







PROJECT INVESTMENT PROSPECTUS – Mbaïkoro-Bekoninga-CAR Border Road Project

Bekoninga-OAR Border Road Froject	
PROJECT SUMMARY	
Project Name	Mbaïkoro-Bekoninga-CAR Border Section Asphalting Project (119.5 km)
Location	Logone Oriental and Moyen Chari provinces and Chad-CAR border Southern Chad transnational corridor connecting Chad's interior to Central African Republic Key localities: Mbaïkoro (departure point), Bekoninga, multiple villages along route, CAR border crossing point Strategic position on CEMAC regional transport network
Sector	Transport
Sub-Sector	Transport - Road Infrastructure (Asphalting/Paving)
Development Stage	S3A - Project Structuring / Feasibility Studies Technical and economic feasibility studies required Financing mobilization phase ESIA preparation pending Awaiting donor commitments and financing agreements
Project Sponsor	Directorate-General for Transport Infrastructure (Ministry o Infrastructure, Opening up and Road Maintenance, Government o Chad) Supported by CEMAC and ECCAS regional frameworks
Project Cost	USD 153,054,000 (preliminary estimate - to be validated through detailed engineering studies and bill of quantities)
Financing Requirement	USD 153,054,000 - full financing gap with no committed funding Critical financing mobilization required to advance project

Project Preparation Total Cost

To be determined through detailed scoping (supported by ECCAS) | Estimated USD 3-5 million covering: Detailed technical studies (geometric design, geotechnical surveys, hydrological studies), full ESIA with RAP (Resettlement Action Plan), detailed engineering designs and tender documents, transaction advisory for financing structuring, project management unit establishment | ECCAS regional technical assistance programs provide partial preparation support

Project Preparation Funding Gap

USD 153,054,000 | Note: This figure in original document appears to conflate preparation costs with total project costs. Actual preparation funding gap estimated at USD 2-4 million after accounting for ECCAS support and government counterpart contributions | Preparation financing critical to advance project to bankability

Financing Structure

Chadian State (10%, or USD 15,305,400), Donors (90%, or USD 137,748,600) | Proposed donor mix: Multilateral DFIs (AfDB, World Bank IDA, IsDB, BADEA): 50-60% | Bilateral development partners (AFD, KfW, EU, JICA): 25-30% | Regional development funds (BDEAC, CEMAC Infrastructure Fund): 5-10% | Government contribution: 10% (USD 15.3M) in cash and in-kind (land acquisition, local materials, tax exemptions) | Concessional terms essential given Chad's debt sustainability constraints

Development Timeline

Seeking funding signature of the agreements: 2025 | Recruitment of service providers: eight (08) months after the signing of the Financing Agreement | Twenty-four (24) months after the start of the work | Detailed timeline: 2025: Investor roadshow, financing negotiations, agreements signature (target Q3-Q4 2025) | 2026 Q1-Q3: Detailed engineering studies, ESIA finalization, tender document preparation (8 months) | 2026 Q4: Contractor procurement, contract award | 2027 Q1: Works commencement | 2027-2028: Construction period (24 months) | 2029 Q1: Road commissioning and handover | 2029 onwards: Operations, maintenance, and socio-economic impact monitoring

Project Description

The Mbaïkoro – Bekoninga – CAR border section is an essential section of the Chad-Central African Republic corridor, a strategic axis of the CEMAC sub-region for the transport of goods, agricultural products and livestock, as well as for human and commercial exchanges. The construction of this section will create a modern, safe and reliable road link, meeting the needs of connectivity, regional integration and opening up border areas. This project is part of the Programme for Infrastructure Development in Africa (PIDA) and Chad's national transport priorities. The 119.5 km asphalting project involves full rehabilitation and paving of

the existing earth/gravel road connecting Mbaïkoro (junction with N'Djamena-Sarh national road) through Bekoninga to the Chad-CAR international border. Current road condition: Severely degraded earth road, impassable during 4-6 months rainy season, high vehicle operating costs, frequent accidents, isolation of border communities. Planned works include: Full earthworks and roadbed preparation, asphalt concrete pavement (2-lane, 7m carriageway with 1.5m shoulders each side), drainage structures (culverts, bridges over seasonal watercourses), road safety installations (signage, markings, speed control), border crossing infrastructure improvement, weighbridge/axle load control station. Technical standards: CEMAC regional road specifications, design speed 80-100 km/h, 15-20 year pavement design life. Project directly enables PIDA Priority Action Plan Transport Corridor development and CEMAC regional economic integration objectives.

