



The Senegal bus renewal program

From 2005
until 2023

Fatima Arroyo Arroyo
Ajay Kumar





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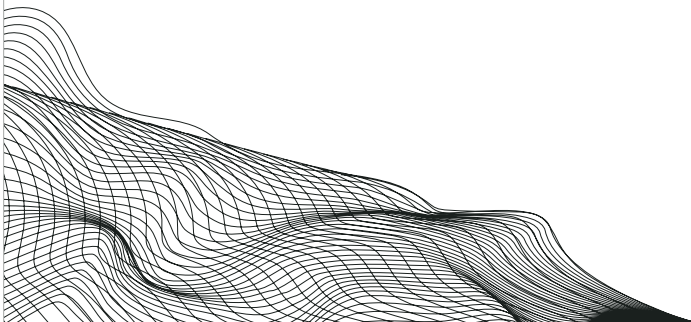
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Acronyms

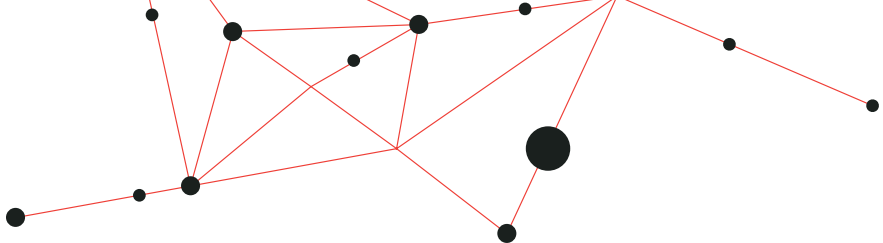
AFTU	<i>Association de Financement des Professionnels des Transports Urbains</i> (Urban Transport Funding Association)
BDK	Bank of Dakar
BNDE	National Bank for Economic Development
BRM	<i>Banque Régionale des Marchés</i> (Regional Market Bank)
CAPTRANS	<i>Centre d'Appui à la Professionnalisation des Transports</i> (Support center for the professionalization of the transport sector)
CETUD	<i>Conseil exécutif des transports urbains de Dakar</i> (Dakar Urban Transport Authority)
DDD	Dakar Dem Dikk
DRTT	Directorate of Land Transport
EIG	Economic Interest Group (see GIE, below)
FDTU	Urban Transport Development Fund
FPE	The Fund for Economic Promotion
GIE	<i>Groupements d'Intérêt Economique</i> (see EIG, above)
PAMU	<i>Projet d'Amélioration de la Mobilité Urbaine</i> (Urban Mobility Improvement Project)
PATMUR	Transport and Urban Mobility Support Project
SGBS	General Society of Senegalese Banks
SOTRAC	Transport Company of Cape Verde
SSATP	Sub-Saharan Africa Transport Program

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TATA
bus



Executive Summary



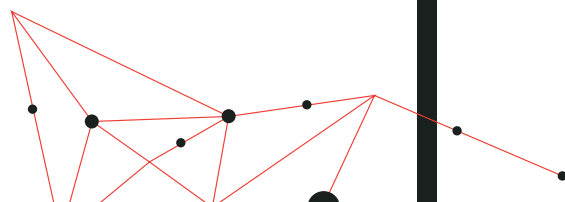
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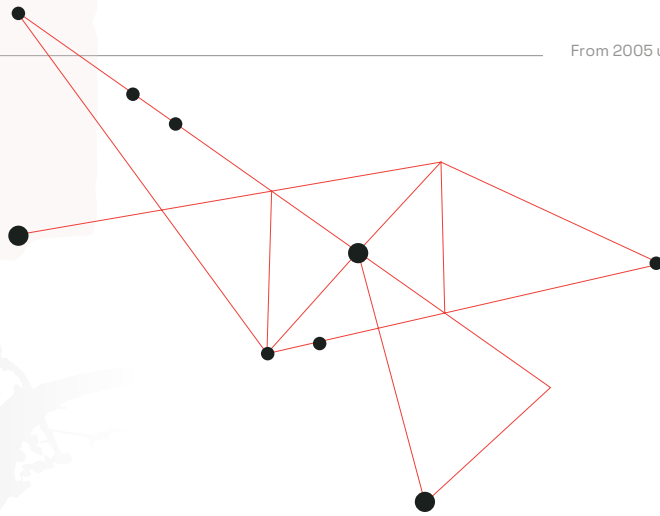
The Senegalese program for renewing informal transport vehicles in Dakar and secondary cities is one of best known and more successful government-supported initiatives in Sub-Saharan Africa (SSA). This report documents the program, and includes an analysis of its design and structure, financing arrangements, achievements, challenges, and impact.

The focus of the report is on bus fleet renewals, bus financing mechanisms, and on the creation of a market for financing – the latter being an important piece within a more comprehensive renewal intervention approach in Sub-Saharan Africa. The terms ‘minibus’, ‘midibus’ or ‘fleets’ are used interchangeably with ‘bus’ in the document.

Context

Informal transport is the dominant passenger transport mode in cities in SSA, carrying between 60 to 70 percent of motorized person trips. It is also an important employer in African cities, directly or indirectly employing over 75 percent of the total workforce. Among the key shortcomings of informal transport are the poor conditions of the vehicles, service unreliability, and high vehicle emissions. These shortcomings reflect the difficulty most operators have in generating enough revenue to cover direct expenses, maintain their vehicles, extract enough income to live on, and at the same time pay finance fees for loans to buy rolling stock.





Challenges for vehicle or fleet financing

Informal transport sector actors lack the collateral necessary to secure any external, 'formal' finance for fleet acquisition, while owner-operators are unable to provide lenders with a credit and income history and a viable business plan.

Thus, commercial banks and other financial institutions are often unwilling to lend to informal operators; where they do offer loans, they secure the loan against the value of the vehicle and charge a premium interest rate in recognition of the risk being taken. These interest rates can exceed 25 percent per annum, and repayment periods are short.

Further, in most cases, the vehicle lessor is an individual (e.g., an owner-driver or a non-trade investor), who is dependent on the availability of their vehicle to be able to meet their loan commitments; a crash or a mechanical problem renders them vulnerable to defaulting.

The Senegalese minibus renewal program

Faced with these challenges, an approach that overcome these challenges to enable fleet renewal became essential if Senegal was to have organized and modernized public transportation.

The program started in 2005 when the World Bank approved a loan to finance the renewal of the bus fleet of Dakar and at the same time build the capacities of operators. The financial set-up made it possible for operators to lease new vehicles, and the criteria for borrowing were used as leverage to collectivize and professionalize the operators and introduce efficient operating, maintenance, and ticketing practices as well as social safeguards and employment conditions. The renewal program was also used to provide technical assistance to participating operators to help them manage the operations.

Phase 1 of the program was replicated three times further in Dakar, with other lenders and with new financing terms and conditions. Phase 2 took place between 2008 and 2010, Phase 3 between 2013 and 2019, and Phase 4 started in 2019 and is ongoing. Since Phase 1, the program expanded to include secondary cities in Senegal, and launched a new financing mechanism through the establishment of a local revolving fund and partnerships with local banks.

While the program in Dakar required operators to scrap an old vehicle to be eligible, the programs in secondary cities at times allowed operators to lease new vehicles with only a personal deposit and without having to trade in an old vehicle. This enabled operators to replace urban taxis with minibuses and increase the transport capacity.

Institutional and financial structure of the program

The institutional and organizational framework of the bus renewal program included the following elements:

- The formation of cooperatives, or Groupements d'intérêts Economiques (GIEs)/Economic Interest Groups (EIGs). An umbrella organization of the EIGs was formed in 2001, the Association de Financement des Professionnels des Transports Urbains (AFTU).
- Contractual agreements for EIGs with predefined routes and levels of service commitments.
- Institutions to support AFTU and the EIGs:
 - A mutual savings and credit institution, MECTRANS
 - A mutual health insurance company, TRANVSIE
 - A capacity building entity, CAPTRANS
 - A local industry partner for the renewal of the fleet, SENBUS
 - A monitoring committee for the refinancing of programs related to public transport fleet renewal.

To acquire a new vehicle, AFTU would request a loan from the EIG for 25 percent of the vehicle purchase price then ask CETUD for a formal guarantee and to open a line of credit for the remaining 75 percent. CETUD, the Conseil exécutif des transports urbains de Dakar (Dakar Urban Transport Authority), had been founded in 1997 as a central transport authority in Senegal.

AFTU would then contact the manufacturer to purchase a certain number of vehicles. Upon delivery, CETUD and AFTU would together pay 100 percent of the vehicle cost. Operators (EIGs) would then be required to pay back the 75 percent of the amount paid by CETUD over time. Repayment started during the third month of operations, allowing the newly formed EIG to adapt to the new conditions. These conditions remained unchanged throughout the various renewal phases.

Key achievements

The Senegal minibus renewal program was initiated in 2005, and since then has mobilized 62.9 billion FCFA of funding and introduced 2,636 new vehicles.

The scheme also led to the professionalization of operators; because operators were required to form EIGs in order to benefit from the renewal program, this directly mitigated the more traditional sector fragmentation. Concession agreements defining the specifications and operating standards were signed with the EIGs.

Fruitful local partnerships, such as the vehicle assembly partnership with local company SENBUS, meant that the national economy benefitted from greater added value (compared to where vehicles are imported directly).

A comprehensive program of capacity building and human development was also part of the reform package and included technical assistance.



Key challenges

Key program challenges include declining operating conditions, lack of fare adjustments, inadequate monitoring of operations, and diminishing control by the EIGs over their members once the vehicle loans had been paid up. With time, the program has seen a deterioration in safety due to informality of labor and unsafe driving behaviors, highlighting the need for stricter regulation and enforcement.

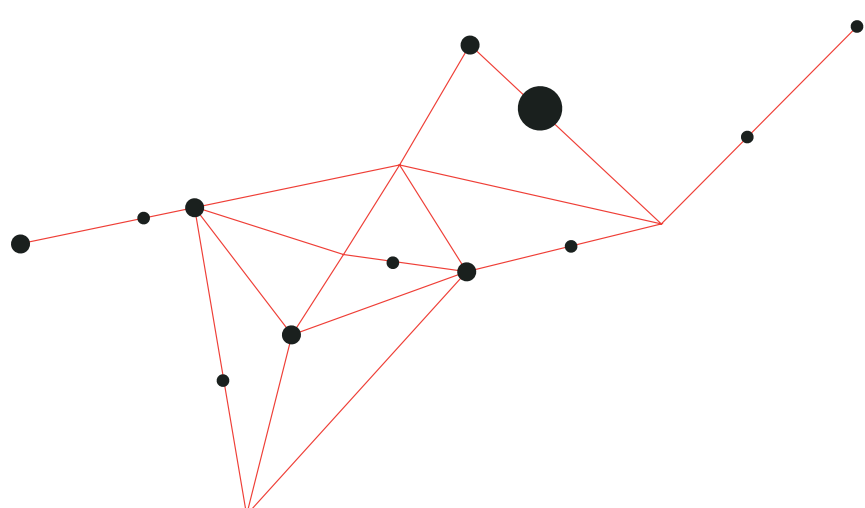
The social safeguard and savings schemes were not as successful as the program hoped, with declining membership over time. However, some promising new programs have achieved a well-functioning collectivization of revenues – such as the urban taxi (yellow taxi) renewal program.

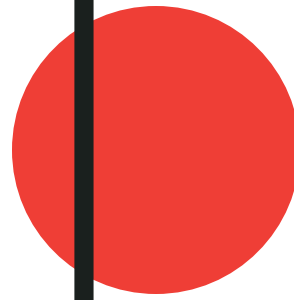
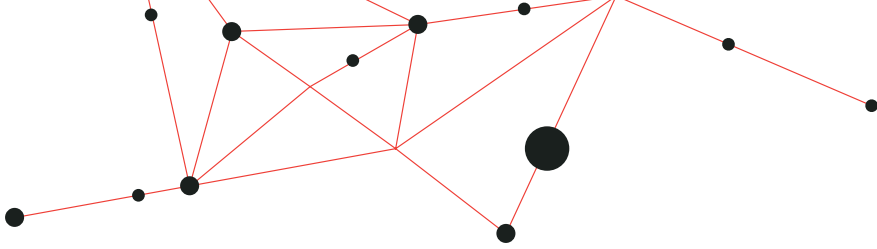
The bus services also face strong competition from illegal operators, which compromises the profitability of routes. In secondary cities, however, operators agreed to rotate routes, to distribute the benefits of the most profitable routes.

The absence of supporting infrastructure in the form of bus stops and depots, for example, has also been a challenge, with cities not always delivering on their support commitments.

Conclusion

All in all, however, the bus renewal program had shown encouraging achievements and benefits, particularly in terms of improving service and safety, reducing air pollution, and enhancing sector organization and professionalization. The program has been sustainable because of the innovative financing mechanisms, good repayment discipline, and the leverage of private funds. In light of the newly created Land Transport Development Fund (FDTT) in Senegal in 2020, as well as new bus technology trends (i.e., electric and compressed natural gas (CNG) vehicles), the financing strategy will now be rethought, and will draw on the lessons learned that are shared in this report.





