difficult to further increase already high tariffs.

14. Fiscal challenges arose mainly due to a lack of adjustment of domestic oil derivatives (such as diesel and gasoline) and electricity prices in the context of high and rapidly rising international oil prices. This resulted in lower tax revenues from oil derivatives such as gasoline and diesel, and higher energy subsidies. Maintaining unchanged domestic price for oil derivatives implied a fiscal revenue loss of around 0.8 percent of GDP in 2017, as it reduced government taxes at the margin. On the expenditure side, it led to an additional 0.5 percent of GDP in energy subsidies due for tariff compensation[4]. Fiscal pressures also arose from some large infrastructure projects which required more disbursement than expected[5]. In addition, the Government faced higher security spending needs, and agreed to increase salaries in health and education.

15. Fiscal pressures have continued in 2018, prompting the Government to increase its deficit target and implement corrective fiscal measures. Part of the 2017 delayed payments have been settled through the 2018 budget, reducing available funding to meet 2018 budgeted expenditures. Unchanged domestic energy prices continue to exert pressure on fiscal revenues and energy subsidies (Figure 1). Fiscal revenue losses from unadjusted oil derivatives pricing amount to 0.6 percent of GDP, while energy subsidies are estimated to reach 1 percent of GDP. In response, the Government had to revise the 2018 budget law and the fiscal program with the IMF mid-year as follows: (1) Increase the 2018 fiscal deficit target from 2.7 to 3.5 percent of GDP; (2) Reduce public spending, starting with non-initiated or delayed investment projects, and projects with low impact on growth or poverty reduction; (3) Increase tax revenue collection[6], through new or increased taxation on selected products, rationalization of tax exemptions, and increased value-added tax (VAT) and tax arrears collection[7]; and (4) Budget CFAF 70 billion (0.5 percent of GDP) to pay around half of the 2018 tariff compensation to SENELEC - an outcome of the policy dialogue with the World Bank in the context of this DPF operation. According to preliminary information, revenues may fall short of the 2018 target by CFAF 115 billion (0.9 percent of GDP). Hence, major efforts from the expenditure side will be needed to meet the 2018 fiscal target.

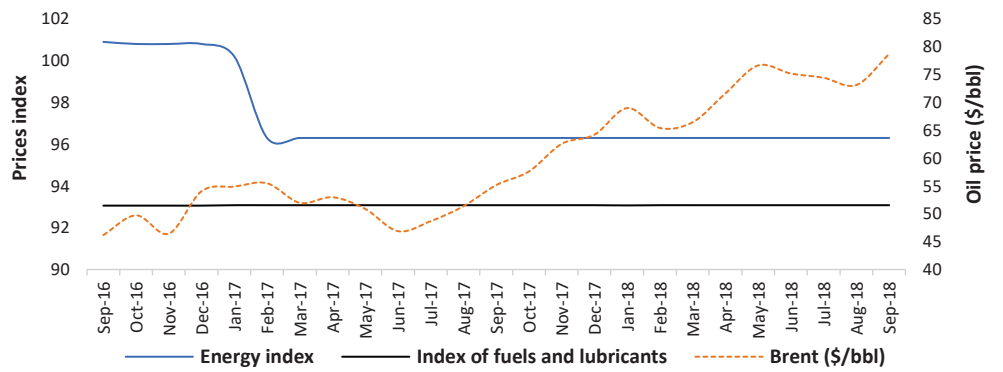
[4] Of which only 0.1 percent of GDP has been paid by the Government.

[5] Furthermore, below-the-line operations - linked to the Treasury's financing of other public institutions, such as La Poste and the Civil Service Pensions - added around 1 percent of GDP to the financing needs of the Central Government.

[6] In effect, following the GDP rebasing, tax revenues fell from around 20 percent of GDP to around 15 percent in 2017.

[7] Also, below-the-line operations are expected to fall from 1.4 percent of GDP in 2017 to 0.7 percent in 2018, which remains relatively high. Private banks and oil firms agreed to reduce compensation transactions through the Postal Office, reducing the Treasury's need to cover compensations from CFAF 16 billion in the first quarter of 2017 to less than CFAF 1 billion in the same period of 2018, but compensations increased again more recently. The Government has taken further steps to eliminate the possibility of transfers from treasury to the postal service.

Figure 1. Global Oil Prices Vs. Domestic Energy and Fuels Prices



Sources: WB GEP, ANSD (As of October 2018).

16. Despite the corrective fiscal measures, new payment delays have accumulated in 2018; the proposed operation addresses them for SENELEC and structurally reduces the vulnerabilities of its financial situation. The fiscal space created by the above-mentioned fiscal measures was insufficient to fully eliminate the delayed payments accumulated in 2017. Delayed payments to private suppliers are undocumented, but information from private sector (including from the banking system) suggests that, following a reduction in early 2018, delays increased again at the end of the first semester of 2018 to levels similar to end 2017. In the case of SENELEC, most of the 2017 subsidy remained unpaid and close to CFAF 70 billion (0.5 percent of GDP) of the 2018 subsidy was not included in the adjusted 2018 budget approved in June. However, under the proposed operation (Prior Action 2), the Government has settled all its pending liabilities to SENELEC through a CFAF 125 billion (0.9 percent of GDP) Promissory Note (to be repaid through the budget over 5 years beginning in 2019) and an additional CFAF 28 billion (0.2 percent of GDP) added to the 2018 budget – which will add to the deficit[8]. The inclusion of these financial settlement operations in the current and future budgets will help enhance the transparency of the government fiscal relations with SENELEC. PA2 also includes measures to structurally reduce government's arrears to SENELEC for electricity tariffs and VAT reimbursement. (See the Energy section below for further details).

17. Following the GDP rebasing, the debt-to-GDP ratio declined, but the new coverage of public debt increased it again to similar levels. GDP rebasing implied a reduction of public debt from over 60 percent of GDP to 47.3 percent in 2017. However, the perimeter of public debt has been expanded to include debt from para-public entities and state-owned enterprises (SOE)[9]. Moreover, government guarantees have been included as part of public debt. As a result, total public debt in 2017 has reached 60.6 percent of GDP. The share of external debt increased substantially mainly due to the issuance of Eurobonds for US$2.2 billion in March 2018[10]. As a result of effective debt management, part of the Eurobonds proceeds was used to buy back around 40 percent of the more expensive US$500 million, 10-

[8] This additional expenditure adds to the fiscal deficit but would not affect the PSI target as the IMF will include an adjustor.
[9] Beginning in 2017, this document includes a broader coverage of the government sector debt stock. The public sector now includes the (i) central government, (ii) para-public entities which are part of the general government, and (iii) state-owned enterprises (SOEs). Before 2017, public sector debt was based on central government data only.
[10] Two bonds were issued at favorable conditions: a US$1 billion, 30-year bond at 6.75 percent and a Euro 1 billion, 10-year bond at 4.75 percent. This compares favorably with previous emission (16 year, US$1.1 billion at 6.25 percent in May 2017) and with peers.

year Eurobond issued in 2011. The Government is also reaching out to private creditors to buy back a similar amount of external debt, thus enhancing the debt service profile. An agreement is expected towards end-2018.

18. On the external front, the current account deficit (CAD) remained moderate and was financed with foreign direct investment (FDI) and Eurobond issuances. The CAD widened from 4.2 percent of GDP in 2016 to 7.3 percent in 2017, despite expanding exports driven by agriculture, food-products and extractives. Imports grew even faster in the wake of rising oil prices and a growing need for imported capital goods. In effect, the value of oil imports increased by 26.4 percent between 2016 and 2017[11]. Good access to international financial markets – reflected in the US$1.1 billion Eurobond issued in May – allowed to finance the CAD deficit in 2017. FDI increased from 1.3 percent of GDP in 2016 to 2.2 percent in 2017 but remain modest and concentrated in extractives industries.

Table 2. Senegal: Key Fiscal Indicators (2014 – 2021)

Senegal: Key Fiscal Indicators, 2014-2021								
	2014	2015	2016	2017	2018	2019	2020	2021
				Est	Projections			
	(Percent of GDP, unless otherwise indicated)							
Overall balance (1)	-3.9	-3.7	-3.3	-3.0	-3.6	-3.0	-3.0	3.0
Revenue	19.2	19.3	20.7	19.4	18.7	19.1	19.5	19.6
Taxes	15.2	15.2	15.9	15.3	15.1	15.6	16.1	16.2
Grants	2.6	2.2	2.2	2.2	2.1	2.0	2.0	2.0
Other revenue	1.4	1.9	2.7	1.9	1.4	1.4	1.4	1.4
Expenditure	23.1	23.0	24.0	22.3	22.3	22.0	22.4	22.6
Current expenditure	14.3	14.3	14.3	13.7	14.6	13.6	13.6	13.6
Compensation of employees	5.0	5.0	5.1	4.9	5.1	5.1	5.2	5.2
Use of goods and services	3.7	3.7	2.9	2.7	2.4	2.3	2.5	2.6
Interest	1.3	1.5	1.7	1.9	2.0	1.9	1.8	1.8
Foreign	0.6	1.2	1.2	1.5	1.7	1.7	1.6	1.6
Domestic	0.7	0.3	0.4	0.5	0.3	0.2	0.2	0.2
Subsidies	0.6	0.5	0.5	0.3	1.2	0.8	0.5	0.4
Grants (current excl. FSE)	1.8	2.1	2.5	1.6	1.9	1.8	1.8	1.8
Social benefits	0.3	0.6	0.1	0.1	0.1	0.1	0.2	0.3
Other expense	1.6	1.0	1.7	2.3	2.1	1.5	1.6	1.5
Capital expenditure	8.8	8.7	9.7	8.6	7.7	8.4	8.8	9.0
Financing	-3.9	-3.7	-3.3	-3.0	-3.7	-3.0	-3.0	-3.0
Net acquisition of financial assets	1.1	-1.0	-0.5	0.2	1.8	-1.6	0.0	0.0
Net incurrence of liabilities	5.0	2.7	2.8	3.1	5.4	1.3	3.0	3.0
Domestic	-1.8	-0.5	-1.4	-2.7	-2.5	0.1	0.1	0.3
Foreign	6.8	3.3	4.2	5.9	7.9	1.3	2.9	2.7
Memorandum items								
Total delayed payments to SENELEC (cumulated)				0.4	0.9			
Clearance of payments due to SENELEC					0.9			
Nominal GDP (billion CFAF)	9775.0	10508.7	11251.7	12264.9	13340.0	14575.9	15859.9	17297.5

Sources : Senegal authorities; IMF and WBG staff estimates and projections (As of October 2018).
(1) Includes an additional paiement to SENELEC of CFAF 28 billion, 0.21% of GDP

19. Senegal's monetary and exchange rate policies, managed at the regional level by the Central Bank of West African States (*Banque Centrale des Etats de l'Afrique de l'Ouest* - BCEAO), continued to deliver price and exchange rate stability. The BCEAO maintains a fixed peg between the CFA Franc and

[11] Although the share of oil imports in total imports didn't increase as fast (from 15.7 percent to 16.7 percent).

the Euro and follows an inflation targeting monetary policy, focused on maintaining low and stable inflation in the region[12]. Monetary policy was tightened in December 2016, as BCEAO raised the marginal lending facility rate from 3.5 to 4.5 percent. This helped ease pressures on international reserves and supported interbank market activity. In April 2017, the policy stance was loosened, as the reserve requirement ratio was reduced from 5 to 3 percent to ease liquidity constraints in the banking sector. However, the BCEAO's limited access to refinancing by banks has maintained the average refinancing rate at the ceiling of the corridor. This monetary policy and the FCFA real appreciation contributed to maintaining price stability at 1.3 percent in 2017 (despite rising international energy prices), and at 0.6 percent on average up till June 2018 (despite the more recent CFAF depreciation). Regional international reserves returned to four months of imports by end 2017 after temporarily peaking in the wake of Eurobond issuances of Cote d'Ivoire, Senegal, and the West African Development Bank. Recent Eurobond issuances in the region are expected to further increase reserves to US$17.6 billion at end 2018, covering five months of imports. Continued fiscal consolidation among member countries is needed to support regional reserves.

Table 3. Balance of Payments (BoP) Financing Requirements & Sources, 2015-2019 (in millions of US$)

BOP Financing Requirements and Sources							
	2015	2016	2017	2018	2019	2020	2021
				Projections			
Financing requirements (US$)	-1291.7	-1974.3	-2277.2	-3042.8	-1832.4	-1891.2	-2361.4
Current account deficit	-961.9	-792.7	-1547.1	-1804.7	-1723.0	-1709.2	-1851.5
General government amortization (excl. IMF)	-165.1	-247.2	-258.0	-773.2	-247.3	-250.1	-641.0
Private (net)	-70.8	-31.0	-270.3	-464.9	137.9	68.2	131.1
Assets	-300.9	-108.7	-240.3	-453.6	-178.5	-243.7	-232.5
Private liabilities	230.1	77.6	-30.0	-11.4	316.4	311.9	363.6
Other short term capital outflows	-93.9	-903.3	-201.8	0.0	0.0	0.0	0.0
Financing Sources (US$)	1291.7	1974.3	2277.2	3042.8	1832.4	1891.2	2361.4
FDI and portfolio investments (net)	641.5	737.6	1309.5	2329.3	613.4	984.9	1459.8
Portfolio investment	263.7	489.1	840.7	1830.5	11.9	299.0	688.1
Direct investment	377.8	248.5	468.8	498.9	601.5	685.9	771.7
Capital grants	347.9	354.6	382.4	462.1	468.7	516.1	560.8
General government disbursement (excl. IMF)	471.9	519.7	704.6	646.1	801.2	849.2	884.8
Change in reserves	-138.3	398.0	-85.6	-359.5	-27.2	-454.3	-544.0
IMF credit (net)	-31.4	-35.7	-33.6	-35.3	-23.7	-4.8	0.0
Sources : Senegal authorities; IMF and WBG staff estimates and projections (As of October 2018).							

20. The financial system remains relatively sound and liquid, but coverage (of both credit and deposits) is still low and concentrated. The banking system, which represents the bulk of the financial system, is still concentrated in large firms, and operates predominantly in urban areas, despite the existence of numerous micro-finance institutions. Thanks to an early 2017 regulatory change that

[12] The CFAF benefits from a guarantee of convertibility by the French Treasury, which provides a buffer to WAEMU members in case of shocks and has helped to limit pressures on the currency. This guarantee is provided as per the WAEMU agreement with the French Treasury, in exchange for which at least 50 percent of the BCEAO's foreign exchange reserves are deposited with the French Treasury, and 20 percent of the BCEAO's liabilities must be covered by foreign reserves.

eliminated the need for previous client consent, the credit bureau created in early 2016 rapidly increased the numbers of registered clients. It now covers 600,000 clients, or 6.9 percent of the adult population, versus zero percent in 2016. On the other hand, deposit coverage remains low, as only 20.4 percent of adults report owning an account in a formal financial institution. Banking credit to the private sector increased robustly at almost 11.2 percent in 2017 (and 14.8 percent in early 2018), stabilizing at around 25 percent of the rebased GDP – as in 2016. Bank credit continued to be predominantly oriented towards the tertiary sector, particularly transport, insurance and real estate, and dominated by short-term loans (less than one year). Overall the financial sector is considered sound, with only a few areas of weaknesses. Non-performing loans continued falling and reached 15.5 percent of total loans in 2017, down from 17.3 percent in 2016. Liquidity fell as the ratio of liquid assets to total assets reduced from 53.4 percent in 2016 to 50.0 percent in 2017. This is linked to the increase in policy rates by the BCEAO at end 2016 and delayed payments from the public sector in 2017. However, liquidity remains higher than historical values. Anecdotal evidence points to a recovery of liquidity in the first half of 2018.

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

21. Medium-term growth prospects remain positive. GDP growth is projected at 6.2 percent in 2018 and approaching 7 percent over the medium term. Potential GDP would growth at a similar rate, thus avoiding undue inflationary pressures. In effect, implementation of PSE structural reforms and projects (particularly in energy, infrastructure and agriculture) would help increase the country's productive capacity. It would boost both public and private investment, while the cumulative effect on diversification and production of past reforms would sustain exports growth, which is also supported by robust external demand. On the other hand, deteriorating Terms of Trade (due to higher imported oil prices, but also lower prices of groundnut exports), further efforts to cap public expenditure (particularly, public investment), and delayed rain would keep growth below the Government projections (7.0 percent) both in 2018 and 2019. Growth should remain broad-based, but the tertiary sector is still expected to remain the main contributor, while the primary sector would recover dynamism. On the demand side, investments and exports are expected to maintain their strong performance. Looking forward, important investments in oil and gas would have an impact on imports, which would be later followed by higher production and exports, as exploitation is expected to start in 2021-2022. Despite high growth, inflation is projected to remain contained at 1-2 percent, thanks to the regional monetary policy and supply-side structural reforms. This continued high growth performance assumes a sustained pace and depth of PSE-related reforms and investments and a benign international economic environment.

22. Reaching the fiscal deficit targets will require continued efforts to increase fiscal revenues. The Government remains committed to converge to a fiscal deficit of 3 percent of GDP in 2019, in line with WAEMU's guidelines and the IMF PSI. However, the fiscal situation will remain complex. As GDP rebasing explain most of the fall of the tax-to-GDP ratio to around 15 percent in 2018, the objective is to reach the target of 20 percent in the medium-term, as set regionally by WAEMU. To this end, the Government will advance on the implementation of the revenue-increasing measures described above, as agreed in the PSI. These measures focus on a broader tax base, lower tax exemptions, and stronger tax administration. Given the weakness of recent revenue collection, additional efforts are required to implement these measures. Looking forward, progressively growing fiscal revenues expected from the oil and gas projects should further support the fiscal balance. However, these measures will take time to have a substantial positive impact on the fiscal balance. For instance, fiscal revenues from gas and oil production will begin

at earliest in 2022, remaining relatively modest (probably less than 1 percent of GDP) during the first years of exploitation.

23. The Government agreed on implementing measures to contain expenditures and delayed payments. These efforts include closely monitoring the evolution of current expenditures (such as for health and education that increased significantly in the first half of the year), taking into account the pressures related to the electoral year. Further efforts on off-budget treasury operations is also needed[13]. In 2019, to prevent the accumulation of new delayed payments, the Government is expected to reduce the gap between domestic and international energy prices and/or find additional resources for tariff compensation. In effect, assuming an oil price of US$80 dollars, tariff compensation to SENELEC is expected to reach CFAF 116.6 billion (0.8 percent of GDP) in 2019, and each additional dollar in the international oil price would increase the required compensation by CFAF 2.3 billion. Over the medium term, the emphasis on reducing dependency on imported oil, mainly through the gas-to-power strategy promoted in this operation, should allow to eliminate the need for energy subsidies through the compensation mechanism.

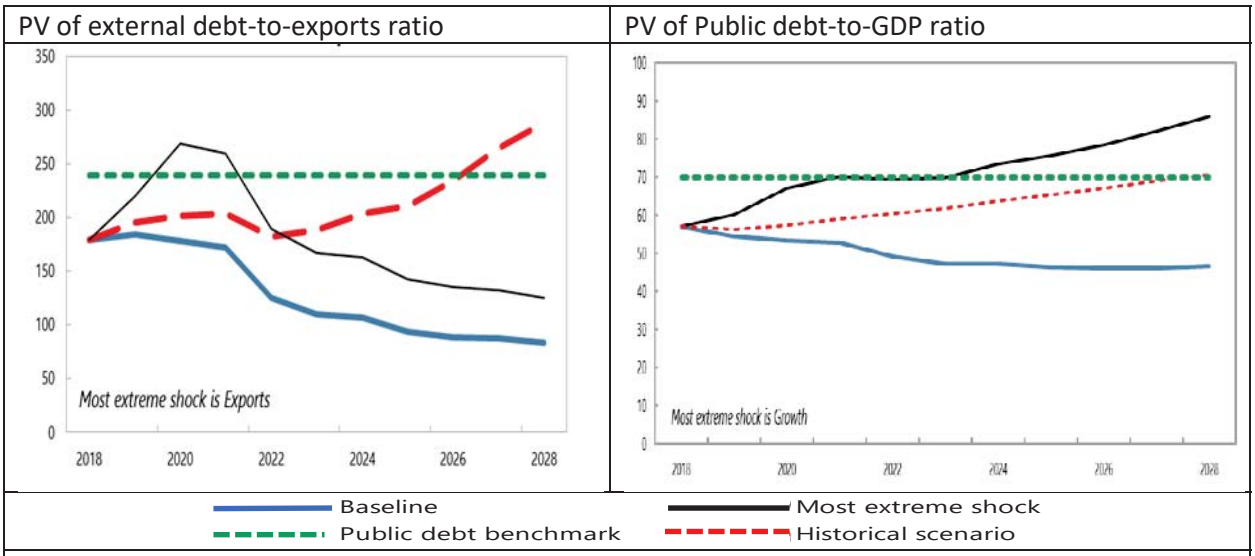
24. Public debt remains on a sustainable path despite an expansion of debt perimeter.[14] Under the revised Joint World Bank-IMF Low Income Debt Sustainability Framework (effective July 2018), Senegal maintains a strong debt carrying capacity, based on the 2018 WEO assumptions and the 2017 CPIA. The expanded perimeter includes the CFAF promissory note, guarantees extended by the Ministry of Economy, Finance and Planning (MEFP) through comfort letters, and debt of several SOEs, including the airport and Petrosen. Going forward, the Government has agreed to stop issuing budgetary letters that commit expenditures beyond or outside the current budget. This would substantially enhance fiscal transparency and public financial management (PFM). At the same time, the recent GDP rebasing reduced the public debt to GDP ratio, and the partial buy-back of the 10-year 2011 Eurobond that took place in early 2018 significantly reduced the 2021 debt service peak (and accompanying breach). Additional debt swap operations considered by the Government could further smooth the debt service trajectory.

25. Debt burden indicators have deteriorated up to 2021, when oil and gas production is expected to kick in. While no debt stock indicator breaches their respective thresholds under the baseline, three indicators (PV of external PPG debt-to-GDP, external PPG debt-service to export ratio, public debt to GDP) surpass their thresholds under stress test scenarios. If the fiscal target is achieved in 2019 and high growth is sustained, the ratio of public debt to GDP would start declining from 2019 onwards to 50 percent in the long run. Senegal would need to continue reforms to raise revenues and to limit below-the-line Treasury operations to reduce debt vulnerabilities. Senegal's access to financial markets is expected to remain adequate but a faster than expected tightening of global and regional market conditions constitutes a risk.

[13] Among others, this will require restructuring La Poste to reduce its deficit (including separating its Post Finance branch from the Post Office operations).

[14] The analysis here is an update of the joint World Bank-IMF DSA from December 2017. A Joint IMF-WB Debt Sustainability Analysis is currently under preparation in the context of the 7th IMF Policy Support Instrument (PSI) Review and is expected to be presented to the IMF Board of Executive Directors on January 15, 2019. This Joint IMF-WB DSA will be distributed to World Bank Executive Directors as a stand-alone document following standard procedures under the new Joint IMF-WB LIC DSF.

Figure 2 . Debt Sustainability Analysis



Source: World Bank staff estimates (as of October 2018).

External Debt Composition, 2017			
	USD (billion)	Share of total Debt	% of GDP
External Debt public sector	8.9	54.1	42.2
External Debt private sector	5.2	31.6	24.6
Total External Debt (public + private)	14.1	85.7	66.8
Medium and Long-Term Debt	14.1	85.7	66.8
Short term Debt	0.05	0.3	0.2

Sources: Senegal authorities; IMF and World Bank staff estimates and projections (as of October 2018).

26. On the external front, the current account deficit will widen due to higher imports, but it is projected to improve in the medium-term on the back of stronger exports. Imports are expected to remain robust in 2018 due to high international oil prices and strong domestic demand. As exports also increase rapidly, the current account deficit is expected to remain at 7.3 percent in 2018. Looking forward, strong exports linked to gas and oil related investments are expected to widen the trade balance deficit in the next couple of years, despite robust exports. Grants and remittances would remain high at 9 percent of GDP in 2018 and will only slowly decline afterwards. As a result, the current account deficit is projected to increase to over 10 percent of GDP since 2020. The 2018 external gap will be mainly financed by the US$2.2 billion Eurobonds issuance. In the following years, the gap would be financed by a combination of external borrowing – including the remnants of the Eurobond –, grants and foreign direct investment (FDI). The Government will prioritize concessional borrowing from traditional partners. However, access to capital markets would help capture additional resources, if required, to meet the substantial investment needs linked to the second phase of the PSE and oil and gas projects.

27. The macroeconomic framework is deemed adequate for the proposed operation. On the back of the strong growth performance of the Senegalese economy, the macroeconomic framework is considered sustainable over the medium-term, as fiscal policies are consistent with macroeconomic stability, and monetary policy is anchored in a credible monetary union framework. Public debt remains on a sustainable path and external balances are assessed to be in line with projected balance of payments financing. Hence, the Government will continue implementing a package of measures to increase revenues and curtail spending pressures in 2018 and onwards. Both the current DPF series and the ongoing PSI with the IMF constitute credible anchors for macroeconomic policy. Potentially higher fiscal revenues from oil and gas (from 2022 onwards) would gradually lend support to the solidity of the fiscal framework.

28. Downside risks to the adequacy of the macroeconomic framework arise from persistent fiscal imbalances, climatic and external shocks, and terrorist threats in the region. On the domestic front, unresolved fiscal vulnerabilities – related to reliance on imported oil as fuel for power generation and fixed domestic energy prices in the context of high oil prices and electoral expenditure pressures – may lead to reduced fiscal space for public investment or to higher deficits. They may also generate additional payment delays with the private sector and the public energy sector, which would be detrimental to growth. Slippages will need to be addressed decisively to avoid a deterioration on debt risk ratings and meet the WAEMU targets. The growth outlook is highly dependent on private investment dynamism, which could also be hampered by delays in structural reforms. Potential climatic shocks may affect agricultural production and incomes, as an important share of the sector is still rain-fed despite emerging diversification. On the external front, higher oil prices, lower global growth and less dynamic global trade would affect the trade balance, investment, and remittances. Tightening of global and regional financial markets, characterized by reduced global liquidity, capital outflows from emerging markets and rising interest rates, may generate additional fiscal and debt pressures. Finally, international terrorist threats, if materialized, will weigh on investment and growth – particularly in the tourism sector – despite preventive measures taken by the Government.

2.3. IMF RELATIONS

29. The ongoing PSI with the IMF, which began in June 2015, aims to consolidate the fiscal balance, while promoting investment and structural reforms to boost growth. The PSI aims to implement economic policies and structural reforms to sustain strong growth and continue the fiscal consolidation in line with regional targets. Reforms aim to boost tax revenue mobilization and reduce fiscal expenditures, enhance the quality of public investment and strengthen PFM. The Sixth Review of the Policy Support Instrument was concluded in June 2018. It underlined the robust growth, which is expected to remain strong in the medium term, while inflation remains under control. However, it also underlined the deterioration of public finances in 2017 due to unchanged domestic energy prices in the face of higher international oil prices. Concerning program implementation, all but one assessment criteria were met, while two Indicative targets were missed (see Annex 3 on IMF Relations). The World Bank and the IMF coordinated closely in the context of this DPF series and the PSI. The main focus of the coordination included fiscal impacts of the delayed payments accumulated in 2017, particularly those related to the energy sector and SENELEC's arrears, and the structural reforms required to reduce the deficit of La Poste. The IMF staff mission for the Article IV Consultation and Seventh Review of the PSI took place in October 2018. The mission's press release underlined the satisfactory implementation of the program, the

country's high growth and positive outlook, and the structural reforms that will be implemented in the second phase of the PSE to prolong high growth. It also emphasized fiscal difficulties, including i) a shortfall in domestic fiscal revenues – compensated by slower execution of public spending; ii) persistence of treasury financing of La Poste; and iii) the accumulation of obligations to the energy sector and other suppliers linked to higher global oil prices and non-adjusted domestic energy prices. The Seventh Review Board date is scheduled for January 15, 2019.

3. GOVERNMENT PROGRAM

30. Since 2014, the PSE, which is now entering its second implementation phase, is the overarching strategic framework for the long-term economic and social development of the country, aimed at achieving an emerging market status for Senegal by 2035. The PSE adopted in 2014 has three strategic axes: (i) transforming the structure of the economy to support strong and sustainable growth; (ii) expanding access to social services and social protection and preserving the conditions for sustainable development; and (iii) responding to the requirements of good governance, through institutional strengthening and promoting peace, security and African integration. The Government has recently concluded the evaluation of the first five-year PAP for 2014-2018 (PAP1). The diagnostic highlighted important progress – particularly the return of growth in the context of strong macroeconomic fundamentals and high investment – but also pointed to persisting structural weaknesses resulting in modest competitiveness gains and an economy still dominated by services with underwhelming structural transformation. Weaknesses include a lower than expected role of exports, private investment still subdued due to heavy tax administration and labor market regulations, and lagging structural reforms, including in infrastructure. On the social side, progress remains overshadowed by spatial and gender inequalities, an unfinished social protection agenda, and inadequate human capital. Key constraints in governance are related to limited effectiveness of public investment, poor law enforcement and weak civil engagement. PSE is now entering its second implementation phase 2019-2023 (PAP2) that puts forward a new and ambitious results matrix along the same strategic axes. Key measures span from exports promotion, infrastructure expansion and sustainable management of natural resources to improved business environment, public administration and social services.

31. Energy and ICT sectors as well as downstream development of a broader digital economy are key "fundamentals for Emergence" in the PSE and will remain critical sectors for a competitive, more inclusive economy under PAP2. In the energy sector, the PSE identifies the high cost and poor quality of energy supply and the absence of comprehensive energy reform as key reasons for low growth and insufficient private development. The PSE also underlines the significant asymmetry in access between urban and rural sectors as a constraint for "emergence". Similarly, the PSE argues that further development of the existing ICT infrastructure and human capital would allow Senegal to become a regional leader in the sector, and to promote value-added and overall growth due to its important cross-sectoral impacts. However, poor access and high cost of Internet restrict the driving effect of ICT and prevents the downstream development of digital public and private applications, that are deemed as critical future drivers of growth in the world rapidly transformed by technological advancements. More recently, the PSE diagnostic that forms the base of the PAP2 has underlined the role of energy (including newly discovered gas and oil) and of digital development as key opportunities for future growth.

32. In the energy sector, the policy is defined by the 2012 Letter of Energy Sector Development

Policy (LESDP), which has been integrated into the PSE and other sector specific strategies, such as the National Program for Rural Electrification (*Programme National d'Electrification Rurale - PNER*). Following the energy crisis of 2011, the LESDP outlines ambitious medium- and long-term objectives to improve the reliability and affordability of access to electricity services for all, in a sustainable manner, by: (i) increasing energy security through reduced dependency on imported heavy fuel oil (HFO); (ii) achieving universal energy access by 2025; (iii) diversifying the country energy mix towards lower carbon options, leveraging indigenous resources, such as gas, and taking full advantage of the opportunities from regional interconnections to access low cost hydropower; (iv) improving the overall competitiveness of the sector. The Government and SENELEC signed an extension of the performance contract for 2017-2019 with a performance incentive system focused on technical and financial performance and contractual obligations, as well as a working incentive system for top management.

33. In the ICT sector, the PSE focuses on enhancing access to broadband Internet and on increasing the impact of ICT on the overall economy. To this end, four strategic objectives are defined for the sector: (i) establishing an enabling legal, regulatory and institutional environment for the development of a digital ecosystem; (ii) implementing a national broadband plan, building on an innovative use of frequencies and leveraging the digital dividend resulting from the digital switch over; (iii) promoting the integration of digital technology in the public and private sectors, particularly amongst businesses, and of digital culture within the population, through training and spreading knowledge; and (iv) developing digital business centers in universities, as well as business parks equipped with adequate telecommunications (telecom) infrastructure to catalyze growth in jobs from exports and Business Process Outsourcing (BPO) activities.

34. In the DE sector, the Government approved in October 2016, under DPF 1, a new Digital Senegal Strategy, *Sénégal Numérique 2025*, focused on facilitating access and reinvigorating Senegal's regional leadership. The Strategy is strongly aligned with the objectives of the DPF series. Its four main axes are: (i) enhancing broadband connectivity for all and promoting high-quality, affordable and reliable telecom services; (ii) digitally connecting public entities in order to dematerialize and facilitate administrative procedures, ensuring synergies, reduced costs and eliminated transaction delays; (iii) creating an enabling environment for the thriving local digital private sector, promoting investment and facilitating exports; and (iv) promoting the innovative use of digital resources to increase productivity and competitiveness in the overall economy.

4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

35. The program supported by this series is anchored in the first pillar of the PSE, which targets strong and inclusive economic growth. Under this pillar – which captures two thirds of total PSE resources – the Government seeks to achieve reforms and promote investment in key economic sectors to unlock inclusive and sustainable growth. The PSE identifies six foundational elements to achieve "emergence", including energy reform as well as ICT and digital development, which are the focus of this series.