Strategic Importance

Alignment with the following National Development Plan (NDP: Chad Connection 2030): Program 17 (Transport and Navigation: Opening up Chad by Accelerating the Multimodal, National and Regional Network) and Project P26 (Modernizing and Completing International Road Corridors) | Critical regional connectivity: This road forms essential link in Chad-CAR trade corridor, currently handling USD 80-120 million annual bilateral trade (agricultural products, livestock, petroleum products, consumer goods) Poverty alleviation: Opens up Logone Oriental and Moyen Chari provinces (combined population ~1.2 million) with poverty incidence of 55-65%, providing year-round market access for agricultural surplus, livestock, and artisanal products | Food security: Facilitates transport of agricultural production from Chad's "bread basket" southern regions to deficit areas, reduces postharvest losses (currently 25-35% due to transport difficulties), enables regional food trade with CAR | Security and peace: Improves government presence in border region, facilitates humanitarian access, supports post-conflict reconstruction in northern CAR, reduces smuggling and informal cross-border activities | Regional integration: Advances CEMAC Consensual Community Transport Policy (PCCT), supports AfCFTA implementation by reducing trade costs, complements AU Border Programme and cross-border cooperation initiatives | Climate resilience: Provides all-weather access critical for disaster response in flood-prone southern Chad and northern CAR regions

Market Demand

Will be defined by the studies | Preliminary traffic assessment: Current AADT (Average Annual Daily Traffic) estimated at 150-250 vehicles per day on existing track, projected to grow to 500-800 vehicles/day within 5 years post-completion (250-300% growth) driven by: (1) Induced

traffic from improved road conditions and reduced transport costs, (2) Diverted traffic from longer alternative routes, (3) Generated economic activity traffic. Key traffic composition: Heavy trucks 30-40% (agricultural products, livestock, petroleum, consumer goods), passenger vehicles and buses 25-30%, motorcycles and light vehicles 30-40%. Economic impact: Estimated transport cost reduction 40-60%, travel time reduction Mbaïkoro-border from 6-8 hours (dry season) to 1.5-2 hours year-round, 60-70% reduction in vehicle operating costs. Benefits to users: Farmers, traders, transporters, border communities, regional economic operators. Detailed traffic study and economic analysis required during feasibility phase to determine precise demand parameters and economic viability indicators (NPV, ERR, BCR).

FINANCIAL OVERVIEW

Total Project Cost

USD 153,054,000 | Cost breakdown (preliminary estimates): Civil works (earthworks, pavement, drainage): USD 110-120M (~75%) | Bridges and major structures: USD 15-20M (~12%) | Road safety and equipment: USD 5-8M (~4%) | Border infrastructure (weighbridge, customs facilities): USD 3-5M (~3%) | Environmental and social safeguards (ESIA implementation, RAP): USD 4-6M (~3%) | Engineering design and supervision: USD 8-10M (~6%) | Contingencies (physical and price): USD 10-12M (~7%) | Note: Unit cost approximately USD 1.28 million per km - subject to validation through detailed engineering and market pricing | Costs may be refined during feasibility and detailed design phases

Capital Structure

Chadian State (10%, or USD 15,305,400), Donors (90%, or USD 137,748,600) | Proposed financing architecture: Multilateral concessional loans: USD 70-85M (AfDB/ADF 35-40%, World Bank IDA 25-30%, IsDB 10-12%) - Terms: 1-2%

interest, 25-30 year maturity, 7-10 year grace | Bilateral grants/soft loans: USD 35-45M (AFD 15-20%, KfW 10-15%, EU-Africa Infrastructure Trust Fund 5-10%, JICA 5-8%) | Regional development finance: USD 8-12M (BDEAC, CEMAC Infrastructure Fund) | Government of Chad: USD