Introduction



This report documents a study of the Senegal Minibus Renewal Program, including an analysis of the design and structure, financing arrangements, achievements, challenges, and impact. The focus of the report is on bus fleet renewals,¹ bus financing mechanisms, and on the creation of a market for financing – the latter being an important piece within a more comprehensive renewal intervention approach in Sub-Saharan Africa (SSA). This study is an extension of the 2008 research on bus financing in Dakar conducted by SSATP (2010). Since the initial study, a revolving fund has been set up in Dakar, and the renewal program’s Phase 1 has been replicated in three subsequent phases. Additionally, the scheme has expanded to encompass secondary cities in Senegal.

This report complements the case study entitled “Minibus Renewal and Professionalization Process: A Combined Approach to Modernize Paratransit Services in Dakar, Senegal.” The case study is part of the SSATP series on *Studies of Informal Passenger Transport Reforms in Sub-Saharan Africa* (2023) and provides a comprehensive overview of the transport reform approach adopted in the country.



1. The terms ‘minibus’ or ‘fleets’ are used interchangeably with ‘bus’ renewals in the document.

Dominance of informal transport in Dakar

Informal transport is the dominant passenger transport mode in cities in Sub-Saharan Africa (SSA), carrying between 60 to 70 percent of motorized person trips. It is also an important employer in African cities, directly or indirectly employing over 75 percent of the total workforce. Informal transport is also known as paratransit, and these terms will be used interchangeably in this document; although provided by private entrepreneurs, these services are referred to as public transport.

Informal transport emerged as a localized response to fill the gap in urban mobility services, in the absence of a structured national policy or dedicated regulations. Almost everywhere in SSA, these modes have become essential to answering the mobility needs of most urban residents, especially people living with low income.

Irrespective of the country, informal transport is characterized by routes driven by market demand, which may align with government-designated routes but have no formal stops or schedules. Individual fleets are generally small, and vehicles and licenses are owned by private operators. Most often, vehicles are leased to drivers who decide when and even where they operate, as long as they cover all their own short-term costs, such as fuel, and pay their lease fees.

However, among the most obvious shortcomings of these services are the poor conditions of the vehicles, the unreliable nature of the service, and high vehicle emissions. This reflects the difficulty most operators have in generating enough revenue to cover direct expenses, maintain their vehicles, extract enough income to live on, and at the same time pay finance fees for loans to buy rolling stock. Financing of new vehicles is problematic throughout the developing world, despite the evidence of business opportunities for financiers. This is largely because informal transport sector actors lack of collateral necessary to secure any external, 'formal' finance for fleet acquisition, and owner-operators are unable to provide lenders with a credit and income history and a viable business plan. Because fares are kept low – for political rather than market reasons – and there are no state subsidies, it is difficult for informal operators to replace or even recondition their vehicles using operating income. Poor daily returns are made worse by increasingly congested streets, a competitive environment with too many players, and the absence of or poor enforcement of traffic regulations.



In Dakar, over 80 percent of motorized trips are made by public transport (including formal and informal modes). By the early 1990s, the state-owned bus company, SOTRAC,² had found itself in financial trouble during a period of national economic and financial structural adjustment phases. SOTRAC was financially weak, due to operating alongside largely unregulated, untaxed, low-cost competitors. It could not expand as an alternative to the rapidly growing informal services, as neither operational costs nor expansion capital costs were covered by farebox revenues. This led to the company declaring bankruptcy, and ultimately disappearing in 1998. Efforts to revive the company, by replacing it with the Dakar Dem Dikk (DDD) bus system, did not succeed.

Informal or paratransit services in Dakar have historically been provided by Cars Rapides (minibuses seating approximately 15-20 passengers), Ndiaga Ndiaye (minibuses seating approximately 30 passengers), and Clandos (illegal, five-seater suburban taxis). Before the renewal program, the informal public transport sector fleet was on average over 20 years old, and had become outdated, unroadworthy, and unsafe. Poor maintenance resulted in low-quality, unreliable service, and the growing congestion reduced travel speeds. Like SOTRAC, informal public transport operators were also barely able to cover their direct operating costs with the set fares, let alone able to ensure proper maintenance or fleet renewal. This resulted in a progressive decline in the number of vehicles in operation.

By the end of the 1990s, authorities had acknowledged the need for change. In secondary cities, the situation was similar but with limited formal public transport.

Challenges for vehicle or fleet financing and renewal for informal operators

Commercial banks and other financial institutions are often unwilling to lend to informal operators; where they do offer loans, they secure the loan against the value of the vehicle and charge a premium interest rate in recognition of the risk being taken. These interest rates can exceed 25 percent per annum, and repayment periods are short.

The problem with securing a loan against the value of a vehicle is two-fold. Firstly, the residual value of a vehicle (whether measured in a second-hand market or by its net earning potential) initially declines much faster than what conventional straight-line depreciation predicts over its useful life. Secondly, the outstanding balance on a loan based on equal monthly payments over its duration (as is standard practice) declines relatively slowly in the early part of that period.

For these reasons, the financier needs to keep the outstanding balance on the loan below the residual value of the vehicle if it is to retain any level of security. This is done by demanding a significant up-front deposit at the beginning of the loan (25 percent for a company or 40 percent for an individual is typical), and then offering short-term finance only (usually three years, or four years at most).

Both these above restrictions are particularly damaging when it comes to financing new, better-quality buses.³ Firstly, the operator needs to take out a second unsecured loan in order to raise the 25 percent

2. Société des Transports du Cap Vert.

3. In this document, 'bus' refers to the mini- and midibuses used by paratransit operators.



deposit (the vehicle having served as the guarantee for the 75 percent loan). This second loan is likely to be at an even higher interest rate than the first loan, and so is paid off as rapidly as possible. To meet the resulting high monthly costs, the driver or operator might end up putting in excessive driving hours. Secondly, the capital repayment element of the secured loan instalment is higher than it would need to be if the loan duration more closely matched the useful life of the vehicle.

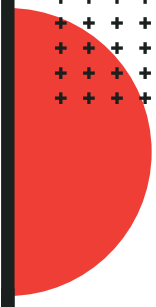
These factors combine to constrain the ability of the operator to cover their repayments in the early months of their finance commitment. Further, the net cashflow from operations is almost never enough to pay for full preventive maintenance of the vehicle – typically seen as an avoidable cost (and loss of earnings) in the short term. Thus, there is a real likelihood that the residual value of the vehicle will fall even faster than the financial institution expects, and that repossession may not even recover the full loan balance. This adverse result is added to the sector reputation, and results in an even higher risk premium being charged.

In addition to the above, further problems in financing the informal sector arise from its fragmented structure. In most cases, the vehicle lessor is an individual (e.g., an owner-driver or a non-trade investor), who is dependent on the availability of their vehicle to be able to meet their loan commitments; a crash or a mechanical problem renders them vulnerable. In most cases, they will not have any other vehicles earning a positive cashflow with which to support the payments on a new vehicle. Moreover, as individual lessors, they are vulnerable to abuse of authority by the regulatory agencies, and extortion from criminal elements. All these factors combine to make a loan default even more likely.

Finally, the productivity of a passenger transport vehicle in the chaotic operating conditions of a city such as Dakar is typically very low; a consequence is that the high fixed costs of vehicle finance more than outweigh any saving in the variable costs of repairs and fuel consumption offered by a new vehicle. This may raise the average costs of operations above the level at which these can be recovered from passengers at the current level of fares.







Design and Development of the Senegal Bus Financing and Renewal Program



The Senegalese program for bus renewal Dakar and the secondary cities is one of best known and more successful government-supported initiatives in Sub-Saharan Africa. The program started in 2005 when the World Bank approved a loan to finance the renewal of the fleet of Dakar and at the same time build the capacities of operators. The financial set-up made it possible for operators to access loans and lease new vehicles if they handed in their old vehicles for scrapping and were also able secure a personal loan to pay the 25 percent deposit on a new one. To date, most operators who have participated in the program have been compliant in repaying the loans and respecting the service quality and safety requirements of the program.

Figure 1: Example of an old minibus (Cars Rapide)



Source: Transitec

Figure 2: Example of an new bus after renewal (AFTU bus)



Source: Transitec



Following its initial success, Phase 1 of the program was replicated three times in Dakar. Phase 2 took place between 2008 and 2010, Phase 3 between 2013 and 2019, and Phase 4 started in 2019 and is ongoing. The program also expanded to secondary cities in Senegal (Saint-Louis, Mbour, Louga, Thiès, among others) and launched a new financing mechanism through the establishment of a local revolving fund and the creation of partnerships with local banks. While the program in Dakar required operators to scrap an old vehicle to be eligible, the programs in secondary cities sometimes allowed operators to receive new vehicles with only a personal deposit and without having to trade in an old vehicle. The program in secondary cities has therefore also enabled operators to replace urban taxis (yellow taxis) with minibuses.

Dakar bus renewal

In response to declining standards of passenger bus services, in early 2000 the Government of Senegal proposed a program to finance the renewal of the fleet⁴ in Dakar. The objective of the overall renewal program was not only fleet financing, but also to formalize and professionalize operations. This formalization was to take place through the introduction of formal route allocation and an official fare structure, together with the provision of technical assistance and training for operators and drivers.

To this end, as part of this Urban Mobility Improvement Program (PAMU)⁵ – implemented between 2001 and 2008 by the Government of Senegal with the support of the World Bank – a paratransit professionalization and vehicle renewal program was developed (the AFTU-Dakar Program).⁶ AFTU, the Urban Transport Financing Group of Dakar (Association de Financement des Professionnels des Transports Urbains, AFTU), is the umbrella organization created in 2001 to act as a leasing company of the fleet renewal vehicles.

The bus renewal program was created to renew the paratransit system by improving the overall quality of service and restructuring these services with a view to their integration into the formal public transport network (Dakar Dem Dikk). Upon handing in their old vehicles for scrapping, operators were given a scrapping allowance and access to loans for new vehicles (through a leasing agreement). The new buses, now called Cars AFTU, today operate dedicated routes under concession agreements and provide 35 percent of the urban trips. Some informal minibus operators (Cars Rapides and Ndiaga Ndiaye) continue to operate but are being gradually professionalized as they meet the criteria (see Box 1) to participate in the renewal process. The remaining operators are expected to gradually withdraw from the sector.

Despite the challenges encountered at the beginning, in 2005, with not all operators supporting the program, it ultimately delivered positive results. This prompted authorities to continue the program in Dakar until the present (four phases have been launched since 2005) and extend it to other cities outside the Dakar region and even to other segments (goods, intercity transport, etc.). With the support of Government, private companies also moved into the paratransit vehicle financing space, such as the Touba program in 2011 (see page 29)

4. As part of the Urban Mobility Improvement Project, the World Bank, through the International Development Association, provided the government of Senegal with a credit to procure 505 new buses under a leasing scheme.
5. PAMU - Cr. 3354-SE.
6. Urban Transport Funding Association.

Institutional and organizational framework

The institutional and organizational framework of the Dakar bus renewal program included the following elements:

- The formation of cooperatives, or Groupements d'intérêts Economiques (GIEs) / Economic Interest Groups (EIGs)
- Contractual agreements for EIGs with predefined routes and levels of service commitments
- Institutions to support AFTU and the EIGs:
 - A mutual savings and credit institution, MECTRANS
 - A mutual health insurance company, TRANVSIE
 - A capacity building entity, CAPTRANS
 - A local industry partner for the renewal of the fleet, SENBUS
 - A monitoring committee for the refinancing of programs related to public transport fleet renewal.

Formation of Economic Interest Groups (EIGs)

The Government of Senegal financed the purchase of the new vehicles to be operated by the current paratransit operators.⁷ To access the renewal program and these new vehicles, operators were required to form cooperatives, or Groupements d'intérêts Economiques (GIEs), which were to be collectively responsible for loan repayments. In this document, the GIEs are mostly referred to in their English translation, Economic Interest Groups (EIGs).

Fourteen EIGs were formed in Dakar, involving about 245 operators, and on 3 April 2001 formed an umbrella organization, Association de Financement des Professionnels des Transports Urbains (AFTU).⁸ AFTU's purpose was to 'contribute to the renewal of the interurban bus fleet,⁹ urban buses,¹⁰ and urban taxis (yellow taxis) to promote the professionalization of the activity in the areas of operation and to improve the quality of service offered to users.¹¹ In practice, the main role of AFTU was to purchase new vehicles and provide them to eligible operators under leasing agreements.¹² The financing that had been mobilized by the Government for the program was transferred to AFTU, which then purchased new vehicles from SENBUS, the local industrial partner.