Operation Description

36. This DPF is the second operation (DPF 2) in the programmatic series, which includes three DPFs operations over the period FY2017–2020. The series envisages different credit amounts depending on the depth of the Government's reforms and financing needs. Following the US$60 million equivalent disbursed under DPF 1, this DPF will allocate US$180 million equivalent to support the reform agenda, which has been extended to include digital economy reforms. The proposed higher amount of this DPF reflects the need to match the scale of World Bank support to the scope of reforms and political risk in a more difficult fiscal environment. The programmatic design of the series will allow the WBG to accompany the Government's efforts in support of well-defined medium-term objectives, while retaining some flexibility in specific content and pace of reforms for each operation.

37. This section of the Program Document (PD) describes the most significant updates to the program for the second phase of reforms, compared with what was established under DPF 1. This PD will not repeat the main content of the program design and background information detailed in the PD of DPF 1. Instead, it will focus on the incremental changes of sectoral and policy context, including taking forward the reforms implemented under DPF 1 and elaborating how the original Triggers are expected to be implemented as Prior Actions under DPF 2.

38. The operation keeps its original design around a common overarching policy structure for the upstream Energy and ICT sectors, while reinforcing policy and institutional foundations of the emerging downstream digital economy. Under the *Energy and ICT Pillars*, the reforms objective remains to expand supply and lower the cost of improved and more equitable access to services. Henceforth, the policy agenda is structured around the following three areas and operational objectives, shared by both pillars:

- *Improving governance of the sector,* including corporate governance of public operators, the sector regulatory environment and the institutional and financial interface between the Government and the operators;
- *Removing barriers to investment and competition,* by adopting more open legal and regulatory frameworks and strengthening sector planning instruments; and
- *Facilitating equitable access* by supporting supply and demand in underserved areas, with a focus on rural areas.

In the *Digital Economy Pillar*, this DPF series (DPF 2) represents an early engagement on a topic that is both critical and relatively new for the Government with an objective of securing quick wins and paving the way for deeper and more substantive reforms in the third series (DPF 3). The operation is currently organized around the following three policy areas:

- *Enhancing the overall institutional framework* to design and implement a cohesive DE policy;
- *Strengthening the roll out of e-Government solutions* to speed up the adoption and use of online and mobile filing and payment solutions;
- *Strengthening the startup ecosystem* by addressing key regulatory and policy constraints.

39. The PDF remains unchanged but for the addition of an objective linked the DE Pillar. The PDO of the series is to support Government's efforts in: (i) strengthening the governance and management of the energy sector to reduce costs, improve reliability and facilitate equitable access; (ii) enhancing the legal and regulatory framework of the ICT sector to promote competition, investment and equitable access, and (iii) reinforcing the policy, institutional, and financial foundations of an emerging digital economy.

40. The program strongly supports the WBG's approach to MFD. The program is MFD-enabling for the following reasons:

- In the *Energy pillar*, the DPF series has promoted a Strategic Electricity Generation Master Plan with a strong emphasis on private sector participation aimed at energy mix diversification. In fact, all new power generation endeavors are currently provided by IPPs. Similarly, the DPF is supporting the implementation of an ambitious program to switch to gas for power generation. These are based on principles that will maximize the likelihood for private sector investment in opportunities arising from the shift to a cleaner and more affordable energy mix.
- In the *ICT pillar*, changes in the regulatory framework through the Telecom Law and accompanying legal decrees have boosted competition and private investment, as evidenced in the recent entry of three new ISPs. To further open the market, new standard guidelines have been promoted by the DPF for ISPs and infrastructure operators, and dominant player regulatory decisions have bene introduced. The DPF also supports the entry of a second operator in the critical 4G market, which has a strong potential for development in the near future.
- In the *DE pillar*, enhancing the enabling environment and the pro-activeness of Government institutions in using digital technologies is expected to foster the development of a more resilient and competitive private sector start-up ecosystem.

Box 2: Working as One World Bank Group

This operation has piloted a more integrated WBG approach to DPFs, with an upfront integration of IFC and MIGA staff in the DPF team, gaining, as a result, in the quality of upstream design and advice. A close and constructive collaboration with IFC and MIGA industry specialist has allowed for an effective integration of private-sector perspectives in the program design and policy dialogue with the Government, which was particularly critical in the areas directly implicating private sector investors, such as SENELEC's financial performance, gas-to-power market creation, 4G market opening, etc. This collaboration took the form of (i) joint missions to advance policy dialogue (including by presenting international best practices) with the Government on strategic reforms; (ii) joint and cross-fertilized analytical work (such as policy notes on PPP-related reforms in the ICT sector, Digital Country Private Sector Diagnostic, etc.) that served as an analytical underpinning of the program; and (iii) joint review and recommendations of key legal provisions (such as, for example, the draft new law on electronic communications and its secondary legislations). Such close coordination and collaboration has enriched the policy dialogue, rendering it more effective and private-sector relevant, and enabled the development of much sharper recommendations on private sector participation in critical energy, ICT and digital markets. In this context, the World Bank staff and management has remained in charge of the ultimate policy dialogue and processing of this operation, which remains IDA supported.

Lessons Learned

41. As detailed in the PD of DPF 1, the design of the series integrates the lessons learned from previous DPF operations in Senegal. The experience underscores the need to find a balance between meaningful and substantial reforms and focused and realistic objectives; the need to balance enough flexibility, to adapt to the nature and pace of political decision making in Senegal, with a sharp focus on few critical measures. The three-year time frame and the focus on the selected sectors (and the sector fundamentals) are meant both to ensure realism, impact and adaptability and to allow for continued build-up of the program, as the series evolves. Also review of previous operation noted the need to avoid excessive focus on financial indictors and rather to focus on the underlying causes of poor financial performance - in this case the Gas-to-Power strategy., as well as the need to match the scale of World

Bank support to the scope of reforms and political risk.

42. This operation also benefits from the lessons learned from the implementation of DPF 1. In the later stage of preparation of DPF 1, the Government took a number of policy decisions that were not aligned with the objectives of the DPF. These decisions required careful evaluation and additional policy dialogue and measures to ensure consistency with the objectives of the reform program in both sectors. This underscores the need to strengthen the reform coalition supporting the program, particularly bringing center of government agencies and the private sector more closely into the policy dialogue. It is also important to maintain flexibility on the implementation timeline and allow pragmatic adjustments to the articulation of Prior Actions. Finally, as emerged from an evaluation seminar between key Government counterparts and the WBG team, more intense communication and coordination among stakeholders is required to ensure adequate implementation. To this end, a high-level Steering Committee has been created in early 2018 to follow up on the progress and eliminate bottlenecks to reforms. The Steering Committee is chaired by the Secretary General of the MEFP.

43. Finally, the discussion by the WBG Board of Directors also provided pertinent suggestions. Directors emphasized the importance of medium-term engagement to maintain the momentum of reforms and highlighted the importance of South-South cooperation mechanisms concerning the implementation of similar reforms. Directors underlined the relevance of the Strategic Master Plan for electricity generation to support diversification of the energy mix with an emphasis on lower carbon technologies, and the need for the WBG to further support diversification towards renewable and gas-fired generation. Finally, Directors highlighted the importance of close monitoring and of providing timely support to the Government's implementation efforts, considering the substantial risk to reform implementation in the face of entrenched interests. They also discussed the importance of having multiple complementary instruments from the World Bank – especially in energy – to ensure sustained progress. Director's guidance has been taken on board by the team, for example, by systemically sharing international experiences of similar reforms from other developing countries, and by supporting the Government to advance the use of natural gas in the production plan, through a package including both technical advice and implementation of the ongoing Oil and Gas technical assistance (TA) project.

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

4.2.1 Pillar 1: Energy Sector

Main Issues and Government Priorities

44. As Senegal continues to rely on HFO for a large share of electrify production, electricity costs are high, and the sector experiences recurring arears when global fuel prices increase. Senegal is committed to a shift towards clean and affordable electricity, and it aims to increase the share of renewable generation capacity to 22 percent by 2025. Senegal will work to phase out the use of HFO for power generation, from 90 percent in June 2016, to 67 percent by the end of the series, to potentially eliminate its use when domestic gas comes online (2023 and beyond). However, 83 percent of the 840 MW grid is currently supplied by HFO, which is extremely expensive compared with other options Senegal is pursuing. Therefore, production costs are subject to the volatility of international oil prices, which for example, have increased by around 40 percent since June 2017. During periods of higher than anticipated

global oil prices, the sector often experiences recurring arrears if tariffs are held constant in two critical ways: (i) delays in payment of the Government's 'compensation' to SENELEC to cover the difference between the costs and the revenue from consumers and (ii) delays in payment of the electricity consumption from the public sector, including the public administration, state-owned enterprises and public lighting.

45. The regulatory system of electricity pricing is transparent, but suffers from weak implementation, resulting in frequent budgetary arrears to the utility. The regulator, Electricity Sector Regulation Commission, *(Commission de Régulation du Secteur d'Electricité or* CRSE), calculates and publishes every quarter the maximum allowed revenues for SENELEC to cover their costs and, by comparing with the current level of tariffs, demonstrates any deficit. As a result, it proposes the needed tariff adjustment, or the level of budgetary 'compensation' needed to cover the costs. It is then the option of the Government to adjust the tariffs accordingly or compensate the utility. This information is published on the CRSE website and is a reason why the effects of increasing production costs on SENELEC finances can easily be tracked. In effect, most of the costs in SENELEC's maximum authorized revenue (RMA), as calculated by CRSE are outside of the utility's control (71 percent of costs in 2017), with 63 percent linked to electricity and fuel purchases. Budgeting of the required tariff compensation by the Government is not consistently or fully implemented, resulting in payments arrears, particularly when the amounts are significant. The main vehicle to pay the tariff compensation is the Special Energy Fund (*Fonds de Soutient à l'Énergie* - FSE), a budgetary fund that receives some earmarked taxes and the budgetary transfers, and should accumulate reserves when oil prices are low.

46. The technical and operational performance of SENELEC has been improving over the last five years, but there is scope for further improvement, and for increasing coverage in rural areas. SENELEC has improved the quality of service delivery, as shown by the large reduction of interruption hours of service at a low voltage level – less than 4 hours (compared to the Performance Contract target of 8 hours), largely due to significant investments in transmission and distribution as well as improvement of the availability of its power plants. It has also achieved some promising results in loss reduction, even though there is still room for increasing the efficiency of its operations. Apart from public entities, the performance of SENELEC in billing collection is quite good with a client-debt ratio of 80 days versus 90 days set in the Performance Contract. However, the public entities' arrears to SENELEC are significant, reaching up to 10 of its gross revenues. Two thirds of households had access to electricity as of end 2017, higher than SSA average of 43 percent. However, rural access substantially lags the average urban access (40 percent versus over 90 percent, respectively), which is consistent with other SSA countries.

47. In this context, the main remaining issues in the energy sector are as follows.

- **The Government's strategy has emphasized decreasing the cost of service (currently at US$0.24/kWh) in an environment where electricity tariffs are already high.** Average tariff in Senegal (US$0.19/kWh) is already relatively high, and almost twice the global average (US$0.10/kWh), higher than the cost in advanced countries, such as the United States (US$0.12/kWh), and much higher than in many emerging economies, such as India (US$0.08/kWh). Government has pursued a strategy to reduce the cost of service, through a change in the energy mix, and efficiency gains along the value chain.
- **With its recent gas discoveries, Senegal has the opportunity to shorten the lead time to sustainably**

switch to a lower cost fuel mix, although this is a complex undertaking. Senegal is working to switch from HFO to natural gas, which should be a 'game-changer' for Senegal in terms of reducing costs in the sector. However, this is a complex process involving many stakeholders and the need for a strong Government's capacity to advance investment and implementation at the up-, mid- and downstream levels of the value chain. Part of the challenge is to make the private sector sufficiently comfortable with the future institutional framework, the speed of implementation and the financial viability of the sector in the interim period. The Government's progress in laying out an effective vision for legal and institutional arrangements in the sector and its ability to maintain SENELEC's financial viability in the interim period will be key.

- **The sector decision making is complex and fragmented between multiple stakeholders**. *Complex* corporate governance has contributed to the sector's long-standing problems. The Board struggles to exercise a substantive strategic and oversight role. Policy decision making on critical sector investment and financing issues suffers from weak coordination between the various institutions involved, including the Executive, the Regulator and the Utility.
- **In rural areas, affordability and the slow roll-out of the concession model has been an issue hampering access to energy services for all**. Although the overall access rate in Senegal is relatively high as per regional standards, rural access remains low (standing at 29 percent in 2016 and estimated at 40 percent in 2017). Progress in scaling up rural access has been hampered by the very limited success of the private rural concession model, due in part to a complex institutional framework that did not allow for a well-aligned implementation of the model. Even where private concessionaires have been operating, the coexistence of different tariffs and connection fees in contiguous areas between SENELEC and private concessionaires, which can be as much as double, has reduced the uptake of service.

Reform Program Supported by the Operation and Expected Results

48. Under the first phase of the program, the Government steered initial reforms related to the sector supply management and production, and governance and financial situation of the state-owned utility. The most significant achievements are as follows:

- An enhanced and actionable Performance Contract between the Government and SENELEC, including monitoring and corrective mechanisms;
- Progress in solving SENELEC's complex cross-debt issues with the Government;
- An approval of a technically sound and comprehensive Strategic Master Plan for electricity generation, focused on enhancing the energy mix towards renewable sources and reducing costs, with significant private sector participation;
- A decision on rural tariff harmonization to noticeably lower the average rural tariff, thus increasing electricity affordability and access.

The key results targeted by the operation are all progressing satisfactorily (see Table 4).

Table 4. Key Results Indicators for Energy Under DPF 1

Indicator	Baseline	Original Target (2019)	Revised Target (2021)	Actual (latest)
SENELEC debt cover ratio (EBIDTA / debt service)	0.54	0.9	1.0	0.65
Un-served energy per year (GWh) as proxy of blackouts and brownouts (GWh)	34.1	20	13	28
Overall electricity losses as % of electricity produced	21	18	15	19
Mix of non-HFO based generation (%)	10	43	33	20
Installed capacity of renewable energy (%)	0	29	29	10
Share of rural population with access to electricity	29	50	60	40

Source: DPF Implementation Status and Results Report.

49. Under the second DPF of the series, the Government advanced in tackling key policy and institutional bottlenecks, but the reform agenda suffered from the resurgence of serious SENELEC financial issues, arising from increasing oil prices, that took time to be addressed. The Government made advances to strengthen the SENELEC's corporate governance, enhance its capacity to recoup revenues through structural measure limiting public entities' arrears, prepare the regulatory framework as a base for the upcoming gas-to-power strategy, and to accelerate coverage in rural areas. However, SENELEC's financial situation remains fragile, as the Government only belatedly covered the amounts due for both tariff compensation and electricity bills. In the face of rising oil prices, it has found it difficult to raise the already high electricity tariffs in a pre-electoral year. The pace of reform is slowed by a weak coordination between key players in the sector, changes in the leadership of the Ministry of Energy and the lack of experience on the Government's side regarding developing the enabling framework for investments in the gas value chain.

50. The reform agenda in the energy sector is expected to culminate in more far reaching impact under the last phase of the program. Under DPF 3, the Government is committed to ensure that SENELEC will recover its costs, with an aim of maintaining financial sustainability of the sector and stimulating the confidence of potential private investors. It plans to pursue its efforts at addressing the policy bottlenecks to shift the energy mix, to better budget for tariff compensation, and to implement structural measures on Government arrears. These efforts will form part of a credible and comprehensive financial framework plan for the sector. Authorities also aim to implement a more profound institutional reform of SENELEC's corporate structure and explore avenues for greater private sector participation in some segments. The end of the purchasing monopoly of SENELEC will open the market to new dynamism. Advances in the legal and institutional framework for the gas-to-power mid- and downstream value chain and new overarching regulatory and planning structure will set the stage for a profound reshaping of the sector's sustainability. Finally, addressing unresolved issues of the rural access agenda should boost further the impact of earlier reform steps.

51. The policy actions supported by the proposed DPF are fully aligned with the Government's priorities and WBG's strategy to support the transformation of the energy sector in Senegal. This approach is guided by the MFD principles: Lowering costs and improving the financial viability of the sector

are critical to ensuring that SENELEC, and the sector as a whole, are viable and creditworthy for private investment. Stronger governance, clearer policy-making and more empowered regulator will also increase confidence and reduce risk perceptions by the private sector. Significant private investment is expected in the generation and gas-to-power infrastructure. Henceforth, the DPF focuses on creating an enabling environment for these investments, enhancing the sustainability and competitiveness of the sector.

Expected Prior Actions by Policy Areas

52. Overall, the reform agenda carried out under DPF 2 was aligned with the broad structure and objectives under DPF 1, but the original triggers had to be significantly adjusted to reflect above-mentioned implementation issues. First, SENELEC's difficult financial situation required the adoption of specific, originally unanticipated measures. Second, the strategic importance of gas-to-power opportunities led to their inclusion in the policy program. Finally, some measures were adjusted or dropped, as they were either not achieved or did not have the anticipated relevance.

4.2.1.1 Improving Governance of the Energy Sector

Governance and Corporate Arrangements of SENELEC

53. The Government implemented initial measures taken under DPF 1 to strengthen SENELEC's corporate governance and management; this improvement will be deepened in DPF 3. The Government is aware that, to be sustained, improvements in SENELEC's performance and financial sustainability require deep structural changes to the governance arrangements, including, possibly, by enhancing private sector participation. These reforms will prepare the ground for a longer-term transformation of SENELEC's corporate model and possibly open the way for private sector participation in the utility.

- Following the changes in SENELEC's statutes under DPF 1, and in order to strengthen the strategic guidance and oversight role of the Board, leading to better corporate governance, especially as significant private sector investment is expected, independent Directors (i.e. non-shareholders) from the private sector and consumer associations will be appointed to SENELEC's Board. This will be based on the decree that specifies the profiles for independent Board members and defines the criteria for their appointment (**DPF 2 Prior Action #1**). The profile required includes expertise in auditing and financial control, track record in managing large industrial companies, and capital market experience.
- For enhanced transparency and commercial orientation, SENELEC envisages carrying out the accounting and organizational separation of its activities over the course of the program. DPF 3 would support the creation of three separate SENELEC subsidiaries for generation, transmission and distribution in 2019 (**DPF 3 Trigger #1**).
- In parallel, over the next two years, the Government plans to work with the WBG and other stakeholders to review available options to further enhance SENELEC's corporate governance and performance and to build consensus around these options.
- A DPF 2 trigger on SENELEC obtaining a baseline rating from a reputable credit rating agency has been met but dropped from the list of prior actions, as ensuing financial arrears from the state has rendered the rating obsolete. A trigger on streamlining the procurement process for SENELEC's operational and maintenance expenses has also been dropped, as SENELEC and the Procurement Regulatory Agency could not reach an agreement.

Sector Financial Arrangements

54. DPF 2 continues to support the strengthening of SENELEC's operational and financial performance by assisting with a structural clean-up of financial relationships with the Government.

- **Under DPF 2 Prior Action #2**, the backlog of compensation and public electricity bills owed to SENELEC is being addressed. The rapid increase in international oil prices in mid-2017 took the Government off guard, leading to accumulated unpaid government bills to SENELEC and to mounting obligations for tariff compensation that had not been budgeted. In particular, the diversion of a tax previously earmarked for the FSE in 2017 and the budgetary use of FSE reserves in late 2017 severely curtailed the FSE's ability to play its financial stabilization role for electricity cost recovery. Similarly, in 2018, the Government was unable to appropriately budget for its tariff compensation obligations and was unable to rely on the FSE. Arrears for compensation due in 2017 amount to a total FCFA 45 billion. In mid-2018, CRSE has estimated the overall yearly compensation, based on an international oil price of around 75 USD/bl, at FCFA 136 billion versus FCFA 70 billion included in the 2018 revised budget. Beyond tariff compensation, the public sector also accumulated unpaid electricity bills in 2017, mainly from autonomous budget institutions such as Universities and Hospitals, and from local government, in particular for public lighting. In mid-2018, these were estimated at around FCFA 38 bn.

Table 5. Government Delayed Payments to SENELEC

Items	**2017**	**2018**
Tariff compensation due to SENELEC	57.2	139.2
- Paid or budgeted amounts	15.0	70.0
Delayed compensation payments to SENELEC	42.2	69.2
Interests on delayed payments	3.1	
Electricity bills due to SENELEC	17.1	21.4
Total delayed payments to SENELEC	62.4	90.6
Total delayed payments to SENELEC (cumulated)		**153.0**
New budgetary transfer		28.0
Promissory Note		125.0
Total settlement under the DPF		**153.0**

- **Under DPF 2 Prior Action #2,** to ensure the robustness of Senegal's cost recovery regulatory system, the Government has settled its total liabilities for electricity bills and tariff compensation, amounting to FCFA 153 billion through additional budgetary transfers for FCFA 28 billion, and the issuance of a promissory note for the remainder FCFA 125 bn. To ensure minimum standards of transparency around this operation, the amount of the promissory note will be included as part of the overall public debt in the next debt sustainability analysis (DSA), and repayments of the promissory note over the next 5 years will be explicitly budgeted (starting with FCFA 25 billion in 2019).
- Under the same **DPF 2 Prior Action #2**, the Government has also adopted structural measures to prevent the accumulation of arrears on electricity bills and VAT reimbursement to SENELEC. On the back of the DPF 1 circular that required all central government autonomous agencies (*Entités*

Publiques avec Autonomie Financière - EPAFs) to have adequately accounted for utility bills in their yearly budgets, the Government has adopted, under DPF 2, a decree authorizing MEFP officials posted in the EPAFs to directly execute those expenditures. Finally, MEFP has issued a circular authorizing the streamlined processing of SENELEC's VAT refund claims.

- Under DPF 3, the Government has agreed to prepare a comprehensive energy sector financial framework plan, which aims to promote the financial sustainability of SENELEC and improve its creditworthiness and, more broadly, providing a road map for ensuring a financially sustainable sector going forward. As part of this plan, the Government has committed to consider the appropriate mix of budgetary and tariff measures to ensure that SENELEC can fully cover its maximum revenues as authorized by the regulator for 2019 (**DPF 3 Trigger #2)**. The Government is also aware of the need to improve the effectiveness of the underlying regulatory mechanism for cost recovery, and will explore options to do so (**DPF 3 Trigger #2)**.
- The sector financial framework also integrates the medium-term plan to make the sector financially viable by switching the energy mix to gas, solar and imported hydropower. The key game changer will be the transition from HFO to gas. The budgetary and tariff measures will ensure viability during this transition – after which it is expected that budgetary support would not be required.

Sector Regulation

55. To optimize the use of public funding in line with international good practices, the Government has committed to private sector participation in electricity generation, as well as in the upstream, midstream and downstream gas sector. To support this objective, under DPF 3, the proposed operation includes measures aimed at improving sector regulation; extending the Regulator's mandate and promoting competitive bidding and third-party access in the mid- and downstream gas sector, enhancing its institutional capacity and gradually allowing third party purchase of power generation. Most of the preparatory work is expected to be carried out with technical assistance support under the Regional Program to Improve the Performance of Power Utilities. This will significantly reduce SENELEC's operating costs and is expected to lead to reduced tariffs over time - allowing critical segments of the economy to benefit from far less costly power supply. To support greater transparency in the sector and a potential for further competition, where appropriate, SENELEC will need to advance accounting separation of its activities. It will also require a regulatory framework defining the rules and compensation related to third party access, with a specific focus on maintaining the sector's overall financial equilibrium (**DPF 3 Triggers # 3 and 4**). The Government also plans to extend the CRSE mandate to cover the mid- and downstream gas sub-sectors. (**DPF 3 Triggers # 3 and #4**).

Expected Results under this Policy Area

56. **The policy and institutional measures to improve overall governance are expected to lead, by the end of the series, to improvements in the technical and financial performance of SENELEC.** The selected indicators of better technical and financial performance are drawn from SENELEC's performance contract and aim to demonstrate significant progress by the end of the series. These include a significant improvement in SENELEC's financial sustainability, as expressed by the debt-cover ratio, targeted to increase from 0.54 to 1.0 by 2021. Overall electricity losses (technical plus commercial) are expected to fall from 21 to 15 percent of total energy produced, as compared with a regional average performance of around 23 percent - a notable result given the fast expansion of the system. The hours of unserved

energy, as a proxy for blackouts and brownouts, already relatively low by regional standards, are projected to reduce further by more than 60 percent, from 34 GWh to 13 GWh per year.

Prior Actions & Triggers: ENERGY – Policy Area I

Prior Action 1: To further strengthen SENELEC's governance, the Recipient has established, for SENELEC's independent Board members, their profiles, reflecting competences in private sector management and auditing, as well as the procedures for their selection and appointment.

Trigger 1: For enhanced transparency and commercial orientation, the Government has reorganized SENELEC in distinct generation, and transmission & distribution subsidiaries.

Prior Action 2: To further strengthen the financial viability of SENELEC, the Recipient: (i) through its MEFP, has agreed to settle its arrears to SENELEC in terms of tariff compensation and electricity bills for fiscal years 2017 and 2018 through additional funding for tariffs compensation in its 2018 budget, and the issuance of a promissory note dated October 22, 2018 to SENELEC for the remaining amount of arrears which first repayment instalment has been included in the 2019 Draft Budget Law submitted to Parliament; (ii) has made the payment of EPAFs' electricity expenditures to the service providers mandatory, and (iii) has streamlined the processing of SENELEC's VAT refund applications.

Trigger 2: As part of a comprehensive electricity sector financial framework plan, the Government has taken the necessary budgetary and tariff measures to ensure that SENELEC can fully cover its maximum authorized revenues for 2019 as determined by the CRSE and has strengthened the effectiveness of its regulatory system for cost recovery.

Trigger 3: In view of the expiration of SENELEC's purchase monopoly, and to further promote competition and private sector participation, the Government has implemented an action plan and regulatory framework, including grid code and transmission charges calculations, allowing eligible customers to purchase directly from power producers, while preserving the financial equilibrium of the power sector.

Trigger 4: To strengthen the sector's supervision governance, the Government has revised the mandate and the legal & regulatory framework and capacity of sector regulator (CRSE), which will include both electricity and gas for midstream and downstream gas sectors.

4.2.1.2 Removing Barriers to Investment and Competition in the Energy Sector

Electricity Generation Expansion

57. Under DPF 2 the Government intends to specifically advance the switch from HFO and coal to gas. Until the recent SENELEC Strategic Master Plan, electricity generation capacity additions have been done without a consistent and credible generation expansion plan, which in turn led to negotiated contracts being awarded without competitive tendering or transparent terms and conditions, and an ad-hoc choice in terms of energy mix. The Power Sector Master plan approved under DPF 1 charts a clear path of diversification from HFO.

- Since the approval of the new Electricity Generation Master Plan under DPF 1, progress on developing two commercially viable off-shore gas resources in Senegal has accelerated and final investment decision agreements with developers are expected between end-2018 and mid-2019. Regardless of

the source of the gas, the Government is committed to maximize the use of gas-based generation as early as possible by switching, whenever economically feasible, existing HFO power plants to gas. Gas is expected to replace all non-contracted coal plants in the Electricity Generation Master plan. Analysis by the World Bank shows that substituting HFO by gas from indigenous sources would reduce costs in the power sector by around 30 percent.

- However, for the transition from HFO to gas to materialize, the Government also has to (i) ensure that the market is ready to receive this gas and (ii) to clarify the policy and regulatory framework. For that purpose, Government, formed and publicized a core strategic vison for the legal, institutional and regulatory framework for mid- and down-stream gas management, including a clear timeline for implementation, and a conversion plan for existing HFO plants **(Prior Action #3, new)**. This strategic vision contains key principles on the separation of roles for gas commodity ownership and gas pipeline, ownership supporting third party access to gas pipeline, development of competition in gas aggregation/supply, development of competition for gas pipeline ownership, expansion of CRSE role, timeline for legal framework and conversion of plants – where viable – from HFO to gas. This will have important positive benefits in accelerating Senegal's transition to low carbon technologies and deepen the diversification of the energy mix. A new DPF 3 trigger (Trigger # 5) covers the update of the Electricity Generation Master Plan to fully include the expanded use of gas, and the approval and adoption of the legal and institutional framework for mid- and downstream.
- A trigger on "mandating the publication of the key contractual terms (including contract modifications) of all future Power Purchasing Agreements (PPAs) and Memoranda of Understanding (MoUs) for which an exception to competitive procurement has been sought" has been met but dropped, as the measures on the gas-to-power was deemed more important for advancing sector planning towards a diversified energy mix.
- Under DPF 3, an audit of the Production Plan implementation will be prepared and published**.**

Expected Results under this Policy Area

58. **By the end of the series, the generation plan would rebalance the composition of the energy mix towards natural gas and renewable energy, thus reducing production costs and emissions.** As the Strategic Master Plan is implemented, the energy mix is expected to see a steep decline in the current 83 percent reliance on expensive and polluting HFO to 67 percent by the end of the series and to close to zero by 2025. HFO is expected to be substituted mainly by gas and renewables. By 2025 the energy mix is expected to include up to 22 percent renewables (including solar, wind and hydro), 64 percent gas and 8 percent coal (corresponding to existing/already contracted plants). This mix requires the Government to further replace about 270 MW of coal, included in the current Master Plan, with renewables and gas-based generation. Analysis carried out by the World Bank finds that it would indeed be least cost to make such a replacement. The rebalance in composition would bring about three long-term benefits. First, the chronic financial vulnerability to oil price shocks would be dramatically reduced. Second, the cost of power generation will fall steadily. In 2025, the plan will reduce SENELEC's average cost of production to US$0.18/kWh (based on a baseline oil price scenario). The overall cost reduction is expected to lead to a cost of US$0.15/kWh from 2026 onwards (from US$0.24/kWh today). Third, the carbon intensity of electricity generated is expected to fall substantially, contributing to lower net greenhouse gas (GHG) emissions over time, within the timeframe of Senegal's voluntary commitments under the UN Intended Nationally Determined Contributions (2020-2030).

Prior Actions & Triggers – ENERGY Policy Area II

Prior Action 3: To accelerate the diversification of the Recipient's energy mix towards less expensive and cleaner technologies, the Recipient's Council of Ministers has approved, and published, a national strategy describing the key features of its institutional and legal framework for midstream and downstream gas subsectors.

Trigger 5: To further advance on the diversification of the energy mix, the Government has: (i) updated its electricity masterplan to fully integrate planned use of gas generation, identifying the priority least cost generation and transmission projects to accelerate the transition to low-carbon technologies; (ii) adopted legal and regulatory texts for planning, regulation, coordination and institutional arrangements for the upstream, midstream and downstream gas sub-sectors.

4.2.1.3 Facilitating Equitable Access to Electricity

Affordability and Availability of Rural Electricity

59. The DPF supports the Government's efforts to expand access to electricity services in underserved rural areas by simultaneously tackling issues of affordability and distribution. The Government's ambitious objective is to achieve universal access by 2025. Under DPF 1, the Government decided to provide a subsidy to lower the tariffs of private rural concessionaires that are higher compared to SENELEC tariffs. Since this measure was adopted, the regulator has been working with the concessionaires to agree on the modalities of harmonized tariffs, but the negotiations are yet to be concluded, with a new target date for implementation in early 2019. Consequently, the trigger on providing a budgetary allocation for the subvention has been dropped. Concerning the remaining non-attributed rural concessions, the Government has decided to attribute them to SENELEC, and to this effect an amendment to SENELEC's concession contact to include the four concessions in its distribution perimeter is to be signed**.** The rationale for this decision is that SENELEC is the entity that already connects the greatest number of customers in rural areas through the grid, and that expanding access through the grid densification in the remaining areas is the surest way to improve access. The Government and SENELEC have agreed to the amendments of the utility's concession contact that includes the four concessions, and submitted the proposal to the regulator, who, on September 25 2018, has issued a call for public consultation on the proposed modification. The process of getting the regulator's approval of the amendment is now expected to be finalized only later during the year. DPF 1 Trigger #6 has therefore been dropped.

60. To effectively implement its rural electrification approach, the Government will need to tackle several remaining challenges. First, there is a need to ensure an adequate financing strategy for investments for the four remaining concessions, and for funding the rural tariff subsidy, as access expands. The rural investments will be partly supported by other planned investments targeting densification and extension of networks, last mile connection and internal installations. There is also a need to take stock of the performance of the private concessionaire and of SENELEC's rural operations, and identify any corrective actions to achieve access targets, including possibly increasing competition in rural concessions. Finally, the institutional coordination between the utility, the rural electrification agency, and the regulator needs to be improved.

Expected Results under this Policy Area

61. Expected results under this policy area are focused on increased access to electricity in rural areas. The projected increase in the number of connections in rural areas due to improved affordability and expansion of the rural concessions is expected to lead to higher rates of access to electricity. Considering complementary programs aimed at scaling-up rural electrification, the share of rural population with access to electricity is expected to increase from 29 percent in 2015 to 60 percent by the end of the series, almost doubling access by end of 2021.