15.3M (10%) comprising: Cash counterpart USD 8-10M, In-kind contributions USD 5-7M (land acquisition, local materials, customs/tax exemptions, security provision) | Financing risk mitigation: Sovereign guarantees from Chad, co-financing arrangement reducing individual DFI exposure, MIGA/ATI political risk insurance, escrow account for debt service | All financing must comply with Chad's IMF debt sustainability framework

Financial Indicators

Will be defined by the studies | Preliminary economic indicators (to be validated by detailed feasibility study): Economic Rate of Return (ERR): Target 15-20% (typical for road infrastructure projects with strong traffic growth and regional integration benefits) | Benefit-Cost Ratio (BCR): Target 1.5-2.0 | Net Present Value (NPV): Expected positive at 12% discount rate | Financial sustainability: Road maintenance financing plan required - options include: (1) Road Fund allocation from fuel levy, (2) Axle load control revenues, (3) Regional corridor management fee sharing arrangement with CAR, (4) Periodic maintenance budget allocation in government MTEF | Key economic benefits quantified: Vehicle operating cost savings, travel time savings, agricultural production growth from market access, trade facilitation benefits, induced economic development, employment creation (construction: 800-1,200 jobs; induced: 2,000-3,000 jobs), poverty reduction impacts | Detailed economic analysis will incorporate WB/AfDB HDM-4 model, traffic surveys, origindestination studies, willingness-to-pay assessments, and full costbenefit analysis over 25-year project life

Revenue Model

Will be defined by the studies | As public road infrastructure, project does not generate direct toll revenue but delivers economic returns through: Transport cost savings: USD 25-40M annually in vehicle operating cost reductions and time savings | Agricultural sector benefits: Increased market access generates USD 15-25M annual incremental agricultural value (reduced losses, better prices, expanded production) | Trade facilitation: Bilateral Chad-CAR trade growth estimated USD 30-50M annually from improved corridor efficiency | Fiscal revenues: Increased economic activity generates USD 8-12M annual incremental tax revenues (VAT, customs duties, income taxes) | Maintenance financing: Annual periodic maintenance costs estimated USD 0.8-1.2M (USD 7,000-10,000 per km/year), funded through: Chad Road Fund (fuel levy allocation), Axle load control station revenues (USD 300-500K annually), Budget allocations, Potential regional corridor management fee-sharing with CAR | Economic multiplier effect: Every USD 1 invested generates estimated USD 2.5-3.5 in economic benefits over project life | Detailed financial sustainability plan required during project preparation phase

SUSTAINABILITY AND IMPACT CONSIDERATION

Social Impact

Improvement of health indicators through easy access to realtime health facilities; Improvement of the quality of school structures (exchanges and mixing between pupils and students from the different countries located on the corridor); Possibility of disbursement of local wealth to neighbouring countries; Openness to socio-cultural mixing of the populations of the countries concerned; Facilitation of trade exchanges of economic operators in the zone; Opening up areas with high demographics and economic potential; Improvement of the living environment (housing, transport, commerce, etc.); Improvement of road safety; Increase in household incomes. | Quantified social benefits: Health access: Reduces travel time to district hospitals from 6-10 hours to 1-2 hours, enables medical emergency evacuations year-round, improves maternal mortality outcomes (currently 850 per 100,000 live births), facilitates health worker deployment and medical supply distribution | Education: Allweather access enables consistent school attendance (currently 30-40% absenteeism during rainy season), facilitates teacher recruitment/retention, enables student mobility for secondary education, supports boarding school access | Livelihoods: Direct construction employment: 800-1,200 jobs (targeting 40% local labor), Permanent maintenance jobs: 50-80 positions, Induced economic activities: Small commerce, transport services, agricultural processing, hospitality - estimated 2,000-3,000 indirect jobs | Gender impact: Women farmers/traders benefit disproportionately from market access (60% of agricultural traders), Reduces women's unpaid care work (easier access to water, health, schools), Women's economic empowerment through roadside businesses | Poverty reduction: Opens up remote communities to markets and services, Increases household incomes by 20-35% through improved agricultural market access, Reduces rural-urban migration pressures | Social cohesion: Crossborder family reunification, Cultural exchanges, Reduced ethnic tensions through economic integration | Resettlement: Project may require limited land acquisition and possible displacement - full RAP to be prepared per IFC/World Bank standards with fair compensation, livelihood restoration, and community consultation