-
7. The funding was used to finance 75 percent of the purchase price of the new vehicles, with the remaining 25 percent to be provided by operators up front as a down payment for the lease.
 8. Urban Transport Financing Group of Dakar (Association de Financement des Professionnels des Transports Urbains, AFTU) is the umbrella organization created in 2001 to act as a leasing company of the bus renewal vehicles. The AFTU members include the Government and associate members (the EIGs formed by private operators of inter-urban buses, buses, and taxis). AFTU has three bodies: (i) the General Assembly, made up of 3 representatives of the Government (Ministry of Finance, Ministry of Transport, and CETUD), and 2 representatives of each company, EIG or group of EIGs; (ii) the Board of Directors: composed of representatives from the Government (3), one representative for each company, EIG or group of EIGs participating in the project; and (iii) an executive board of eight members, all operators.
 9. The minibuses were known as 'fast buses' and Ndiaga Ndiaye at that time.
 10. Of the limited company Dakar Dem Dikk, operating the urban bus transport.
 11. Article 1, AFTU Statute.
 12. Vehicles are provided to individual operators who are members of EIGs. Leasing agreements are hence signed by individual operators and countersigned by their EIG. Concession agreements for the operation of the network are however signed between the CETUD and the EIGs.

Box 1: Eligibility criteria for the bus renewal program (Dakar and regions)**Eligibility criteria for the bus renewal program (Dakar and regions)**

Overall, the program is intended for existing operators in the Dakar agglomeration. To facilitate the management of the system, these operators were asked to form Economic Interest Groups (EIGs).

One (or more) EIG, with a name proposed by the operators, was to be created in line with the capacity of the network and affinities between the operators.

The requests for new vehicles from operators are then identified and validated within the EIG by a committee.

These applications are validated by a Credit Committee, according to the eligibility criteria of the program.

Each operator will have to comply with the following criteria:

- Hold a transport license issued by the Regional Land Transportation Division
- Be a member of one of the EIGs recognized by the renewal program
- Be the owner of a vehicle with a license for public transport in urban areas (valid technical inspection)
- Commit to operate the vehicle(s) on the routes of the conceded routes and in compliance with the terms defined in the concession agreement and the specifications (only in Dakar)
- Commit to the repayment of the loans granted
- Commit to participating in the training program (including its staff)
- Have the necessary resources to pay the personal deposit if required
- Commit to have the vehicle maintained by the approved service provider or supplier during the entire period of loan repayment
- Ensure the vehicles are purchased according to the conditions set by the program
- Comply strictly with all the provisions of the financing agreement signed as part of the program.

The program did not result in any increase in transport capacity, because for every new vehicle leased, the operators had to scrap their existing, legally licensed but high-polluting vehicle, for which they received compensation payments averaging FCFA 2.46 million (3,700 EUR equivalent).¹³

Contractual agreements

Each participating EIG was required to enter into a concession agreement with the Conseil exécutif des transports urbains de Dakar (CETUD),¹⁴ which specified the routes to be followed, the fares to be charged, and certain key operating practices. The participating operators had to commit to, for example, stopping at official bus stops, abandoning the practices of short-tripping and use of unofficial fare stages, and to issuing tickets to all passengers. These concessions gave CETUD the right to monitor service provision and required the operators to provide CETUD with operational and financial data. The concession agreements were also, in principle, to specify service intervals and other service quality parameters, but CETUD was unable to reach agreement with the operators on these issues, and so the requirements were omitted.



13. All Euro currency conversation approximations are based on December 2023 rates.

14. CETUD was set up in 1997 to plan and coordinate the urban transport sector in the city, including allocating routes and monitoring and imposing service conditions.

Supporting institutions and mechanisms

To support the professionalization of operators and improve the operating standards of buses, CETUD put in place a capacity-building program whereby participating operators and staff¹⁵ received training in transport fleet management, with an emphasis on financial management. Drivers and ticket collectors received instruction in dealing with the public, in operating and maintaining vehicles, and in what was required of them under the concession agreements. In addition, the EIGs and AFTU received technical assistance, funded through World Bank financing, the International Development Association (IDA).

The solid contractual framework put in place with operators greatly contributed to the relatively sustainable and independent financing mechanism (see figure 3). Financing of the renewal program was through leasing agreements with AFTU. Because operators are required to provide a personal deposit for an amount fixed by CETUD (25 percent of the cost of vehicle in Dakar, 20 percent in the secondary cities), they are required to contribute to a Mutual Guarantee Fund, intended to cover possible defaults in the repayment of the loan. The Mutual Guarantee Fund is financed by an initial endowment made up of the first three monthly leasing amounts paid by the operators, then each month by a deduction of a percentage of the leasing payment (set by the Monitoring Committee at 5 percent).

Mutual Savings and Loans Association for Transport Operators (MECTRANS)

In view of the recurrent challenges of the personal deposits – which greatly delayed the start of the program between 2001 (the creation of AFTU) and 2005 (the delivery of the first vehicles) – a Mutual Savings and Loans Association for Transport Operators (MECTRANS) was set up as part of the program. MECTRANS was to mobilize financing for the personal deposit. Once an operator had been deemed eligible for the renewal program, and the market value and scrapping allowance had been calculated, MECTRANS would disburse the additional amount necessary for the personal contribution. The application process to MECTRANS financing and to the renewal program is integrated and the operator has only to submit the renewal request through their EIG, which manages all the process afterwards.

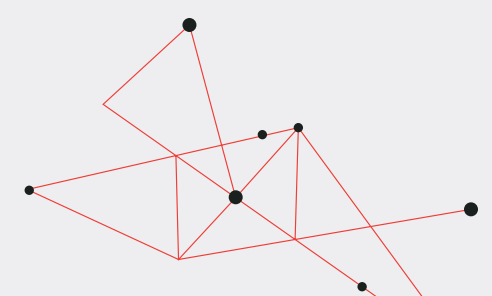
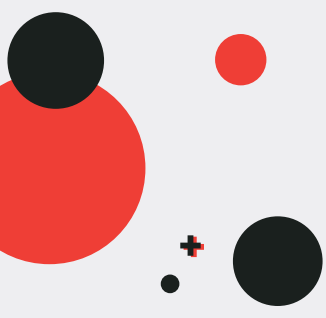
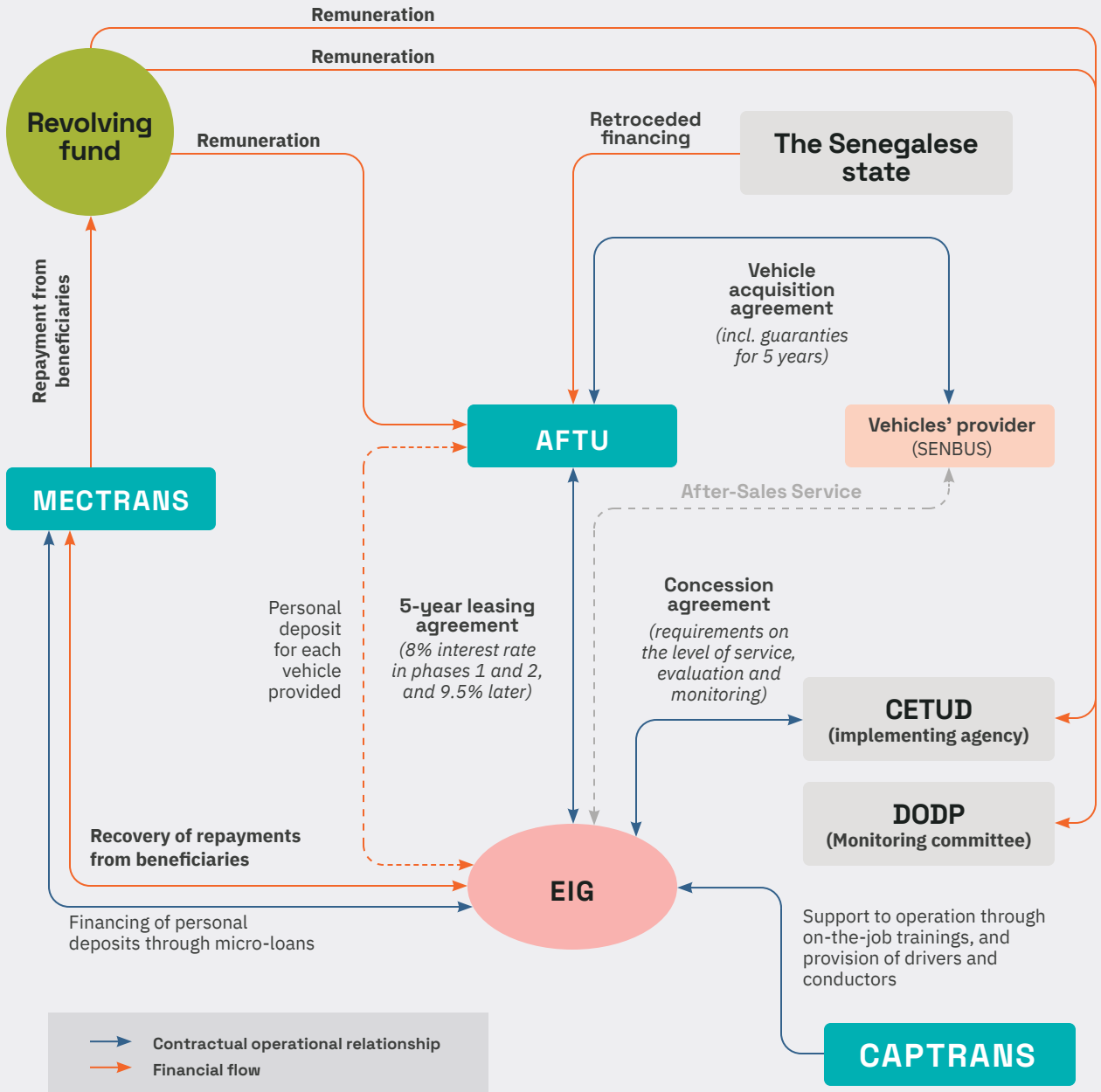
Later, MECTRANS was further entrusted with the recovery of lease payments from operators on behalf of AFTU, against a fee of 5,000 FCFA on each repayment recovered. The Association also provides loans to members for vehicle maintenance.

Always in search of additional resources, MECTRANS participated (with support from CETUD) in launching a new operation for Clandos, in an attempt to modernize these vehicles (See Box 2).

Today, MECTRANS has 13 offices in the regions. These offices are entirely financed (rent, furniture, and equipment) by AFTU. The membership fees, fixed at 10,000 FCFA per year, constitute the share capital of MECTRANS. With 6,663 members, its share capital can be estimated at 66,630,000 FCFA.

15. For example, drivers and conductors and, to a lesser extent, controllers, line managers, supervisors, and dispatchers.

Figure 3: Detailed contractual relationships and financial flows, Dakar bus renewal program





BOX 2: The suburban taxi (Clandos) modernization program in Dakar led by MECTRANS

The Clandos¹⁶ modernization program in Dakar led by MECTRANS, a financial instrument for and by transport operators

As part of the professionalization of transport operators supported by the renewal of the fleet, in 2014, CETUD launched a pilot in the suburbs of Dakar to renew suburban taxis (Clandos) and rationalize their operations. These taxis had proliferated over the years, and efforts to organize them had never produced the expected results.

Thus, the Government decided to use the bus renewal program as an instrument to also organize the Clandos (operators without a license and vehicles without any transport or traffic authorization, such as a certificate of technical aptitude). These Clandos complement the existing urban transport network and play the role of feeders to the AFTU and Dakar Dem Dikk networks.

The pilot aimed to: (i) identify clandestine taxis (vehicles and owners) and incentivize them to comply with the regulations (obtain the necessary certificates and licenses); (ii) organize the network of clandestine taxis around routes serving the main hubs; and (iii) ensure fare levels approved by the administrative services.

For the renewal program, an eight-seater TATA vehicle was selected (existing Clandos had a five-seat capacity). This vehicle was approved on October 30, 2013, by decree n° 2013-1374, granting it an exemption to the ban on having seats with passengers facing each other.

Despite the favorable conclusions of the study commissioned for this purpose, it was decided to test the project on a reduced scale. Hence, the pilot was launched with 20 vehicles deployed on selected routes in Pikine and Rufisque. Arrangements were to be made by the central administrative authorities (DTR and CETUD) and local authorities (the cities of Pikine and Guediawaye) to ensure the exclusivity of the recommended service on the routes chosen (protection against unfair competition).

Led by CETUD with TATA Motors as an industrial partner, the financing of the operation in the pilot phase was provided by MECTRANS. The purchase cost of the vehicle negotiated with TATA was 6 million FCFA (9,140 EUR equivalent) including tax, or 120 million FCFA (183,000 EUR equivalent) for the entire project.