Prior Actions & Triggers – ENERGY Policy Area III

Trigger 6: To increase competitiveness in rural areas, the Government has restructured Rural Electricity Concessionaires (*Concessionaire d'Electrification Rurale* - CERs) contracts to eliminate the exclusivity of providing electricity services in concessions outside priority areas.

62. Table 6 summarizes the original DPF 1 Triggers and the proposed text for the DPF 2 Prior Actions in the energy sector. An update on the implementation status of each Prior Action is included. Annex 1 identifies advances to date in the Indicators defined under DPF 1 related to these PA.

Table 6. Original Triggers and Proposed Prior Actions for the Energy Sector

Original Trigger (as stated in DPF 1)	Proposed Prior Action (DPF2)
Policy Area I.1: Improving governance of the energy sector	
Governance and corporate arrangements of SENELEC	
Trigger 1: In order to subject SENELEC to greater market discipline, SENELEC has applied for a baseline rating from a reputable credit rating agency and adopted an associated action plan to secure an intermediate investment grade rating within a two-year period.	**Dropped** Trigger attained but dropped as the rating became obsolete due to financial arrears.
Trigger 2: The Government has established the required profile for SENELEC Board members and determines the criteria for the appointment of directors that are not shareholders to SENELEC's Board and the Government has appointed a new SENELEC Board based on the new rules.	**Prior Action 1:** To further strengthen SENELEC's governance, the Recipient has established, for SENELEC's independent Board members, their profiles, reflecting competences in private sector management and auditing, as well as the procedures for their selection and appointment. **Completed**
Trigger 3: For greater operational efficiency, the Government has streamlined procurement procedures related to SENELEC's operation and maintenance investments.	**Dropped** SENELEC and the Procurement Regulatory Agency could not reach an agreement.
Sector financial arrangements	

Trigger 4: In order to sustainably resolve the sector issues on cross debt and financial arrears: (i) the Government and SENELEC have signed an addendum to their November 2016 cross-debt clearance agreement, offsetting the backlog of SENELEC's VAT credits against the balance of the cross-debt clearance agreement; (ii) the Government and SENELEC have signed an addendum to their November 2016 cross-debt clearance agreement to settle the remaining cross-debt and arrears related to the period March 2016 to February 2017; (iii) the Minister of Finance has allocated CFAF 10 billion for the payment of public lighting in the 2017 budget.	**Prior Action 2:** To further strengthen the financial viability of SENELEC, the Recipient: (i) through its MEFP has agreed to settle its arrears to SENELEC in terms of tariff compensation and electricity bills for fiscal years 2017 and 2018 through additional funding for tariffs compensation in its 2018 budget, and the issuance of a promissory note dated October 22, 2018 to SENELEC for the remaining amount of arrears which first repayment instalment has been included in the 2019 Draft Budget Law submitted to Parliament; (ii) has made the payment of EPAFs' electricity expenditures to the service providers mandatory, and (iii) has streamlined the processing of SENELEC's VAT refund applications. **Completed**
Policy Area I.2: Removing barriers to investment and competition in the energy sector	
Electricity generation expansion	
Trigger 5: To ensure transparent implementation of the Government's Energy Master Plan, the Minister of Energy has issued a decision mandating SENELEC to publish key terms of the legal agreements of any generation project, including PPAs, MoUs and any related contract modifications, for which an exception to competitive procurement (as per laws 2010–21 and 2002-01 or the country Procurement Code) is obtained.	**Achieved, but replaced by new PA for greater relevance:** **Prior Action 3:** To accelerate the diversification of the Recipient's energy mix towards less expensive and cleaner technologies, the Recipient's Council of Ministers has approved and published, a national strategy describing the key features of its institutional and legal framework for midstream and downstream gas subsectors.
Policy Area I.3: Facilitating equitable access to electricity	
Affordability and availability of rural electricity	
Trigger 6: The Government has awarded the remaining 4 rural concessions and made available the associated funding.	**Dropped**: Award of the rural concessions was delayed.
Trigger 7: The Government has provided resources from the 2017 budget to fund the lowering of rural concessionaire electricity tariffs for 2017.	**Dropped** Negotiations with concessionaires on the modalities of harmonization not completed yet.

4.2.2 Pillar 2: ICT Sector

Main Issues and Government Priorities

63. Access to Internet broadband services remains limited and unequal, despite Senegal's well-developed fiber infrastructure. Senegal has a bandwidth of 23 Gigabytes/second (Gb/s) through its three submarine cables and its satellite connections, and its telecom infrastructure ranks among the most developed in West Africa. However, the percentage of people using the Internet in 2016 was estimated at only 27 percent in Senegal (up from 22 percent in 2015), against 35 percent in Ghana, 48 percent in Cape Verde, and 58 in Morocco (International Telecommunication Union, ITU, 2017). While the use of mobile cellular is very high, broadband use is still underdeveloped, as only 7 percent of population has

access to fixed broadband and 19 percent to mobile broadband (ITU, 2016). Moreover, the country is still facing a persistent digital divide between rural and urban areas as well as between main and secondary cities, and within cities, which is undermining the country's potential for transformation and growth.

64. An outdated governance and regulatory environment, coordination failures, and the lack of consistent policy implementation result in poor sector outcomes. Senegal has transposed relevant Economic Community of West African States (ECOWAS) and WAEMU sector provisions into national law through the 2011 Telecommunications Code, amended belatedly in 2017[15]. However, in effect, the Government has never developed a set of implementation decrees for the 2011 Code, leaving the sector to operate under an incomplete legal framework. The situation is exacerbated by a multiplicity and an instability of decision centers, rendering the application of law and the sector oversight erratic, and by the ability of the historic operator to resist policy outcomes that limit its monopolist status. Overall, in a rapidly evolving environment, the lack of a modern regulatory framework, compounded by a difficult political economy context and vested interests, has prevented an effective reform implementation to boost sector competition and efficiency. As a result, the quality and coverage of services remain low, while costs continue to be persistently high.

- **Insufficient competition in the broadband market affects accessibility, affordability and quality of Internet services, while inhibiting private sector investment and innovation**. There are three main telecom operators in Senegal, of which one has a dominant position, accounting for 58 and 65 percent of the mobile telephony and mobile Internet markets by value respectively, owning the largest fiber optic network and being the only provider of fixed Internet and 4G services. The entry in 2017 of three new Internet access providers has boosted competition, but the situation remains fragile, due to existing restrictions on the provision of certain highly demanded services, such as VoIP (Voice over Internet Protocol) and IPTV (Internet Protocol TV) services, and a lack of regulation on dominant operators. The experience with 4G license allocation in Senegal also reflects uncompetitive practices and non-transparent sector regulation[16]. Largely as a result, mobile broadband services remain relatively expensive and of low quality[17], representing 12 percent of the average monthly revenue per capita versus 5 percent in Ghana and Morocco, 2 percent in Cape Verde, and 1 percent South Africa.
- **Senegal's large public fiber optic network is largely underused, despite significant potential demand.** The strategic network, under the responsibility of the State Informatics Agency (*Agence de l'Informatique de l'État - ADIE*), includes close to 4,000 kilometers of optical fiber deployed across the country, in urban and rural areas. ADIE lacks the technical and financial resources needed to manage and commercialize this network effectively. This strategic asset is thus severely underused creating a shortfall for government revenues and constraining telecom operators who are interested in renting access to the network. Due to the poor quality of the ADIE's network, the public administration is obliged to purchase services from telecom operators at higher prices.
- **The Senegalese Universal Service Fund (USF) for Telecommunications is severely mismanaged, inactive, and marked by opacity over its resources and activities.** As in other countries, USF is supposed to play a key role in democratizing access to digital services by financing digital

[15] Law # 2017-13 as of January 2017.
[16] In effect, in 2017, the regulator (ARTP) allocated only one 4G license to the dominant operator following direct bilateral negotiations, discouraging new entry.
[17] According to ITU, Internet bandwidth per user in Senegal stands at 5 compared to 12 on average in Africa.

infrastructure/services in underserved areas that are not profitable for the private sector. However, USF resources are limited, and in absence of annual audits there is limited transparency over their size and management. Similarly, there is no universal access strategy and USF is free of an obligation to prepare annual activity reports. In addition, USF's ability to implement universal access projects is constrained by insufficient technical capacity and weak governance structures, as the sector regulator Regulatory Authority of Telecommunications and Posts *(Autorité de Régulation des Télécommunications et des Postes – ARTP)* is de facto controlling the management of the USF without government coordination. In this context, no significant digital projects have been financed by the USF to date.

Reform Program Supported by the Operation and Expected Results

65. Under the first operation, the Government managed to achieve early reform gains and laid the foundations for a deeper transformation of the sector. Under DPF 1 the Government adopted a new sector strategy (*Stratégie Sénégal Numérique 2016-2025 – SSN 2025*), aligned with international best practices and focused on improving competition, access, and governance. SSN 2025 seeks to democratize access to Internet through enhanced competition permitted by the entry of new players and by the reinforced regulation of essential infrastructure owned by dominant players. Main priorities of SSN 2025 include the adoption of a new law on electronic communications and the creation of the National Consultative Council (*Conseil National du Numérique - CNN)*. The Government has also amended the 2011 Telecom Code and adopted key decrees to increase competition in retail Internet service provision and to strengthen infrastructure sharing.

66. Under this second operation, the Government is profoundly reshaping the legal and regulatory framework, marking a turning point for the sector. The operation supports the adoption by the Government of a new sector Law on electronic communications and of key implementation decrees and the concomitant creation of the CNN, an umbrella high-level consultative structure for the ICT sector. Under the DPF 2, the Government fully operationalizes the authorization regime for ISPs and wholesale infrastructure operators, introduced under DPF 1, as well as put in place the institutional arrangement to negotiate with existing licensed operators the insertion of 4G services and frequencies under their current licenses. This measure will accelerate introduction of more competition in the monopolistic 4G market segment. In addition, the regulator crucially extends and strengthens the obligations on dominant players through the adoption of two strategic regulation decisions. Finally, the Government has taken steps to support access to broadband services in under-served areas mainly by selecting a concession arrangement for leveraging the excess capacity of the ADIE public infrastructure network, which covers (but doesn't operate in) underserved areas.

67. The fragmented and complex institutional governance fabric of the sector as well as strong vested interests have necessitated significant consultations and negotiations efforts to advance the reforms. Progress to implement reforms in the second phase of the program slowed down due to the following factors: (i) weak coordination and unequal capacity between ARTP, ADIE and the Ministry of Communication, Telecommunications, Posts and Digital Economy (*Ministère de la Communication, des Télécommunications, des Postes et de l'Economie numérique - MCTPEN*), all of which have different reporting lines; (ii) a complex political economy environment with strong and diverse vested interests. In this context, key processing steps and decisions took more time than anticipated. However, strong

presidential support and the implication of MEFP helped overcome those challenges.

Expected Prior Actions by Policy Areas

68. The reform program implemented by the Government is robustly in line with what was anticipated under DPF 1. All but one of the reform triggers have been achieved. One has been partially achieved. The part not yet achieve has been pushed back to the last phase of the program (i.e. **DPF 3 Trigger #8**). A new policy area has been introduced and is related to the Government's objective to better exploit the Hertzian spectrum, by allocating more 4G licenses and reducing the cost of the spectrum, which is significantly higher in Senegal compared to most other countries.

Table 7. Key Results Indicators for ICT under DPF 1

Indicator	Baseline	Original Target (2019)	Revised Target (2021)	Actual (latest)
Ranking of Senegal with respect to the A 1.02 sub-index of the Networked Readiness Index	81	72	65	73
Internet penetration rate (%)	60	70	75	66
Number of facility-based Internet providers	1	6	6	3
% of rural households reporting access to Internet	23	40	30	17

Source: DPF Implementation Status and Results Report.

4.2.2.1 Improving Governance of ICT Sector

Sector Legal, Policy and Institutional Framework

69. Under DPF 2, the Government implemented profound reforms of the regulatory framework, including the Cabinet's approval for submission to the Parliament of a new Electronic Communications Code in line with the National Digital Senegal Strategy. In accordance with the principles of SSN 2025, the Cabinet approved and sent to the Parliament a draft bill on telecommunications that will deeply change the governance and financing structure of the sector, accelerating competition and improving the efficiency of universal access public policy and programs (**DPF 2 Prior Action #4**). Concurrently, the Government internally approved Decrees needed to implement the new law on critical aspects related to competition, sector regulation, and universal access policy. The Government also issued a decree on the creation of CNN hosted under the Prime minister's Office and composed of 20 voluntary members, most of whom from the private sector.

Expected Results under this Policy Area

70. The measures taken under this policy area aim to improve the quality of the legal and regulatory environment for broadband Internet provision. Such improvement will be measured by the ranking of Senegal in the Network Readiness Index of the World Economic Forum (WEF).

Prior Actions & Triggers – ICT Policy Area I

Prior Action 4: To strengthen the ICT's overall legal and institutional framework, the Recipient: (i) has submitted to the National Assembly the Draft Electronic communications Act in line with the *Sénégal Numérique* 2025 Strategy; and (ii) has established the *Conseil National du Numérique*.

Trigger 7. To enhance the operational efficiency in the sector, the Cabinet has adopted a legal and regulatory framework to promote inter-sectoral coordination for civil works related to telecom infrastructure projects.

4.2.2.2 Removing Barriers to Investment and Competition in the Internet Broadband Market

Overcoming Barriers to Entry for New Internet Service Providers and Wholesale Infrastructure Operators

71. The measures taken under this policy area allow to fully operationalize a leaner regulatory regime of "authorization" introduced under DPF 1, aimed at facilitating the market entry of new Internet providers and wholesale operators. Following the entry of three ISPs, under DPF 1, the Regulator will publish on its website, with MCTPEN's approval, a standard model and guidelines (i.e. *cahier des charges)* for granting of additional ISP authorizations (**DPF 2 Prior Action #6**). The regulator has finalized the drafting of the standard model, which has been approved by the Ministry who authorized its publication. The standard model contains no unjustified restrictions on Internet service provision and geographic coverage. In parallel, and as part of the same prior action, the program supports measures promoting market entry by wholesale telecom infrastructure operators. Following the Decree specifying the rules for granting authorizations to wholesale telecom infrastructure operators under DPF 1, ARTP will publish on its website, with Ministry's approval, a standard model and guidelines to process the granting of this authorization **(DPF 2 Prior Action #6)**. The regulator has finalized the drafting of the standard model, which has been approved by the Ministry who authorized its publication. The standard model contains no unjustified restrictions on wholesale service provision and geographic coverage. In terms of impacts, publication of the two standard models will attract new private players by bringing transparency and trust and by ensuring a level playing field between actors. This is expected to boost further Internet competition and coverage, while bringing down the cost of services provision.

Opening the Existing Infrastructure to Competitive Use

72. After repeated delays, the anticipated DPF action on facilitating essential infrastructure sharing between dominant and non-dominant telecom players has recently been achieved and will be completed under the proposed program. Under DPF 1, the Government adopted a decree on infrastructure-sharing. Implementation of this decree now requires three regulation decisions to be published by the regulator. DPF 2 supports the regulator in preparing these decisions that aim at imposing specific obligations on dominant players to provide (to non-dominant players) open and non-discriminatory access to their essential infrastructure. Significant delays (mainly due to the national procurement process) in conducting the market analysis that provides key underlying parameters for these regulation decisions were registered, but the study is now completed, and its recommendations are ambitious, aggressive towards the dominancy of the incumbent operator and aligned on international best practices. This study has been approved by the Regulator's management (both at the CEO and

Council level) and successfully presented to operators (in presence of WB) on September 27, 2018. Out of the three regulation decisions, two (i.e. list of relevant markets and list of dominant operators on those markets) have been adopted and published on October 17, 2018 **(DPF 2 Prior Action #5)**. The third one (approbation of the dominant operators' service catalogs) is expected to be adopted by end of November 2018 since the existing sector legislation imposes to the regulator adoption of these three decisions before end of calendar year 2018. Due to time constraints and by precaution, the adoption of the third regulation decision will be made under **DPF3 (Trigger #8).** Opening the access to dominant players' essential infrastructure for new and existing non-dominant operators will promote competition and decrease non-dominant operators' costs, due to efficiency gains in infrastructure usage.

Promoting 4G Services and Optimizing Spectrum Management

73. DPF 2 also supports a more proactive policy stance by the Government to end the existing monopoly in 4G services. Since 2017, one operator has had a de facto monopoly in the 4G market[18], following direct negotiations with the Government to obtain the authorization to deploy 4G mobile services. In 2018, the Government has decided to proactively seek to attribute additional 4G frequencies to interested licensed operators, with the aim of introducing competition in this important segment. Under DPF 2, the Government has requested the regulator, in June 2018, to establish a joint commission (composed of Ministry of Finances and Ministry of Telecom) mandated to negotiate with interested licensed operators the technical and financial conditions for allocating additional 4G frequencies (DPF2 Prior Action #7). Allocating 4G frequencies to an existing licensed operator requires updating the dispositions of the current license documentation (*convention de concession and cahier des charges*) to include 4G services, which are then approved by decree and made public. Following the establishment of the commission, the Government has effectively engaged a negotiation with interested operators in October 2018 through the submission of an updated *Convention* and *Cahier des charges* allowing for a level playing field competition in the 4G market.

74. As part of DPF 3 and given the extensive spectrum needs for providing high quality 3G and 4G services, the Government will review the amount of frequency fees to be paid by operators, based on a market study, which is expected to lead to a reduction of the relatively high current fees in Senegal. This will allow to optimize spectrum management through a higher frequency usage rate (improving operators' quality of services) and will increase spectrum revenues for the Government.

Expected Results under this Policy Area

75. The regulatory and legal measures taken under this policy area are expected to lead to an expansion of overall broadband Internet access. The indicators to measure progress include a larger number of facility-based ISPs and wholesale infrastructure operators providing services in Senegal, leading to an increase in the Internet penetration rate.

[18] The terms of the operator's license, including 4G services are publicly available at *http://www.jo.gouv.sn/spip.php?article10896*

Prior Actions & Triggers - ICT Policy Area II

Prior Action 5: To strengthen competition in the ICT market, the ARTP has adopted: (i) a decision listing the relevant markets for market dominance in the ICT sector; and (ii) a decision listing the dominant operators and their respective obligations in the relevant markets.

Prior Action 6: To strengthen the competition in the broadband market, the ARTP has published on its website, the standard model and guidelines to be used for: (i) granting of internet service providers authorizations which contain only limited and reasonable restrictions to internet service provision and geographic coverage; and (ii) granting of authorizations to wholesale telecom infrastructure operators.

Prior Action 7: To strengthen the competition in the 4G market, the Recipient, through its MPTEN, has established a Committee to engage in negotiations with interested mobile operators for the provisions of 4G telecom services.

Trigger 8: To further strengthen the sector's regulatory framework, based on the updated market study, the Regulator, ARTP, has approved the supply service catalogs of the dominant players operating in the relevant markets.

Trigger 9: To reduce the costs to operators on the use of frequencies, the Government has defined a new cost structure for the spectrum, based on a market study of its economic value.

4.2.2.3 Facilitating Equitable Access to ICT services

Leveraging the State-Owned Fiber Network

76. DPF 2 and DPF 3 support the adoption and implementation of a private sector concession model to manage the extra capacity of the large public fiber optic network, to facilitate wider provision of Internet services. Under DPF 2, the Government crystalized a consensus on using a concession model for the management of the ADIE public fiber optic network excess capacity. This was formalized in July 2018 through a joint order of the MCTPEN and MEFP that established an inter-ministerial committee to work out the details of the concession model. Although this measure was originally included as a trigger for DPF 2, given its process-oriented nature, it was dropped as a prior action under DPF2. The effective implementation of the concession model by signing of a concession contract with a private partner selected on a transparent and competitive basis is retained as an envisaged measure under **DPF 3 (Trigger #11)**. The new management model is coherent with the MFD approach and will improve the management of the public telecom infrastructure, allowing private operators to access the network in both urban and rural areas, thus avoiding duplication and saving costs. Having access to the ADIE network would allow private operators to direct their infrastructure investments to areas previously deemed insufficiently profitable.

Expected Results under this Policy Area

77. Expected results by the end of the series include an increase in the availability of ICT services in currently underserved areas and for underserved populations. More specifically, it is expected that

the digital divide gap between rural and urban areas (as measured by Gallup survey) will start decreasing.

Prior Actions & Triggers - ICT Policy Area III

Trigger 10: To further promote universal access to ICT services, the Government has implemented the decrees of the new Telecom Act related to the Universal Telecommunications Services and has adopted a fully-funded investment plan for universal access to ICT services.

Trigger 11: To promote access to ICT services, the Government has operationalized the concession model for the management of the excess capacity of state-owned digital network of ADIE, according to criteria of open access and competitive bidding.

78. Table 8 includes the set of original DPF 1 Triggers in the ICT sector and the proposed text for the DPF 2 Prior Actions in the ICT sector. An update on the implementation status of each Prior Action is detailed in Annex 1 that identifies advances to date in the Indicators defined under DPF 1 related to these PAs.

Table 8. Original Triggers and Proposed Prior Actions for the ICT Sector

Original Trigger (DPF 1)	**Proposed Prior Action (DPF 2)**
Policy Area II.1: Improving Governance of ICT Sector	
Sector legal, policy and institutional framework	
Trigger 8: Submission to Parliament of a new Telecom Act that reflects the principles of the National Strategy for the Digital Economy, *Sénégal Numérique 2025*, and approval of associated implementation decrees.	**Prior Action 4:** To strengthen the ICT's overall legal and institutional framework, the Recipient: (i) has submitted to the National Assembly the Draft Electronic communications Act in line with the *Sénégal Numérique 2025* Strategy; and (ii) has established the *Conseil National du Numérique.* **Completed**
Trigger 9: The Government has created the *Conseil National du Numérique* and appointed its members, and a first meeting of the said *Conseil* has taken place.	Included in PA4.
Policy Area II.2: Removing Barriers to Investment and Competition in the Internet Broadband Market	
Regulatory Framework for Internet Service Providers (ISPs) and IT Infrastructure Operators	
Trigger 10: The regulator, ARTP, has issued a standard model and guidelines to be used for the granting of ISP authorizations which contain only limited and reasonable restrictions to service provision and geographic coverage.	**Prior Action 6:** To strengthen the competition in the broadband market, the ARTP has published on its website, the standard model and guidelines to be used for: (i) granting of internet service providers authorizations which contain only limited and reasonable restrictions to internet service provision and geographic coverage; and (ii) granting of authorizations to wholesale telecom infrastructure operators. **Completed**
Trigger 11: The regulator, ARTP, has issued a standard model and guidelines to be used for the granting of authorizations to wholesale Telecom infrastructure operators.	Included in PA6.
	Prior Action 7: To strengthen the competition in the 4G market, the Recipient, through its MPTEN, has

	established a Committee to engage in negotiations with interested mobile operators for the provisions of 4G telecom services. **Completed**
Access to Essential Infrastructure and Interconnection	
Trigger 12: Publication of regulatory decisions by the Regulator, ARPT, to guide the technical and pricing interconnection offers of telecom operators with a significant influence on relevant telecom markets.	**Prior Action 5**: To strengthen competition in the ICT market, the ARTP has adopted: (i) a decision listing the relevant markets for market dominance in the ICT sector; and (ii) a decision listing the dominant operators and their respective obligations in the relevant markets. **Completed**
Policy Area II.3: Facilitating Equitable Access to ICT services	
Leveraging the State-Owned Fiber Network	
Trigger 13: In order to fully exploit the country-wide, state-owned digital network of ADIE, the Government has adopted a new management model, which meets criteria of economic and financial efficiency and national security.	**Achieved but Dropped** Trigger dropped due to its process-oriented nature.

4.2.3 Pillar 3: Digital Economy

Main Issues and Government Priorities

79. Senegal has identified DE as essential to the country's objective of accelerated, inclusive and sustainable growth. Increasing digitalization of economic activities and digital transformation of public services provide an opportunity to improve productivity and competitiveness across a wide range of sectors as well as to resolve some of its main investment climate weaknesses through the dematerialization of public procedures. The second PSE implementation plan (PAP2) therefore relies particularly heavily on DE[19] - the foundation on which the digital transition of the entire Senegalese society can be built. This long-term vision is specified within the framework of the Digital Senegal Strategy 2025, adopted under DPF 1, which identifies the prerequisites and priority axes based on the slogan "digital for all and for all uses in 2025 in Senegal with a dynamic and innovative private sector in a high-performance ecosystem". Regarding investment climate reforms, the Business Environment and Competitiveness Reform Program (PREAC) places the digitization of administrative services as the first order priority in its action plan.

80. The country is already witnessing the rise of a small, but vibrant digital economy, spanning private and public sectors. There is a private sector ecosystem for digital innovation, which is relatively

[19] *Digital Economy* encompasses the physical infrastructure that digital technologies are based on (broadband lines, routers, etc.), the devices that are used for access (computers, smartphones, etc.), the applications they power (Google, Salesforce, Uber, etc.), the functionality they provide (data analytics, cloud computing, Internet of Things, etc.) and a wide range of economic activities that are using these technologies (e-trade, e-finance, gaming, online services, etc.) (Dahlman and al. 2016, World Bank 2016, as quoted in 2018 Digital Country Private Sector Diagnostic Concept Note, World Bank and IFC 2018). Contingent on appropriate enabling and risk-mitigating policies, DE is poised to have significant impact on countries' growth prospects and productivity by allowing to i) exploit economies of scale and network effects, ii) raise productivity and iii) facilitate access to global value chains. It may also contribute to greater inclusion by lowering transaction costs and addressing information asymmetries associated with certain activities (for example access to finance) (Dahlman and al. 2016).

dynamic by regional standards, but remains fragile. Entrepreneurial activity rate is high with 39 percent of the population aged between 18 to 64 years either setting up or heading a new company[20]. In 2015, there were 63 startups for each 1 million inhabitants in Senegal (13th out of 107 classified countries) against 43 in France and 7 in India.[21] This number has been steadily increasing in the last two years. Start-ups are active in many fields, ranging from agriculture, health and education to fintech, commerce and marketing. The innovation ecosystem is also rapidly evolving, with around 15 co-working and incubating hubs serving the needs of a community of over 2500 startups and digital entrepreneurs in Senegal. The Government has also already launched several e-government initiatives, which are starting to make a difference. For example, Senegal is a pioneer in the region when it comes to digital identification systems. The biometric ID card compliant with the standards of the ECOWAS covers about 70 percent of the population.

81. Despite this incipient progress, DE in Senegal remains embryonic and its further development is inhibited by several critical constraints. Following the Digital Economy for Africa[22] (DE4A) analytical framework, which identifies the foundational elements of a successful and inclusive digital economy, Senegal faces challenges along all of its five dimensions:

- ***Digital infrastructure:*** The cost of energy and ICT, in particular broadband Internet, remains elevated, access constrained, and the quality of services weak. These fundamental issues are addressed under the first two pillars of the program supported by the DPF series.
- ***E-Government:*** **The development of public platforms is hampered by a complex institutional and governance architecture with ample coordination failures and weak strategic oversight**. At the institutional level, the sector is currently characterized by a complex governance fabric, in which the multiplicity and instability of decision centers, as well as the lack of clarity over roles and responsibilities of various institutions, result in initiatives that lack strategic steering. The e-government initiatives are still patchy and often disjointed. For example, despite the existence of the biometric ID database with the unique identifying number, many other personal databases are created by various public administrations with different identifiers (taxpayers, health insurance, family stock market register, etc.), although often bridges exist with the identifier of the e-ID card. In addition, several key public digital systems are still missing. As of now, a public key infrastructure (PKI)[23] is underdeveloped, while the institutional framework to manage this system as well as key regulations do not exist. Personal data protection regulations are limited and regulations applying to on-line-sales are not harmonized and differ widely across sellers.

[20] Global Entrepreneurship Monitor, 2015.
[21] Cunchbase, 2015.
[22] The five foundational elements of the Digital Economy for Africa (DE4A) analytical framework include: (a) digital infrastructure to connect the unconnected; (b) enabling e-government shared platforms (digital identification, cloud, etc.); (c) transaction and payment accounts to facilitate digital financial services; (d) digital entrepreneurship ecosystem; and (e) technical and social skills.
[23] A public key infrastructure (PKI) is a set of roles, policies, and procedures needed to create, manage, distribute, use, store, and revoke digital certificates and manage public-key encryption. The purpose of a PKI is to facilitate the secure electronic transfer of information for a range of network activities such as e-commerce, internet banking and confidential email. It is required for activities where simple passwords are an inadequate authentication method and more rigorous proof is required to confirm the identity of the parties involved in the communication and to validate the information being transferred. As such, it is a major building block an internet economy.

Therefore, public trust is limited for on-line transactions, which is hampering the development of e-commerce.

- ***Digital Entrepreneurship:*** **Start-ups in the digital world are not yet supported at the regulatory and eco-system level.** Indeed, most economies with environments conducive to the development of startups (such as the USA, the EU, Israel or Tunisia) have policies and regulations specific to startups, often under the form of a "Startup Act". The lack of a regulatory framework in this area in Senegal leaves several pressing issues, such as taxation and access to public procurement, unaddressed. At the eco-system level, the assistance provided by incubators or accelerators is often insufficient and unsustainable, while funding options are still missing (business angels) or limited (venture capital) translating into startups low survival rate. Only US$10.7 million have been mobilized by Senegalese startups in 2017, against US$147 million in Kenya (i.e. 14 times more for a population that is only 3 times larger) and US$247 million in Malaysia (i.e. 23 times more for a population that is only twice its size)[24]. Overall, the Government does not act as an anchor client for entrepreneurs, due to the limited use of government e-payments and the lack of access of startups to public procurement.
- ***Digital Finance:*** **Despite significant advancements, access to finance in general, and digital finance in particular, remains limited**. The gaps are significant: 53 percent of small and medium enterprises (SMEs) do not have an account in a formal financial institution, 80 percent of firms don't use banks to finance their investment and 95 percent of financial institutions neither offer nor issue digital credit. The economy remains strongly dominated by cash, despite increased holdings of mobile money accounts or electronic wallets; and the use of digital payments remains very low at 10 percent of the population. In the context of missing fintech and agent banking regulation, these challenges impose serious additional constraints on start-ups and DE in general. However, as most of these issues are regulated at the regional level by the BCEAO, they remain out of the scope of this DPF.
- ***Digital Skills:*** **The rise of a dynamic digital economy in Senegal is further hindered by a lack of qualified, competent and sufficient human resources, as well as by a low level of general digital literacy among the population**. Only 7.4 percent of the population is enrolled in tertiary education, while the Government spends only 0.54 percent of its budget on research and development initiatives. This helps to explain why SMEs and companies operating in the digital sector have difficulty to recruit talent, while foreign investors wishing to develop off-shore activities do not find diversified skills. Moreover, the public administration does not have the required ICT-skilled human resources in ministries to efficiently carry forward the country's digital transformation ambition. On the demand side, digital literacy presents a major constraint.

[24] Partech Ventures, 2018.

Reform Program Supported by the Operation and Expected Results

82. In addition to resolving core challenges in the upstream provision of digital infrastructure in Pillars 1 and 2, this DPF series supports the Government in addressing foundational weaknesses related to the DE governance, e-Government initiatives, as well as the private sector digital entrepreneurship ecosystem. In line with Government priorities, the proposed series supports critical policy and institutional actions under the following areas:

a. Enhancing the institutional and legal framework for the digital economy;
b. Strengthening the roll out of e-Government solutions to speed up the adoption and use of online and mobile filing and payment solutions;
c. Strengthening the startup ecosystem by addressing key regulatory and policy constraints.

4.2.3.1. Enhancing DE Institutional and Legal Framework

83. Persistent issues related to the governance of the digital economy in Senegal pose a fundamental challenge of cross-sectoral coordination. By nature, DE issues are cross-cutting and hence involve multiple institutional actors. Nominally, the MCTPEN is responsible for supporting DE development in Senegal. However, due to insufficient technical capacity, limited financial resources and relatively weak political capital, this Ministry faces significant difficulties in implementing effective sector coordination and in providing strategic leadership within the Government. The State Informatics Agency, ADIE, which has the technical mandate for e-government, is linked to another ministry - the Ministry of Investment Promotion, Partnerships and Development of Teleservices of the State (*Ministère de la Promotion des Investissements, des Partenariats et du Développement des Téléservices de l'Etat* - MPIPDTE). In addition, the Ministry of Higher Education and Innovation is responsible for the digital skills agenda. The Commission for the Protection of Personal Data (CDP) is yet another Independent Administrative Authority, attached directly to the Presidency, without representation of the MCTPEN. Finally, the Delegation for Rapid Entrepreneurship (*Délégation Générale à l'Entrepreneuriat Rapide - DER*), anchored under the Presidency, is responsible for supporting the entrepreneurship ecosystem, along with the Ministry of Commerce, Informal Sector, Consumption, Promotion of Local Products and SMEs (*Ministère du Commerce, du Secteur Informel, de la Consommation, de la Promotion des produits locaux et des PME - MCSICPP*). Moreover, large departments in various line ministries have strong internal capacity and budgets to develop their own digital projects. The interface with the private sector and civil society is also limited and ad hoc.