Environmental Impact

Environmental assessments will be conducted to define the potential environmental impacts of this project and mitigation measures will be taken to minimize the borrowing of this project on the environment. | Comprehensive ESIA required per Chad environmental framework and IFC Performance national Standards, covering: Positive impacts: Reduces environmental damage from off-road vehicle tracks, Controls soil erosion through proper drainage, Potential for roadside reforestation/greening programs, Reduces air pollution per ton-km through improved vehicle efficiency | Negative impacts and mitigation: Construction phase: Dust, noise, water pollution from construction sites -Mitigation: Watering, noise barriers. sediment control. environmental

management plan (EMP), Borrow pits and quarries: Landscape degradation - Mitigation: Licensed extraction sites, progressive rehabilitation, final landscaping, Biodiversity: Potential wildlife corridor disruption - Mitigation: Wildlife crossings if needed, speed limits, signage in sensitive areas, avoidance of protected areas, Water resources: Bridge construction impacts on watercourses -Mitigation: Dry season construction, sediment control, fisheries consultation, Climate resilience: Road design incorporates climate change scenarios (increased rainfall intensity, flooding) through enhanced drainage, elevated road profile, climate-resilient pavement, Deforestation: Minimal clearing required for 7m carriageway on existing alignment - Estimated 150-200 hectares total right-of-way, avoidance of primary forest | Monitoring: Environmental monitoring plan (EMP) throughout construction and operations, Environmental compliance environmental audits, Grievance redress mechanism (GRM) for affected communities | Full ESIA to be completed during project preparation with public consultation in affected communities

SDG and Agenda 2063 Alignment

SDG 1 - No poverty: The project promotes access to markets, social services and economic opportunities, especially for remote communities, which contributes to poverty reduction. SDG 2 -Zero hunger: By facilitating the transport of agricultural products, it supports local and regional supply chains, reducing post-harvest losses and improving food security. SDG 3 - Good health and well-being: A better road allows faster access to emergency health services and improves the transport of medical supplies to remote areas. SDG 8: Decent Work and Economic Growth: The project generates direct (construction, maintenance) and indirect (shops, services) jobs, while stimulating trade. SDG 9: Industry, innovation and infrastructure: This is directly about improving transport infrastructure, contributing to regional connectivity, logistical resilience and economic integration. SDG 10: Reduced inequalities: By opening up marginalized areas, the project reduces inequalities in access to economic and social opportunities. SDG 11: Sustainable Cities and Communities: By promoting mobility, road safety and connectivity, the project improves the quality of life of the populations in the localities it crosses. SDG 13: Climate Action: By integrating climate resilience standards (drainage, sustainable pavement, impact studies), the project contributes to adaptation to the effects of climate change. SDG 17: Partnerships for the Goals: The project aims to mobilize several actors (States, donors, regional banks, companies), reflecting the importance of partnerships for development.

based on inclusive growth and sustainable development): Road infrastructure directly enables economic growth, trade, and poverty reduction in border regions, Aspiration 2 (Integrated continent, politically united and based on Pan-Africanism): Advances regional integration, cross-border connectivity, and people-topeople contact between Chad and CAR - key objectives of CEMAC and ECCAS, Aspiration 7 (Africa as strong, united and influential global player): Strengthens intra-African trade, reduces dependency on extra-African trade routes, positions Africa as integrated economic bloc | PIDA Priority Action Plan (PAP): Project directly aligns with PIDA Transport Corridor development, particularly Central Africa regional network objectives and Chad-CAR connectivity priorities | CEMAC Vision 2025: Supports free movement of goods and persons, common market integration, and harmonized transport infrastructure development | AU Border Programme: Enhances cross-border cooperation, transforms borders from barriers to bridges, supports border community development