The financing conditions were as follows:

1. TATA handed over the vehicles to its subsidiary Unitech Motors, which granted a loan equivalent to their cost to MECTRANS, for 15 instalments.
2. MECTRANS leased the vehicles to the operators selected for the operation and grouped into approved EIGs, under the following financial conditions:
 - Operator's personal contribution: 25 percent of the cost including tax of the vehicle, i.e., 1.5 million FCFA (2,285 EUR equivalent) per vehicle, or 30 million FCFA for the pilot phase
 - Interest rate: 11 percent per year
 - Repayment term: three years, i.e., 36 monthly instalments.
3. CETUD remitted to MECTRANS an amount of 25 million FCFA (38,100 EUR equivalent), as a financial guarantee for the operation. This amount was to be returned to CETUD at the end of the operation.
4. The following accompanying measures had to be implemented to guarantee the pilot's success:
 - An awareness campaign for the selected operators, the decentralized authorities, and the users.
 - The repair of the defective sections on the routes selected to carry out the operation, supported by CETUD.
 - Unitech Motors had to provide vehicle maintenance. This was financed by a flat-rate financial contribution from the operators included in the monthly loan repayments.
 - CETUD was to monitor the implementation of the pilot.

Based on the results obtained, it was decided to extend the program to the suburbs and other towns in the country (e.g., Touba). Hence, in these subsequent phases, more than 400 vehicles were introduced by sponsors in partnership with MECTRANS and the National Economic Development Bank (BNDE).

16. The Senegalese legal framework defines a taxi as a public transport vehicle with five seats, including that of the driver. Suburban taxi operators were the first to infringe this regulation by making them collective transport vehicles on fixed routes, in response to a demand not covered by Cars Rapides and Ndiaga Ndiaye, before the creation of the AFTU and DDD.

TRANSVIE, a mutual health insurance company

TRANSVIE was created by AFTU to provide health insurance, thus formalizing employer–employee relationships with social security coverage and retirement benefits for operators, staff, and families. A monthly contribution of 5,000 FCFA (7.6 EUR equivalent) from the employee and 2,200 FCFA (3.35 EUR equivalent) from the employer were to provide this coverage. Compulsory membership of TRANSVIE allowed the structure to get off to a good start, although over time, and once loans had been repaid, compulsory membership could no longer be enforced, and membership declined.

CAPTRANS (Centre d'Appui à la Professionnalisation aux Métiers des Transports)

During Phase 3 of the bus renewal program, in 2015, CETUD, together with the operators, set up a division within AFTU for route regulation and operational assistance to the EIGs, called CAPTRANS (Support Centre for Transport Professionalization).

CAPTRANS is a non-profit organization funded through compulsory annual membership fees paid by the EIGs. It was created with the support of the World Bank through the Transport and Urban Mobility Support Project (PATMUR, 2010-2017). The objective was to support the EIGs, as concessionaires of the routes, to better control overall performance through regular collection and processing of operating data and reinforce their operational and managerial capacities.

Since inception, CAPTRANS has supported operators in staff and route management, and today it supervises the entire network in Dakar, with a pooling of the management personnel of EIGs.

SENBUS, local industrial partner

Created in 2001, SENBUS Industries is a private limited company under Senegalese law with a capital of 2 billion FCFA (3 million EUR equivalent), of which 7 percent is held by the Government of Senegal. SENBUS specializes in the assembly of vehicles.

The partnership between Government and SENBUS began in 2002 when the former issued an international call for tenders for the provision of vehicles for the renewal of AFTU's fleet.

A detailed vehicle specification had been drawn up and put out to tender, with the requirement that the vehicles be maintained in Senegal and that the warranty cover the first 200,000 kilometers or five years, whichever came first. The contract was won in January 2004 by Indian supplier, TATA International, with an offer of about FCFA 22 million (33,500 EUR equivalent) per vehicle, in collaboration with SENBUS as the nominated maintenance agent. Thanks to its understanding of the local economic context, SENBUS had been able to advise its Indian partner on the most appropriate type of vehicles and the acceptable price level for Senegal. As a result, TATA met the technical standards of the tender but also offered prices that were significantly lower than those of the other bidders.

The collaboration agreement between SENBUS and TATA also included a technology transfer to SENBUS; this extended SENBUS' role to manufacturing some components, such as windows and vehicle seats.

Later, SENBUS diversified its partnerships to include Chinese firms King Long (402 vehicles assembled) and Dong Feng (100 vehicles assembled for the regions). Another Indian manufacturer, Ashok Leyland, partnered with SENBUS for both the AFTU-Dakar (Phase 4) and the AFTU-Regions programs.

To date, SENBUS remains the Government's industrial partner for the bus renewal program, both in Dakar and in the secondary cities.

An important dimension in the success of the program was the ability to keep the price of vehicles low. Phase 1, conducted in partnership with the TATA Motors-SENBUS consortium, was in part successful thanks to Government support of SENBUS with a favorable tax regime. In Phases 2, 3 and 4, the Government granted a waiver of tax and customs duties to keep the price of vehicles at an acceptable level regime (the kits are exempt from all taxes and customs duties). The estimates of this waiver for the last three phases (2010 to 2019) amount to more than 17 billion FCFA (25.9 million EUR equivalent), equivalent to an average of 9.45 million FCFA (14,400 EUR equivalent) per vehicle assembled by SENBUS (see Table 1).

Table 1: Estimated waiver of tax, customs duties, and VAT

	Phase 2	Phase 3	Phase 4	TOTAL
Period	2005 – 2008	2010 – 2012	2012 – 2019	
Number of vehicles	402	702	710	1,814
Brand	King Long	TATA LP 613	TATA LP 913 Ashok Leyland	-
Unit cost (after government waivers; in million FCFA)	22.2	23.3	24.5	-
Total cost (after government waivers; in million FCFA)	8,924	16,356	17,395	42,676
Waivers (in million FCFA)	Unitary	9.43	9.92	9.45
	Total	3,614.38	6,624.42	17,142.00

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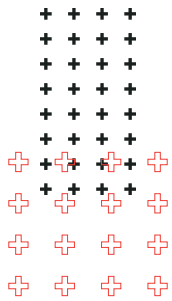
A monitoring committee for program refinancing

A Monitoring Committee was established by Order n°9965 of the Minister of Economy and Finance, dated 16/11/2010. This Order repealed and replaced Order n°10957 of 24/12/2008. The latter was modified by Order n°06269 of 05/06/2009, which established a partnership agreement between the Government, CETUD, and SENBUS Industries.

This Committee was created following the Government's decision to use the repayments of loans granted to operators for bus renewal to finance a revolving fund that could be used to finance future renewal programs.

Originally, the fund was financed by repayments of the first loan granted by IDA (8 billion FCFA/ 12.2 million EUR equivalent: Phase 1), to which were added resources from repayments of an Exim Bank China loan (6.7 billion FCFA/ 10.2 million EUR equivalent: Phase 2). At the end of Phase 4, the revolving fund raised around 53.2 billion FCFA (81.2 million EUR equivalent). Considering the 8.4 billion FCFA (12.8 million EUR equivalent) raised for the AFTU-Region program, the total amount raised by the revolving fund is estimated to be 61.6 billion FCFA (94 million EUR equivalent). However, it must be noted that this amount is not all available for financing future programs, as it also includes the investment and operating costs of the institutions responsible for the administration of the revolving fund.





The Monitoring Committee is made up of 14 members, including: (i) relevant departments from the Ministry of Finance;¹⁷ (ii) the Ministry in charge of Transport represented by the technical advisor of the Minister of Land Transport, the Director of Land Transport, and the General Director of CETUD;¹⁸ and (iii) AFTU.¹⁹

The Monitoring Committee²⁰ was to monitor the use of funds allocated to the financing of the AFTU-Dakar program. Thus, CETUD may request that it review funding applications received from operators. It can also review the socioeconomic impacts, the consistency with the program's objectives and its financing mechanisms, the amount requested, and the eligibility criteria for the loan.

Bus financing mechanism

In the beginning of the program, to acquire a new vehicle, operators relied on AFTU. AFTU would request from the EIGs a loan for 25 percent of the vehicle purchase price, then ask CETUD for a formal guarantee and to open a line of credit for the remaining 75 percent. AFTU would then contact the manufacturer to purchase a certain number of vehicles. Upon delivery, CETUD and AFTU would together pay 100 percent of the cost of the vehicles. Operators (EIGs) would then be required to repay the 75 percent of the amount paid by CETUD over time. Repayment started during the third month of operations, allowing the newly formed EIG to adapt to the new conditions. These conditions remained unchanged throughout the various renewal phases.

However, paying the 25 percent contribution up-front had proven difficult for the operators. Even those who were able to pay, at times refused to do so as an act of 'solidarity' towards others. This almost scuttled the project. The issue was addressed in two phases:

- For the first batch of 105 vehicles, the General Society of Senegalese Banks (SGBS)²¹ agreed to make a loan to the Government of Senegal partially guaranteed by an escrow account of 180 million FCFA (274,220 EUR equivalent), to fund the scrapping mechanism. In theory, operators would be required to physically scrap one vehicle before receiving a new one, so that they could not transfer the old vehicle to an operator not participating in the scheme (although this did not always happen in practice). These funds for the scrapping allowance were initially borrowed by Government from a national development bank. However, this borrowing arrangement exposed public authorities to unreasonable risk.
- Later in Phase 1 (2006-2007), MECTRANS was created to support operators involved in the program. This fund works like a savings and credit mechanism, which receives deposits from its members and provides credit to them. To cover the individual operator contributions,

17. These are the former Directorate of Debt and Investment (equivalent to the current Directorate of the Ordering of Public Expenditure), which chairs the committee, and the former Directorate of Economic and Financial Cooperation (equivalent to the current Directorate of Cooperation and External Financing). These departments are assisted by an external legal advisor, who is also a member of the Monitoring Committee. The Head of the Retrocession Office (DDI) and the Head of the Transport Sector of the DCEF were also designated members of the Monitoring Committee.

18. CETUD was also represented by its Administrative and Financial Director and its Economic Expert.

19. AFTU was represented by its president, supported by its Financial Assistant (the head of the accounting firm) and the AFTU-Dakar Project Manager.

20. Article 5 of the Order n°9965 of 24/12/2008.

21. Société Générale de Banques du Sénégal.

MECTRANS received a loan from the Fund for Economic Promotion (FPE),²² a national development bank. This loan is partially guaranteed by the mutual guarantee funds and by an escrow account from the revenue received by the operators from the scrapping of vehicles in Phases 2 and 3.

Moving toward an independent financing mechanism

Subsequent phases of the program continued to use the resources of a revolving fund that was financed by repayments from operators and used to raise substantial financing by AFTU from the local banks.²³ The resources of this fund were dedicated to the continuation of the renewal program in Dakar and the secondary cities, which helped renew the confidence of local financial institutions in the industry. Successful vehicle financing and the repayment process increased the trust in the business model. Overall, the compliance of Dakar's operators in repaying loans under the leasing agreement, the very encouraging results in formalizing the sector and, above all, the strong impact on the level of service and satisfaction levels of passengers, increased trust in the business model and encouraged further actions by the authorities to give greater support to the financing of the urban transport sector.

AFTU's user satisfaction level was estimated at 97.7 percent for 2013 compared to 74.6 percent for 2012 trips.^{24,25}

In Phase 1 (2005-2008), the use of IDA (World Bank) concessional loans enabled AFTU to obtain loans at 6 percent interest, which in turn enabled it to finance the operators at 8 percent, providing a margin of two percentage points. Initial analysis of the renewed fleet's financial situation indicated that it was positive overall. Firstly, the loan repayment rate was as high as 99 percent. Secondly, when detailing operational costs, analysis suggested that operators were better able to maintain profitability, even when including vehicle loan reimbursement costs in the calculations.

Based on the success of Phase 1, three subsequent phases were initiated. Exim Bank of China supported Phase 2 (2008-2010), whereby 402 King Long minibuses were purchased. For this phase, Exim Bank granted 6.8 billion FCFA to the Government of Senegal, which was subsequently transferred to AFTU at an interest rate of 8 percent. Repayment rates were not as successful as in Phase 1, but they remained acceptable, at 91 percent across the entire fleet. Importantly, Phase 2 of the renewal program was not subject to the condition that vehicles be assembled by SENBUS.

Phases 3 and 4 were made possible due to the repayments by the operators in Phases 1 and 2 converted into revolving funds, with the Government's permission. These funds were used as a guarantee for AFTU to raise commercial debt from local banks.

22. Fonds de Promotion Economique.

23. The conditions for using the fund's resources are: (i) the acquisition of new vehicles; (ii) the subsidization of credits within the framework of bus renewal operations; and (iii) support for the participation of the components in the realization of certain financial arrangements, within the framework of the bus renewal (Article 5, Decree n°9,965 of December 24, 2008, on the creation and organization of the Fund's Monitoring Committee).