Reform Agenda

84. The Government is aware of these challenges and is working on reformulating the framework for inter-ministerial steering and coordination in the DE domain in the next phase of the program. Some potential operational models relevant to the Senegalese context include the following:

- *Steering anchored in a strong Ministry of Telecom (Rwanda model)* would require technically and financially strong Ministry that has an appropriate political weight in policy elaboration within the Government. It is not clear whether this option can be easily implemented;
- *Steering anchored in the Presidency or the Prime Minister's office (Côte d'Ivoire model)* would require these central Executive institutions to have an administration technically capable to monitor and act, if needed, in the sector;

- *Steering by a new Inter-ministerial entity, such as Permanent Secretariat or Permanent Commission* would require the creation of a new body, whose authority remains to be clarified;
- *A hybrid model* that combines the advantages of the above approached, such as a Permanent Secretariat anchored in the Prime Minister's office, but administratively based in MCTPEN.

85. Moreover, the Government is considering further consolidation of various agencies. Under the new Telecom law, ARTP, while remaining an autonomous entity, will be linked to MCTPEN, while ADIE might also change its reporting line to MCTPEN in the future, as the Government is in the process of reviewing various options for its more efficient management.

86. At the operational level, the need for better security and interoperability of public databases, including e-ID, requires better mechanisms for coordination and regulation. Today many of the public databases are kept on internal servers of responsible institutions and are not centralized in a safe public datacenter. Also, the connections between various databases are mostly ad-hoc, and there is no clear organizational architecture to ensure that they are kept up to date, e.g. between the Civil Registry and the e-ID databases. Moreover, interoperability rules are largely impromptu, limiting the ability to leverage the potential of existing databases. To address these issues, the Government is exploring ways to create regulatory and institutional mechanisms to update and securely operate its public databases.

87. Under DPF 3 (DPF 3 Trigger #12), the Government will take the legal, institutional and organizational measures to fix the sector strategic steering and coordination architecture at both the strategic and operational level.

Expected Results

88. The measures taken under this policy area aim to improve the quality of institutional and regulatory environment for digital economy. Such improvement will be measured by the following indicator:

- Number of decisions made by the inter-ministerial steering committee, regarding key issues of collective interest, such as civil registry, e-identity, cybersecurity, e-commerce, among others.

Prior Actions & Triggers – DIGITAL ECONOMY Policy Area I

Trigger 12: Establishment of an institutional framework for strategic management and coordination of the digital economy through: (i) the adoption of an inter-ministerial steering and coordination framework; (ii) the alignment of the institutional positioning of agencies to the adopted institutional framework; (iii) establishment of a steering committee for the regulation and interoperability of public data, including civil registry and e-identity, and cybersecurity.

4.2.3.2. Strengthening the Roll-out of e-Government Solutions

Reform Agenda

89. Through e-government solutions, State actors play an anchoring role in bringing digital innovations to scale and in demonstrating how digital technologies can resolve long-standing issues, such as reducing administrative burden. In this context, paying taxes constitutes one of the key investment climate constraints in Senegal, and one of the Government's top business environment reform priorities. While Senegal has made much progress in investment climate reforms[25] in the last few years, it has been lagging behind, especially with regards to paying taxes, where the country ranks 178/190 in the 2018 Doing Business Report[26]. Challenges related to the ability of making and receiving electronic payments constitute one of the key weaknesses of the current system. This applies not only to tax administration, but to other government services, such as customs. Recognizing this problem, MEFP is investing in modernizing its information systems with the objective of allowing for both inbound and outbound e-payments.

90. Under DPF 2, the Government is extending the benefits of online declaration and payment options to a larger number of taxpayers for both tax and customs duties. The Tax Department (*Direction Générale des Impôts et des Domaines - DGID*) has extended the coverage of the e-tax module to all firms with turnover over FCFA 100 million **(DPF 2 Prior Action #8)**. In 2019, the DGID is planning to provide a tailor-made mobile solution ("m-tax") for micro and small enterprises operating under the informal sector simplified tax regime. The starting point of the m-tax solution is allowing online interactions between taxpayers and administrations and managing online accounts specific to taxpayers. For the customs, the Government has issued the implementation decree of Art 140 of the Customs Code that provides for the mandatory electronic payment of customs duties and fees **(DPF 2 Prior Action #8)** for all transactions above FCFA 50 million. While the threshold may seem relatively high, it is important to note that this initial measure concerns about 13 percent of all customs payments, which account for about 64 percent of customs revenues[27]. It constitutes a first step towards mainstreaming e-payment of customs duties, gradually rolling out cash- and cheque-based transactions.

91. The Government is also working to better integrate tax and customs databases to improve compliance and use algorithms to improve the risk-based selection of tax audits. With regards to the availability of customs information for the DGID's oversight services, technical developments in the "Tandem" platform have progressed, but there is a need to invest in the underlying infrastructure and to expand the sources of integrated information in the common data center. In the medium term, the program aims to fully implement the selection of tax audits based on a transparent and automated risk analysis **(DPF 3 Trigger #13)**. The Government plans to start scaling up the system in 2019.

92. Under DPF 2 (Prior Action #9), the regulatory framework governing digital payments involving the public administration has been updated to allow for the State to leverage a broad range of innovative payment services. The existing framework limited the State's capacity to play an anchoring role in the development of digital payment services and to offer payment solutions that are inclusive and adapted to business and citizen's needs. The existing regulatory framework was piecemeal, applying to only a few selected administrations such as the DGID individually. There was no harmonized framework that sets common rules applying across the range of public administration. In addition, the rules

[25] Senegal counted among the Global Top 10 Reformers in Doing Business in 2015.
[26] This is corroborated by tax administration being respectively the 3rd and 4th most important constraints to doing business according to the WEF's Global Competitiveness Report (2017) and the WB's Enterprise Survey (2014).
[27] World Bank Staff estimates, based on Customs data.

governing digital payments covered only bank wires as digital payment, keeping payments by cards, mobile money or through aggregators and other innovative approaches out of their scope. Finally, the existing rules focused on government revenues, or inbound payments made by citizens and enterprises to the State. They do not encompass outbound payments made by the State citizens or enterprises. In order for the State to play a pro-active role in supporting the development and innovation in digital financial services – as an anchor user with the need to process high numbers of transactions on a regular basis – a new harmonized regulation on government e-transactions has been issued **(DPF 2, Prior Action #9)**, which achieves the following:

- Updating the regulation to include a broader range of digital payment services that can be used in transacting with the public administration;
- Broadening the range of public administrations able to use digital payment services;
- Broadening the scope of the regulation to cover both inbound and outbound payments (ie. revenues and payments of the State);
- Finally, ensuring that the new regulatory framework fosters competition in the provision of digital payment services, as well as interoperability of services, data security and protection of personal data.

Expected Results

93. Expanding the use of digital payment services (or e-payment) for the public administration is expected to generate substantial benefits to the economy. First, it will strengthen financial inclusion, in a country where the degree of bankarization remains low. Digital payments allow for the unbanked population to execute financial transactions without facing the barriers and costs linked to opening a bank account. They also reduce transaction costs, and the inherent risks associated with cash-based transactions. Developing e-payments will also spur the growth of the digital economy, for example e-commerce, which is highly dependent on e-payments to transacts with its market. It is also expected to have an impact on formalization, as it will reduce compliance costs to deal with taxes, customs and other formalities, but will require to transact with the State in transparent fashion that leaves a digital record, thus reducing the scope for informal practices. Finally, it is also expected to have an impact on domestic revenue mobilization[28], as it enables taxpayers to perform both filing and payment obligations digitally.

94. Expected results by the end of the series include increased tax base, improved transparency and reduced compliance costs and obstacles to formalization. The roll out of e-tax and m-tax solutions will also reduce the number of physical interaction between taxpayers and the DGID. These results will be measured by the following indicators:

- An increase by at least 10 percent of the number of MSME taxpayers registered with the DGID from 88,010 (baseline in 2018) to 96,811 (target by 2021).
- A reduction in the number of tax payments, as measured by the Doing Business Paying Taxes indicator, dropping from 58 (baseline in 2018) to an expected 40 (target by 2021).

[28] See for example: IMF Fiscal Monitor, 2018: "Simulation analysis indicates that reducing the distance to the digitalization frontier by 50 percent could raise the median VAT revenue by 1.7 percent of GDP for low-income developing countries".

Prior Actions & Triggers - DIGITAL ECONOMY Policy Area II

Prior Action 8: To generalize online tax and customs payments, the MEFP has: (a) reduced the mandatory threshold for the use of electronic filing from FCFA 500 million to FCFA 100 million of annual turnover to ensure coverage of all medium-sized companies in the e-tax platform in 2019; and (b) established the threshold of FCFA 50 million for the mandatory online payment of customs duties and fees.

Prior Action 9: To harmonize and expand the use of digital payment options, the MEFP has: (i) updated and consolidated the rules governing digital payments received by the Recipient's Treasury, Customs and Tax administrations; (ii) expanded the range of payment options to include mobile money, payment by cards, as well as payment service aggregators, among others; and (iii) established an open selection process for providers of digital payment services and defined the modalities for interoperability, data security, and protection of personal data applying to such services.

Trigger 13: To reduce compliance costs for small and large taxpayers and, the tax administration (DGID) has: (i) operationalized an MSME mobile tax declaration and payment system ("m-tax"), achieving a coverage of at least 10% of eligible individuals and MSMEs; (ii) implemented: a transparent risk-based audit case selection system (which encompasses at least 50% of all tax audit planned), and an automatic monitoring of audit performance.

4.2.3.3. *Strengthening the Start-up Ecosystem*

95. While one of the most dynamic in francophone West Africa, the Senegalese entrepreneurship ecosystem[29] is still nascent, and in need of more structure and scale. This series seeks to strengthen some of the core foundational elements of this ecosystem by improving (i) the legal and regulatory environment applicable to startup companies; (ii) startups' access to markets, particularly the market for innovation in government services (or GovTech market); and (iii) the quality and availability of support to startups, in the form of incubation and acceleration services.

Legal and Institutional Environment for Start-ups

96. The Government recognizes that start-ups face unique challenges that require specific legal and regulatory attention. While this field remains relatively new, good international practices suggest that a dedicated legal and regulatory framework tailored to the needs and challenges of start-ups, including digital entrepreneurs, plays a fundamental role in stimulating the digital economy. Countries as diverse as France, India, Tunisia, the United States, Israel, Italy or Brazil have all adopted, if not specific legislation, then at least dedicated programs and institutions to support the development of startups[30]. Recognizing these challenges, the Government has launched several initiatives, including the establishment of a special Fund for entrepreneurship and digital promotion (with the annual budget of

[29] The entrepreneurship ecosystem is constituted by a set of interconnected entrepreneurial actors, entrepreneurial organizations, institutions, and processes that formally and informally coalesce to connect, mediate, and govern the performance within the local entrepreneurial environment. It constitutes one of the foundational pillars of a dynamic digital economy, allowing for ideas and innovation to materialize into startups, who mature into businesses through their various stages of growth.

[30] Peter Cook. Report on Start-Up Acts International Benchmarking *(forthcoming).*

CFAF 1 billion, or around US$1.8 million) under the DER. Seizing the momentum and capitalizing on support from relevant public institutions, key ecosystem players, including startups, hubs and investors, have recently launched a Policy Hackathon[31] to produce a Senegal Start-Up Act. The draft of the Act was submitted to the authorities in September 2018. DER, MCPTEN, MEFP, DGID and MESRI have now formed a task force to assess its feasibility and identify appropriate vehicles to integrate proposed actions into existing legal and regulatory framework **(DPF 3 Trigger #14)**.

97. Another important measure taken jointly by the Government, private sector and development partners has been the establishment of the first ICT incubator in francophone SSA, which, despite its initial successes, has been recently losing dynamism. This digital incubator, CTIC (Center for Technology, Innovation and Competition), established in Dakar in April 2011[32], serves as an office space and testing laboratory for resident companies as well as provides training programs and sub-regional business development programs for startups interested in entering international markets. Since its establishment, it has trained over 1,300 entrepreneurs, supported over 64 companies that have a cumulated turnover of US$5 million and 34 percent average annual revenue growth. Despite its successes, however, CTIC has been losing traction over the past years largely due to its insufficiently inclusive and non-transparent governance structure. Its Board of Directors comprising 10-15 institutions, such as Organization of Professionals in the Information Technology and Communication Sector (*Organisation des Professionnels des Technologies de l'Information et des Communications* – OPTIC), ARTP, MCTPEN, ADIE, and (*Société Nationale des Télécommunications – SONATEL*), is biased towards the public sector, without representation from startups themselves. A leaner and more representative leadership structure, balanced between public and private sectors, could help CTIC regain agility and become more responsive to changes and new developments in such a quickly evolving sector.

Market for Innovation in Government Services (GovTech)

98. Due to a small market size, limiting the demand for start-ups' solutions, as well as insufficient financing options to sustain them outside the protected incubators' environment, Government action to more proactively open up public procurement systems is warranted to make the start-up ecosystem more resilient. Senegalese startups lack financing options tailored to their specific circumstances, being burdened by high initial investments and protracted development periods to break even. Even though a handful of capital-risk investment funds have recently started emerging in Senegal, none of them is yet able to finance a significant number of startups at the seed stage due to inadequate incentives to attract them to this type of very risky tickets, such as management fee subsidies or subscription to the capital. For their part, international funds, such as Partech Ventures and Orange Digital Ventures, start investing

[31] Policy Hackathon inspired by software specialists' proven collaborative problem-solving methodologies aims to bring together a group of relevant actors and policy practitioners for a sustained period of time in order to make progress on a certain issue. The core creation phase of the Senegal Start-up Policy Hackathon took place in July 2018 in Dakar, when 50 participants produced a draft legislation that was subsequently open for online comments on a dedicated platform (*www.senstartupact.com*) and through a dedicated Facebook bot. This online consultation engaged close to 500 entrepreneurs, submitting over 100 comments on the draft. It was then consolidated and submitted to the authorities for review early September 2018.

[32] CTIC was established under the joint leadership of the Government, represented by MCTPEN and ADIE, private sector represented by OPTIC and SONATEL (Orange), and development partners, such as WBG (both IDA and IFC) and GIZ.

in more mature, series A level[33], companies and are more focused on more mature African markets, such as South Africa, Kenya and Nigeria that have already registered solid progress in digital technologies. In the absence of alternative financing mechanisms that can provide the capital required by nascent companies to take-off, more proactive public intervention is necessary[34].

99. One effective approach of engaging with startups are adjusting public procurement regulations or letting them develop solutions to specific public services challenges through business reverse pitches or hackathons. The 2011 UNCITRAL Model Law on Public Procurement provides for new procurement procedures aimed at facilitating dialogue between procuring entities and suppliers with a view to procuring innovative products. The 2014 EU public procurement directives make extensive provision for procuring innovation, and the EU has built an online platform to facilitate this method of procurement (www.innovation-procurement.org). To develop the market for competitive and innovative start-ups, the Government of Senegal plans to adopt an inter-ministerial decree that requests key ministries to hold annual Business Reverse Pitches or Hackathons, aimed at leveraging digital solutions to improve service delivery **(DPF 3 Trigger #14).** This measure builds on prior experience in partnering with the private sector through Business Reverse Pitches (2016 and 2018) and a number of hackathons held by various departments (most recently, DGID in 2016).

Expected Results

100. The measures taken under this policy area aim to strengthen the startup ecosystem by mainstreaming innovative approaches for Government agencies to engage with startups, providing them with an enabling regulatory environment and boosting available support services. The main expected result by the end of the series include a more resilient and independent start-up ecosystem and can be measured by the following indicator:

- Improvement in Senegal's "Institutional Score" of the Global Entrepreneurship Index (GEI) from 35 percent (baseline in 2018) to 45 percent (target by 2021).

Other indicators for potential tracking include the following: (a) number and value of contracts obtained by startups through "public procurement for innovation"; (b) number of companies incubated at CTIC Dakar, and ability to graduate.

[33] Series A is the name given to the first substantial financing of a company raised through capital-risk, after shares are issued to company's founders, employers, friends, family and business angels. A typical series A is about US $1 to 10 million and corresponds to the purchase of 10 percent to 30 percent of the company.
[34] Wilson, K. E. (2015), "Policy Lessons from Financing Innovative Firms", OECD Science, Technology and Industry Policy Papers, No. 24, OECD Publishing, Paris.

Prior Actions & Triggers - DIGITAL ECONOMY Policy Area III

Trigger 14: To create an environment conducive to entrepreneurship and innovation, the MEFP, jointly with other key ministries, have adopted a dedicated StartUp regulatory framework, as a result of the consultative Dakar Policy Hackathon.

Trigger 15: To create the conditions for startups to provide solutions to administrative challenges, the Government adopts a revision of the Public Procurement Code, in line with "public procurement for innovation" principles.

4.2.4 *DPF Prior Actions and Analytical Underpinnings*

Table 9. Analytical Underpinnings

DPF 2 Prior Actions	Analytical Underpinnings
Pillar I: ENERGY SECTOR	
Policy Area I.1: Improving Governance of Energy Sector	
Prior Action 1: 1. To further strengthen SENELEC's governance, the Recipient has established, for SENELEC's independent Board members, their profiles, reflecting competences in private sector management and auditing, as well as the procedures for their selection and appointment.	Electricity Sector Support Project strategic studies: Organizational and Managerial Audit of SENELEC; Institutional and Regulatory Sector Study; SENELEC accounting separation reports; Reports from the Independent Auditor of the Performance Contract; Institutional audit of CRSE World Bank financial diagnostic of SENELEC.
Prior Action 2: To further strengthen the financial viability of SENELEC, the Recipient: (i) through its MEFP, has agreed to settle its arrears to SENELEC in terms of tariff compensation and electricity bills for fiscal years 2017 and 2018 through additional funding for tariffs compensation in its 2018 budget, and the issuance of a promissory note dated October 22, 2018 to SENELEC for the remaining amount of arrears which first repayment instalment has been included in the 2019 Draft Budget Law submitted to Parliament; (ii) has made the payment of EPAFs' electricity expenditures to the service providers mandatory, and (iii) has streamlined the processing of SENELEC's VAT refund applications.	
Policy Area I.2: Removing Barriers to Investment and Competition in the Energy Sector	
Prior Action 3: To accelerate the diversification of the Recipient's energy mix towards less expensive and cleaner technologies, the Recipient, through its Council of Ministers, has approved and published, a national strategy describing the key features of its institutional and legal framework for midstream and downstream gas subsectors.	Electricity Sector Support Project strategic studies: Strategy for gas-to-power options; World Bank economic analysis of switching from HFO to gas; Least-cost planning TA.
Pillar II: ICT SECTOR	
Policy Area II.1: Improving Governance of ICT Sector	
Prior Action 4: To strengthen the ICT's overall legal and institutional framework, the Recipient: (i) has submitted to the National Assembly the Draft Electronic communications Act in line with the *Sénégal Numérique 2025* Strategy; and (ii) has established the *Conseil National du Numérique*.	ICT TA with IFC inputs/cooperation; Competition ASA.
Policy Area II.2: Removing Barriers to Investment and Competition in the Internet Broadband Market	

Prior Action 5: To strengthen competition in the ICT market, the ARTP has adopted: (i) a decision listing the relevant markets for market dominance in the ICT sector; and (ii) a decision listing the dominant operators and their respective obligations in the relevant markets. **Prior Action 6:** To strengthen the competition in the broadband market, the ARTP has published on its website, the standard model and guidelines to be used for: (i) granting of internet service providers authorizations which contain only limited and reasonable restrictions to internet service provision and geographic coverage; and (ii) granting of authorizations to wholesale telecom infrastructure operators. **Prior Action 7:** To strengthen the competition in the 4G market, the Recipient through its MPTEN, has established a Committee to engage in negotiations with interested mobile operators for the provisions of 4G telecom services.	ICT TA with IFC inputs/cooperation; Competition ASA.
Policy Area II.3: Facilitating Equitable Access to ICT Services	
	ICT TA with IFC inputs/cooperation.
Pillar III: DIGITAL ECONOMY	
Policy Area III.1: Enhancing DE Institutional and Legal Framework	
	Digital Transformation Agenda TA.
Policy Area III.2: Strengthening the Roll-out of e-Government Solutions	
Prior Action 8: To generalize online tax and customs payments, the MEFP has: (i) reduced the mandatory threshold for the use of electronic filing from FCFA500 million to FCFA100 million of annual turnover to ensure coverage of all medium-sized companies in the e-tax platform in 2019; and (i) established the threshold of FCFA50 million for the mandatory online payment of customs duties and fees.	TA Supporting the Design of Risk-Based Tax Audit; Digital Transformation Agenda TA; Digital Sources of Growth Study.
Prior Action 9: To harmonize and expand the use of digital payment options, the MEFP has: (i) updated and consolidated the rules governing digital payments received by the Recipient's Treasury, Customs and Tax administrations; (ii) expanded the range of payment options to include mobile money, payment by cards, as well as payment service aggregators, among others; and (iii) established an open selection process for providers of digital payment services and defined the modalities for interoperability, data security, and protection of personal data applying to such services.	
Policy Area III.3: Strengthening the Start-up Ecosystem	
	Digital Entrepreneurship Program TA; Digital Sources of Growth Study; IFC Digital Private Sector Diagnostics; Assessment of the entrepreneurial ecosystem in Senegal, Dutch Good Growth Fund.

4.3. LINK TO CPF, OTHER BANK OPERATIONS AND THE WBG STRATEGY

Links to the Country Partnership Framework (CPF)

101. The Energy and ICT pillars of this series are fully in line with the FY2013–2017 Country

Partnership Strategy (CPS)[35], while the Digital Economy Pillar is aligned the upcoming FY2018-2024 Country Partnership Framework[36] (CPF), falling under competitiveness and job creation agenda. The programmatic DPF modality was explicitly envisaged in the former CPS and is further reinforced by the upcoming FY2018-2024 CPF that aims to focus IDA resources much more on establishing enabling policy and regulatory environment in key economic sectors through impactful and intrepid DPF measures, thus laying the foundations for subsequent private sector investments. From the sectoral perspective, energy, ICT and digital development are covered by the upcoming CPF under Pillar I (*Boosting Competitiveness and Job Creation Through Private-Sector Led Growth*) and Pillar III (*Increase Resilience and Sustainability in The Context of Growing Risks*) that aim to improve digital and physical connectivity at the national and regional levels, lower energy costs, optimize the energy mix, and bridge the equity gap in access to electricity in the most vulnerable areas, which is fully consistent with the objective of this operation. Digital technologies are emerging as one of the key cross-cutting areas, as the WBG is striving to include digital lens throughout its operations to further strengthen competitiveness of key economic sectors in Senegal, thus supporting the country's progress towards "Emergence", while paving the way for a steeper, more inclusive and sustainable growth trajectory over time. The current DPF series will, henceforth, serve as a critical contribution to attaining these objectives by ensuring adequate and private-sector friendly policy, institutional and financial arrangements in key economic enablers, such as energy, ICT and digital technologies.

Links to Other World Bank Group Operations

102. In the energy sector, the proposed operation is a key element of a suite of WBG instruments supporting the power sector value chain in Senegal and SENELEC's performance. Annex 5 presents the World Bank Group strategy in the energy sector in Senegal and how the overall World Bank Group support is aligned with and complementary to the proposed DPF. The focus is on achieving a reduction in costs of generation as part of the energy sector financial (recovery) framework. The proposed new *Regional Program to Improve the Performance of Power Utilities in Support of Private Sector Investment and Regional Trade* (P168746), aims to reduce SENELEC's costs of generation and improve service reliability – and by doing so, improve the viability of the sector. Improving viability will support the significant private sector investment required in the sector. In particular, IFC and MIGA expect to support the significant amount of private sector investment that will be needed as part of the Government's gas-to-power program being supported by the World Bank. To date, the World Bank Group has played an important role in supporting the sector to diversify. The IDA-supported Organization for the Development of the Valley of River Gambia (*Organisation pour la Mise en Valeur du Fleuve Gambie* - OMVG), Interconnection *Project* (P146830) will link Senegal to Guinea, providing access to its extensive hydropower at lower cost, and connecting the Casamance and Senegal Oriental regions to the national grid. A project (P147921) to extend the Organization for the Development of the Valley of River Senegal (*Organisation pour la Mise en Valeur du Fleuve Sénégal* - OMVS) system is under preparation to enable hydropower capacity (from the Manantali and Gouina plants) to be utilized by interconnecting the OMVS and OMVG systems. The World Bank Group is supporting the Scaling Solar Program to qualify and support private sector players able to implement up to 100MW of greenfield solar IPPs. MIGA is supporting the 150MW Taiba Ndiaye Wind Project. In relation to supporting future conversion to gas, the 105 MW, dual fuel private power investment at Taiba Ndiaye, online since mid-March 2016, will be converted to run on

[35] Senegal CPF, Report No. 73478, which was current at the time of preparation of the programmatic series.
[36] Tentatively scheduled for Board presentation before end FY19.

gas.

103. The World Bank has been engaged in an ICT policy dialogue for the last three years. In FY2016, this dialogue was supported by ICT policy notes (P157222), encouraging policy makers to endorse policy and regulatory reforms aimed at increasing competition in the broadband market, while improving the readiness of public agencies to implement these reforms. This policy dialogue has provided much of the technical and policy input for the DPF. Over the current fiscal year, a study on competition issues in Senegal will also look at the ICT sector and provide additional analytical insights into the sector.

104. The policy dialogue has recently expanded to cover the broader DE agenda, as the World Bank has decided to allocate significant resources to elucidate critical analytical gaps in this domain. In FY18 Digital Transformation Agenda TA (P166386) was launched with the aim of helping the Government gain a holistic perspective on its readiness for a digital transformation in line with the recently adopted Digital Senegal Strategy *SSN 2015*. In this context, a comprehensive Digital Economy Country Assessment (DECA) and Digital Government Readiness Assessment (DGRA) have been completed as inputs into the Report on *"Unleashing Senegal's Digital Economy Potential",* which covers foundational DE components, namely: (i) enabling institutions, governance and digital skills; (ii) quality digital infrastructure; (iii) appropriate government digital platforms; (iv) adequate digital financial services; and (v) digital entrepreneurship and innovation. The report has devoted particular attention to the issues of digital identity (e-ID), digital taxation (e-Tax), and digital port (e-Port), and provides a snapshot of the level of digital development in the country. A complementary joint WB-IFC Digital Country Private Sector Diagnostic (CPSD) is under preparation and will help elucidate specific private-sector constraints related to digitalization across selected economic sectors. To fill the emerging data gaps and provide further insights on both growth and inclusion impacts of DE, a Digital Sources of Growth Study *"Productivity and Inclusion Opportunities from Adoption of Digital Technologies in Senegal"* has been launched with an aim of identifying the extent of digitization across enterprises in main economic sectors and measuring the existing and potential impact of digital technologies adoption on productivity growth, jobs and inclusion. The study will involve primary data collection, building on a technology adoption survey covering 500 companies across Senegal, and will thus provide critical quantitative insights that can serve as useful inputs for practical policy recommendations to the Government. Moreover, a few additional advisory and analytical work streams are also discussed with the Government with an idea of elaborating on the topic of digital job opportunities for the youth in Senegal. This policy dialogue and report provide further analytical inputs to the DE pillar of the program.

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

105. In addition to the consultations that took place during the preparation of DPF 1, additional activities are being implemented for DPF 2. Broad consultations with civil society, academics and the Government took place in May and June 2017, in the context of the SCD. These consultations included discussions on the factors and interests affecting the implementation of reforms, including in the energy and ICT sectors. In July 2017, the World Bank participated in a discussion with the Government and private sector representatives organized by Performances Group, a private consultancy, concerning the digital sector role in development in Senegal and in Africa. Moreover, a wide consultative workshop focused on digital economy development in Senegal was organized in March 2018 in close collaboration with IFC and in partnership with Microsoft, convening key public and private stakeholders, including

MCTPEN, MEFP, DGID, Optic, big multinational companies and small start-ups and entrepreneurs.

106. On all three sectors - energy, ICT and DE - the World Bank collaborates closely with key bilateral and multilateral development agencies in Senegal. Through the Budget Support Framework Agreement, involved donors contribute to establishing a coordinated matrix of policy reforms and common monitoring mechanisms, to improve harmonization, exchange of information and predictability of budget support. In the energy sector, the World Bank team has worked closely with the Millennium Challenge Corporation (MCC), contributing to its report on *Policy Options for Reform*, exchanging information and including its inputs as DPF 1 and DPF 2 analytical underpinnings. Moreover, the World Bank team regularly participates in the Development Partners Coordination Group at the energy sector level, particularly in recent discussions on the issues of financial sustainability of SENELEC that got eventually reflected in DPF 2. In the DE sector, close collaboration has been ongoing with African Development Bank (AfDB) and even more so with EU, in light of the latter's upcoming budget support linked to the DE development to avoid overlap and exchange technical expertise and sector diagnostic.

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

107. The policies outlined in this operation are expected to have positive welfare effects for the whole population, as well as have positive effects on poverty reduction and social outcomes.[37] A poverty and Social Impact Assessment (PSIA) was carried out to analyze the expected distributional social impacts of this program of policy reforms. This PSIA is structured to follow the main three pillars of the program, providing empirical evidence for those policies that are associated with specific investments and actions that may directly affect the poor.[38]

108. The set of prior actions under Pillar 1 corresponding to the Energy Sector are expected to have positive direct effects on poverty reduction in the medium and long-run due to lowers electricity tariffs. Under an optimistic scenario of electricity tariff reduction of 30 percent associated with prior action 3, the poverty headcount rate may decline by 0.39 percentage points in about five years.[39] Tariff reductions are also expected to reduce existing gender gaps by increasing access to electricity amongst female entrepreneurs, which significantly lags behind that of males.[40] In the shorter term, the negative poverty

[37] The empirical analysis to estimate the potential distributional effects of these reforms is based mostly on the latest available household survey, 2011 *Enquête de suivi de la pauvreté au Sénégal II* (2011 ESPS II). Given that this data is from seven years ago, the interpretation of results should be taken as lower bound effects of the reforms as both access to electricity and ICTs have increased significantly since 2011.

[38] To refine this analysis further work will be carried out during the implementation of this operation such as: i) new and adjusted scenarios, and ii) a simulation using an Input-Output matrix, which will account for indirect effects such as changes in the price of goods and services that use electricity or ICTs as inputs to the production of other goods and services consumed by households.

[39] The simulation assumed that households do not adjust their level of electricity consumption and the simulation also does not adjust for additional consumption by households that cannot afford the service with a prior higher tariff. This analysis only account for the direct channel linking electricity prices to household consumption.

[40] Systematic Country Diagnostic for Senegal (SCD). 2018, The World Bank. Washington, DC.

impact of potential tariff increases in the coming years -to adjust tariffs to generation costs-, would be mitigated by lower increases for the lowest block tariff, as well as a strengthening of the cash transfer program supported by the World Bank. Prior actions 1 to 3 are also expected to boost direct job creation in the energy sector as well as indirect job creation in labor intensive sectors highly dependent on electricity, such as tourism and retail. Policies under Pillar 1 will also reduce implicit and direct subsidies that currently benefit larger firms and better-off households, and thus releasing fiscal resources for much required social and productive investments. Only the Public Lighting Tax of 2.5 percent on the electricity bill for commercial use may be associated with a small negative effect on poverty, but this will depend on the behavioral response by firms. However, the expected social benefits associated with more and better provision of public lighting such as expected declines in urban violence[41] as well as negative perceptions of insecurity, that often prevent women and vulnerable users from becoming users of public space, may well be significantly higher than the costs of the tax.

109. All income groups will benefit from higher competition in the ICT sector outlined under Pillar 2, mainly due to lower prices and more access, and to a lesser extent through direct and indirect job creation. Specifically, under certain conditions, prior actions 5 and 6, which aim at expanding market competition in broadband and 4G network currently operating as monopolies, may achieve a combined impact on poverty reduction in the medium term of 0.73 percentage points, lifting almost 100,000 people above the poverty line.[42,43] Since as of 2012 only few households in the top consumption quintile (6 percent in the decile IX and 25 percent in the decile X) had positive expenditure on broadband services, lower prices of ICT services are also expected to increase access and enhance connectivity for individuals and firms which are currently left out of broadband and 4G services. Although the ICT sector is capital intensive, promoting higher competition in the telecommunications market may create direct jobs, as well as unlash the economic potential of other economic sectors that will benefit from lower prices, better quality of service and enhanced connectivity to markets.