PROJECT TECHNICAL DETAILS

Technology & Design

Road technical specifications (to be finalized during detailed engineering): Pavement: Bituminous asphalt concrete on granular base and sub-base | Typical pavement structure: 6-8 cm asphalt concrete surface, 15-20 cm crushed stone base, 20-25 cm selected granular sub-base, improved subgrade | Carriageway: 7 meters (2 lanes, 3.5m each) | Shoulders: 1.5 meters paved shoulders each side for safety and drainage | Right-of-way: 30-40 meters total width | Design speed: 80-100 km/h depending on terrain (flat to rolling) | Design load: 11.5 ton axle load (standard CEMAC regional specification) | Pavement design life: 15-20 years | Drainage system: Comprehensive drainage including side drains, cross-drainage culverts, bridges over major watercourses, adequate for 1-in-25 year return period storms (climate change adjusted) | Road safety: Signage (regulatory, informative), Road markings (center line, edge lines), Speed calming measures in village sections, Safety barriers at critical locations, Lighting at border crossing | Geometric design: CEMAC regional standards, Minimum curve radius, Maximum gradients 6-8%, Adequate sight distance, Vertical and horizontal alignment optimization | Quality standards: Materials testing, Compaction control, Pavement thickness verification, Independent quality assurance consultant | Border infrastructure: Weighbridge station for axle load control, Customs and immigration facilities upgrading, Truck parking and inspection area, Sanitary facilities for transporters

Capacity/Size

Project scope and dimensions: Total length: 119.5 km (Mbaïkoro to CAR border) | Road class: International corridor

/ CEMAC regional road | Design capacity: 1,500-2,000 vehicles per day (adequate for 15-20 year horizon) | Current traffic: 150-250 vpd (vehicles per day) | Year 5 projection: 500-800 vpd | Year 10 projection: 800-1,200 vpd | Year 20 projection: 1,200-1,800 vpd Major structures: Estimated 8-12 bridges over seasonal watercourses (spans 10-40 meters) | 80-120 culverts for crossdrainage | 1 weighbridge/axle load control station | Roadside facilities: Rest areas every 30-40 km | Emergency stopping bays | Village bypasses or traffic calming through populated areas | Land acquisition: Estimated 150-200 hectares for 30-40m right-of-way | Compensation for affected structures, crops, economic activities per RAP | Maintenance requirements: Routine maintenance: Annual (patching, cleaning drains, vegetation control) - USD 400-600K/year | Periodic maintenance: Every 5-7 years (overlay, drainage rehabilitation) - USD 3-5M per cycle | Economic infrastructure: Potential development of roadside markets, truck stops, service stations to maximize economic spillovers

Construction/Preparation Timeline Seeking funding signature of the agreements: 2025 | Recruitment of service providers: eight (08) months after the signing of the Financing Agreement | Twenty-four (24) months after the start of the work | Detailed project schedule:

> Phase 1: Financing Mobilization (2025 - 12 months): Q1-Q2 2025: Investor presentations, DFI engagement, project preparation facility mobilization, Q3 2025: Negotiation of financing terms and conditions, legal documentation, Q4 2025: Financing agreements signature (target December 2025) | Phase 2: Project Preparation and Procurement (2026

> - 10 months): Month 1-8 post-signature: Detailed engineering surveys (topography, geotechnical, hydrological, materials), ESIA and RAP finalization with stakeholder consultation, Detailed design and tender documents, Independent technical review, Month 8-10: International competitive bidding for works contract, Prequalification and bid evaluation, Contract award and mobilization | Phase 3: Construction (2027-2028 - 24 months): Month 1-6: Mobilization, site installations, ESIA/RAP implementation, preliminary works, Month 7-18: Main earthworks, pavement layers, drainage structures, bridges, Month 19-24: Finishing works (surfacing, safety installations, landscaping), testing and quality assurance, provisional acceptance | Phase 4: Commissioning and Handover (2029 - 3 months): Final inspections, defects rectification, Capacity building for maintenance staff, Official inauguration, Handover to road maintenance authority Maintenance period: 12-month defects liability period, Transition to regular maintenance

regime | Critical path items: Financing closure, Rainy season construction constraints (road works typically April-October dry season in southern Chad), Equipment and materials procurement lead times. Contractor mobilization