24. CETUD, Urban Public Transport User Satisfaction Surveys, 2014.

25. CETUD/GMAT, Measurements of the performance indicators of the PAMU (May/June 2008 campaigns).

Figure 4: Minibus AFTU, TATA, Phase 1



Source: Transitec

Figure 5: Minibus AFTU, King Long, Phase 2



Source: Transitec

The mechanism thus ensured:

- Moderate interest rates for AFTU and operators: For example, in Phase 3, with the BRM loan, these rates were 8.25 percent for AFTU and 9.5 percent for the operator. Compared to Phase 1, the margin for AFTU was 1.25 percent and the loan's interest is 1.5 percentage points higher for the operator.
- A margin to finance the subsequent phases and ensure the continuity of the program: Direct financing (Phases 1 and 2) allowed CETUD/AFTU to benefit from a margin of two percentage points (on the interests of loans provided) to cover the costs of its intervention and that of the revolving fund Monitoring Committee. This was instrumental in covering the increasing costs of the program due to the extension to secondary cities.

Additional resources were needed, however, to match the urgency shown by the authorities to accelerate the pace of renewal in Dakar and to extend the program to secondary cities. Thus, the Monitoring Committee, in accordance with the provisions of the decree establishing the revolving fund, used part of the available resources as a guarantee to raise substantial financing from local banks.²⁶

To source these additional finances, the services of a financial engineering firm were required to support the Monitoring Committee. A partnership agreement was signed with IMPAXIS-Capital²⁷ and included the Government of Senegal, AFTU, and SENBUS. IMPAXIS-Capital is now exclusively in charge of the search for financing for the subsequent phases of the bus renewal program. Based on this agreement, Phase 3 for the Dakar region (13.5 billion FCFA, for 700 minibuses) was launched with a guarantee of 5 billion FCFA from the revolving fund, which led to mobilization of financing from the Banque Régionale des Marchés (BRM) at a 9 percent interest rate. Disbursements were based on a tripartite signing of CETUD, AFTU and the Ministry of Finance (who approves the disbursement).

26. The conditions for using the fund's resources are: (i) the acquisition of new vehicles; (ii) the subsidization of credits within the framework of bus renewal operations; and (iii) support for the participation of the components in the realization of certain financial arrangements, within the framework of the bus renewal (Article 5, Decree n° 9,965 of December 24, 2008, on the creation and organization of the Fund's Monitoring Committee).

27. Specialized in fundraising operations and member of the SIFI SA group (Société Internationale Financière) like SENBUS (also a member of SIFI SA Group).

Thus, Phase 3 (2013-2019) saw the purchase of 700 TATA minibuses (700 TATA LP 913 and 300 TATA Marcopolo). A similar approach was taken for Phase 4 (2019-present), but this time with financing from the Bank of Dakar (BDK). The interest rates for operators were 9.5 percent.

The financing of the subsequent phases was ensured by the revolving fund. The framework agreement concluded in February 2011 between the Government of Senegal (represented by the Ministry in charge of Economy and Finance and the Ministry in charge of Transport) and AFTU; it dedicates the resources of this fund exclusively to the continuation of the renewal program in Dakar and the secondary cities.

The financing of the renewal program is now organized according to the following principles:

- An interest rate is set by the Monitoring Committee.
- The repayment period is 60 months.
- A three-month grace period is offered to ensure the profitability of the network's routes and, if necessary, for CETUD to review and revise the feasibility studies about route concessions.
- Repayments are made monthly.
- Operators are still required to provide a personal deposit for an amount fixed by CETUD (25 percent of the cost of vehicle in Dakar, 20 percent in the secondary cities).
- Operators are still required to participate in the Mutual Guarantee Fund, intended to cover possible defaults in the repayment of the loan. The Mutual Guarantee Fund is financed by an initial endowment represented by the first three monthly leasing amounts paid by the operators. Thereafter, the Mutual Guarantee Fund is financed each month by a deduction of a percentage of the leasing payment set by the Monitoring Committee (5 percent).
- For the repayment of loans for which MECTRANS is mandated to ensure recovery, a monthly table for repayments is established and distributed to all parties involved in the execution of the project, in particular CETUD.
- During the whole AFTU program, the financial, administrative, and accounting management of the program is entrusted to a consulting firm that manages the AFTU program in Dakar.

A summary of the contractual relationships and financial flows under this program is provided in Figure 3. Details on the financing terms and conditions are provided in Table 2.



Table 2: Summary of renewal phases

Renewal phases and dates	Phase 1 (2005-2008)	Phase 2 (2008-2010)	Phase 3 (2013-2019)	Phase 4 2019 – present
Number of vehicles	505	406	700	710 (538 already delivered)
Vehicle type	TATA 613	King Long	Tranche 1 (2012-2014) 400 TATA LP 913 Tranche 2 (2016-2019) 300 TATA Marcopolo LP 613	332 Ashok Leyland 378 TATA LP 913
Beneficiaries	9 EIGs 245 operators (239 men, 6 women)	14 EIGs 342 operators (311 men, 31 women)	14 EIGs 597 operators (533 men, 64 women)	14 EIGs
Funding source	World Bank (IDA)	Exim Bank	Regional Market Bank (BRM)	Bank of Dakar (BDK)
Type of guarantee	Mutual guarantee fund (AFTU) + escrow account	Mutual guarantee fund (AFTU) + escrow account	Revolving fund	Revolving fund
Unit cost (after government waivers, in million FCFA)	21.2	22.2	23.3	24.5
Funding amount (in billion FCFA)	10.7	8.9	16.3	17.4
Funding (in billion FCFA)	World Bank: 8.0 AFTU (operators personal deposit) 2.7	PRC: 6.7 AFTU: 2.2	Revolving fund: 12.2 AFTU: 4.0	Revolving fund: 13.1 AFTU: 4.3
Beneficiary	Government of Senegal	Government of Senegal	AFTU	AFTU
Mode of transfer to the operators	5-year leasing by AFTU	5-year leasing by AFTU	5-year leasing by AFTU	5-year leasing by AFTU
Financing conditions	Interest rate: 8% Duration: 5 years after 3 months of deferment	Interest rate: 8% Duration: 5 years after 3 months of deferment	Interest rate: 9.5% Duration: 5 years after 3 months of deferment	Interest rate: 9.5% Duration: 5 years after 3 months of deferment
Loan repayment rate	99%	91%	95%	
Refund amount/month	390,111 FCFA	518,414 FCFA	583,284 FCFA	729,160 FCFA

The regions program: extending renewal to secondary cities

The modernization of informal transport in the secondary cities began in 2015, after the satisfactory results of the Dakar experience.

While the process was the same as that in Dakar, in the secondary cities, operators were at times able to lease a new vehicle without first scrapping an old one (e.g., in Fatick and Tivaouane). However, operators had to contribute to the cost of the vehicle and provide a personal deposit. Urban taxis (yellow taxis) were replaced by minibuses in Tambacounda.

Institutional and organizational framework

As in Dakar, there are four key support mechanisms:

- AFTU, as the financial institution in charge of the program, develops and signs leasing contracts with the operators and EIGs (tripartite agreements).
- MECTRANS, while mainly responsible for the recovery of payments from the operators, is also a microfinance institution that offers financial services to operators to facilitate deposits.
- TRANSVIE offers social protection to operators and a broader membership group. However, membership in the secondary cities is low, mainly due to the low salaries of staff as well as the lack of awareness of the benefits of such insurance.
- CETUD has appointed a local focal point in each participating secondary city, attached to the regional Directorate of Land Transport (DRTT). The local focal point is required to have a higher education degree and be younger than 40 years old. While CETUD undertakes technical supervision, the focal point assists in monitoring program implementation and vehicle operations.

The role of the local focal point also includes the following tasks:

- (i) Collect operating parameters by monitoring the network's operations (centralization and processing of route sheets)
- (ii) Participate in the analysis of the various reports received and operating logs collected
- (iii) Contribute to the identification of training needs
- (iv) Participate in various studies and surveys
- (v) Identify the difficulties encountered by operators and, as far as possible, advise them on operational matters
- (vi) Prepare periodic reports under the aegis of the DRTT and with the support of CETUD
- (vii) Participate, as required, in the various committees and commissions set up for the program

In addition to the institutional set-up at the national level, the following bodies were created:

- A management committee within the national monitoring committee, with CETUD designated as committee chair
- A local management committee, set up by the local administrative authorities (governor or prefect), to supervise the implementation of the project
- A commission responsible for withdrawing vehicles to be replaced and supervising their scrapping. Its composition is determined by the local authorities.

SENBUS continues to support the program in the regions. For this purpose, a new partnership agreement was signed on 11 February 2009 between the Government of Senegal (Ministry of Finance and Ministry in charge of Land Transport), CETUD, and SENBUS, as a Private Public Partnership. While the assembly contract remains identical to that of Dakar, there are additional provisions, notably in the following aspects:

- At ELTON fuel stations²⁸ in some secondary cities, SENBUS has rented space to provide bus maintenance. In cities where there are no ELTON stations, SENBUS has created bays for maintenance elsewhere. These SENBUS Spaces are equipped by SENBUS and provide the necessary human resources to conduct maintenance activities.
- A mobile rapid repair unit, with adequate equipment and resources, is in place to support the after-sales service in secondary cities.

The commercial contract provides for penalties for delays in attending to maintenance similar to those provided for the Dakar program. The operators' obligations regarding fleet management and the guarantees for after-sales service provided by SENBUS also remain the same.

Local participation in the program

The success of the AFTU program had generated high demand from other cities to replicate the program outside of Dakar. After an initial phase of excitement about the long-awaited program, where local authorities showed a good commitment, there was actually very limited involvement of local authorities in the day-to-day operations of the program.

Saint-Louis was the only city to have developed basic bus infrastructure and provided spaces for bus stops throughout the network. In the city of Thiès, as part of its corporate social responsibility, SENBUS (whose assembly workshop is in the Thiès municipality) built bus stops for the network, and in few other cities CETUD did the same. Other local authorities were not able to deliver on their commitments to develop the required basic bus infrastructure

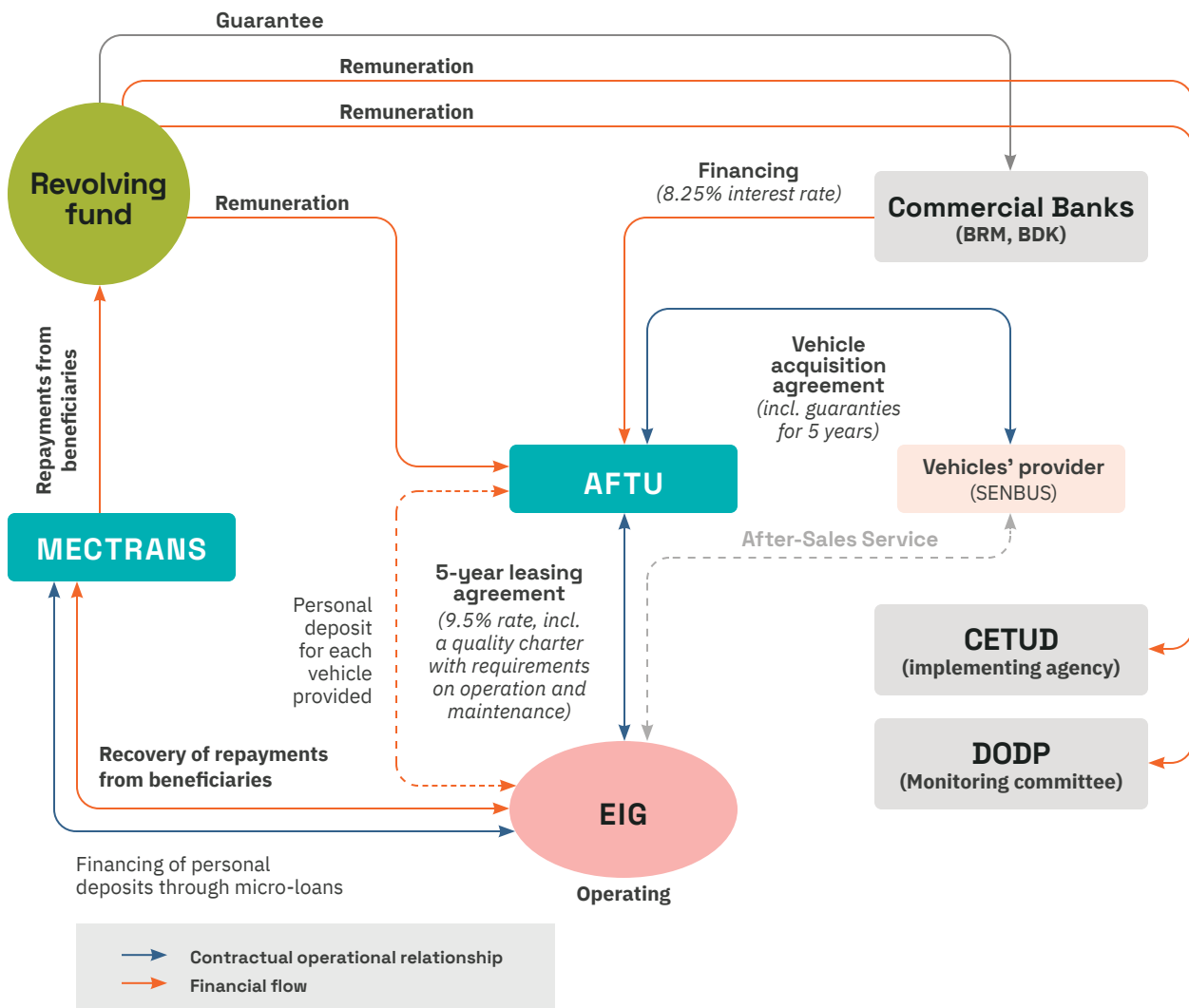
Operations management

As in Dakar, operators were grouped into EIGs – the only difference being that operators in the secondary cities do not have concession agreements but are bound by a quality charter (defining the level of service) annexed to the leasing agreement of vehicles. This is because the AFTU network routes are mapped out by CETUD, which then assigns them to the EIGs for operation. The operators must respect their routes. However, in some cities and by mutual agreement, the EIGs run vehicles alternately on the most profitable routes to balance operating revenues. In other words, the assigned routes to operators are not fixed and change periodically, to allow everyone to benefit from the most profitable routes.