110. Policies under Pillar 3 on Digital Economy will have positive indirect social effects. Although prior actions 7 and 8, aimed at expanding digital payments to public agencies as well as e-taxation, are not expected to have direct effects on poverty reduction, as these policies refer to regulatory

[41] Cerda M., Morenoff, Hansen B.B et al. 2012. "Reducing violence by transforming neighborhoods: A natural experiment in Medellín, Colombia". American Journal of Epidemiology. 175 (10): 1045-1053. They present the case of Medellin, Colombia, and find that the relative homicide rate fell by 66 percent in neighborhoods with integrated public space and infrastructure investment, including more and better public lightening service.

[42] These findings were produced with the WELCOM (Welfare and Competition) simulation tool developed by the Poverty and Equity GP at the World Bank. For more information please refer to: Abdelkrim Araar, Eduardo Alonso Malasquez, Sergio Olivieri, Carlos Rodriguez Castelan, (2018), "Introducing WELCOM: A tool to simulate the welfare impacts of competition. Version 2.1", World Bank, August 2018. *http://dasp.ecn.ulaval.ca/webwel/welcom.html*

[43] This specific scenario assumed increasing competition from 3 to 6 firms for the mobile market, from 2 to 4 firms for the fixed line market, and from a 100 percent market share in the broadband market to a 33.3 percent (see Lancaster, Henry (2018), "Senegal Telecoms, Mobile and Broadband-Statistics and Analyses"/ Paul Budde Communication). Moreover, the price elasticity of demand (PED) utilized to run these simulations were: for the mobile market -0.558 (Iimi, Atsushi (2007), "Price Structure and Network Externalities in the Telecommunication's Industry: Evidence from Sub-Saharan Africa". The World Bank Group), for the case of fixed-line 0.31 (Waverman, Leonard, Meloria Meschi, and Melvyn Fuss (2005). "The Impact of Telecoms on Economic Growth in Developing Countries." In Africa: The Impact of Mobile Phones. Vodafone Policy Paper 3, pp. 10–23), and; for broadband -1.1 (Grzybowski et al, (2014). "Market definition for broadband internet in Slovakia – Are fixed and mobile technologies in the same market?").

frameworks, positive indirect social effects are expected. Enhancing and expanding e-taxation can potentially increase the tax base and raise tax collection which in turn could be targeted for social and productive investments, as well as improved and expanded service delivery across the country. Moreover, the strong complementarity between policies covered under Pillars 1 and 2 with the two prior actions under Pillar 3, should enhance the positive social effects expected from reforms associated with the Digital Economy, particularly since factors such as access to a computer, internet, and a bank account, typically limit the take-up of e-taxation and digital payments to public agencies.[44] Moreover, implementing electronic filling and online payment systems can allow for lower transaction costs for MSMEs paying taxes, which in turn could have a positive impact in their profitability and reduce the gap with larger firms. Finally, expanding the use of digital payment options to government agencies might have positive welfare effects as it may incentivize an economy-wide expansion of digital payment systems, including those from the private sector, such as mobile money and e-commerce.

5.2. ENVIRONMENTAL ASPECTS

111. The reforms and policy actions supported by the proposed operation are not likely to have significant impact on environment, forests, and natural resources. Over the last 17 years, the Government has made significant strides in developing a framework for environmental management and mainstreaming environmental sustainability in projects, starting first with the environmental decree no. 2001/182 of April 12, 2001 and the ministerial order no. 9470 of November 28, 2001 establishing the conditions governing the granting of approval to carry out environmental impact assessments. Public consultation and information disclosure are compulsory at the initial stage of the Environmental Impact Assessment (EIA) process in conformity with the ministerial order no. 9468 of November 28, 2001. The Directorate of Environment and classified establishments (DEEC) in the Ministry of Environment and Sustainable Development is institutionally saddled with reviewing and clearing EIA documents.

112. As per the World Bank Policy on DPF, the World Bank assessed whether specific country policies supported by the DPF are likely to cause significant effects on the country's environment, forests, and other natural resources. The assessment concluded that the policies supported by the proposed DPF are not likely to have negative impacts on the country 's natural assets. All the actions supported throughout the operation are policy-oriented; they do not support direct investment in environmentally impactful investments or involve policy actions with significant environmental consequences. The assessment of potential impacts related to actions supported by the DPF will rely on the existing national legal and regulatory framework and will be monitored and addressed through the national procedures in place in Senegal. DEEC has the capacity to implement, monitor, and report on mitigating measures and/or environmental and social management plans; and have been working in direct collaboration with the environmental and social specialists of World Bank funded projects. Furthermore, Government capacity to assess and mitigate potential impacts of energy sector projects is being reinforced, including support by the World Bank Group.

113. Prior actions and triggers concerning the energy sector are expected to be environmentally positive. The current DPF 2 will build upon on the tenets and impacts of the Strategic Master Plan for electricity generation approved under DPF 1. The Production Plan includes coal, gas, oil and renewables

[44] "Introducing Declaration to calculate turnover tax in Rwanda," World Bank. Washington DC, forthcoming.

(hydropower, solar and wind) as energy sources. The Plan's impact on air pollution is expected to be positive or neutral (and clearly positive in rural areas), as it will reduce the high use of heavy fuel while significantly increasing renewable sources – which would compensate for the higher production of coal. The HFO to gas switch will improve air quality by reducing energy related emissions, thus improving air pollution and reducing the related impacts on human health. Also, increased electricity supply in the rural areas will reduce indoor air polluting sources, such as wood and charcoal, compounding the effect of the new energy mix. The carbon intensity of power generation is expected to fall by 30 percent from 0.70 to 0.48 tons of CO2 per MWh by 2035, when the Plan would be fully implemented. Finally increase affordable energy access in rural areas will improve basic service delivery, by providing light to primary health facilities and schools, with a concomitant benefit to maternal and child health services which are among the development outcomes lagging in the country.

114. Other policy actions supported by the operation are determined to be environmentally neutral. Regarding the ICT sector, the reforms supported by the program are of legal and regulatory nature and are not expected to have any direct adverse impact on environment. Indirectly, the reforms would stimulate the deployment of new retail broadband infrastructure (i.e. upgrade of active equipment's on an already existing tower or set up of new towers) by service providers. But these new deployments will have to comply with the generic and specific obligations mentioned in their legal authorization and consistent with national environmental procedures. It is pertinent to note that granting authorizations to wholesale telecom infrastructure operators and expanding the digital payment systems could lead to the propagation of e-waste. Though there are no specific regulations for e-waste management, their proper management and management will be handled within the confines of the environment code and the national strategy for sustainable and integrated management of waste, and the national solid waste management program.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

115. Performance of the PFM reform program in Senegal has been considered as satisfactory, but an independent evaluation of PFM system in Senegal is needed. A self-assessment of Public Expenditure Framework Assessment (PEFA) conducted in 2017 rated the credibility of the budget and the planning and budgeting execution processes as globally satisfactory: (i) Treasury management and public investment have been improved; (ii) income' regulatory framework is well structured to allow for regular centralization of revenue; (iii) the internal audit is revitalized and (iv) Some success has been achieved in improving the transparency of fiscal information with the regular publication of quarterly budget appropriations and their execution on the Ministry of Finance website – the country has also adopted the BOOST instrument to improve the availability of budget data, and made it partially public. A recent Fiscal Transparency report of the IMF for Senegal charts the remaining agenda in this area. A new Tax Code came into force in 2013 and the application of the Common External Tariff (CET) of ECOWAS from January 2015 expanded the tax base. The development of a Single Taxpayer Identification number (NINEA) has also been critical for enforcement and cross checking of taxes, in both the customs and the tax directorate. A new full PEFA is scheduled to start in early 2019.

116. Further efforts are needed to strengthen the PFM institutional framework and accelerate the pace of reform implementation to shift state public spending to the WAEMU-mandated performance-based paradigm. A noticeable progress has been made in the implementation of the guidelines, notably

in the multiyear programming and budgeting of investment funds with Commitment Authorizations (AE) and Payment Appropriations (CP), and the improvement of budgetary information related to programs. However, the relatively low decision-making process does not allow for the capitalization of the grace period. The blank test of the devolution of the commitment authority in 2018 in five (5) pilot ministries of SIGIF/IFMIS (Finance, National Education, Environment, Health and Justice) is yet to kick off, while it is crucial to test the Ministries' technical and organizational capacities and to draw lessons ahead of the generalization in 2019. Necessary arrangements should be taken for the SIGIF to be ready by September 2019 in order to be fully utilized by 2020. An accounting instruction in progress since 2015 facilitates the recording Senegal' debts and financial contributions in the general accounts. An embryonic system for asset declaration was introduced in 2014 and a draft law to introduce an integrity code is in the final stages of preparation. Notwithstanding the progress made in transposing the directives, fundamental aspects of the architecture required for shifting responsibility for program budgets to line ministries have yet to be developed. These include: the institutional and organizational arrangements for the devolution of commitment authority to line ministries, the identification of program managers, the re-positioning of internal controls including the revision of the regulatory framework and the coordination mechanism among key actors. Although significant progress has been made, a number of challenges remain, including: (i) setting a comprehensive and transparent budget management system which takes into account payments related to state-owned enterprises and national agencies; (ii) developing a reliable budget monitoring system to limit budget deviations, (iii) reinforcing the internal and external controls of budget execution.

117. The credit will follow IDA's disbursement procedures for development policy credits. Upon effectiveness of the Financing Agreement, and, provided IDA is satisfied with the implementation of the development policy program and the appropriateness of the Recipient's macroeconomic policy framework. The proceeds of the credit would be disbursed by IDA into a dedicated account designated by the Recipient that is part of the country's foreign exchange reserves accounts at the BCEAO. The dedicated account will be used exclusively for the DPF credit proceeds. Disbursement will not be linked to specific purchases however the proceeds of the credit would not be used to finance expenditures excluded under the Agreement. The Borrower shall ensure that upon the deposit of the credit into said account, an equivalent amount is credited in the Borrower's budget management system, in a manner acceptable to IDA. Based on previous experience, the execution of such a transaction from the Central Bank (BCEAO) to the Treasury (Ministry of Economy and Finance) does not require more than four days. The Borrower will report to the World Bank on the amounts deposited in the foreign currency account and credited in local currency to the budget management system. Assuming that the withdrawal request is in foreign exchange, the equivalent amount in CFAF reported in the budgetary system will be based on the market rate at the date of the transfer. The Borrower will promptly notify the World Bank by fax or email that such transfer has taken place, and that proceeds have been credited in a manner satisfactory to the World Bank.

118. The BCEAO is the common central bank of the West African States including Senegal. The BCEAO publishes a full set of audited financial statements. and improvements have been made to move financial reporting closer to International Financial Reporting Standards (IFRS). the external auditors have issued an unqualified opinion (clear opinion) on the 2017 financial statements of BCEAO. The most recent IMF Safeguards Assessment was conducted in 2013. IMF noted that the BCEAO had improved the explanatory notes to the financial statements and further changes are scheduled, with a view toward

gradual alignment with International Accounting Standards (IAS). Furthermore, an internal audit charter has been put in place, mechanisms have been established to improve risk management and risk prevention, and follow-up on internal and external audit recommendations has been strengthened. The assessment identified a number of areas where further steps would help solidify the progress made in recent years. The main recommendations relate to: (i) improving the external audit process by adopting a formal rotation policy and further enhancing the transparency of the financial statements by adopting IFRS in full; and (ii) enhancing the effectiveness of the internal audit function by further strengthening reporting to management of the BCEAO. Progress has been achieved in corporate governance and the strength and transparency of internal financial reports. The foreign exchange risk is considered to be at an acceptable level.

119. Auditing. The Borrower will (a) report the exact sum received into the Dedicated Account; (b) ensure that all withdrawals from the Dedicated Account are for budgeted public expenditures, except for purposes such as military expenditures or for other items on IDA's negative list; (c) provide to IDA evidence that the CFAF equivalent of the credit proceeds were credited to the Dedicated Account and disbursements from that account were for budgeted public expenditures. IDA reserves the right to seek an audit of the dedicated account by independent auditors acceptable to IDA. If, after being deposited in this account, the proceeds of the credit are used for excluded expenditures as defined in the IDA General Conditions for IDA Financing, DPF, IDA will require the Recipient to either: (a) apply the corresponding amount to eligible purposes, or (b) refund the amount directly to IDA. Amounts refunded to the World Bank upon such a request will be cancelled.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

120. Strengthening monitoring and evaluation is critical for the successful implementation of the Government's priorities. The institutional framework for the evaluation of public policies is still evolving and focused on procedural and expenditure control. M&E functions in the Senegalese public administration are characterized by weakness in line ministries, and the need to coordinate and strengthen central government actors. The current institutional link between the head of the executive, the head of government, the Ministries of Finance Planning and Economy, and sector M&E units has not been clear. On May 2015, the Government adopted through decree a new M&E framework called Harmonized Monitoring and Evaluation Framework (*Cadre Harmonisé de Suivi-Evaluation* - CASE) in order to assure coordinated monitoring across sectors of strategic objectives, projects and programs in the PSE. The CASE supports an M&E unit based in the Bureau of Operations and Method (BoM), located in the Office of the President, a unit to follow up on the PSE implementation and priority programs, the BoS (Bureau Operationel de Suivi), also located in the Office of the President, while the Ministry of Finance still has responsibility for the overall monitoring of budget spending. An inter-agency committee has been established between these three entities to define clearly an integrated M&E system based on the CASE decree, and clarify operational division of responsibilities. It is expected that M&E reporting will improve based on the work of this committee over the period of the program.

121. The MEFP remains the main counterpart for monitoring program implementation. The WBG and the MEFP set up two mechanisms for close follow up and monitoring of program implementation. A high-level Steering Committee, led by the MEFP Secretary General, and technical committees, led by a Technical Advisor of the Minister. The Steering Committee, that meets at least twice per month, groups

all involved institutions both at the executive and technical levels, allows to identify delays and bottleneck, and defines alternative solutions and staff responsible for delivery. The Technical Committees, for Energy and ICT, meet at an ad hoc basis, alternating with the Steering Committee, and follows up the day-to-day advances in the reform program, and identifies higher-level difficulties to be brought to the Steering Committee attention.

122. Grievance Redress. Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation (DPO) may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

6. SUMMARY OF RISKS AND MITIGATION

123. Overall risk has been downgraded from substantial to high, as higher fiscal vulnerability may impact the program outcomes, particularly in the energy sector. There are several factors that could jeopardize the expected outcomes and benefits. These factors include: (i) resistance to reform by entrenched interests; (ii) pressure to water down reforms or take politically-motivated decisions ahead of presidential elections in 2019; and (iii) weak government implementation capacity. In addition, growing fiscal vulnerabilities – that also explain the revision of the macroeconomic risk – generated an accumulation of arrears to SENELEC's since 2017. This partially reversed the advances related to the reforms applied to solve the SOE's financial situation under DPF 1. The design of this operation – including the specific measures to solve the delayed payments situation –, the relative strength of Senegalese institutions, the country's tradition of stability and its willingness to recover a solid medium-term macroeconomic framework, and the ongoing PSI fiscal program with the IMF are important mitigating factors.

124. Risks associated with the political environment has been downgraded to high. The political situation is subject to the pressures of a coalition in a lively democracy. Also, good economic results help support the President's popularity, despite the perception that the benefits of growth are not being evenly distributed. On the other hand, the ruling party depends on numerous smaller parties and there is continuous political bickering, which is escalating in view of the 2019 general elections. Also, key sectors – in particular, health and education – visibly increased their mobilizations during 2018 asking for additional public resources. Given the positive response from the Government, other sectors may be tempted to follow suite. Hence, policy decisions risk becoming increasingly politicized, as the 2019 elections approach. The programmatic nature of the operation helps adapt the pace of reforms to the electoral calendar, while the high priority of the selected sectors in the PSE open the door for a high level

of Bank engagement in the policy dialgue with the authorities to mitigate this risk.

125. Risks related to the macroeconomic context have been increased to high. Fixed domestic energy prices in a context of high and rising international oil prices reduced fiscal revenues and increased fiscal expenditure, particularly tariff subsidies (compensation) in the electricity sector. As a result, the fiscal stance deteriorated in 2017 and is expected to remain vulnerable in 2018 and early 2019. Slippages will need to be addressed decisively to avoid a deterioration on debt risk ratings and meet the WAEMU targets. This situation has a clear impact on SENELEC's financial situation as the Government has substantial delayed payments both in terms of tariff compensation and unpaid electricity bills both in 2017 and 2018, and an important amount is still expected as tariff compensation in 2019 (0.8 percent of GDP). Conversely, paying back the cumulated delayed payments to SENELEC and the ongoing compensation imply an additional stress for fiscal expenditures. As the Government is still aiming for a fiscal deficit of 3 percent of GDP in 2019 and onwards, this implies that other expenditures must be reduced, or new revenues created. As part of the delayed payments would be covered through a Promissory Note issued by the State, the DSA will need to consider this in the analysis. The DPO team seeks to mitigate this risk through strong coordination with the IMF's PSI program, particularly on budget transparency and debt issues, and through sustained direct policy dialogue on fiscal and PFM issues under existing Bank AAA and lending instruments. The prior actions of this operation related to SENELEC's financial situation also contribute to the mitigation of this risk.

126. Risks associated with sectoral strategies and policies remain high. The electricity sector reforms have a long history of failed attempts, and their leadership has often lacked a sense of urgency, or they have been captured by vested interests. Also, emerging fiscal vulnerabilities reduced the Central Government's responsiveness to pay arrears to SENELEC and to solve this SOE's complex financial situation, and the sector remains highly vulnerable to eventual further increases in the international oil prices. The experience from previous operations underscores the need to balance a realistic, more focused but substantive reform agenda with enough flexibility to adapt to the political decision making in the country, and to ensure Government's ownership. Similarly, the reforms in the ICT sector affect powerful vested interests in this growing and highly profitable sector, which have been able to delay or dilute reform attempts in the past. The experience of DPF 1 implementation in both sectors ratifies the need for close monitoring and permanent coordination among all stakeholders, including from the private sector. The reforms promoted through this series are backed by continuous policy dialogue and monitoring efforts by a field-based team, including the IFC, active involvement by management, and regular discussions with the IMF and other Development Partners on structural and sector reforms. This provides for prompt addressing of emerging issues, and the Government so far has proved responsive to instances of potential policy misalignments with the program.

127. Risks related to institutional capacity for implementation and sustainability have been increased to high. Bureaucratic inertia, poor coordination between the MEFP, sector ministries and regulating agencies, and bottlenecks at the decision-making level, frequently result in delays in implementation and, at times, policy stalling or partially reverting altogether – as observed during implementation of DPF 1. The programmatic nature of this series, its close supervision by field-based staff, as well as complementary investment and technical assistance operations in the same sectors, help mitigate this risk.

Table 10: Summary Risk Ratings

Risk Categories	Rating
1. Political and Governance	High
2. Macroeconomic	High
3. Sector Strategies and Policies	High
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	Moderate
Overall	High

AANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
PILLAR I: ENERGY SECTOR			
Policy Area *I.1: Improving governance of the energy sector*			
Governance and corporate arrangements of SENELEC			Improvement in SENELEC's performance and financial sustainability (aligned with SENELEC's performance contract indicators): **SENELEC debt cover ratio (EBIDTA*/debt service)** Baseline: 0.54 (2016) Latest value: 0.65 (end 2016, estimated. It will be confirmed with SENELEC's financial statements) Target: 1.0 (2021) **Un-served energy (total) per year (GWh) as proxy of blackouts and brownouts:** Baseline: 34.1 (2015) Latest value: 28 (2017) Target: 13 (2021) **Overall electricity losses as percent of electricity produced** Baseline: 21 percent (2014) Latest value: 19percent (2017) Target: 15 percent (2021)
Prior Action 1: In order to improve the management of SENELEC, the Government has entered with SENELEC into a focused performance contract, which includes a monitoring and corrective mechanism, and incorporates a functional performance incentive system. **Prior Action 2**: In order to enable the board of directors of SENELEC to better perform its corporate governance role, (i) SENELEC's General Assembly has adopted the modifications to SENELEC's statutes to ensure compliance with Article 416 of the OHADA Revised Uniform Act of 2014, allowing the appointment of directors to its board of directors that are not shareholders, and (ii) SENELEC's Board of Directors has established technical and financial committees	**Prior Action 1:** To further strengthen SENELEC's governance, the Recipient has established, for SENELEC's independent Board members, their profiles, reflecting competences in private sector management and auditing, as well as the procedures for their selection and appointment.	**Trigger 1:** For enhanced transparency and commercial orientation, the Government has reorganized SENELEC in distinct generation, and transmission & distribution subsidiaries.	
Sector financial arrangements			
Prior Action 3: In order to sustainably resolve the sector issues on cross debt and financial arrears (i) the Government has entered with SENELEC into a cross-debt and arrears clearance agreement covering the period August 2012 - February 2016, (ii) the Government has agreed to pay SENELEC's 2017 VAT credits within the statutory three months while SENELEC has agreed to honor 100 percent of its tax commitments by 2019; and (iii) the	**Prior Action 2:** To further strengthen the financial viability of SENELEC, the Recipient: (i) through its MEFP, has agreed to settle its arrears to SENELEC in terms of tariff compensation and electricity bills for fiscal years 2017 and 2018 through additional funding for tariffs compensation in its 2018 budget, and the issuance of a promissory note to SENELEC for the remaining amount of arrears which first repayment instalment has	**Trigger 2:** As part of a comprehensive electricity sector financial framework plan, the Government has taken the necessary budgetary and tariff measures to ensure that SENELEC can fully cover its maximum authorized revenues for 2019 as determined by the CRSE, and has strengthened the effectiveness of its regulatory system for cost recovery.	

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
Minister of Finance has issued a circular instructing all central government autonomous institutions and entities to include in their yearly budgets separate allocations for covering electricity and water bills.	been included in the 2019 Draft Budget Law submitted to Parliament; (ii) has made the payment of EPAFs' electricity expenditures to the service providers mandatory, and (iii) has streamlined the processing of SENELEC's VAT refund applications.		*Earnings before interest, taxes, depreciation and amortization
Sector regulation			
		Trigger 3: In view of the expiration of SENELEC's purchase monopoly, and to further promote competition and private sector participation, the Government has implemented an action plan and regulatory framework, including grid code and transmission charges calculations, allowing eligible customers to purchase directly from power producers, while preserving the financial equilibrium of the power sector. **Trigger 4:** To strengthen the sector's supervision governance, the Government has revised the mandate and the legal & regulatory framework and capacity of sector regulator (CRSE), which will include both electricity and gas for midstream and downstream gas sectors.	
Policy Area *I.2: Removing barriers to investment and competition in the energy sector*			
Electricity generation expansion			Least cost generation expansion in progress as indicated by: **Mix of non-HFO based generation** Baseline: 10 percent (2015) Latest value: 20 percent (2018) Target: 33 percent (2021)
Prior Action 4: In order to diversify the country energy mix towards less expensive sources including renewables, the Council of Ministers has approved a Strategic Master Plan for Electricity Generation setting forth the Government's priorities in energy diversification and private sector participation in power generation, including related project development modalities.	**Prior Action 3:** To accelerate the diversification of the Recipient's energy mix towards less expensive and cleaner technologies, the Recipient's Council of Ministers, has approved and published a national strategy describing the key features of its institutional and legal framework for midstream and downstream gas subsectors.	**Trigger 5:** To further advance on the diversification of the energy mix, the Government has: (i) updated its electricity masterplan to fully integrate planned use of gas generation, identifying the priority least cost generation and transmission projects to accelerate the transition to low-carbon technologies; (ii) adopted legal and regulatory texts for planning, regulation, coordination and institutional arrangements	

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
		for the upstream, midstream and downstream gas sub-sectors.	**Installed Capacity of Renewable Energy** Baseline: 0 percent (2015) Latest value: 10 percent (2018) Target: 29 percent (2021)
Policy Area *I.3: Facilitating equitable access to electricity*			
Affordability and availability of rural electricity			Increased access to electricity in rural areas. **Share of rural population with access to electricity** Baseline: 29 percent of the population (2015) Latest value: 40 percent (2016) Target: 60 percent (2021)
Prior Action 5: In order to improve access to affordable electricity services in rural areas, the Minister of Energy has instructed the electricity national regulator to lower rural concessions' electricity user tariffs to SENELEC's national tariffs.		**Trigger 6:** To increase competitiveness in rural areas, the Government has restructured CERs contracts to eliminate the exclusivity of providing electricity services in concessions outside priority areas.	
PILLAR II: ICT SECTOR			
Policy Area II.1: Improving governance of the ICT sector			
Sector legal, policy and institutional framework			
Prior Action 6: The Council of Ministers has adopted the National Strategy for the Digital Economy "Sénégal Numérique 2025" providing policy basis for increased open market access to new service providers in the telecommunications sector in line with international best practices.	**Prior Action 4:** To strengthen the ICT's overall legal and institutional framework, the Recipient: (i) has submitted to the National Assembly the Draft Electronic communications Act in line with the *Sénégal Numérique 2025* Strategy; and (ii) has established the *Conseil National du Numérique*.	**Trigger 7.** To enhance the operational efficiency in the sector, the Cabinet has adopted a legal and regulatory framework to promote inter-sectoral coordination for civil works related to telecom infrastructure projects.	**Ranking of Senegal with respect to the A.1.02 sub-index of the Network Readiness Index** (which assesses the extent to which the national legal framework facilitates ICT penetration and a safe development of business activities -Source WEF) Baseline (2015): 81th Latest value (2016): 73rd Target (2021): 65th
Policy Area II.2: Removing barriers to investment and competition in the internet broadband market			
Overcoming barriers to entry for new internet service providers and wholesale infrastructure operators			

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
Prior Action 7: In order to facilitate the entry of a wider range of Internet Service Providers (ISP) into the retail internet broadband segment, the Government has: (i) enacted the amendments to Articles 29 to 32 of the Telecom Law No 2011-01 of February 24, 2011, providing that ISPs are subject to the lighter and less expensive general "authorization" regime instead of the "licensing" regime, and are allowed to deploy and operate their own infrastructure; (ii) issued an implementation decree of the amended Articles 29 to 32 of the Telecom Law No 2011-01 of February 24, 2011, which includes a provision converting already attributed ISP licenses into authorizations. **Prior Action 8**: In order to increase competition in the wholesale internet broadband segment, the Government has adopted and implemented a decree specifying the rules for granting authorizations to wholesale telecommunications infrastructure operators, in accordance with Telecom law no 2011-01 of February 24, 2011.	**Prior Action 5:** To strengthen competition in the ICT market, the ARTP has adopted: (i) a decision listing the relevant markets for market dominance in the ICT sector; and (ii) a decision listing the dominant operators and their respective obligations in the relevant markets. **Prior Action 6:** To strengthen the competition in the broadband market, the ARTP has published on its website, the standard model and guidelines to be used for: (i) granting of internet service providers authorizations which contain only limited and reasonable restrictions to internet service provision and geographic coverage; and (ii) granting of authorizations to wholesale telecom infrastructure operators. **Prior Action 7:** To strengthen the competition in the 4G market, the Recipient, through its MPTEN, has established a Committee to engage in negotiations with interested mobile operators for the provisions of 4G telecom services.	**Trigger 8**: To further strengthen the sector's regulatory framework, based on the updated market study, the Regulator, ARTP, has approved the supply service catalogs of the dominant players operating in the relevant markets. **Trigger 9**. To reduce the costs to operators on the use of frequencies, the Government has defined a new cost structure for the spectrum, based on a market study of its economic value.	**Internet penetration rate** (source ARTP) Baseline (June 2016): 60 percent Latest value (March 2018): 66 percent Target (2021): 75 percent **Number of facility-based Internet providers** Baseline (2015): 1 Latest value (2018): 3 Target (2021): 6

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
Policy Area *II.3: Facilitating equitable access to ICT services*			
Prior Action 9: With a view to reduce infrastructure roll-out costs for telecom operators, the Government has adopted and implemented a decree clarifying the technical and financial rules for infrastructure sharing among telecommunication operators in accordance with Articles 10 and 25 of the Telecom law no 2011-01 of February 24, 2011.		**Trigger 10**: To further promote universal access to ICT services, the Government has implemented the decrees of the new Telecom Act related to the Universal Telecommunications Services and has adopted a fully-funded investment plan for universal access to ICT services. **Trigger 11**: To promote access to ICT services, the Government has operationalized the concession model for the management of the excess capacity of state-owned digital network of ADIE, according to criteria of open access and competitive bidding.	**Percentage of rural households reporting access to the Internet (Source: Gallup survey)** Baseline (2016): 23 percent Latest value (2017): 17 percent (Question in the survey has changed to: Do you have access to the Internet in any way, whether on a mobile phone, a computer, or some other device?) Target (2021): 30 percent
PILLAR III: DIGITAL ECONOMY			
Policy Area III.1: Enhancing DE Institutional and Legal Framework			
		Trigger 12: Establishment of an institutional framework for strategic management and coordination of the digital economy through: (i) the adoption of an inter-ministerial steering and coordination framework; (ii) the alignment of the institutional positioning of agencies to the adopted institutional framework; (iii) establishment of a steering committee for the regulation and interoperability of public data, including civil registry and e-identity, and cybersecurity.	**Number of key decisions made by inter-ministerial steering committee**: Baseline (2018) = 0. Target (2021) = 5.
Policy Area III.2: Strengthening the roll out of e-Government solutions			
	Prior Action 8: To generalize online tax and customs payments, the MEFP has: (i) reduced the mandatory threshold for the use of electronic filing from FCFA 500 million to FCFA 100 million of annual turnover to ensure	**Trigger 13:** To reduce compliance costs for small and large taxpayers, the tax administration (DGID) has (i) operationalized an MSME mobile tax declaration and payment system ("m-tax"), achieving a	**Increase by 10 percent of the number of MSME taxpayers registered with the DGID**.

Prior Actions under DPF 1	Prior Actions under DPF 2	Triggers under DPF 3	Results
	coverage of all medium-sized companies in the e-tax platform in 2019; and (ii) established the threshold of FCFA50 million for the mandatory online payment of customs duties and fees.	coverage of at least 10 percent of eligible individuals and MSMEs; (ii) implemented: a transparent risk-based audit case selection system (which encompasses at least 50 percent of all tax audit planned), and an automatic monitoring of audit performance.	Baseline (2018) = 88,010 Target (2021) = 96,811 Source: DGID. **Number of tax payments**. Baseline (2018) = 58 Target (2021) = 40 Source: Doing Business «Paying Taxes» indicator.
	Prior Action 9: To harmonize and expand the use of digital payment options, the MEFP has: (i) updated and consolidated the rules governing digital payments received by the Recipient's Treasury, Customs and Tax administrations; (ii) expanded the range of payment options to include mobile money, payment by cards, as well as payment service aggregators, among others; and (iii) established an open selection process for providers of digital payment services and defined the modalities for interoperability, data security, and protection of personal data applying to such services.		
Policy Area III.3: Strengthening the start-up ecosystem			
		Trigger 14: To create an environment conducive to entrepreneurship and innovation, the MEFP, jointly with other key ministries, have adopted a dedicated StartUp regulatory framework, as a result of the consultative Dakar Policy Hackathon. **Trigger 15:** To create the conditions for startups to provide solutions to administrative challenges, the Government adopts a revision of the Public Procurement Code, in line with "public procurement for innovation" principles.	**Improvement in Senegal's score in the "Institutional Score" of the Global Entrepreneurship Index (GEI).** Baseline (2018) = 35 percent Target (2021) = 45 percent. Source: GEI.

ANNEX 2: LETTER OF DEVELOPMENT POLICY

République du Sénégal
Un Peuple – Un But – Une Foi

MINISTERE DE L'ECONOMIE
DES FINANCES ET DU PLAN

LE MINISTRE

N° 10177 MEFP/CAB/CT A. ND

Dakar, le 13 NOV 2018

A Monsieur Jim Yong Kim
Président de la Banque Mondiale
Washington D.C

OBJET : Deuxième Crédit d'Appui aux Réformes Structurelles Multisectorielles (CARSM II)

Monsieur le Président,

Je voudrais, au nom du Gouvernement de la République du Sénégal, solliciter un crédit d'appui aux réformes structurelles multisectorielles CARSM d'un montant équivalent à 180 millions de dollars US pour soutenir notre programme de réformes.

A cet effet, je vous transmets en annexe, une lettre de politique de développement qui résume les récentes performances économiques et sociales du Sénégal, particulièrement dans les domaines soutenus par le CARSM II et présente les orientations majeures sur la période 2017 – 2019, faisant partie intégrante de la nouvelle vision du Gouvernement du Sénégal intitulée Plan Sénégal Emergent (PSE).

Par ailleurs, l'ensemble des actions préalables convenues avec les services de la Banque Mondiale ont été entièrement réalisées.

En vous remerciant pour l'appui constant que vous nous apportez, je vous prie d'agréer, Monsieur le Président, l'assurance de ma haute considération.

Le Ministre de l'Economie des Finances et du Plan
Amadou BA

REPUBLIQUE DU SENEGAL

Un Peuple – Un But – Une Foi

MINISTERE DEL'ECONOMIE, DES FINANCES ET DU PLAN

LETTRE DE POLITIQUE DEVELOPPEMENT

(octobre 2018)

I. Introduction

1.Le Sénégal a élaboré et adopté, avec l'appui de ses partenaires techniques et financiers sa Stratégie de développement économique et social, le Plan Sénégal Emergent (PSE II). Il s'agit de politiques et programmes intégrés qui traduisent la volonté politique du Gouvernement, d'inscrire le Sénégal sur la voie du développement et la prise en compte des préoccupations de base des populations. L'objectif consiste à assurer les conditions d'une croissance soutenue, inclusive et durable à même de réduire significativement la pauvreté et d'atteindre les Objectifs de Développement Durable (ODD).

2.Le développement économique et social du Sénégal nécessite la mise en œuvre d'une stratégie conduisant à une croissance économique à fort impact positif sur les conditions de vie des populations mais prenant en compte la nécessité de redresser les finances publiques et de maintenir la dette publique à des niveaux soutenables. A cet égard, le défi majeur porte essentiellement sur la relance de l'économie dans un contexte de gouvernance vertueuse, efficace et efficiente. Le PSE II s'articule autour de trois axes : (i) Croissance, Productivité et Création de richesses ; (ii) Capital humain, Protection sociale et Développement durable ; et (iii) Gouvernance, Institutions, Paix et Sécurité.

3. Par ailleurs, en vue de renforcer le dialogue sur les politiques publiques avec ses partenaires au développement, et de rationaliser les interventions de ces derniers pour un meilleur alignement et une meilleure prévisibilité, le Gouvernement tient des rencontres périodiques avec le groupe G50 des partenaires techniques et financiers et une revue annuelle conjointe.

4. Ce document résume les récentes performances économiques et sociales et les perspectives du Sénégal,

II. Les résultats préliminaires pour 2017

1. **L'élaboration des comptes nationaux selon les recommandations du Système de Comptabilité Nationale (SCN) 2008 avec comme nouvelle année de base 2014, reflète au mieux les structures actuelles de l'économie sénégalaise.** Le changement de base des comptes nationaux (de 1999 à 2014) implique une augmentation de 30 pourcent du PIB nominal ce qui a un impact significatif sur les indicateurs macroéconomiques assis sur le PIB (ratio de dette publique, de déficit budgétaire, PIB per capita, mais aussi de la pression fiscale).

2. **Au plan interne, la mise en œuvre du PSE continue de donner des résultats très appréciables.** En effet, au terme de l'année 2017, le taux de croissance du PIB s'est établi à 7,2%, contre une prévision initiale de 6,8%. Cette performance supérieure à 6 pour cent enregistrée pour la troisième année consécutive (après 6,4% en 2015 et 6,2% en 2016) est imputable principalement à la bonne tenue des secteurs comme l'agriculture (+16,8%), la fabrication de produits alimentaires céréaliers (+7,8%), les produits chimiques (+17,8%), l'électricité et gaz (+8,9%), la construction (+9,6%), les transports (10,5%), les services d'hébergement et de restauration (+15,0%), et les services financiers et d'assurance (+16,5%). Sous l'angle de la demande, la croissance est principalement portée par l'absorption intérieure. Les contributions de la consommation et de la formation brute de capitale fixe sont respectivement de 5,6 et 1,7 points de pourcentage. En matière d'inflation, l'évolution des prix est restée timide au regard de la progression de l'indice harmonisé des prix à la consommation (IHPC) évaluée à 1,3% en 2017. Au titre des échanges avec l'extérieur, le déficit du compte courant est en dégradation, passant de 4,2 % en 2016 à 7,2% en 2017, en raison de l'impact de la remontée des cours du pétrole sur les importations de produits pétroliers et de la forte progression des achats extérieurs de produits alimentaires, ainsi que des biens d'équipement.

5. L'objectif de déficit budgétaire de 372 milliards de FCFA (3.0 pourcent du nouveau PIB) a été respecté. Cependant, il faut souligner que le respect de l'objectif du déficit budgétaire est aussi le résultat de l'accumulation de retards de paiement envers divers créanciers, y inclus SENELEC. Ces retards, qui ne sont pas reflétés de façon explicite dans les comptes budgétaires de 2017, seront régularisés progressivement dès 2018. Cette régularisation implique d'abord leur enregistrement explicite dans le budget de 2018 et suivants – et dans les programmes budgétaires correspondants – et ensuite leur paiement effectif. Parallèlement, le Gouvernement a poursuivi la rationalisation des dépenses de consommation publique afin de favoriser l'investissement dans le capital humain, les infrastructures publiques et dans le renforcement du développement communautaire. Il a, par ailleurs, renforcé le recouvrement des recettes budgétaires.

III. Politique macroéconomique et réformes structurelles pour 2018-2020

6. L'objectif principal est de mettre en place les conditions favorables à une croissance plus forte et mieux partagée pour une réduction significative de la pauvreté. En 2018, le taux de croissance du PIB est projeté à 6,8%contre une estimation initiale de 7.0%. Pour atteindre cet objectif, le gouvernement doit accélérer la cadence dans la mise en œuvre des projets et des réformes du PSE, notamment dans l'énergie, l'agriculture (filières riz et horticulture), du tourisme, des mines, des infrastructures et de l'économie numérique. En outre, il convient également de créer les conditions favorables à l'ouverture de l'espace économique aux startups, PMEs et à l'IDE. L'objectif est de promouvoir un environnement réglementaire favorable à l'entreprise y compris un régime fiscal approprié mais également la mise en place de plusieurs zones économiques spéciales dédiées.

A. politique macroéconomique

7. Les perspectives macroéconomiques du Sénégal sur la période 2018-20sont généralement bien orientées. La croissance du PIB réel devrait se maintenir élevée pour atteindre 6,8% en 2018, en léger fléchissement par rapport à 2017. L'inflation devrait rester dans la fourchette de 1 à 2 pourcent. Le déficit du compte courant (en pourcentage du PIB) devrait rester élevé en 2018dû à une forte croissance des importations (liée à l'augmentation des prix du pétrole et des aliments, et un accroissement des importations de bien intermédiaires). Et ce malgré la croissance soutenue des exportations. Cependant, ce déficit devrait diminuer par la suite et surtout de plus en plus financé par des flux d'Investissements Directs Etrangers (IDE). L'objectif pour le déficit budgétaire est fixé à FCFA 475 milliards en 2018soit 3,5% du PIB. Il devrait atteindre les 3% à l'horizon de convergence fixé par l'UEMOA en 2019. Cet objectif reste un défi pour la gestion budgétaire. En effet, l'augmentation du prix du pétrole a généré depuis 2017 des pressions sur les revenus et dépenses budgétaires. En plus, les retards de paiements accumulés en 2017 doivent être au moins en partie payés en 2018. Le niveau du ratio d'endettement (dette publique totale, extérieure et intérieure) devrait être réduit et ramené sous la barre des 50% du PIB sur la période sous revue grâce aussi au nouveau PIB. Pour atteindre les objectifs de déficit public, le gouvernement compte sur une bonne collecte des recettes budgétaires par l'élargissement progressif de l'assiette fiscale, l'efficacité accrue des administrations fiscales et améliorer sensiblement l'efficience de la dépense publique dans les secteurs sociaux et des infrastructures et contenir les risques budgétaires. Cependant, une attention particulière sera accordée à l'accroissement des dépenses d'investissement pour soutenir la croissance inclusive à travers les différents programmes de développement communautaire. Il s'agira de créer un environnement favorable à des activités génératrices de revenu et d'améliorer les conditions de vie des populations en milieu rural.

B. Réformes structurelles

B.1. Réformes budgétaires et de marchés publics

8. Le gouvernement poursuivra ses efforts de réformes budgétaires en vue d'améliorer le recouvrement des ressources et la productivité des dépenses publiques, d'accroître la transparence budgétaire et de renforcer l'évaluation, le suivi et la comptabilisation des risques budgétaires. A cet effet, le gouvernement entend relever le défi de la mobilisation des ressources internes par un renforcement des administrations fiscale et douanière et un élargissement progressif de l'assiette fiscale. En effet, l'accent sera mis sur la poursuite de la modernisation des administrations fiscale et douanière, le renforcement de la politique fiscale et la rationalisation des dépenses fiscales. Les mesures d'ordre législatif et/ou réglementaires seront prises pour rapatrier dans le budget dans la LFI 2019tout ou partie des impôts, droits, taxes, redevances, contributions qui ne sont pas prélevés au profit du budget de l'Etat et qui frappent des opérations, notamment dans le secteur des mines, de l'Energie, des télécommunications et maritime. Ainsi, le gouvernement a décidé de rapatrier dans la LFI2019 certaines taxes parafiscales ou redevances affectées au FSE, à l'ARTP, au COSEC et au FERA. La DGID sera également impliquée dans la liquidation, le contrôle et le recouvrement des redevances et autres recettes minières et pétrolières.

Par ailleurs, suite à l'audit des restes à recouvrer réalisé par la DGID, le gouvernement s'engage à mobiliser au minimum 67% de créances fiscales jugées recouvrables, d'ici à fin décembre 2018.

9. L'amélioration de la qualité de la dépense publique financée sur ressources internes reste un défi majeur. Ainsi, le gouvernement entend, à partir de la deuxième année d'exécution d'un projet dont le coût global est supérieur ou égal à un milliard de francs, subordonner l'inscription de crédits de paiement dans la loi de finances, à la production, par le ministère concerné, d'un rapport d'exécution physique et financière portant sur l'année antérieure. Par ailleurs, en vue de favoriser l'orientation des dépenses vers la formation brute de capital fixe, le gouvernement s'engage à réviser le décret n°2012-673 du 4 juillet 2012 portant nomenclature budgétaire de l'Etat. Le Gouvernement entend accroître l'efficacité de l'investissement. A cet effet, il va mettre au point des critères rigoureux pour la sélection et la hiérarchisation des projets. Toute proposition de projet serait inscrite dans une banque de projets et une analyse rigoureuse serait demandée avant de pouvoir l'inclure dans le budget. Les projets étudiés seront désormais prioritaires dans le Budget Consolidé d'Investissement (BCI). La banque intégrée de projets sera opérationnelle et un Comité de sélection des investissements publics sera mis en place. Un plan d'actions sera mis en place pour intégrer, dans la plateforme, le cheminement des projets significatifs en termes d'impact sur la croissance. L'amélioration de l'efficacité

des investissements en actifs financiers et non financiers est également une forte préoccupation. le Gouvernement a sollicité l'appui du FMI pour la réalisation d'une évaluation de type PIMA avant la fin de l'année 2018. Les conclusions de cette étude seront prises en compte dès la gestion 2020.

Le gouvernement continuera à mettre en œuvre les réformes visant à améliorer la planification et la préparation du budget, son exécution transparente, ainsi que son contrôle à posteriori par l'Assemblée nationale. Entre autres, le Gouvernement continuera à faire des efforts pour refléter dans les budgets et dans les programmes budgétaires, de façon transparente et explicite, les délais de paiement accumulés avec des créanciers publics et privés. Le Gouvernement soutiendra aussi ses efforts de payer ces obligations dans les plus courts délais, dans les limites définis par le programme budgétaire agréé avec le FMI. Le Gouvernement compte renforcer davantage le contrôle externe de l'exécution du budget. A cet effet, la loi de règlement 2016 a été votée par l'assemblée nationale et les comptes de gestion de l'année 2017 ont été transmis à la Cour des comptes.

10. Le parachèvement de l'interface entre le Système Intégré de Gestion des Finances Publiques (SIGFIP) et ASTER (logiciel de comptabilité du Trésor public) a permis de réduire considérablement les délais de production des comptes de gestion et des projets de lois de règlement. Par ailleurs, le Gouvernement a renforcé les moyens et l'indépendance de la Cour des Comptes et a, à cet effet, fait adopter par l'Assemblée Nationale une nouvelle loi organique sur la Cour des Comptes en 2012 et une loi sur le statut des magistrats de cette Cour. En 2018, la Cour des comptes lancera un concours pour le recrutement de 15 magistrats et de 20 auditeurs. Les rapports annuels de cette Cour sont régulièrement publiés et les comptes des comptables publics audités.

11. Le Gouvernement procédera à l'évaluation préalable de tous les projets financés sous forme de Partenariat Public-Privé (PPP) en application de la loi relative aux contrats de partenariat et de son décret d'application. Le Gouvernement utilisera les meilleurs critères d'analyse des implications budgétaires pour tous les projets de ce type et s'assurera de leur soutenabilité budgétaire. Le Ministère de l'Economie, des Finances et du Plan prendra les dispositions nécessaires pour fixer les modalités de financement des PPP et veillera à ce que les risques d'exploitation de ces projets soient supportés par les opérateurs privés attributaires de conventions. A cet effet, le gouvernement a sollicité le soutien de la Banque mondiale pour l'évaluation des passifs contingents.

12. Un débat d'orientation budgétaire entre le gouvernement et l'Assemblée nationale précède toujours la présentation du budget. Toutes les directives de l'UEMOA sont maintenant internalisées et leur mise en œuvre effective débutera en 2020.

B2. Autres réformes structurelles

13. Le Gouvernement entend promouvoir le secteur privé, vecteur de valeur ajoutée et d'émergence par : (i) la création dans une ZES d'un espace économique avec une réglementation favorable à l'entreprise y compris un régime fiscal avec un taux d'imposition modéré et des dépenses fiscales minimales ; (ii) la poursuite de la dématérialisation des procédures administratives et la facilitation dans les meilleurs délais possibles de la circulation dans la zone industrielle ; l'examen des contraintes liées au processus d'immatriculation des véhicules neufs, à l'établissement de textes juridiques dans le secteur de la sécurité, etc., (iii) l'accompagnement ou la contribution des services de la Douane dans l'amélioration de l'environnement du climat des affaires se poursuivra par la finalisation du projet relatif au ticket libératoire dans sa double composante de signature de l'arrêté ministériel et de la plateforme informatique de mise en œuvre ; (iv) la création d'un cadre règlementaire favorable au développement des startups, moteurs de l'économie numérique.

14. En ce qui concerne l'accès au crédit, l'opérationnalisation des bureaux d'informations sur le crédit (BIC) est effective depuis le 1er février2016. Une stratégie de communication à l'endroit du public est en cours afin de faciliter le recueil du consentement des clients des établissements assujettis.

15. Egalement pour faciliter l'accès aux services financiers, le Gouvernement s'engage à : i) mettre en œuvre intégralement le programme d'éducation financière pour les PME ; ii) poursuivre les discussions avec le secteur privé et les syndicats des travailleurs pour le paiement, par domiciliation dans les comptes bancaires ou par tout moyen de paiement électronique, des salaires supérieurs à 100.000 FCFA ; iii) poursuivre, en collaboration avec les partenaires techniques et financiers et la BCEAO, les efforts visant la promotion de l'inclusion financière à travers l'élaboration d'une stratégie nationale d'inclusion financière et la digitalisation de certains paiements gouvernementaux.

C. Autres politiques de réformes sectorielles

20. Le Plan Sénégal Emergent ambitionne de réduire les inégalités sociales en corrigeant, entre autres, les disparités locales d'accès aux services de base. La pauvreté ayant un caractère multidimensionnel, l'accès à des infrastructures socio-économiques, de santé, d'éducation, d'eau et d'assainissement, énergie et infrastructures de télécommunication et infrastructures de transport ainsi que de financement, aura un effet de levier direct sur la qualité de vie. Il détermine, en plus, l'offre d'opportunités économiques aux populations à la base. Il met aussi l'accent sur une politique de décentralisation et de bonne gouvernance accrue. Pour relever l'ensemble des défis relatifs à une amélioration durable des conditions de vie de sa population, le Sénégal a élaboré un agenda de transformations économiques et sociales bâties sur des politiques sectorielles ambitieuses dont une bonne partie concerne les communautés de base.

a) SECTEUR DE L'ENERGIE

21. Le Gouvernement réaffirme sa volonté de poursuivre l'accompagnement de l'évolution du secteur par un dispositif législatif, réglementaire et institutionnel, en cohérence avec les ambitions de transparence, de sécurisation et de développement. Ainsi, l'élaboration d'un code de l'électricité va consacrer l'extension des missions du régulateur actuel (CRSE) permettra de couvrir le secteur aval des Hydrocarbures. En outre, cette régulation sera renforcée pour les activités du sous-secteur de l'électricité (Production, Transport, Distribution vente, Electrification rurale et Energies renouvelables). Le parachèvement des réformes institutionnelles du sous-secteur de l'électricité dans sa globalité tiendra compte de (i) l'ouverture du réseau aux tiers prévu en 2019 mais également des engagements pris au niveau communautaire (UEMOA, CEDEAO), (ii)l'harmonisation des tarifs entre les clients ruraux des CER et de ceux de SENELEC et (iii) la détermination en cours des tarifs d'achat du surplus de production d'ENR et le lancement du 1er appel d'offres pour la sélection de producteurs indépendants d'Electricité (PIE/IPP)à partir de source renouvelable parla CRSE. L'extension des missions du Fonds Spécial de soutien au Secteur de l'énergie (FSE) au paiement de la péréquation transport des produits pétroliers, droits de portes et sur différentiel commercial et de la compensation due aux opérateurs (SENELEC et CER)

De même, le renforcement du conseil d'administration de SENELEC par des administrateurs indépendants est retenu.

22. Dans le cadre d'un meilleur équilibre offre-demande, le Gouvernement s'est déjà engagé pas seulement à poursuivre une expansion du parc de production d'une façon compétitive, mais aussi à poursuivre une politique de diversification du mix énergétique

vers les énergies renouvelables. Sur la période 2013-2017, SENELEC a mis en service 304 MW de nouvelles capacités faisant passer la puissance installée de 804 MW en 2013 à 1001 MW en 2017. Le développement de la production s'est réalisé avec un mix énergétique plus diversifiée. Ainsi, il convient de noter l'arrivée dans le Réseau Interconnecté de 102 MW de capacités solaires PV faisant passer le taux de pénétration des énergies renouvelables hors hydraulique, à 10,18% pour un objectif préalablement fixés de 20% en 2017. Dans le cadre de la stratégie de diversification, il est également à noter la mise en service de 201 MW d'unités privées (IPP) plus performantes fonctionnant au fioul lourd et convertibles au Gaz naturel. Il convient de noter la réalisation, dans le cadre de l'OMVS, de la centrale hydroélectrique de Félou d'une puissance de 60 MW dont 15 MW pour le Sénégal. Les récentes découvertes de gaz et de pétrole constituent une opportunité pour le développement du parc avec des énergies plus propres. Une stratégie « gas to power » est élaborée. Cette stratégie est un élément clé du nouveau mix énergétique en vue de réduire de façon substantielle les coûts de production d'électricité avec des sources plus propres. Des coûts substantiellement plus bas permettront aussi l'élimination dans le moyen terme du besoin de compensation tarifaire. La stratégie définira le cadre règlementaire et institutionnel pour le gas-to-power, avec un focus sur le midstream et le downstream. Si nécessaire, la stratégie considèrera une solution bridge en vue d'une possible importation de LNG avant l'utilisation du gaz domestique, bien que le scénario optimal soit d'avoir le gaz domestique au plus tôt.

Une baisse notable du coût de Production a été enregistrée avec le coût variable de production qui est passé de 85,5 FCFA/kWh en 2013 à 55,01 FCFA/kWh en 2017 grâce notamment à une baisse du prix des produits pétroliers (jusqu'au premier semestre 2017 du moins) et aux nouveaux investissements réalisés. Cette baisse a été accompagnée d'une amélioration de la continuité et de la qualité de service avec une diminution du nombre d'heures de coupure qui a chuté de 124 h cumulées en 2013 à 77 h cumulées en fin 2017. La lutte contre les pertes techniques et non techniques constitue une priorité pour SENELEC. Cette lutte a été renforcée en 2016 avec comme objectifs de récupérer globalement 0,5% du chiffre d'affaires pour SENELEC et d'assurer une meilleure gestion des Pertes Non Techniques en termes d'analyse et de reporting. Au titre des actions entreprises, un suivi est assuré au niveau des clients prépaiement qui n'ont pas acheté de crédit pendant au moins 3 mois. En conséquence, le rendement a été amélioré entre 2013 et 2017 passant de 79,4% à 81,11% soit un gain de 1,71 % sur les pertes techniques et non techniques.

23. S'agissant en particulier de l'électrification rurale, le Gouvernement a élaboré un Programme National d'Urgence d'Electrification Rurale (PNUER) dont l'objectif est d'atteindre un taux d'Electrification rurale de 60% en 2021 au niveau national avec un

minimum de 30% par département en vue de l'accès universel à l'électricité (100%) à l'horizon 2025. Le programme vise plus spécifiquement : (i) d'accroître la pénétration du réseau dans les zones rurales par la construction de nouvelles dorsales MT ; (ii) de raccorder au réseau toutes les localités proches ; (iii) de réduire les disparités observées entre les départements en matière d'accès et (iv) de densifier les réseaux BT dans les localités déjà électrifiés. Ainsi, le nombre de localités rurales électrifiées est passé de 1648 localités en 2012 à 3864 en 2017 ; soit un doublement (103,3%) en 5 années. Dans la même période, Le taux d'électrification rurale est passé de 24% à 40% soit une évolution de 16%.L'Etat signera une nouvelle convention avec SENELEC pour l'attribution des quatre concessions rurales encore non attribuées. Etant donné les résultats positifs en termes de couverture dans les concessions sous la gestion de SENELEC, cette nouvelle convention permettra d'accélérer les efforts d'extension de la couverture, de clore graduellement les écarts avec le secteur urbain et de s'approcher des objectifs de couverture universelle.

24. En ce qui concerne la restructuration financière du secteur, le Gouvernement a pris une série de mesures qui permettront de nettoyer les importants stocks de dettes envers la SENELEC et, en même temps, de mettre en place des mécanismes pour éviter l'accumulation de nouvelles dettes dans le futur. Ce paquet de mesures inclut un paiement du reliquat de compensation de 2017 et celle de 2018 ainsi que les autres arriérés. Pour 2019, l'Etat révisera la politique tarifaire du secteur et choisira un mix entre compensation tarifaire et révision des tarifs qui permette à la SENELEC le recouvrement complet de ses coûts de production. Le gouvernement s'engage à améliorer le dispositif de compensation tarifaire notamment en prévoyant des ressources budgétaires suffisantes. Le suivi du Contrat de Performance 2017-2019 se poursuit avec le recrutement d'un nouvel auditeur externe. Il faut également souligner que le gouvernement prendra en charge la subvention pour l'harmonisation des tarifs à travers le FSE. Le gouvernement s'attellera à mettre en place un mécanisme pérenne pour (i) le financement de l'éclairage public à travers la nouvelle Taxe sur l'Éclairage Public, (ii) le paiement des factures d'électricité des EPAFs en les rendant dépenses obligatoires et (iii) la restitution plus efficient de la TVA à SENELEC. Ces mesures financières sont complétées par des mesures de bonne gouvernance, qui incluent la nomination de deux membres non-actionnaires dans le Conseil d'Administration de SENELEC.

b) SECTEUR DES TECHNOLOGIES DE LA COMMUNICATION

25. Le numérique constitue un domaine déterminant dans le développement économique et social du Sénégal. Il est un levier essentiel de démultiplication des gains de productivité et d'accroissement de la compétitivité de tous les secteurs de l'économie, à travers l'offre des biens et des services numériques. Son impact se ressent notamment sur l'amélioration des services administratifs et d'autre part, sur l'amélioration de la

productivité dans les secteurs-clés (agriculture, santé, éducation, commerce, services financiers, e-gouvernement).

26. L'industrie des Télécommunications au Sénégal constitue la locomotive actuelle de l'économie numérique et représente le socle sur lequel va s'élaborer la transition numérique de toute l'économie.

Le sous-secteur des Télécommunications s'est développé à la faveur de la privatisation de l'opérateur historique, la Société Nationale des Télécommunications (SONATEL), de la mise en place d'une autorité de régulation mais également, de l'ouverture du marché à deux (2) autres opérateurs globaux, TIGO et EXPRESSO, à un (1) opérateur de service universel, le Consortium du Service Universel (CSU) et à trois (3) fournisseurs d'accès à Internet (FAI).

L'écosystème du numérique est aussi constitué d'entreprises privées principalement de PME et de « Startups » actives dans la conception et le développement d'applications, l'intégration, l'ingénierie et le conseil en général.

Le chiffre d'affaires global des Opérateurs de Télécommunications est en progression, passant de 635 milliards en 2010 à 873 milliards en 2017, soit un taux de croissance annuel moyen de 1,40% sur sept ans.

27. Le numérique représente une part significative de l'activité économique, en termes de chiffre d'affaires, de redistribution des richesses créées, de création d'emplois, d'innovation, directement dans le secteur des télécommunications et TIC, et par effets induits dans le reste de l'économie.

Le numérique est défini par le Président de la République dans sa vision comme : « un facteur de démultiplication des gains de productivité et d'accroissement de compétitivité de tous les secteurs de l'économie sénégalaise ».

Le secteur est ainsi un des principaux moteurs de développement du Sénégal par sa contribution à la croissance du PIB et sa part effective dans celui-ci. Le poids de l'Internet dans le PIB sénégalais reste en 2015, le plus fort de tout le continent africain, se rapprochant davantage de la moyenne des pays développés.

28.Au niveau continental, le Sénégal est classé 1er pays africain pour le poids d'Internet dans l'économie (I-PIB) estimé à 3,3%, du fait notamment d'une très bonne connectivité internationale et d'un bon réseau national de transmission. Toutefois, la décomposition de l'I-PIB du Sénégal montre que 91% de sa valeur est due à la consommation privée tandis que les autres dimensions telles que la contribution des investissements privés, publics et l'exportation sont plus faibles.

29. Il s'agira d'accélérer la diffusion du numérique dans les secteurs prioritaires identifiés dans le PSE pour d'une part, favoriser l'accès aux services sociaux de base (santé, éducation, services financiers) et d'autre partaccroître sensiblement la productivité en se focalisant sur l'usage accrue du numérique dans l'agriculture, l'élevage, la pêche et le commerce.

30. Les progrès attendus à l'horizon 2025, pourront se mesurer à travers les classements internationaux à partir des indices suivants :

- D'une part, pour le *Network Readiness Index*(NRI) du World Economic Forum (WEF), l'objectif visé est d'atteindre au moins la **70ème place dans le monde**, et le **4ème rang en Afrique à l'horizon 2025**. Tandis que l'indice NRI comporte plusieurs sous indices, la réalisation de cet objectif impliquera notamment d'améliorer le score du Sénégal sur l'indice A.1.02 qui mesure l'ampleur avec laquelle le cadre légal et règlementaire favorise la pénétration des TIC et le développement des initiatives privées en prenant en compte notamment l'adoption de nouvelles lois relatives aux télécommunications et à l'économie numérique[45].

- D'autre part, concernant l'*Indice de développement des TIC* (IDI) de l'Union internationale des Télécommunications (UIT), l'objectif visé est d'atteindre au moins **la 90eme place mondiale** et le **4ème rang en Afrique à l'horizon 2025.**

31. Le Sénégal a défini une nouvelle stratégie de développement du numérique à l'horizon 2025 et alignée sur les orientations du PSE. En effet, dans la vision du Sénégal Emergent, le numérique joue un rôle déterminant, car considéré comme un facteur essentiel de démultiplication des gains de productivité et d'accroissement de la compétitivité de tous les secteurs. Avec l'ambition de faire du numérique un moteur de développement économique et social à l'horizon 2025, la stratégie vise à apporter « le numérique pour tous et pour tous les usages avec un secteur privé dynamique et innovant dans un écosystème performant ». Cette vision traduit l'option de s'appuyer sur le numérique comme catalyseur pour une transformation structurelle de l'économie nationale et de s'inscrire dans la société du savoir et de la connaissance de manière inclusive et durable. Elle traduit également une véritable prise de conscience que l'enjeu des politiques publiques du secteur consiste aujourd'hui à élargir l'accès et l'usage de l'internet au-delà des principaux centres urbains du pays afin d'éviter le creusement d'une fracture numérique entre zones rurales et urbaines et par conséquent un accroissement des inégalités économiques et sociales. Afin d'atteindre les objectifs visés, la stratégie fournit les fondations en matière de politique sectorielle, en particulier pour le parachèvement de l'ouverture du marché des télécommunications au secteur privé et du

développement dans la lignée des meilleures pratiques internationales.

32. Dans le cadre des orientations de la stratégie Sénégal Numérique 2025, le Gouvernement vise notamment à mettre en œuvre rapidement plusieurs mesures stratégiques pour transformer le secteur des télécommunications et se positionner à nouveau en tant que leader dans la sous-région, à côté d'autres leaders africains tels que le Ghana, le Kenya, l'Afrique du Sud, le Nigéria, ou l'Ile Maurice :

- Adopter et mettre en œuvre (via des décrets d'application) un nouveau code des télécommunications aligné aux objectifs de la Stratégie Sénégal Numérique 2025 permettant de renforcer le niveau de concurrence en facilitant l'entrée de nouveaux acteurs sur les marchés de gros et de détail de l'Internet haut débit. Ainsi, les Fournisseurs d'Accès Internet ne seront plus soumis au régime de licence mais au régime d'autorisation générale, moins contraignant et moins coûteux, et seront autorisés à déployer leur propre infrastructure dans le cadre d'une convention « type ». Cette mesure vise à réduire la complexité des procédures administratives pour l'accès au marché des télécommunications, dans la lignée des engagements présidentiels. De façon similaire, et afin de créer un véritable marché de gros dans le secteur de l'Internet haut débit, les modalités d'introduction, d'instruction, et d'octroi des demandes d'autorisation pour les « opérateurs d'infrastructures » de télécommunications seront clarifiées de façon à pouvoir accélérer l'entrée de tels acteurs sur le marché dans le cadre d'une convient « type ». Enfin, parce que l'accroissement du niveau de concurrence sur le marché des télécommunications nécessite de renforcer les efforts de régulation sectorielle, la notion de « partage des infrastructures » de télécommunications sera précisée en clarifiant le type d'infrastructures concernées et les modalités de régulation du partage des infrastructures concernées. Dans ce sens des décisions de régulation seront prises pour permettre le partage d'infrastructures entre opérateurs dans des conditions justes et d'accès ouvert. Ces mesures iront de pair avec des efforts visant à renforcer le modèle de gouvernance publique du secteur des télécommunications et de l'économie numérique via un partage équilibré et clair des rôles des différents acteurs publics en charge de la politique sectorielle et de la régulation. Finalement, sur la base d'une étude complète récemment achevée, le Régulateur émettra des décisions pour identifier les marchés pertinents dans le secteur ainsi que les acteurs dominants. Cela permettra dans prochainement (fin de l'année 2018) de définir les nouveaux catalogues de prix et de services des acteurs identifiés comme dominants dans les marchés pertinents. Ces décisions importantes pour éviter les comportements abusifs des acteurs dominants seront alignées avec les meilleurs pratiques internationales. Dans le même sens, le gouvernement a créé une Commission de négociations pour permettre l'entrée de nouveaux opérateurs intéressés dans l'obtention des fréquences 4G. Cela permettra aussi de finir avec la situation monopolistique actuelle. La Commission a déjà engagé des discussions tant techniques – avec

la discussion des projets de cahiers de charges – comme financières – en particulier sur les redevances à payer pour les fréquences et la durée de la concession – avec les deux acteurs existants dans le secteur.

- Adopter et rendre opérationnel un modèle de gestion permettant d'optimiser l'usage des infrastructures publiques numériques tout en garantissant les critères d'efficacité économique, financière et de sécurité nationale. Le Sénégal dispose d'infrastructures numériques publiques qui constituent un actif unique dans La sous-région et donc un avantage comparatif significatif et un atout stratégique pour le développement des TIC et de l'économie numérique. Ainsi, il est indispensable que ces infrastructures soient pleinement exploitées dans des conditions économiques, financières et sécuritaires optimales. Des études pointues seront donc menées à partir de meilleures expériences internationales et tenant compte des spécificités nationales, pour identifier et appliquer le modèle de gestion le plus adaptée pour la gestion des infrastructures fibres optiques financées par des investissements publics. Tout en permettant de réduire les coûts d'investissement en infrastructure des opérateurs de télécommunications qui pourront mieux utiliser les infrastructures numériques publiques sénégalaises, cela générera aussi des économies financières pour l'Etat.