Fares in the secondary cities are very low. The official rates vary between 100 FCFA and 200 FCFA, regardless of the length of the route. Staff usually includes a driver and conductor. However, for each vehicle, the operator must recruit four employees to meet the required service levels and legal working

28. Chain of service stations of the Société d'Intervention Financière (SIFI SA) group of which SENBUS is also a subsidiary.

Figure 6: Detailed contractual relationships and financial flows, secondary cities



hours: two conductors (one regular and one substitute) and two drivers (one regular and one substitute). It is estimated (based on surveys developed as part of this study) that more than 95 percent of the drivers and conductors have a substitute. None of the drivers and receivers interviewed for this study had a formal contract, and only 5 percent of the drivers owned their vehicles. 74 percent of the drivers were paid monthly. The salary level for 60 percent of drivers is between 45,000 and 70,000 FCFA.

Support staff are also necessary for the network to function, including line managers, controllers, and regulators, who are supported by a pool of funds contributed by the vehicle owners.

In the regions, a fleet of 454 TATA and Dong Feng minibuses constitute the AFTU network, with 68 routes. Since the program began in 2014, 21 of the new vehicles under the AFTU program (4.6 percent of the total delivered) have been declared permanently out of service, for reasons mostly related to maintenance but also to road crashes. No cases of vandalism have been reported.

Bus financing mechanism

The programs in the secondary cities were carried out using the resources of the revolving fund, which included the interest paid by the operators in the Dakar program. IMPAXIS-Capital was entrusted with the financial structuring of the program, and obtained a loan from BRM under the following conditions:

- An interest rate of 6 percent per annum for the amount deposited as collateral (5 billion FCFA)
- A deferment period of three months
- An interest rate of 8.25 percent per annum for AFTU

For the operator:

- A credit repayment period of five years
- A deferment period of three months
- An interest rate of 9.5 percent

Details about the financing terms and conditions are provided in Table 3.

Contractual and financial agreements

The financing of the renewal program is through five-year leasing agreements, signed between AFTU and individual operator members and countersigned by their EIG. The leasing agreement requires operators to:

- Provide a personal deposit for an amount fixed by CETUD (20 percent in the secondary cities). Individual operators could obtain financing for the personal deposits from MECTRANS.
- Provide a monthly repayment of the vehicles during a 60-month repayment period and at interest rates set by the Monitoring Committee. The repayment period included a three-month grace period to allow operators to test the routes and ensure the profitability.
- Participate in the Mutual Guarantee Fund within MECTRANS, intended to cover possible defaults in the repayment of the loan. The Mutual Guarantee Fund is financed in the same way as in Dakar.

Scrapping program

As in Dakar, the bus renewal program was complemented by a scrapping program. In the case of regions, however, because the aim was to modernize transport in a context where there was previously no public transport system, operators could either scrap old vehicles or lease new vehicles without exchanging an old vehicle. For example, beneficiaries could exchange an old vehicle for a scrapping allowance (capped at 2 million FCFA for the secondary cities) or, in the absence of a vehicle, pay the full deposit amount.

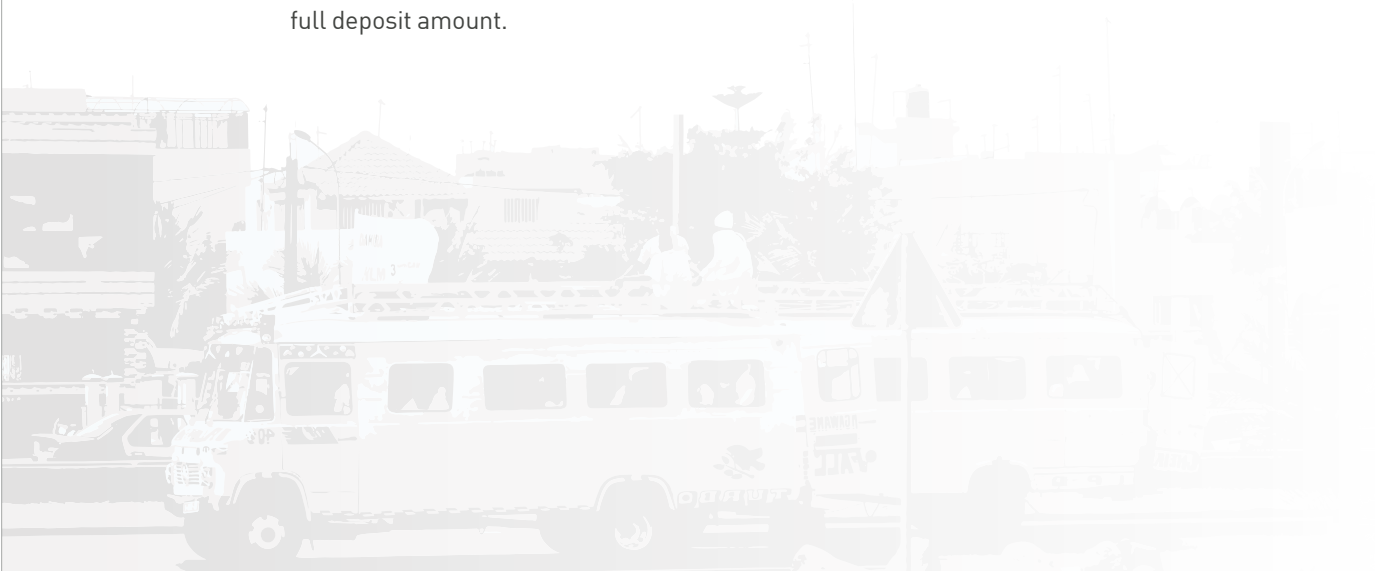


Table 3: Summary of the financing conditions of the AFTU-Regions program, Phase 1

PHASE 1						
	Kaolack	Louga	Saint-Louis	Tambacounda	Thiès	Ziguinchor
Start/end dates	April 2015 – present	2015 – present	April 2015 – present	2015 – present	2015 – present	2015 – present
Number of EIGs created	2	1	3	1	3	1
Number of vehicles renewed	56	None	128	63 urban taxis	93	87
Unit price per vehicle	18,700,000 FCFA					
Tranche 1	822,800,000 FCFA (44 vehicles)	243,100,000 FCFA (13 vehicles)	935,000,000 FCFA (50 vehicles)	374,000,000 FCFA (20 vehicles)	935,000,000 FCFA (50 vehicles)	448,800,000 FCFA (24 vehicles)
Tranche 2	112,200,000 FCFA (6 vehicles)	93,500,000 FCFA (5 vehicles)	691,900,000 FCFA (37 vehicles)		492,700,000 FCFA (26 vehicles)	149,600,000 FCFA (8 vehicles)
Tranche 3	18,700,000 FCFA (1 vehicle)		336,600,000 FCFA (18 vehicles)		187,000,000 FCFA (10 vehicles)	355,300,000 FCFA (19 vehicles)
Tranche 4			93,500,000 FCFA (5 vehicles)		93,500,000 FCFA (5 vehicles)	
Overall cost	953,700,000 FCFA (51 vehicles)	336,600,000 FCFA (18 vehicles)	2,057,000,000 FCFA (110 vehicles)	374,000,000 FCFA (20 vehicles)	1,724,450,000 FCFA (91 vehicles)	953,700,000 FCFA (51 vehicles)
	6,399,450,000 FCFA (341 vehicles)					
Distribution of funding	<ul style="list-style-type: none"> ■ Revolving fund: 5.72 billion FCFA (for all the tranches) ■ AFTU operators (personal deposit): 1.28 billion FCFA 					
AFTU's local partner banks	<ul style="list-style-type: none"> ■ Regional Markets Bank (BRM), 4.2 billion FCFA, and Dakar Bank (BDK), 4 billion FCFA: <ul style="list-style-type: none"> → 6% annual remuneration of the guarantee deposit (5 billion FCFA) → 6 months of deferment → an interest rate of 8.25% per annum for AFTU 					
Financing conditions for operators	<ul style="list-style-type: none"> ■ Interest rate: 9.5% ■ Duration: 5 years after 3 months of deferment ■ Monthly payments: 506,000 FCFA (for one vehicle) 					
Source of funding	Revolving fund/BRM/Operators					
Type of vehicle	TATA minibus (Indian brand)			Dong Feng minibus (Chinese brand)		

Source: CETUD and AFTU

Table 4: Summary of the financing conditions of the AFTU-Regions program, Phase 2

PHASE 1							
	DIOURBEL	FATICK	KAFFRINE	KOLDA	MBOUR	SEDHIOU	TIVAOUANE
Start/end dates	NA	July 2017 - present	NA	June 2018 - present	August 2017 - present	NA	NA
Number of EIGs created	1	1	-	1	4	-	1
Number of vehicles renewed	19	7	NA	20	43	NA	15
Unit price per vehicle	18,950,000 FCFA						
Tranche 1	263,500,000 FCFA (14 vehicles)	132,650,000 FCFA (7 vehicles)		284,250,000 FCFA (15 vehicles)	720,100,000 FCFA (38 vehicles)		284,250,000 FCFA (15 vehicles)
Tranche 2	94,500,000 FCFA (5 vehicles)			94,750,000 FCFA (5 vehicles)	94,750,000 FCFA (5 vehicles)		
Tranche 3							
Overall cost	360,050,000 FCFA (19 vehicles)	132,650,000 FCFA (7 vehicles)		379,000,000 FCFA (20 vehicles)	814,850,000 FCFA (43 vehicles)		284,250,000 FCFA (15 vehicles)
	1,970,800,000 FCFA (104 vehicles)						
	Phases 1 and 2: 8,370,250,000 FCFA (445 vehicles) Beneficiaries: 19 EIGs and 247 beneficiaries						
Distribution of funding	<ul style="list-style-type: none"> ■ Revolving fund: 1.18 billion FCFA (for all the tranches) ■ AFTU operators (personal deposit): 394 million FCFA 						
AFTU's local partner banks	<ul style="list-style-type: none"> ■ Regional Markets Bank (BRM), 4.2 billion FCFA, and Dakar Bank (BDK), 4 billion FCFA: <ul style="list-style-type: none"> → 6% annual remuneration of the guarantee deposit (5 billion FCFA) → 6 months of deferment → an interest rate of 8.25% per annum for AFTU 						
Financing conditions for operators	<ul style="list-style-type: none"> ■ Interest rate: 9.5% ■ Duration: 5 years after 3 months of deferment ■ Monthly payments: 506,000 FCFA (for one vehicle) 						
Source of funding	Revolving fund/BRM/Operators						