- Améliorer l'utilisation du Dispositif mis en place pour le Développement du Service Universel des Télécommunications en concertation avec les acteurs publics et privés du secteur afin de généraliser l'accès à l'économie numérique sur l'ensemble du territoire sénégalais. Ce dispositif devra permettre de favoriser plus efficacement le développement des réseaux et services de télécommunications, et de haut débit en particulier, dans des régions sous-desservies en zone semi urbaine et rurale. Ainsi, les dispositions du nouveau cadre légal et réglementaire seront rapidement appliquées. Et, le gouvernement adoptera un plan d'investissement relatif à l'accès au service universel qui dotera le dispositif mis en place de ressources budgétaires adéquates. Par conséquent, et dans le cadre d'une stratégie d'accès universelle qui sera préparée en consultation avec l'ensemble des acteurs du secteur, le gouvernement s'attachera à réaliser des projets de renforcement de la connectivité nationale dans les zones caractérisées par des carences d'intérêt privé.

- Aussi dans le cadre de la mise en place de la Stratégie Sénégal Numérique 2025, le Gouvernement mettra en place le Conseil National du Numérique et nommera ses membres, avec une présence majoritaire de représentants du secteur privé. Le CNN permettra l'alignement des objectifs et la coordination des efforts pour la mise en place des réformes dans le secteur, dans le cadre de la Stratégie et du nouveau Code des Communications Electroniques.

Au niveau des réalisations et des perspectives à court terme, nous pouvons citer :

1. **Réalisations majeures**

Les résultats suivants ont été enregistrés :

- ✓ Actualisation du cadre juridique des télécommunications (loi et décrets) : textes finaux reçus du cabinet, finalisation à faire avec les acteurs, adoption en Conseil des Ministres du 6 juin 2018 ;
- ✓ Textes sur le Conseil National du Numérique (décret de création et arrêté de nomination des membres)
- ✓ Déploiement de la Télévision Numérique Terrestre (couverture de 92% du territoire) ;
- ✓ Elaboration du Plan national haut et très haut débit ;
- ✓ Actualisation de la stratégie accès/service universel des Télécommunications ;
- ✓ Début de la réalisation du parc des technologies numériques (PTN) ;
- ✓ Démarrage des activités de trois (3) Fournisseurs d'accès Internet (FAI) ;
- ✓ Sélection de trois (3) Opérateurs Mobiles Virtuels (MVNO).

2. **Perspectives**

- Renforcement du cadre institutionnel et incitatif
- Création du Conseil National du Numérique
- Actualisation du cadre juridique du secteur du numérique (révision des lois et décrets sur la société de l'information, les transactions électroniques, les données à caractère personnel, la cybercriminalité et la cryptologie)
- Etude de faisabilité du projet « Pôles d'activités numériques »/digipoles ;
- Etude sur le partage des infrastructures de Télécommunications et des TIC
- Mise en œuvre des recommandations des études sur les infrastructures
- Etude des différents projets d'infrastructure inscrits dans la stratégie SN2025.

c) Economie numérique.

Afin de permettre à l'économie numérique de jouer son rôle de « démultiplication des gains de productivité et d'accroissement de compétitivité de tous les secteurs de l'économie sénégalaise », le gouvernement s'engage dans un travail de fond critique visant à moderniser et combler les lacunes du dispositif légal, réglementaire et normatif sur la dématérialisation. Ceci implique notamment de compléter le cadre juridique relatif aux télépaiements, à la régulation des données publiques, à la protection des consommateurs, à la fiscalité des transactions électroniques, et au statut des entreprises innovantes (ou « *startups* »). Il s'agit également d'actualiser le cadre législatif et réglementaire sur les transactions électroniques et les paiements électroniques. Finalement, au niveau normatif, il importera d'élaborer, puis homologuer le règlement général d'interopérabilité et de sécurité pour l'ensemble de l'administration publique.

La stratégie Sénégal Numérique 2025 (SSN2025)organise l'intervention de l'Etat dans ce domaine en identifiant quatre axes clés d'intervention. Le premier, relatif à l'accès ouvert et abordable aux réseaux et services numériques est traité en particulier au point b) ci-dessus, au travers des réformes entreprises dans le secteur des télécommunications.

Concernant les trois autres axes prioritaires, le Gouvernement s'engage à prendre des mesures ambitieuses pour concrétiser les bénéfices attendus de l'économie numérique :

- Axe 2 : Une administration connectée au service du citoyen et des entreprises (SSN2025)

La dématérialisation des procédures administrative est au cœur de la stratégie du gouvernement pour améliorer le climat des affaires (cf. PREAC2), ainsi que rapprocher l'administration des citoyens et renforcer son efficacité et sa transparence. Dans ce cadre-là, le gouvernement s'équipe des outils technologiques et règlementaires modernes pour généraliser le règlement par voie numérique des dépenses et recettes de l'administration publique. Il s'agit principalement de permettre à l'administration publique d'employer toute solution de télépaiement (virement, carte, mobile, agrégateurs, etc.) sécurisée et conforme à la règlementation en vigueur, qui permette de faciliter la collecte des recettes aussi bien que les paiements au profit des citoyens ou entreprises (salaires, bourses, subventions, etc.).

Le gouvernement s'engage également à généraliser l'opérationnalisation des procédures de télépaiement, à commencer par la collecte des recettes de la Direction Générale des Impôts et Domaines (DGID), en généralisant la couverture de la plateforme eTax aux PMEs et, a terme, en développant le paiement des impôts par téléphonie mobile (mTax), ainsi que les recettes de la Direction Générale des Douanes (DGD), en introduisant un seuil obligatoire de télépaiement pour les opérations en douanes, dans l'optique de minimiser le recours aux paiements au comptant ou par chèque.

Ces mesures vont permettre un accroissement sensible des flux de télépaiement au profit

du Trésor public, et vont substantiellement réduire les coûts de transaction liés aux obligations fiscales et douanières des entreprises, qui constituent l'une des principales préoccupations du secteur privé. Elles doivent aussi permettre de développer le marché des services de paiements numérique, sur une base concurrentielle, qui favorise l'innovation de solutions adaptées aux besoins du marché sénégalais. A terme, l'objectif est de pouvoir exploiter les synergies d'une administration mieux connectée, plus transparente et efficace au service des citoyens et entreprises.

- Axe 3 : La promotion d'une industrie du numérique innovante et créatrice de valeur (SSN2025)

Outre les réformes applicables au secteur des télécoms, qui constitue la pierre angulaire infrastructurelle sur laquelle repose l'économie numérique, le Gouvernement s'engage à soutenir le développement d'une industrie du numérique au Sénégal, le renforcement de l'écosystème entrepreneurial du numérique. Cela passe par la mise en place d'un cadre réglementaire attrayant pour les entreprises innovantes (ou *« startups »*), qui prenne en compte leurs spécificités, notamment au niveau de la protection de la propriété intellectuelle, de l'accès à des modes de financement adaptés (financement d'amorçage, capital-risque, etc.), de la fiscalité, ou encore de l'accès à la commande publique, à des fins d'innovation. A ces fins, le Gouvernement participe activement au *Dakar Policy Hackathon*, processus de co-création réglementaire, en collaboration avec les acteurs de l'écosystème entrepreneurial sénégalais.

Par ailleurs, le Gouvernement souhaite renforcer l'écosystème entrepreneurial au travers de différentes structures de soutien à l'incubation ou à l'accélération, qui favorisent les échanges entre les structures de recherches (universités, écoles techniques, etc.), le secteur privé établi, et les startups. Cela passe notamment par l'opérationnalisation du Parc des Technologies Numériques du Sénégal (PTN), et la revitalisation de structures historiques telles que le CTIC Dakar, qui font office de référence et ont beaucoup œuvré au rayonnement des startups sénégalaise dans la sous-région.

- Axe 4 : La diffusion du numérique dans les secteurs économiques prioritaires (SSN2025)

Concernant ce quatrième et dernier axe de la Stratégie Sénégal Numérique 2025, le Gouvernement s'engage à développer le marché pour l'innovation technologique dans les services publics (que les anglophones appellent *GovTech*), avec la tenue régulière de *hackathons* et autres modes innovants d'engagement avec les startups, tels que les *business reverse pitches* notamment. Il s'agira également de repenser les règles de marchés publics pour s'assurer qu'elles prennent en compte les impératifs lies a l'innovation technologique. En effet, les approches traditionnelles d'accès à la commande publique, basée sur les règles de passation de marché traditionnelles, ne sont pas bien adaptées à l'innovation, car elles impliquent une définition *ex ante* de la solution recherchée (sur la base de termes de référence et spécifications techniques). Il s'agit de

mettre en place des processus qui partent de la définition du défi ou problème à résoudre, en demandant aux startups sur le marché de proposer des solutions innovantes en mesure de les résoudre.

REPUBLIQUE DU SENEGAL

Un Peuple – Un But – Une Foi

MINISTERE DE L'ECONOMIE, DES FINANCES ET DU PLAN

DEVELOPMENT POLICY LETTER

(October 2018)

I. Introduction

1. With the support of its technical and financial partners, Senegal has developed and adopted its Economic and Social Development Strategy, the Emerging Senegal Plan (PSE II). These are integrated policies and programs that reflect the Government's political will to place Senegal on the path to development and take into account the basic concerns of the populations. The objective is to provide the conditions for sustained, inclusive and sustainable growth that will significantly reduce poverty and achieve the Sustainable Development Goals (SDOs).

2. Senegal's economic and social development requires the implementation of a strategy leading to economic growth with a strong positive impact on people's living conditions but taking into account the need to restore public finances and maintain public debt at sustainable levels. In this respect, the main challenge is to revive the economy in a context of virtuous, effective and efficient governance. PSE II is structured around three axes: (i) Growth, Productivity and Wealth Creation; (ii) Human Capital, Social Protection and Sustainable Development; and (iii) Governance, Institutions, Peace and Security.

3. Furthermore, in order to strengthen public policy dialogue with its development partners, and streamline their interventions for enhanced alignment and predictability, the Government holds regular meetings with the G50 group of technical and financial partners and a joint annual review.

4. This document summarizes Senegal's recent economic and social performance and prospects.

II. Preliminary results for 2017

The preparation of national accounts according to the recommendations of the National Accounts System (SNA) 2008 with 2014 as the new base year, best reflects the current structures of the Senegalese economy. The basic change of the national accounts (from 1999 to 2014) implies a 30 percent increase in nominal GDP, which has a significant impact on GDP-based macroeconomic indicators (public debt ratio, budget deficit, GDP per capita, but also the tax burden).

1. **Internally, the implementation of the PSE continues to yield very significant results.** Indeed, at the end of 2017, GDP growth rate stood at 7.2%, against an initial forecast of 6.8%. This performance of over 6 percent for the third consecutive year (after 6.4% in 2015 and 6.2% in 2016) is primarily due to the strong performance of sectors such as agriculture (+16.8%), the manufacture of cereal-based food products (+7.8%), chemicals (+17.8%), electricity and gas (+8.9%), construction (+9.6%), transport (10.5%), accommodation and food services (+15.0%), and financial and insurance services (+16.5%). From the demand perspective, growth is mainly driven by domestic absorption. Consumption and gross fixed capital formation account for 5.6 and 1.7 percentage points respectively. With regard to inflation, the pricing trends remained shy in view of the increase in the Harmonized Index of Consumer Prices (HICP), which was estimated at 1.3% in 2017. In terms of external trade, the current account deficit deteriorated from 4.2% in 2016 to 7.2% in 2017, due to the impact of the rise in oil prices on the imports of petroleum products and the sharp increase in external purchases of food products and capital goods.

2. The budget deficit target of CFAF 372 billion (3.0 percent of the new GDP) was met. However, it must be underscored that compliance with the budget deficit target also results from the accumulated delays in payment to various creditors, including SENELEC. These delayed payments, which are not explicitly reflected in the 2017 budgetary accounts, will be gradually regularized from 2018 onwards. Such regularization first implies their explicit inclusion in the 2018 and subsequent budgets - and in the corresponding budget programs – followed by their actual payment. In parallel, the Government pursued the rationalization of public consumption expenditure in order to promote investment in human capital, public infrastructure and to strengthen community development. It also improved the collection of budgetary revenues.

III. Macroeconomic policy and structural reforms for 2018-2020

4. The main objective is to create the conditions for stronger and better-shared growth aimed at significant poverty reduction. In 2018, the GDP growth rate is projected at 6.8% compared to an initial estimate of 7.0%. To achieve this objective, the government must accelerate the pace of implementation of PSE projects and reforms, particularly in energy, agriculture (rice and horticulture sectors), tourism, mining, infrastructure and the digital economy. There is also need to create favourable conditions to open the economic space to start-ups, SMEs and FDI, with the aim of promoting a regulatory environment that is conducive to business, including an appropriate tax regime and the setting up of several dedicated special economic zones.

A. Macroeconomic policy

5. Senegal's macroeconomic outlook for the period 2018-20 is generally favourable. Real GDP growth is expected to remain high at 6.8% in 2018, slightly lower than in 2017. Inflation is expected to remain in the 1 to 2 percent range. The current account deficit (as a percentage of GDP) is expected to remain high in 2018 due to strong import growth (linked to rising oil and food prices, and increased imports of intermediate goods), despite the sustained export growth. However, this deficit is expected to subsequently decline and be increasingly financed by Foreign Direct Investment (FDI) flows. The budget deficit

target is set at CFAF 475 billion in 2018, or 3.5% of GDP. It should reach 3% by the convergence horizon set by WAEMU in 2019. This objective is a challenge for budgetary management. Indeed, the increase in oil prices has generated pressure on budgetary revenues and expenditures since 2017. In addition, the delayed payment accumulated in 2017 must at least be partially paid in 2018. The debt ratio level (total public debt, external and domestic) is expected to drop to below 50% of GDP over the period under review, also thanks to the new GDP. To achieve the deficit targets, the government intends to ensure good fiscal revenue collection by gradually widening the tax base, improving the efficiency of tax administrations, significantly improving the effectiveness of public spending in the social and infrastructure sectors and containing fiscal risks. However, special focus will be placed on increasing investment spending to support inclusive growth through various community development programs. The aim will be to create an environment conducive to income-generating activities and improve the living conditions of populations in rural areas.

B. Structural Reforms

B.1. Budgetary and public procurement reforms

6. The government will pursue its fiscal reform efforts to improve resource recovery and public expenditure productivity, increase fiscal transparency and strengthen the assessment, monitoring and accounting of fiscal risks. To this end, the government intends to address the challenge of mobilizing domestic resources by strengthening the tax and customs administrations and gradually broadening the tax base. Indeed, emphasis will be placed on further modernizing the tax and customs administrations, strengthening tax policy and rationalizing tax expenditures. Legislative and/or regulatory measures will be taken to repatriate to LFI 2019 of the budget, all or part of the taxes, duties, levies, fees, charges, contributions that are not deducted for the benefit of the State budget and are levied on operations, particularly in the mining, energy, telecommunications and maritime sectors. Thus, the government has decided to repatriate to LFI2019 certain parafiscal taxes or fees allocated to the ESF, ARTP, COSEC and FERA. The DGID will also be involved in the liquidation, control and collection of royalties and other mining and oil revenues.

Following the audit of outstanding amounts conducted by the DGID, the government undertakes to mobilize at least 67% of tax receivables deemed recoverable by the end of December 2018.

7. Improving the quality of public expenditure financed from domestic resources continues to be a major challenge. Thus, from the second year of implementation of a project whose overall cost is not less than FRF 1 billion, the government intends to ensure that payment appropriations are not entered into the Finance Act unless the ministry concerned produces a physical and financial implementation report covering the previous year. Besides, to encourage the orientation of expenditure towards gross fixed capital formation, the government undertakes to revise Decree No. 2012-673 of 4 July 2012 on

the State's budgetary nomenclature. The Government intends to increase the efficiency of investment. To this end, it will develop rigorous criteria for the selection and prioritization of projects. All project proposals would be entered into a project bank and a rigorous analysis would be required before they are included in the budget. The projects under consideration will henceforth be given priority in the Consolidated Investment Budget (BCI). The integrated project bank will be operational and a Public Investment Selection Committee will be set up. An action plan will be put in place to integrate, in the platform, the progress of significant projects in terms of impact on growth. The Government has requested IMF support for the conduct of a PIMA-type evaluation before the end of 2018. The conclusions of this study will be taken into account as of the 2020 management.

The government will continue to implement reforms to improve budget planning and preparation, transparent budget implementation, and ex-post control by the National Assembly. Among other things, the Government will pursue its efforts to transparently and explicitly reflect in budgets and budget plans, the payment arrears owed to public and private creditors. The Government will also support efforts to pay these obligations as soon as possible, within the limits defined by the budget program agreed with the IMF. It intends to further strengthen external oversight of budget implementation. To this end, the 2016 Budget Review Act was passed by the National Assembly and the 2017 management accounts were forwarded to the Court of Auditors.

8. The completion of the interface between the Integrated Public Finance Management System (SIGFIP) and ASTER (Public Treasury accounting software) has considerably reduced the time required to produce management accounts and draft budget review acts. The Government has also increased the resources and reinforced the independence of the Court of Auditors and, to this end, has had the National Assembly adopt a new organic law on the Court of Auditors in 2012 and a law on the status of judges of this Court. In 2018, the Court of Auditors will launch a competitive examination for the recruitment of 15 judges and 20 auditors. The Court’s annual reports are regularly published and the public accountants’ accounts audited.

9. The Government will make a prior assessment of all projects financed in the form of Public-Private Partnerships (PPPs) under the Law on Partnership Contracts and its implementing decree. The Government will use the best criteria to analyze the budget implications for all such projects and ensure their fiscal sustainability. The Ministry of the Economy, Finance and Planning will take the necessary steps to determine the terms and conditions for financing PPPs and will ensure that the risks of operating these projects are borne by private operators that have concluded agreements. To this end, the government has requested the support of the World Bank for the evaluation of contingent liabilities.

10. The presentation of the budget is always preceded by a budgetary orientation debate between the government and the National Assembly. All WAEMU directives have been internalized and will be effectively implemented with effect from 2020.

B2. Other structural reforms

11. The Government intends to promote the private sector, a vector of added value and emergence through: (i) the creation in a SEZ of an economic space with business-friendly regulations including a tax regime with a moderate tax rate and minimum tax expenditure; (ii) the continued dematerialization of administrative procedures and the facilitation, as soon as possible, of traffic in the industrial zone; the review of constraints in the registration process for new vehicles, preparation of legal texts in the security sector; etc.., (iii) the support or contribution of customs services to the improvement of the business climate will be pursued with the finalization of the project on the discharge ticket in its dual component of signing the ministerial order and the IT implementation platform; (iv) the creation of a regulatory framework that fosters the development of startups, the mainsprings of the digital economy.

12. With regard to access to credit, the credit information bureaus (BICs) have been operational since 1 February 2016. A public communication strategy is underway to help collect the approval of clients of reporting institutions.

13. Also, to facilitate access to financial services, the Government undertakes to: (i) fully implement the financial education program for SMEs; (ii) pursue discussions with the private sector and workers' unions for the payment of salaries above CFAF 100 000, by direct debit in bank accounts or by any means of electronic payment; (iii) pursue, in collaboration with technical and financial partners and BCEAO, efforts to promote financial inclusion by drafting a national strategy on financial inclusion and digitalizing certain Government payments.

C. Other sectoral reform policies

14. The Emerging Senegal Plan aims to reduce social inequalities by, inter alia, correcting local disparities in access to basic services. As poverty is multidimensional, access to socio-economic, health, education, water and sanitation, energy, telecommunications, transport and transport and financing facilities will have a direct leverage effect on the quality of life. It also determines the provision of economic opportunities to the grassroots populations and focuses on a decentralization and improved good governance policy. To meet all the challenges of sustainably improving the living conditions of its population, Senegal has developed an agenda of economic and social transformations based on ambitious sectoral policies, many of which concern the grassroots communities.

a) ENERGY SECTOR

15. The Government reaffirms its willingness to continue to support the development of the sector through a legal, regulatory and institutional framework, in line with the transparency, security and development goals. Thus, the development of an electricity code will extend the missions of the current regulator (CRSE) to cover the downstream sector of Hydrocarbons. This regulation will be strengthened to cover the activities of the electricity sub-sector (Generation, Transmission, Distribution and Sale, Rural Electrification and Renewable Energies). The completion of the institutional reforms of the entire electricity sub-sector will take into account (i) the opening of the network to third parties scheduled for 2019 as well as commitments made at the Community level (WAEMU, ECOWAS), (ii) the harmonization of tariffs between rural customers of RECs and those of SENELEC and (iii) the current fixing of tariffs for the purchase of surplus ENR production and the launch of the 1st tender call for the selection by the CRSE, of independent generators producing power from renewable energy sources (PIE/IPP). Extending the missions of the Special Energy Sector Support Fund (ESF) to include the payment of equalization for the transport of petroleum products, port duties and trade differential and compensation owed to operators (SENELEC and REC)

Similarly, the need to beef up SENELEC's Board of Directors with independent directors is also highlighted.

16. As part of the effort to improve the supply-demand balance, the Government has already committed itself not only to continue to expand the production fleet in a competitive manner, but also to pursue a policy of diversifying the energy mix towards renewable energies. Over the 2013-2017 period, SENELEC commissioned 304 MW of new capacity, thus increasing the installed capacity from 804 MW in 2013 to 1001 MW in 2017. Increased production was achieved with a more diversified energy mix. It should be noted that 102 MW of PV solar capacity has arrived in the Interconnected Network, increasing the penetration rate of renewable energies (excluding hydropower) to 10.18%, for a target previously set at 20% in 2017. As part of the diversification strategy, it should also be noted that 201 MW of more efficient private units (IPPs) running on heavy fuel oil and convertible to natural gas have been commissioned. It should be noted that the Félou hydroelectric power plant, with a capacity of 60 MW, including 15 MW for Senegal, was built within the framework of OMVS. The recent discoveries of gas and oil constitute an opportunity for the development of the park with cleaner energy. A "gas to power" strategy is developed. This strategy is a key element of the new energy mix meant to significantly reduce the costs of generating electricity with cleaner sources. Substantially lower costs will also eliminate the need for tariff compensation in the medium term. The strategy will define the regulatory and institutional framework for gas-to-power, with a focus on both midstream and downstream. If necessary, the strategy will consider a bridge solution for the possible importation of LNG before the use of domestic gas, although the optimal scenario is to have domestic gas as soon as possible.

A significant decline in production costs was registered with the variable production cost

dropping from CFAF 85.5/kWh in 2013 to CFAF 55.01/kWh in 2017, thanks in particular to a decrease in oil product prices (at least until the first half of 2017) and to new investments. This decrease was accompanied by an improvement in the availability and quality of service marked by a reduction in the number of outage hours, which fell from 124 hours in 2013 to 77 hours at the end of 2017. Addressing technical and non-technical losses is a priority for SENELEC. This effort was intensified in 2016 with the aim of recovering 0.5% of SENELEC's total revenue and improving the management of non-technical losses in terms of analysis and reporting. The actions undertaken include a follow-up with prepaid customers who have not purchased credit for at least 3 months. As a result, the yield improved between 2013 and 2017 from 79.4% to 81.11%, representing a gain of 1.71% on technical and non-technical losses.

17. With regard to rural electrification in particular, the Government has developed a National Emergency Rural Electrification Program (PNUER) whose objective is to achieve a 60% rural electrification rate by 20221 at the national level with a minimum of 30% per department with the aim of attaining universal access to electricity (100%) by 2025. The program is more specifically aimed at: (i) increasing network penetration in rural areas through the construction of new MV backbones; (ii) connecting all nearby localities to the network; (iii) reducing disparities in access between departments; and (iv) densifying LV networks in localities that have already been electrified. Thus, the number of electrified rural localities has increased from 1,648 in 2012 to 3,864 in 2017, i.e. a twofold increase (103.3%) in 5 years. During the same period, the rural electrification rate increased from 24% to 40%, i.e. a 16% increase. The State will sign a new agreement with SENELEC for the award of the four rural concessions not yet allocated. Given the positive results in terms of coverage in the concessions under SENELEC's management, this new agreement will help accelerate efforts to extend coverage, gradually close gaps with the urban sector and come close to achieving the objectives of universal coverage.

18. With regard to the financial restructuring of the sector, the Government has taken a series of measures to clear the huge outstanding debt owed to SENELEC and, at the same time, establish mechanisms to avoid the accumulation of new debts in the future. This package of measures includes the payment of the compensation balance for 2017 and 2018 as well as other arrears. For 2019, the State will revise the tariff policy of the sector and select a mix between tariff compensation and tariff revision to enable SENELEC to fully recover its production costs. The government undertakes to improve the system of tariff compensation, in particular by providing sufficient budgetary resources. The follow-up to the 2017-2019 performance contract is being pursued with the recruitment of a new external auditor. There is also need to stress that the government will cover the tariff harmonization subsidy through the ESF. The Government will strive to establish a permanent mechanism for the (i) financing of public lighting through the new public lighting tax, (ii) the payment of EPAFs' electricity bills by including them in the compulsory expenditure category and (iii) the more efficient refund of VAT to SENELEC.

These financial measures are complemented by good governance measures, which include the appointment of two non-shareholder members in SENELEC's Board of Directors.

b) COMMUNICATION TECHNOLOGY SECTOR

19. The digital sector is a key area in Senegal's economic and social development. It is an essential lever to improve productivity gains and increase the competitiveness of all sectors of the economy, through the supply of digital goods and services. Its impact is particularly felt in the improvement of administrative services, on the one hand, and the boosting of productivity in key sectors (agriculture, health, education, trade, financial services, e-government).

20. The telecommunications industry in Senegal is the current powerhouse of the digital economy and the bedrock on which the digital transition of the entire economy will be built.

The telecommunications sub-sector has developed with the privatization of the historical operator, the National Telecommunications Company (SONATEL), the establishment of a regulatory authority and the opening of the market to two (2) other global operators, TIGO and EXPRESSO, one (1) universal service provider, the Universal Service Consortium (CSU/USC) and three (3) Internet Service Providers (ISPs).

The digital ecosystem also includes private companies, mainly SMEs and "startups" active in the design and development of applications, integration, engineering and consulting, in general.

The total turnover of telecommunications operators is increasing. It rose from 635 billion in 2010 to 873 billion in 2017, i.e. an average annual growth rate of 1.40% over seven years.

21. Digital accounts for a significant share of economic activity, in terms of turnover, redistribution of generated wealth, job creation, innovation, directly in the telecommunications and ICT sector, and through induced effects in the rest of the economy.

The President of the Republic, in his vision, describes digital as: "a factor for the improvement of productivity gains and the increase in the competitiveness of all sectors of the Senegalese economy".

The sector is thus among the major drivers of Senegal's development through its contribution to GDP growth and its actual share in it. In 2015, the weight of the Internet in Senegal's GDP was the highest in the entire African continent, and more in line with the average in developed countries.

22. At the continental level, Senegal is ranked 1st African country with regard to the weight of the Internet in the economy (I-GDP) estimated at 3.3% due, in particular, to very good international connectivity and a good national transmission network. However, the

breakdown of Senegal's I-GDP shows that 91% of its value is due to private consumption while other dimensions such as the contribution of private and public investments as well as exports, are lower.

23. It will involve accelerating the dissemination of digital technologies in priority sectors identified in the PSE to promote access to basic social services (health, education, financial services) on the one hand, and on the other, to significantly increase productivity by focusing on the increased use of digital technologies in agriculture, livestock, fishing and trade.

24. The progress expected by 2025 will be measurable through international ranking based on the following indices:

-On the one hand, for the *Network Readiness Index* (NRI) of the World Economic Forum (WEF), the aim is to at least obtain **70th place in the world**, and the **4th in Africa by 2025.** While the NRI index has several sub-indices, the achievement of this objective will entail improving Senegal's score on the A.1.02 index, which measures the extent to which the legal and regulatory framework is conducive to the penetration of ICT and the development of private initiatives, taking into account the adoption of new laws on telecommunications and the digital economy[46].

- On the other hand, the *ICT Development Index* (IDI) of the International Telecommunication Union (ITU) seeks to reach at least **90th position worldwide and 4th position in Africa by 2025**.

25. Senegal has defined a new digital development strategy for 2025 aligned with the PES guidelines. Indeed, digital technologies play a key role in Senegal's emerging vision, since it is considered as an essential factor in the improvement of productivity gains and the increase in the competitiveness of all sectors. In the bid to make digital technologies an engine of economic and social development by 2025, the strategy seeks to provide "digital for all and for all uses with a dynamic and innovative private sector in a well-functioning ecosystem". This vision reflects the option to rely on digital as a catalyst for a structural transformation of the national economy and to be in line with the knowledge society in an inclusive and sustainable manner.

It also reflects a real awareness that the issue of the sector's public policies today consists in expanding the access and use of the Internet beyond the country's main urban centres to avoid widening the digital divide between the rural and urban areas and the resulting increase in economic and social inequalities. To achieve the set objectives, the strategy provides the basis for sectoral policy to complete the opening of the telecommunications market to the private sector and development in line with International best practices.

26. As part of the orientations of the Senegal Digital 2025 Strategy, the Government aims, inter alia, to rapidly implement several strategic measures to transform the telecommunications sector and position itself anew as a leader in the sub-region,

alongside other African leaders such as Ghana, Kenya, South Africa, Nigeria, or Mauritius:

➢Adopt and implement (through implementing decrees) a new Telecommunications Code aligned with the objectives of the Senegal Digital 2025 strategy to enhance competitiveness by facilitating the entry of new players in the wholesale and retail markets for high speed Internet. Thus, Internet service providers will no longer be subjected to the licensing regime, but to the general authorization system, which is less restrictive and cheaper, and will be allowed to deploy their own infrastructure under a "standard" agreement. This measure is intended to reduce the complexity of administrative procedures for access to the telecommunications market, in line with the presidential commitments. Similarly, and in order to create a real wholesale market in the high-speed Internet sector, the terms and conditions for introducing, processing and granting applications for authorizations to telecommunications "infrastructure operators" will be clarified so as to accelerate the entry of such players into the market within the framework of a "standard" agreement. Finally, because the increase in competitiveness in the telecommunications market requires strengthened sectoral regulation efforts, the concept of telecommunications "facility sharing" will be clarified by indicating the type of facility concerned and the arrangements to regulate the sharing of facilities concerned. In this regard, regulatory decisions will be taken for the sharing of facilities among operators under fair and open access conditions. These measures will be complemented by efforts to strengthen the public governance model of the telecommunications sector and the digital economy through a balanced and clear sharing of roles of various public actors in charge of sectoral policy and regulation. Finally, on the basis of a recently completed comprehensive study, the Regulator will issue decisions to identify the relevant markets in the sector as well as the dominant players. This will help define, in the near future (end of 2018), the new catalogues of prices and services of so-called dominant players in relevant markets. These decisions – important because they are intended to prevent abusive behavior by dominant players – will be aligned with the best international practices. In the same vein, the government has set up a Negotiating Committee to allow the entry of new operators interested in obtaining 4G frequencies. This will also put an end to the current monopolistic situation. The Committee has already initiated both technical – with the discussion of the draft specifications – and financial discussions – in particular, on the fees to be paid for frequencies and the duration of the concession – with the two existing actors in the Sector.

➢Adopt and operationalize a management model that maximizes the use of public digital facilities while guaranteeing the criteria for economic, financial and national security efficiency. Senegal has public digital facilities, which constitute a unique asset in the sub-region and, as a result, a significant comparative advantage and strategic asset for the development of ICT and the digital economy. These facilities must therefore be fully exploited in optimum economic, financial and security conditions. Detailed studies will be carried out on the basis of the best international experiences, taking national specificities

into account, to identify and apply the most suitable management model for the administration of fibre optic infrastructure funded through public investments. While reducing the infrastructure investment costs of telecommunications operators who can optimize the use of the Senegalese public digital infrastructure, it will also generate financial savings for the State.

➢ Improve the use of the system set up for the development of the Universal telecommunications Service in consultation with public and private sector actors in order to generalize access to the digital economy throughout Senegalese territory. This mechanism will more effectively promote the development of telecommunications networks and services, particularly broadband, in the underserviced regions of semi-urban and rural areas. The provisions of the new legal and regulatory framework will be implemented rapidly. And the Government will adopt an investment plan for access to universal service, which will provide the system with adequate budgetary resources. As a result, and within the framework of a universal access strategy to be prepared in consultation with all players in the sector, the Government will strive to implement projects to strengthen national connectivity in areas characterized by lack of private interest.

➢ Besides, as part of the implementation of the Digital Senegal 2025 Strategy, the Government will set up the National Digital Council and appoint its members, with a preponderance of private sector representatives. The NDC//CNN will facilitate the alignment of objectives and coordination of efforts to implement reforms in the sector, within the framework of the strategy and the new Electronic Communications Code.

In terms of achievements and short-term prospects, we can mention:

1. Major accomplishments

The following results were registered:

- ✓ Updating the legal telecommunications framework (Law and Decrees): final texts received from Cabinet, to be finalized with the actors, adoption by the Council of Ministers of 6 June 2018;
- ✓ Texts on the National Digital Council (Decree establishing it and Decision appointing its members)
- ✓ Deployment of digital terrestrial television (coverage of 92% of the territory);
- ✓ Drafting the National Plan on high and very high bandwidth;
- ✓ Updating of the Universal Telecommunications Access/service strategy;
- ✓ Start of the digital Technology Park (PTN);
- ✓ Start of the activities of three (3) Internet Service Providers (ISPs);
- ✓ Selection of three (3) Mobile Virtual Network Operators (MVNO).