Source: CETUD and AFTU

The Touba program: a private sector initiative

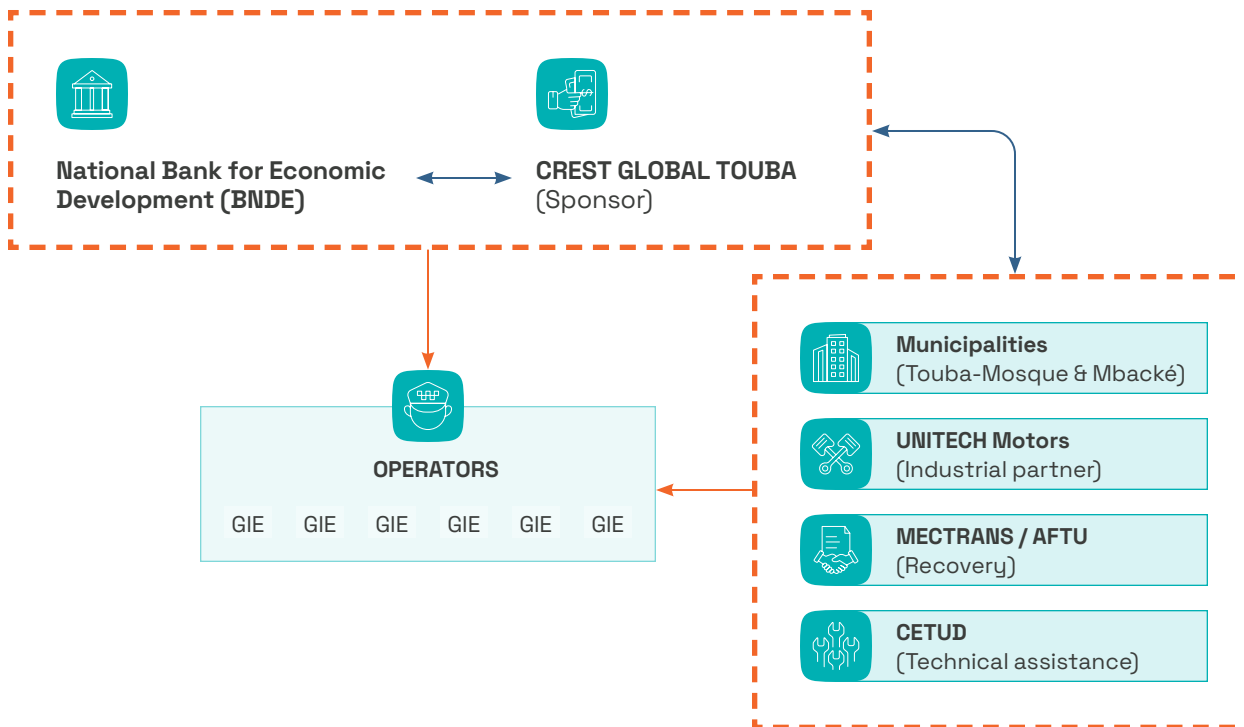
In contrast to the bus renewal program in Dakar and the secondary cities, where financing was secured by Government, in the municipalities of Touba-Mosque and Mbacké a bus financing program was initiated by private sponsor (Crest Global Touba S.A.) in partnership with Unitech Motors (a subsidiary of TATA Motors). This partnership was financed by the National Bank for Economic Development (BNDE).²⁹

Institutional and organizational framework

The institutional and organizational framework included the following key elements:

- MECTRANS signed a partnership contract with the sponsor and is responsible for the administrative, financial, and accounting management of the program.
- Vehicles are operated under a leasing contract with the sponsor, and with the financial and technical conditions defined respectively by both the sponsor and CETUD.
- To participate in the program, operators must join an EIG and provide a personal deposit. Six EIGs were created. No previous bus operations experience was required although most of the beneficiaries of the program do have previous experience as operators.

Figure 7: The Touba program, a public private partnership



29. Formerly the Economic Development Fund (FPE).

- The municipalities of Touba-Mosque and Mbacké were responsible for providing the necessary conditions for the viable and safe operation of the buses. For example, the city of Mbacké made the bus station available to Unitech Motors for after-sales service, and the municipality of Touba-Mosquée put in place bus stops and bus shelters.
- CETUD helped organize the program, by confirming or revising the services proposed by the operators, defining the frequencies and the number of vehicles required for each service, and allocating routes to EIGs. It also provided the technical assistance necessary for the efficient operation of buses deployed on the predefined routes, and trained operators and their staff. Training sessions were similar to those provided to the Dakar operators.
- Unlike the AFTU-Dakar and AFTU-Regions programs, buses in Touba are imported directly from India. The industrial partner, Unitech Motors, is responsible only for the after-sales service.
- While the contractual framework between lessee and sponsor is similar in both the government program and this program, the financial arrangements are very different – this program was implemented as a PPP. The detailed contractual framework as well as the financial arrangements are described in Table 5 and Figure 8.

Bus financing mechanism

By 2015, the program had delivered 150 buses operated by six EIGs. The interest rate difference between financing to the sponsor and to operators (4 percentage points) allows the sponsor to cover the costs of managing the program, including financing. Operators are required to make a personal deposit equivalent to 10 percent of the cost of the vehicle, as a guarantee for their commitment to the project.

The program faced several challenges:

- The design of the program allowed anyone able to fund the deposit to have access to the new vehicles. This allowed operators in Dakar, the regions, and even individuals without operating experience to enter the market, alienating existing operators in Touba.
- Unfair competition from various other modes of transport and illegal buses
- High cost of after-sales services and spare parts
- Operational problems resulting from poor understanding of the contractual arrangements by the operators, non-compliance of the ticketing system, and weak monitoring
- Poor network management and service quality
- Lack of trust between operators and sponsors.

The project is continuing, but with difficulty. In 2017, the National Bank for Economic Development (BNDE) divested Crest Global Touba, after a series of difficulties. Initially, as the sponsor, Crest Global Touba had faced conflict with the presidents of the first four EIGs, who had as individuals been temporarily exempted from paying the personal deposit. The sponsor then sued MECTRANS for not releasing its management fees. Finally, Unitech withdrew from the vehicle supply partnership.

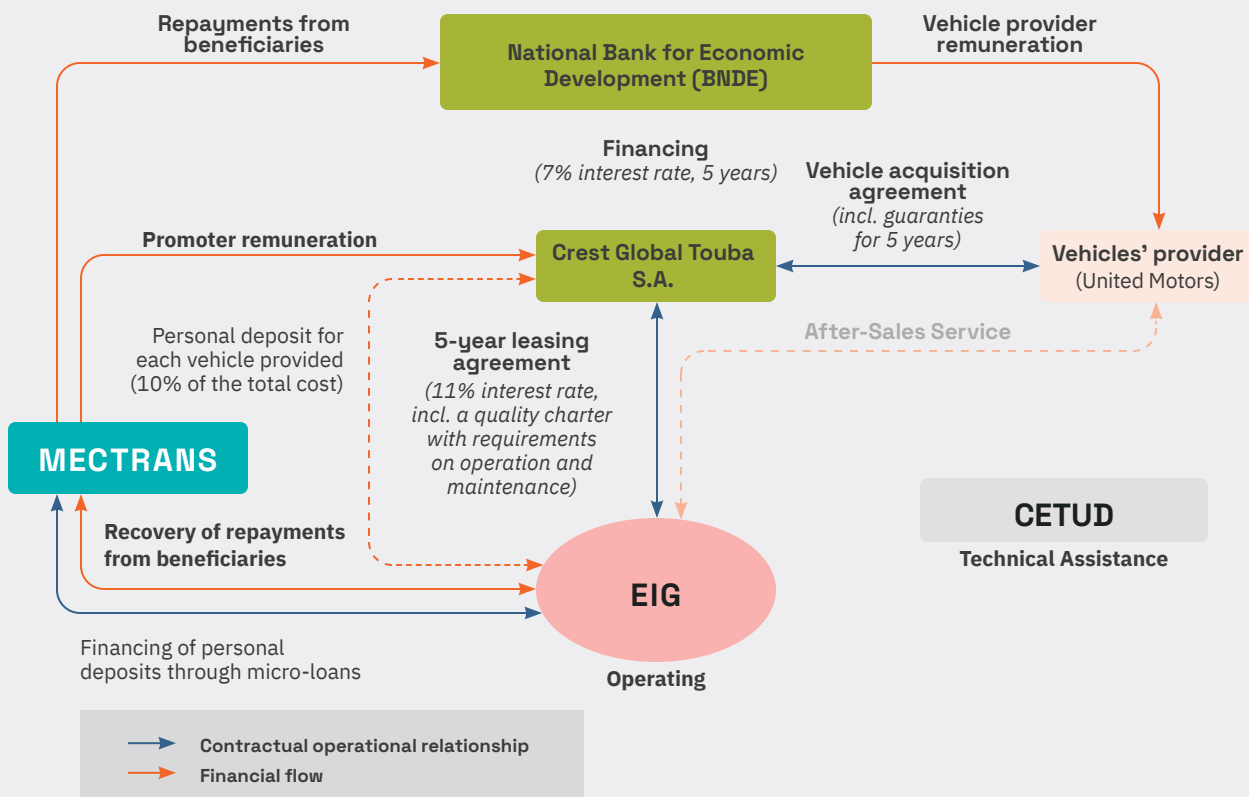
At present, MECTRANS has replaced Crest Global as the sponsor, and together with the operators and BNDE are attempting to revive the program.

Table 5: Summary of the financing conditions of Touba program, Phases 1 and 2

	Tranche 1	Tranche 2
Start/end dates	July 2010 – January 2013	2015 – present
Number of EIGs operating	5	6
Number of vehicles renewed	50	100
Unit price per vehicle	21,575,000 FCFA	
Overall cost	1,078,750,000 FCFA (50 vehicles)	2,157,500,000 FCFA (100 vehicles)
	3,236,250,000 FCFA (150 vehicles)	
Distribution of funding	<ul style="list-style-type: none"> ■ Economic Promotion Fund (FPE): 3.2 billion FCFA ■ Operators (personal deposit: 10%): 32.4 million FCFA 	
Local partner banks	<ul style="list-style-type: none"> ■ FPE (own resources financing) ■ MECTRANS/AFTU (recovery) 	
Financing conditions to the sponsor (Crest Global Touba)	<ul style="list-style-type: none"> ■ Interest rate to the sponsor: 7% ■ Repayment frequency: semi-annual ■ Deferred repayment: 1 semester ■ Repayment term: 5 years, i.e., 11 half-yearly payments including 1 deferred payment 	
Financing conditions for operators	<ul style="list-style-type: none"> ■ Interest rate: 11% ■ Repayment frequency: monthly ■ Deferred payment: 6 months ■ Repayment period: 5 years, i.e., 66 monthly payments including 6 deferred payments 	
Source of funding	FPE and Operators	
Type of vehicle	Minibus TATA LP 709 (Indian brand)	

Source: CETUD and AFTU

Figure 8: Detailed contractual relationships and financial flows, Touba program







Achievements, Challenges, and Conclusions of the Senegal Program

Program achievements

The Senegal bus renewal program was initiated in 2005, and since then has mobilized 62.9 billion FCFA (95 million EUR equivalent) of funding and introduced 2,636 new vehicles, most of which replaced old vehicles.

In Dakar the four phases of the bus renewal scheme replaced 2,145 old vehicles, while 172 vehicles are to be replaced in the final phase. A total of 53.3 billion FCFA was mobilized to renew the fleet in Dakar. In secondary cities (except Touba), the two phases of the program resulted in 341 new and larger vehicles, mobilizing 6.4 billion FCFA. Including Touba, this adds up to 491 vehicles in the secondary cities, and an investment of 9.6 billion FCFA.

The speed at which the bus renewal program was deployed was modest, mostly because of the limitations on the Government budget to cover the scrapping allowance. The scrapping allowance was capped at 2.5 million FCFA (3,700 EUR) per vehicle in Dakar, and 2 million FCFA (3,000 EUR) for the secondary cities.

Successful vehicle financing and repayment processes increased the trust in the business model. Overall, the compliance of Dakar's operators in repaying loans under the leasing agreement, the very encouraging results in formalizing the sector and, above all, the strong impact on the level of service and satisfaction levels of passengers,³⁰ increased trust in the business model and encouraged further action by the authorities to support the financing of the urban transport sector.



30. AFTU's users' satisfaction level was estimated at 97.7 percent for the year 2013 compared to 74.6 percent for the year 2012. AFTU's operators are also now ensuring 56.8 percent of motorized trips.

Funding innovation

A significant achievement was the innovative use of a revolving fund to mobilize private sector financing, with a strong monitoring governance. Phases 3 and 4 of the AFTU program in Dakar and the AFTU secondary cities' program (excluding Touba) were able to leverage significant financing from local commercial banks, with the fund as a guarantee. This, together with the Monitoring Committee that included parties from public and private sector, proved key to the continuity of the program.

Fruitful local partnerships

With the option of assembling the new vehicles in Senegal, the national economy benefitted from greater added value (compared to the case where vehicles are imported directly). Although this meant forfeiting the revenue that could have been collected through import taxes, the direct economic and financial gains of local assembly resulted in significant positive externalities: more than 300 jobs (including about 50 direct jobs) were created in the workshops of Thiès and Dakar. Local assembly also allowed for the development of skills such as industrial painting and welding.

Professionalization of operators

The bus renewal program, integrated within a larger program of formalization, resulted in significant professionalization of operators, including the adoption of regular services in Dakar and other localities (including Touba). However, challenges remain in terms of compliance with transport and labor regulations, the collectivization of operations and revenues, and the capacity of different parties.

One important innovation in the professionalization of informal transport in Senegal was the creation of the EIGs, and the contractual relationships between CETUD and the EIGs, which directly mitigated the more traditional sector fragmentation.

Phase 1 of the renewal scheme was structured in such a way that each route was uniquely assigned for operation to one EIG. However, owners seeking to sell their vehicles³¹ are not obliged to sell within their own EIG. From Phase 2 individual operators purchasing existing vehicles were not permitted to switch EIGs and participate in two or more such groups; consequently, the vehicles sold will effectively be switched to the new owner's EIG, thus creating routes operated by more than a single EIG.

Efficient operations

Within the new service offering, vehicles now leave terminals according to a predefined schedule, without waiting for the vehicle first fill up. The on-board ticketing systems are supported by operators; this innovation is continuing with a gradual switch to digital solutions that can replace paper tickets and help reduce fraud. Ticketing is a major factor in securing revenue, and therefore the operator's income and the continuity of operations.

31. Licenses are linked to the vehicle and not directly to the EIG.

Human development

In Dakar, as part of the PAMU, technical assistance was provided to EIGs and operators to help them manage urban public transport operations. At the end of the PAMU (September 2008), this assistance extended beyond operational tasks to service supervision and monitoring the route performance. Route supervisors and managers were made available to the EIGs. The route manager was responsible for managing the crews (drivers and conductors) and support staff, as well as monitoring the operations of the routes (mileage travelled, number of passengers, revenue generated, expenses incurred, etc.).

This assistance continued within the framework of the Transport and Urban Mobility Support Project (PATMUR, 2010–2017), through training of operators and the assistance and support of the EIGs to provide them with the necessary tools for the control and proper management of their activity; strong participation of the EIGs enabled the centralization of the accounting function and the creation of CAPTRANS in 2015.

Program challenges

Declining operating conditions

Route data in Dakar and secondary cities shows that the number of rotations per day have deteriorated over time, due to worsening congestion partly caused by buses circulating in mixed traffic, especially in Dakar. This has greatly compromised the profitability of routes. In secondary cities, operators have agreed to rotate routes, to distribute the benefits of the most profitable routes.

Table 6: AFTU-Dakar program: characteristics of sample routes in Dakar and results, 2022

Routes	Length (km)	Number of buses / route	Number of rotations / day	Kilometers driven / day	Operating income / vehicle (in June 2022, in CFA francs)	Repayment (in FCFA)		Current earnings before taxes (EBITDA, in FCFA)	
						Phase 3	Phase 4	Phase 3	Phase 4
Dakar: L02 (urban)	14	25	3	84	701,410			118,126	-27,750
Dakar: L26 (semi urban)	10	25	3	60	343,180	583,284	729,160	-240,104	-385,980
Dakar: L27 (semi urban)	18	19	4	64	830,050			246,766	100,890
Dakar: L80 (suburb)	28	23	2	112	828,910			245,626	99,750

Source: ECO ACCESS, based on CETUD-DOP estimates of revenues and expenses for the first half of 2022

Table 7: AFTU-Dakar program: characteristics of sample routes in Dakar and results, 2022

Routes	Length / route (km)	Number of buses / route	Number of rotations / day	Kilometers driven / day	Operating income / vehicle (in FCFA)			Repayment (in FCFA)	Current income before taxes (EBITDA, in FCFA)		
					April	May	June		April	May	June
Kaolack: L03 Terminus Médina – Term. SENELEC	6	10	12	144	186,800	676,000	178,000	506,000	-319,200	170,000	-328,000
Kaolack: L07 Term. Marché Central – Term. Sibassor	11	9	9	198	487,778	487,778	58,000		-18,222	-18,222	-448,000
Louga: L01 Garage – Garage (circular: 1A and 1B)	8	4	11	176	0	0	172,000		0	0	-334,000
Saint-Louis: L01 Bus station – Goxu Mbacc	10	18	10	200	1,177,360	1,363,895	1,356,664		671,360	857,895	850,664
Saint-Louis: L04 Bango – Ndar market	10	10	11	220	867,586	1,024,354	1,069,139		361,586	518,354	563,139
Ziguinchor: L01 Hop. Regional – Governance – Hop. Regional	10	8	10	200	836,875	574,964	560,563		330,875	68,964	54,563
Ziguinchor: L04 Lyndiane – Rd Pt J.Paul 2 – Lyndiane	13	5	10	260	929,728	934,516	1,281,766		423,728	428,516	775,766
Fatick: L01 (Circular) Bus station – Ndiaye Ndiaye – Hlm 6 – Bus station	7	4	9	126	187,123	33,655	-16,149		-318,877	-472,345	-522,149
Mbour: L01 Market – Gendarmerie RN1	5	6	13	130	887,231	739,905	307,853		381,231	233,905	-198,147
Mbour L04 Market – Saly	9	12	8	144	614,435	776,127	674,207		108,435	270,127	168,207

Source: ECO ACCESS, based on CETUD-DOP revenue and expense estimates for the first half of 2022

Lack of fare adjustments

During the initial years of the AFTU program, fares were fixed by a committee. This committee was chaired by a representative of the Ministry of Internal Trade, and included representatives of the Ministries of Transport, Finance and Energy, in consultation with the representatives of AFTU and trade unions of transport professionals and user associations. Since 2008, however, there has been no consultation. Operators have thus unilaterally changed the fares each time there is a significant fuel price increase.

Strong competition from unauthorized operators and other modes

Competition from operators without licenses, such as the Car Rapides, Ndiaga Ndiaye, moto-taxis, and Clandos, continues to be a challenge. In Touba, there is the additional challenge of Toyota L200 pick-ups, known as 'Mbacké-Touba'. These unauthorized services compete with the regulated modes on the road and compromise their profitability and viability.

Challenges in monitoring operations

The creation of CAPTRANS was an important step toward better management of operations and to ensure better internal discipline. However, the capacity of CAPTRANS has deteriorated over time. In particular, the collection and analysis of operating data needs to be improved, but this requires more capacity, organization, and commitment at both the CAPTRANS and EIG levels. Furthermore, the supervisory role and authority of CAPTRANS should be strengthened, including the role of its Disciplinary Committee.

On the other hand, the role of CETUD in the supervision of the network should be enhanced, to include enforcing the public transport regulations in the AFTU network. The monitoring and supervision by the government institutions in secondary cities, in particular local authorities, is virtually absent.

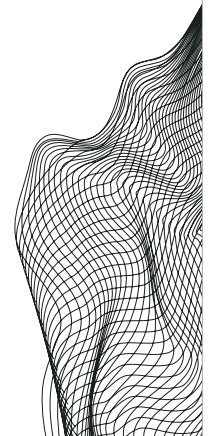
Increasing non-compliance of operators

The level of service has deteriorated in the last years due to worsening operating conditions and the challenges in monitoring operations. Despite the efforts of the EIG managers to combat non-compliance, this becomes increasingly prevalent once leasing agreements end. Non-compliance with service level commitments and routes is also particularly prevalent where operators operate routes as single owner-drivers and hence are still competing on the road for passengers to maximize profit.

CETUD's difficulties in monitoring operators' performance, and the absence of internal regulations, operating regulations, and a procedures' manual, has further compromised operations.

Diminishing EIG control over members

In Dakar, there is an increasing distance between the EIGs and their members, especially once the leasing period has ended. This lack of leverage over operators is because AFTU can no longer impose its operating standards once vehicles are fully owned by operators. This is also evident in the secondary cities, particularly as the majority of owners are not transport professionals but 'business owners' with enough resources to overcome the only barrier to entry, the personal deposits.



Lack of collective revenue

In Dakar and in most of the towns in the regions, fares are collected by a ticketing system using paper or an electronic machine. The tickets are validated on board with a stamp. Once collected by the conductor, the fares are disbursed to the employer (the operator). The operator, at a frequency agreed to by the EIG, disburses the revenue into an account at MECTRANS. In secondary cities Kaolack and Fatick, once the fares have been collected by the conductor, these are handed over to the route regulators or the focal points, who transfer them daily to the operator's account at MECTRANS. In all these cases, this is not a pooling of revenue but simply a measure to ensure that the operator saves what is necessary to repay the loan.

However, some promising new programs have achieved a well-functioning collectivization of revenues – such as the Clandos renewal program (Box 2).

Poor after-sales service

Operators report challenges with after-sales service and vehicle maintenance, including:

- i) challenges in the reliability of the new vehicles, with recurrent issues breakdowns; and
- ii) high cost of vehicle maintenance and long repair times due to the unavailability of spare parts.

In practice, vehicle maintenance is often sacrificed to achieve shorter term gains. These short-term savings can have important consequences in the life of the vehicles.

Informal maintenance options are more affordable than those offered by SENBUS or Unitech. Consequently, operators often maintain their vehicles outside of the formal supplier system, which in practice cancels the contractual guarantee of the manufacturer.

Absence of supporting infrastructure

In Dakar and in the secondary cities, one of the major difficulties faced by operators is the lack of bus infrastructure (bus stations, terminals, etc.) and the non-existence of depots.

Of the 64 terminal stations in the Dakar agglomeration, only six are functioning urban stations. As a result, the operators have to park their vehicles along the main roads at night. This has generated conflict with local authorities and complaints from residents about various nuisances, traffic congestion, or failure to pay parking fees. Furthermore, the poor maintenance of roads, especially in the secondary cities, causes vehicle deterioration.

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Labor regulations

Most of the sector workers (drivers, conductors, etc) are daily workers and do not have employment contracts. Based on the surveys conducted as part of this study, 83 percent of the drivers and 87 percent of the conductors had no employment contracts. The overwhelming majority of the drivers (98 percent) worked more than 12 hours a day, and more than 60 hours per week, compared to the regulatory working time of 40 hours.³² Conductors (90 percent) as well as drivers (70 percent) have at least two days off per week. None of drivers or conductors have annual leave.

Declining membership of TRANSVIE

TRANSVIE was welcomed with enthusiasm during the first few years as a great added value of the renewal program. Today, however, operators are not eager to join the insurance company, as the monthly contribution of 7,200 FCFA per employee represents around 1/10 of the average salary of the staff.

Unsafe driving behaviors

The deterioration of safety is mainly explained by the informality of labor and driver behavior. Further, there are fewer drivers available than there used to be, partly because the age at which someone may obtain a passenger transport driving license has increased to 25 years (from 18), and also because Dakar Dem Dikk poaches AFTU drivers. In the early phases of the program, driver training was an important component, but this is no longer a key element of the program; further, the ongoing practice of using daily workers has undermined the sustainability and outcomes of these earlier capacity building programs.

32. According to the interprofessional collective agreement of Senegal.





CONCLUSION

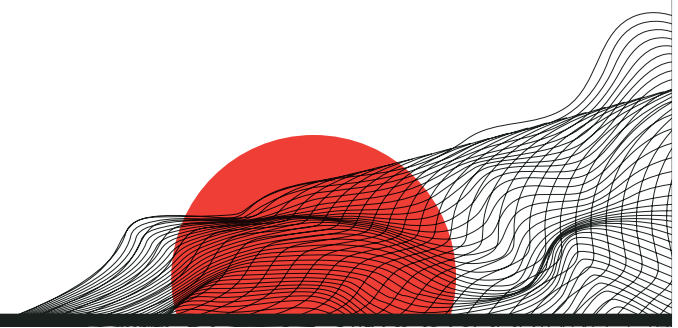


The AFTU program has shown encouraging achievements and benefits, particularly in terms of improving service and safety, reducing air pollution, and enhancing sector organization and professionalization. The program has been sustainable because of the innovative financing mechanisms, good repayment discipline, and the leverage of private funds.

However, the AFTU program faces, at the same time, some fundamental challenges. The business model has deteriorated in recent years and needs to be rethought in the evolving context of Dakar and secondary cities – particularly with worsening congestion, growing competition, and declining operating conditions. Poor enforcement of contractual operating conditions has led to increased non-compliance. The monopoly of AFTU as the only formal operators has not encouraged healthy competition to improve quality of service with time, and their dominance has not encouraged the scale-up of the program to include operators that are out of the AFTU sphere. Furthermore, the organization of the EIGs has eroded, with growing distance between management and operators.

The Touba experience, despite significant challenges, is an interesting model, where the private sector has played a more dominant role in initiating and implementing the reform; here, the public sector has participated mostly by supporting the planning and regulations.

The financing strategy needs to be re-conceptualized in the light of the recently created Land Transport Development Fund (FDTT) in 2020, and the sector's new bus technology trends (i.e., CNG and electric). This new strategy must draw on lessons learned from the AFTU programs (Dakar and secondary cities), the Touba program, and the Clandos renewal program.



REFERENCES

Kumar, Ajay, and Christian Diou. 2010. "The Dakar Bus Renewal Scheme – Before and After." SSATP Discussion Paper No. 11. Washington, DC: SSATP.

<https://www.ssatp.org/sites/ssatp/files/publication/DP11-Bus-Renewal-Scheme-Dakar-with-cover.pdf>

SSATP. 2018. Policies for Sustainable Accessibility and Mobility in Urban Areas of Nigeria. Washington, DC: SSATP.

https://www.ssatp.org/sites/ssatp/files/publication/SSATP_UTM_FinalReport_NIGERIA.pdf

SSATP. 2023. The Minibus Renewal and Professionalization Process: A Combined Approach to Modernize Paratransit Services in Dakar, Senegal. Studies of Informal Passenger Transport Reforms in Sub-Saharan Africa series. Washington, DC: SSATP.

https://www.ssatp.org/sites/ssatp/files/publication/Dakar_vf.pdf