1. Perspectives

• Strengthening the institutional and incentive framework
• Creation of the National Digital Council
• Updating of the legal framework of the digital sector (revision of laws and decrees on the information society, electronic transactions, personal data, cybercrime and cryptology)
• Feasibility study of the project "clusters of digital activity"/digipoles;
• Study on the sharing of telecommunications infrastructure and ICT
• Implementation of the recommendations of the Infrastructure studies
• Study of the various infrastructure projects included in the Digital Senegal strategy.

Digital economy.

To enable the digital economy to play its role of "improving productivity gains and increasing the competitiveness of all sectors of the Senegalese economy", the government is engaged in critical groundwork aimed at modernizing and filling the gaps in the legal, regulatory and normative framework applying to digitization (or dematerialization). This requires, among others, completing the legal framework for electronic payments, the regulation of public data, the protection of consumers, the taxation of electronic transactions, and the status of innovative companies (or "startups"). It also requires updating the legal and regulatory framework for electronic transactions and electronic payments. Finally, at the normative level, it will be necessary to develop and have certified the general interoperability and security regulations for the whole of the public administration.

The Digital Senegal 2025 Strategy (SSN2025) organizes the State's intervention in this area by identifying four key axes of intervention. The first, concerning open and affordable access to digital networks and services is dealt with in point (b) above, through reforms conducted in the telecommunications sector.

With regard to the other three priority areas, the Government commits to taking ambitious measures to materialize the expected benefits of the digital economy:

• Axis 2: An connected administration at the service of citizens and businesses (SSN2025)

The dematerialization of administrative procedures is at the heart of the government's strategy to improve the business climate (cf. PREAC2), bring the administration closer to citizens and enhance its effectiveness and transparency. In this context, the Government equips itself with modern technological and regulatory tools to generalize the payment of public administration expenditures and revenues by digital means. This is aimed at allowing the public administration to use any electronic payment solution (by bank transfers, credit/debit cards, mobile payments, aggregators, etc.) that is secure and in conformity with the regulation in force, which facilitates the collection of revenues as well payments for the benefit of citizens or businesses (salaries, grants, grants, etc.).

The government further commits to generalize the roll-out of electronic payment procedures, starting with revenue collection by the Directorate General of Taxes and Estates (DGID), by generalizing the coverage of the eTax platform to SMEs, and, ultimately, by developing the payment of taxes by mobile telephony (mTax), as well as revenue of the General Customs Directorate (DGD), by introducing a mandatory electronic payment threshold for customs operations, with the objective of rolling out payment in cash or by cheque.

These measures will lead to a significant increase in the flow of electronic payment to the public treasury, and will substantially reduce the transaction costs associated with corporate taxes and customs obligations, which is among the main concerns of the private sector. They must also enable the development of the market for digital payment services, on a competitive basis, which favors the innovation of solutions adapted to the needs of the Senegalese market. Ultimately, the objective is to make use of the synergies of a better connected, more transparent and effective administration, at the service of citizens and businesses.

• Axis 3: The promotion of an innovative and value-creating digital industry (SSN2025)

In addition to the reforms applicable to the telecoms sector, which is the infrastructural cornerstone of the digital economy, the Government is committed to supporting the development of a digital industry in Senegal and strengthening the digital entrepreneurial ecosystem. This requires the establishment of an attractive regulatory framework for startups, taking their specificities into account, particularly in terms of the protection of intellectual property, access to appropriate financing methods (seed financing, risk capital, etc.), taxation, or access to public procurement, for innovation purposes. To this end, the Government is actively involved in the *Dakar Policy Hackathon*, a regulatory co-creation process, in collaboration with the actors of the Senegalese entrepreneurial ecosystem.

In addition, the Government wishes to strengthen the entrepreneurial ecosystem through various incubation or acceleration support structures, which promote exchanges between research structures (universities, technical institutes, etc.), the established private sector, and startups. This requires the operationalization of the Digital Technology Park of Senegal (PTN), and the revitalization of historical structures such as CTIC Dakar, which serve as reference and contribute significantly to the visibility of Senegalese startups in the sub-region.

• Axis 4: Digital dissemination in the priority economic sectors (SSN2025)

Regarding this fourth and final axis of the Senegal Digital 2025 strategy, the government commits to developing the market for technological innovation in public services (which Anglophones refer to as *GovTech*), with the regular holding of *hackathons* and other innovative modes of engagement with startups, such as *business reverse pitches* among others. It will also be necessary to rethink public procurement rules to ensure that they take into account the imperatives of technological innovation. In fact, traditional approaches to public procurement access, based on traditional rules of procurement, are not well adapted to innovation, as they imply an ex ante definition of the solution sought (based on terms of reference and technical specifications). It involves establishing processes that start with the definition of the challenge or problem to be solved and requesting startups on the market to propose innovative solutions to solve them.

ANNEX 3: IMF RELATIONS ANNEX

Press Release No. 18/271
July 2, 2018

IMF Executive Board Completes Sixth Review
Under the Policy Support Instrument (PSI) for Senegal

The Executive Board of the International Monetary Fund (IMF) completed the sixth review of Senegal's economic performance under a program supported by the Policy Support Instrument (PSI). 1 The program aims to implement economic policies and structural reforms needed to sustain strong growth and ongoing fiscal consolidation to meet the regional fiscal criteria.

In completing the review, the Board also approved the authorities' request for waiver of nonobservance and modification of assessment criteria. The PSI for Senegal was approved on June 24, 2015 (see Press Release No. 15/297).

Following the Executive Board discussion, Mr. Mitsuhiro Furusawa, Deputy Managing Director and Acting Chair, made the following statement:

"Senegal's reform efforts, as laid out in the Plan Sénégal Emergent (PSE) and aided by the Policy Support Instrument (PSI), have helped to increase growth while maintaining economic stability. Growth reached 7.2 percent in 2017 while inflation remained low and the fiscal deficit was contained to 3 percent of GDP. However, public finances deteriorated, driven mainly by unchanged prices for domestic energy products in the face of higher global energy prices. This deterioration was somewhat offset by new fiscal measures, with an upwards revision of the 2018 fiscal deficit to 3.5 percent.

"The authorities remain committed to PSI fiscal targets. Over the medium term, increased revenues through improving administration and lowering tax expenditures, improved public investment efficiency, and energy price reform would create space to finance Senegal's development needs in a sustainable manner.

"The authorities have made substantial progress in reducing weaknesses in treasury operations and containing additional financing needs, but a timebound plan to address accumulated energy sector obligations is needed. Together with improvements in debt management and debt coverage, this will support fiscal sustainability.

"Risks to Senegal's economy have increased but remain manageable. On the domestic side, lack of progress on structural fiscal issues such as revenue mobilization, energy subsidies, and reforms to further reduce the treasury's additional financing needs could undermine fiscal sustainability. On the external side, security risks in the region could adversely affect investment and growth.

"Senegal's high growth during the first years of the PSE now needs to be consolidated by further implementing structural reforms and attracting private investment to generate continued high growth, with opportunities for all. This requires tackling impediments to access to credit, cost of energy, and taxation issues, while improving the business environment, including further development of special economic zones, three of which are now operational."

ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior actions	Significant positive or negative environment effects (yes/no/to be determined)	Significant poverty, social or distributional effects positive or negative (yes/no/to be determined)
Pillar 1: Energy sector		
Prior Action 1: To further strengthen SENELEC's governance, the Recipient has established, for SENELEC's independent Board members, their profiles, reflecting competences in private sector management and auditing, as well as the procedures for their selection and appointment.	No	No
Prior Action 2: To further strengthen the financial viability of SENELEC, the Recipient: (i) through its MEFP, has agreed to settle its arrears to SENELEC in terms of tariff compensation and electricity bills for fiscal years 2017 and 2018 through additional funding for tariffs compensation in its 2018 budget, and the issuance of a promissory note dated October 22, 2018 to SENELEC for the remaining amount of arrears which first repayment instalment has been included in the 2019 Draft Budget Law submitted to Parliament; (ii) has made the payment of EPAFs' electricity expenditures to the service providers mandatory, and (iii) has streamlined the processing of SENELEC's VAT refund applications.	No	Yes, overall positive effects. Positive indirect social effects through improved service delivery of public goods, and potential lower crime rates due to better public lightning. Also, lower implicit subsidies to businesses will increase the availability of much needed fiscal resources. Small direct negative distributional effects through the Public Lighting Tax, which will increase by 2.5% the electricity bill for commercial users.
Prior Action 3: To accelerate the diversification of the Recipient's energy mix towards less expensive and cleaner technologies, the Recipient's Council of Ministers has approved and published a national strategy describing the key features of its institutional and legal framework for midstream and downstream gas subsectors.	Yes. While this will have positive impacts in terms of energy access, different types of generation can have potential environmental impacts, which will need to be mitigated. The overall impact is expected to be positive as it will reduce current use of heavy fuel in energy generation, and of wood and charcoal in domestic uses.	Yes, positive direct effects on poverty reduction in the medium and long run, through: (i) lower electricity prices will reduce households and firms' expenditure in electricity; (ii) increased access to electricity for households and business currently priced out, (iii) potentially increased firm productivity, (iv) direct job creation (in the clean energy sector); (v) indirect job creation in labor intensive sectors dependent on electricity (retail, services, manufacturing); and, (vi) lower subsidies to businesses and better-off households freeing up fiscal resources with high opportunity cost.
Pillar 2: ICT sector		
Prior Action 4: To strengthen the ICT's overall legal and institutional framework, the Government: (i) has submitted to the National Assembly the Draft Electronic communications Act in line with the Sénégal Numérique 2025 Strategy; and (ii) has established and appointed the members of the Conseil National du Numérique.	No	No direct effects on poverty. But potential positive indirect effects of poverty reduction through lower prices and more jobs as this would enable higher market competition.

Prior Action 5. To strengthen competition in the ICT market, the ARTP has adopted: (i) a decision listing the relevant markets for market dominance in the ICT sector; and (ii) a decision listing the dominant operators and their respective obligations in the relevant markets.	No	No direct effects on poverty. But potential positive indirect effects of poverty reduction through lower prices and more jobs as this would enable higher market competition.
Prior Action 6: To strengthen the competition in the broadband market, the ARTP has published on its website, the standard model and guidelines to be used for: (i) granting of internet service providers authorizations which contain only limited and reasonable restrictions to internet service provision and geographic coverage; and (ii) granting of authorizations to wholesale telecom infrastructure operators.	To be determined. Deployment and operation of infrastructure by service providers has the potential for negative environmental impacts which could require mitigation measures to be determined and put in place. The positive impact is the ability to influence such policy at an upstream level.	Yes, positive direct effects on poverty reduction mainly due to lower prices. Overall positive effects for the whole population, with higher benefits to non-poor households. Higher access, better quality service and connectivity to markets for poor households and MSMEs.
Prior Action 7: To strengthen the competition in the 4G market, the Recipient through its MPTEN, has established a Committee to engage in negotiations with interested mobile operators for the provisions of 4G telecom services.	No	Yes, positive direct effects on poverty reduction mainly due to lower prices. Overall positive effects for the whole population, with higher relative positive effects on non-poor households. Higher access, better quality service and connectivity to markets for poor households and MSMEs.
Prior Action 8: To generalize online tax and customs payments, the MEFP has: (i) reduced the mandatory threshold for the use of electronic filing from FCFA500 million to FCFA100 million of annual turnover to ensure coverage of all medium-sized companies in the e-tax platform in 2019; and (ii) established the threshold of FCFA50 million for the mandatory online payment of customs duties and fees.	No	No direct effects. But positive indirect effects through potential higher tax collection that could be assigned to social and productive inclusion, and improved service delivery.
Prior Action 9: To harmonize and expand the use of digital payment options, the MEFP has: (i) updated and consolidated the rules governing digital payments received by the Recipient's Treasury, Customs and Tax administrations; (ii) expanded the range of payment options to include mobile money, payment by cards, as well as payment service aggregators, among others; and (iii) established an open selection process for providers of digital payment services and defined the modalities for interoperability, data security, and protection of personal data applying to such services.	No	No. But potential positive indirect effects on poverty through expansion on mobile money, access to credit and e-commerce.

ANNEX 5: WORLD BANK STRATEGY IN THE ENERGY SECTOR IN SENEGAL

Context

1. **The Senegalese electricity sector is reliant for its revenues on a combination of already high consumer tariffs and Government 'compensation' payments** (whose size is based on the publication of a maximum allowed revenue or RMA calculated by the electricity regulator, CRSE[47]). The sector effectively has a high structural operating deficit which needs to be covered by the Government on an annual basis. SENELEC's cost base is mostly driven by fuel costs and tariff revenues do not cover all costs. Significant subsidies will be required in the coming years. Most of the costs in the RMA are outside SENELEC's control (71 percent of costs in 2017). 63 percent relates to electricity and fuel purchases (i.e. direct operating costs). The shortfall for the following year is expected at FCFA 135bn in 2018 and FCFA 110bn in 2019 (with current tariff and with crude oil price assumptions of US$75/barrel).

2. **Senegal has been finding it difficult to meet its obligations under the regulatory process - arrears in the sector are growing.** Arrears for 2017 account for a total of FCFA 42 billion. Delays in payments or non-payment for consumption by municipalities for public lighting and other state entities accounts for a further FCFA 18 billion. With respect to 2018, the national regulator has already estimated an overall yearly compensation at FCFA 135 billion. Arrears of the order of FCFA 65 billion which are being addressed in this operation together with the FCFA 42 billion from 2017. The large size of compensation in 2018 stems from the 10 percent tariff reduction in early 2017 and the de-funding of FSE in late 2017, limiting FSE's ability to play its financial stabilization role. The compensation for 2019 is expected to be in the region of FCFA 110 billion. Tariffs in Senegal are already high by international standards. Further increases may be possible, but are not a long-term sustainable solution.

3. **The Government is committed to work on an energy sector financial framework plan to address the ongoing liquidity crisis and ensure the long-term sustainability of the sector.** The sector plan includes the following key components (being supported by the World Bank through the DPF and other complementary interventions): (i) diversification of the country energy mix towards low carbon technology especially gas; (ii) short-term sector financial sustainability, especially to give private sector investors comfort; (iii) sector governance, reform and institutional strengthening. A successful implementation of the plan would allow Senegal to realize its vision of a country with affordable and sustainable universal access. Each component of the plan is described below, including WBG support.

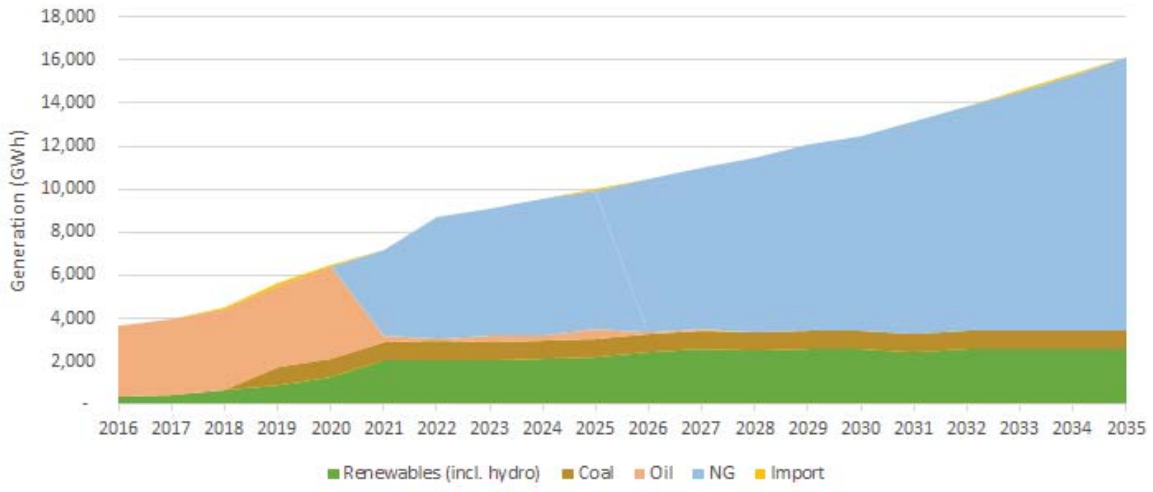
Diversification of the energy mix

4. **Senegal aims to increase the share of renewable generation and to substitute, over time, HFO for power generation with domestic gas, when it comes online**. Since 2016, Senegal has put into service about 100 MW of grid-connected solar capacity. However, the solar projects undertaken by the GoS thus far have been negotiated deals with prices in the range of US$0.12/kWh, which had limited impacts in decreasing overall electricity costs. An additional 65 MW and 100 MW are forecasted to come into services in 2018 and 2019 respectively. The successful solar auction under the WBG Scaling Solar initiative reduced

[47] On a quarterly and annual basis, the sector regulator (CRSE) publishes maximum allowed revenues (RMA) for SENELEC based on current and projected economic conditions. The GoS then chooses whether to adjust consumer tariffs or subsidize the revenue gap through provision of 'compensation'. The process is formalized in the law and SENELEC concession contract. The regulatory mechanism worked adequately over the years since the energy crisis in 2011. During 2012-16, the special energy fund (FSE) played a key financial stabilization role and decreasing global oil prices helped to reduce the burden of the electricity sector on the national budget.

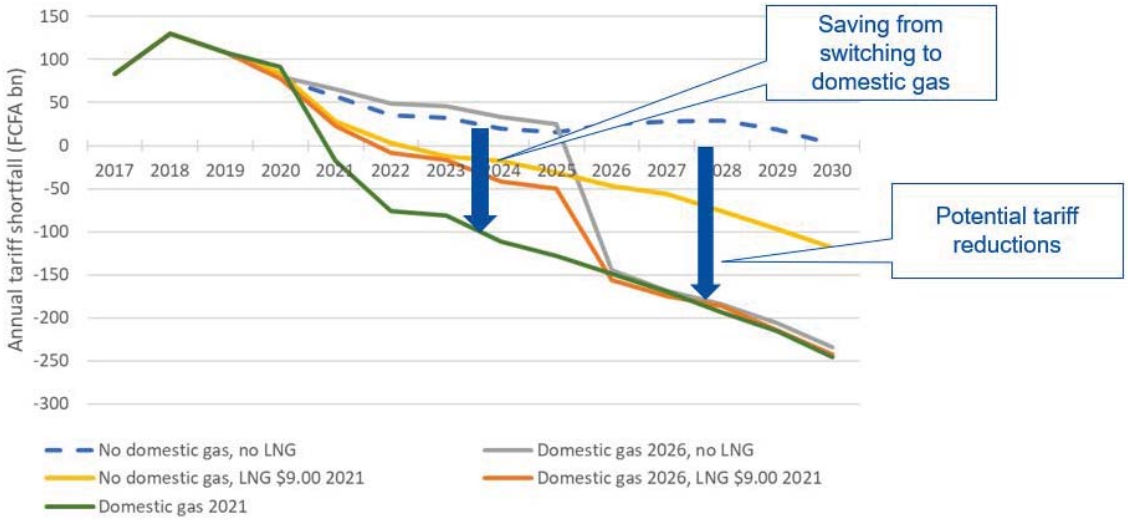
the benchmark for solar projects significantly (c. US$0.05/kWh). Together with the 150 MW expected from wind energy in 2020, the World Bank view is that the country will surpass 22 percent energy from renewables (including solar, wind and hydro) by 2025. To ensure grid stability and a smooth integration of such large share of renewable energy generation in the grid, it is key for the Government to prioritize studies and carry out critical investments in dispatching and grid upgrades already in the short-term. By 2025, the energy mix is therefore expected to be composed of 22 percent renewable energy (including solar, wind and hydro), 64 percent gas and 8 percent coal. No new coal is envisaged except older projects committed before 2015.

Figure 3 : Scenario for Senegal energy mix (GWhs)



5. Analysis by the World Bank shows that a switch from using HFO to gas from indigenous sources would reduce costs in the power sector by of the order of US$200 million per annum – effectively eliminating the need for the Government to subsidize the sector. There are significant gas finds off the coast of Senegal. Sangomar (being developed by Cairn/Woodside) and Tortue (being developed by BP) could deliver gas to the Senegal power sector. Gas could also be imported as LNG. Even importing LNG could potentially lead to savings of the order of US$90 million per annum (this is highly sensitive to pricing assumptions). The Government has taken the decision to request the offshore operators to develop options to deliver gas to Senegal as early as possible.

Figure 4: Size of annual tariff shortfall for SENELEC depending on different scenarios for gas



6. The GoS is advancing the important area of institutional arrangements for the midstream and downstream. Developing the midstream[48] and downstream[49] allows the Government to pass-on payment risks to downstream users and gives comfort to the operators that there is a sufficient market for gas. To accelerate development of gas resources, the GoS has taken specific actions to date as part of the current DPF (Prior Action 3): *In order to accelerate the diversification of the country energy mix towards cheaper and cleaner technologies, the Council of Ministers has approved, and the Minister of Energy and Petroleum has published a strategy note on the institutional framework for the gas midstream and downstream subsectors, including among other things, a description of the content of the necessary legal instruments, a timetable for their implementation, and a timetable for the conversion of production units from HFO to gas on the basis of a cost-benefit study.*

SENELEC Financial Sustainability

7. The process of switching to gas will taking time (2-3 years). During the interim period, the GoS will continue to support funding SENELEC's maximum allowed revenues through a combination of tariff and compensation. For 2018, US$122 million has been approved in the budget and is available to the FSE for payment of fuel bills. The GoS has approved a further US$53 million for SENELEC. The remaining US$220 million for 2017-18 will be funded by the GoS, with first payment due in 2019. The Government has formally recognized its arrears to SENELEC accumulated in 2017 and 2018, and approved a 5-year budgetary repayment plan, starting in 2019 and the 2019 draft budget law includes the corresponding amounts of the repayment plan. For 2019, the GoS will use a combination of compensation (with budgetary allocations) and tariffs to ensure SENELEC receives its maximum allowed revenue.

8. The GoS has also taken structural measures to improve revenue collection by SENELEC. The

[48] The midstream refers to the pipeline system that will deliver gas from the shore to the power stations. Approximately 300 kms of pipeline will be required, costing in the region of Euro 200m.

[49] The downstream refers to the users of gas, predominantly power stations. HFO engines are currently owned and operated by both SENELEC and private sector IPPs. Whilst some of the fleet is old and uneconomic to convert, at least 400 MWs of gas-engine will need to be converted and will cost in the region of US$ 110m to convert. Most of these conversations relate to IPPs, though some may involve SENELEC. SENELEC will also need to determine what to do with engines that are too old to convert. There are early discussions regarding development of a new combined-cycle plant.

Council of Ministers has issued a decree on the expansion of the TCO tax to the industrial sector in order to finance at least 61 percent of the public lighting expenses; (v) the Government has issued a decree to make EPAFs' electricity expenditures mandatory and has only authorized EPAFs budgets with enough allocations to cover these expenses.

Sector Governance, Reform and Institutional Strengthening

9. As the sector transforms to lower cost fuels, newer technologies and increased private sector investment, there is a need for SENELEC's management to be able to benefit from broader expertise. The GoS has established the profiles and the criteria for the appointment of independent directors to SENELEC's Board, and the Government has appointed a new SENELEC Board based on the new rules. To become ready for an increased private sector participation, the Government has committed to improve SENELEC performances and governance. The goal is to ensure that SENELEC provides quality of service to customers in full compliance with applicable regulations and commitments: losses reduced, all amounts of energy being consumed permanently billed and collected (including from public consumers) and costs incurred reflect efficiency in operations in all business areas. Improvement of performance requires effective implementation of identified performance plans addressing operations in all business areas of SENELEC. These include timely implementation of investments and programs for reducing losses, major scale-up of pre-paid meters, adequate implementation of accounting separation, HR plans, etc. Governance should also be improved: description of functions and responsibilities of positions at all levels (including Board members), competitive and transparent selection of staff to occupy positions at all levels. Ministry of Energy (MPE) should monitor more closely ongoing work aiming at improving SENELEC corporate governance and performances, with a view of transforming SENELEC into a well-run and financially viable utility.

10. Strengthen other sector institutions to ensure they are well equipped to address the sector challenges. MPE leadership on sector strategies and systematic optimized (least-cost) planning and implementation for all segments of the sector supply chain (including access) is needed as part of the turnaround plan. MPE needs to reinforce its leadership and become the originator of sector policies, including for the upstream oil and gas sector, gas-to-power, electrification policies, strategies and yearly targets. The turnaround plan should also include measures aimed at improving sector regulation and enhancing the institutional capacity of the regulator CRSE. As the sector is undergoing significant changes, the capacity and mandate of the sector regulator needs to be strengthened, for it to be better equipped to face current and future regulatory challenges in a highly politicized environment. These challenges pertain in particular to the regulation of SENELEC and the monitoring of its performance contract, as well as the regulation of new concessions for rural electrification, the downstream hydrocarbon sector, and IPPs.

11. The successful implementation of the energy sector financial framework plan will steer the sector over time back to a sustainable path and pave the way for deeper reforms and private sector participation. The following table sets out a scenario for this recovery path.

Table 11: Scenario for progression of sector with energy financial framework

	2017	2018	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Senelec (GWh)			**1,125**	**956**	**761**	**1,008**	**948**	**1,114**	**752**	**745**	**536**	**588**	**690**
Oil			1,125	277	73	319	259	425	83	57	2	4	35
Gas			-	679	689	689	689	689	669	687	533	584	655
IPPs (GWh)			**3,831**	**3,855**	**3,837**	**3,754**	**3,813**	**3,711**	**3,835**	**3,835**	**3,633**	**3,765**	**3,827**
Renewable			571	639	639	558	617	515	639	639	632	639	639
Oil			2,411	20	2	-	-	-	-	-	-	-	-
Coal			849	849	849	849	849	849	849	849	849	849	849
Gas			-	2,347	2,347	2,347	2,347	2,347	2,347	2,347	2,152	2,277	2,339
Generic (GWh)			**1,470**	**2,386**	**4,114**	**4,330**	**4,767**	**5,112**	**5,851**	**6,400**	**7,296**	**7,720**	**7,956**
Renewable			697	1,409	1,451	1,489	1,494	1,699	1,775	1,928	1,880	1,928	1,926
Oil			773	-	-	-	-	-	-	-	-	-	-
Gas			-	976	2,662	2,841	3,273	3,413	4,076	4,472	5,416	5,793	6,031
Imports and other (GWh)			**41**	**14**	**0**	**30**	**30**	**83**	**61**	**34**	**1**	**2**	**5**
Total power supplied (GWh)			**6,466**	**7,210**	**8,712**	**9,123**	**9,558**	**10,021**	**10,499**	**11,014**	**11,465**	**12,076**	**12,478**
Technical and commercial losses			1,351	1,507	1,638	1,724	1,814	1,911	2,011	2,119	2,213	2,341	2,425
Exports			-	-	876	876	876	876	876	876	876	876	876
In country sales (GWh)	3,148	3,479	**5,114**	**5,703**	**6,198**	**6,524**	**6,868**	**7,234**	**7,612**	**8,019**	**8,376**	**8,859**	**9,177**
Revenues (FCFA m)	338,986	371,048	**550,818**	**614,137**	**730,002**	**764,736**	**801,517**	**840,777**	**881,222**	**924,791**	**962,976**	**1,014,732**	**1,048,720**
Exports	-	-	-	-	62,550	62,286	62,023	61,762	61,501	61,242	60,983	60,726	60,470
In country sales	338,986	371,048	550,818	614,137	667,451	702,450	739,494	779,015	819,720	863,549	901,993	954,006	988,250
Total costs (FCFA m)	422,039	494,920	**628,668**	**637,155**	**721,588**	**748,016**	**759,931**	**790,396**	**725,319**	**750,549**	**777,202**	**800,021**	**805,871**
Fixed costs			262,148	263,981	278,425	273,842	262,750	263,609	281,613	288,522	303,111	300,155	286,448
Variable costs			366,520	343,611	413,600	444,610	467,618	497,225	414,142	432,463	444,528	470,303	489,860
Gas network and unit conversion			-	29,563	29,563	29,563	29,563	29,563	29,563	29,563	29,563	29,563	29,563
Average cost of supply (FCFA/kWh)	134	142	123	112	102	101	98	97	85	84	84	82	80
Tariff shortfall (FCFA m)	83,053	123,872	**77,851**	**23,018**	**- 8,413**	**- 16,720**	**- 41,586**	**- 50,380**	**- 155,903**	**- 174,242**	**- 185,774**	**- 214,711**	**- 242,849**
Tariff shortfall ($USm, 565 FCFA = $1)	147	219	**138**	**41**	**- 15**	**- 30**	**- 74**	**- 89**	**- 276**	**- 308**	**- 329**	**- 380**	**- 430**

12. In the longer term, the Government is considering moving ahead with the unbundling of SENELEC along the business lines of generation, transmission and distribution and mix ownership for sector sub-segments. While the transmission sub-segment will remain public, generation is expected to become mostly private through IPPs (although SENELEC would like to retain a large share of generation, up to 40 percent) and the distribution segment is expected to be restructured following an *affermage* model.

The table below shows the above objectives and activities as articulated in the World Bank Group portfolio of projects in Senegal.

Table 12: World Bank Group Energy Portfolio in Senegal

	Security of Supply/ Shift to Less Carbon Intensive Technologies	**Universal Access**	**Develop the Enabling Policy Environment**	**Improve Utility Performance to Lower the Cost of Supply**
Existing				
The Electricity Sector Support Project (P125565 - US$85 million) and its Additional Financing (US$70 million – IDA SUF financing)	Resolving transmission and distribution bottlenecks to ensure electricity produced is delivered to end consumers	235,000 new connections to be financed under the project	Substantial investments and TA in improving sector performance and governance	Substantial investment in losses reductions programs, pre-paid and intelligent meters and new Client Information System, and TA in improving SENELEC operational performance and separation into distinct subsidiaries
Taiba Ndiaye IPP IDA guarantee (P143605 - US$40 million guarantee)	Supported the development of 115 MW of additional power			
IFC investments in Tobene Power, Cap de Biches and Kounoune Power	Supported the development of about 270 MW of additional power			
Sustainable Energy for All Technical Assistance Program (P145845 - US$1.2 million)		Supported the development of the electrification Master Plan and prospectus		
Second Sustainable and Participatory Energy Management Project (P120629 - US$15 million) and US$4.9 from NDF		Contributes to increasing the availability of diversified household fuels		
Rural Electrification Carbon Finance Project (US$8 million)		Supports increased access to electricity and reduce GHG emissions in rural areas		Improving financial sustainability of sector through result-based carbon finance
Banda Gas to Power	Supports imports of			Supports financial

Guarantee Project (P107940, for Senegal US$99 million)	150 MW of additional gas based cheaper power			viability for the sector by promoting less expensive generation
OMVG Interconnection Project (P146930)	Supports the potential of additional imports of low- cost and clean hydro power			Supports financial viability for the sector by promoting less expensive generation
Enhancing Gas Market Governance Technical Assistance (P160652 – US$20 million – IDA 17)	Will support the development of gas resources to provide gas-to-power options			Supports financial viability for the sector by promoting less expensive generation
OMVS interconnection project (IDA 17)	Will support the potential of additional imports of cheap hydro power			Supports financial viability for the sector by promoting less expensive generation
Senegal Structural Reforms DPO Series (P159023 - US$60 million – IDA 17)	Supports the approval of the energy sector Master Plan	Supports policy actions to foster access in rural areas	Supports significant policy actions to address key issues with sector financial arrangements, including cross-debt and arrears	Substantial leverage to take reform actions to improve SENELEC governance, operational performance and reform
MIGA Taiba Ndiaye Wind Project	Aiming at developing additional 150MW of wind power through IPP			
Pipeline				
Scaling Solar Program (P153826- US$20 million)	Aiming at developing additional 100MW of solar power through IPP			
Third Sustainable and Participatory Energy Management Project (P120629 – US$50 million)		Will contribute to scaling up the availability of diversified household fuels		
Modern Energy Services PforR (P147765 - estimated US$60 million)		Will support access in urban and rural areas	Will further clarify the institutional model for rural electrification in unserved areas	
Regional Off-grid Electrification Project		Will support off-grid access in rural areas (especially where grid densification is not feasible)		
Scaling Up Grid-connected Solar Electricity Generation in Sub-Saharan Project	Will support the development of grid investment and TA to ensure appropriate integration of renewable energy		Supports better utility operational performance	Supports financial viability for the sector by promoting less expensive generation
Project Based Guarantee to support SENELEC	Could provide financing for addressing	Could support policy actions to foster access in rural areas	Could provide substantial leverage to take reform	Could support significant policy actions to address key

creditworthiness	transmission and distribution bottlenecks to ensure that electricity produced is delivered to end consumers		actions to improve SENELEC governance, operational performance and reform	issues with SENELEC financial performance and debt sustainability