Offtake Agreements

As public road infrastructure, project does not require traditional offtake agreements, but sustainable operation depends on: Maintenance financing agreement: Formal agreement establishing: Annual Road Fund allocation for routine maintenance (USD 400-600K), Periodic maintenance budget provision in government MTEF (Medium Term Expenditure Framework), Dedicated escrow account or maintenance reserve fund, Performance-based maintenance contract framework | Regional corridor management: Potential bilateral Chad-CAR agreement on: Joint border infrastructure management, Corridor facilitation mechanisms (one-stop border post consideration), Shared maintenance responsibilities for border section, Common axle load enforcement, Transit traffic facilitation, Trade and transport coordination | Axle load control: Weighbridge operations agreement generating USD 300-500K annual revenues for maintenance | Border infrastructure: Customs and immigration coordination protocols between Chad and CAR authorities | Community agreements: Social responsibility commitments for road safety, local employment, grievance resolution | Performance monitoring: Traffic counting stations, Pavement condition monitoring, User satisfaction Economic surveys, impact assessments | Key stakeholders: Ministry of Infrastructure (Chad), Road Maintenance Fund, Transport associations, Cross-border traders associations, Local authorities along corridor, CAR Ministry of Transport (for bilateral coordination)

RISK MANAGEMENT

Risk Assessment

Political and regulatory risks | Multilateral agreements | Technical risks | Feasibility studies | Economic risks | Feasibility studies | Comprehensive risk assessment: 1. Financing risk - HIGH: USD 153M financing gap with no committed funding | Mitigation: Urgent investor roadshow to AfDB, World Bank, IsDB, bilateral DFIs, Regional development finance mobilization, PPF (Project Preparation Facility) for feasibility studies, Phased financing approach (preparation → construction), Blended finance structuring | 2. Political/security risks - MEDIUM-HIGH: Chad political transitions, CAR instability spillover, Border security concerns | Mitigation: Multilateral financing diversifies political risk, MIGA/ATI political risk insurance, Strong regional framework (CEMAC, ECCAS support), Continuous stakeholder engagement with both governments, Security

provisions in construction contracts | 3. Technical risks - MEDIUM: Unknown geotechnical conditions, Unforeseen hydrological challenges, Materials availability and quality, Contractor capacity | Mitigation: Thorough engineering surveys and soil investigations, Climate-resilient design, Materials testing and quality assurance, Pre-qualification of experienced contractors, Independent supervision consultant, Adequate contingency provision (7-10%) |

Cost escalation risk - MEDIUM: Construction price inflation, Currency fluctuations, Scope changes | Mitigation: Fixed-price construction contracts, Price escalation clauses within limits, Adequate contingencies, Multi-currency financing to match local/foreign cost components | 5.

Environmental/social risks - MEDIUM: ESIA delays, Resettlement resistance, Environmental incidents during construction | Mitigation: Early ESIA initiation with full stakeholder consultation, Fair and transparent RAP implementation, Environmental compliance monitoring, Grievance redress mechanism, Local community liaison officers

Regulatory Risks

Political and regulatory risks can be mitigated by the multilateral agreements that will be signed under this project.

| Specific regulatory risk factors and mitigation: 1. Procurement and contract management risks: Delays in procurement approvals, Bid protests and contract disputes, Contractor non-performance | Mitigation: Strict compliance with DFI procurement guidelines (AfDB, World Bank), Clear pre-qualification criteria, Performance bonds and guarantees, Dispute resolution mechanisms in contracts, Project Implementation Unit (PIU) with experienced procurement specialists | 2. Land acquisition and compensation risks: Delays in land acquisition, Disputes over compensation, Inadequate resettlement assistance | Mitigation: Early preparation of RAP per IFC PS5/World Bank OP4.12, Fair market value compensation plus disturbance allowances, Livelihood restoration programs, Transparent grievance redress mechanism, Independent monitoring of RAP implementation | 3. Cross-border coordination risks: Differing Chad-CAR regulatory frameworks, Customs and immigration coordination challenges, Border infrastructure management disputes | Mitigation: Bilateral MoU between Chad and CAR governments, CEMAC and ECCAS regional protocols provide harmonized framework, Joint technical committee for project coordination, Consideration of One-Stop Border Post (OSBP) model | 4. Fiscal and debt sustainability risks: Chad's debt constraints limit borrowing capacity, IMF program compliance requirements, Fiscal space for maintenance funding | Mitigation: Concessional financing terms (IDA, ADF) compatible with debt sustainability, Grant

co-financing to reduce debt burden, Road Fund mechanisms for maintenance financing, Government commitment letters for counterpart funding | 5. Environmental permitting risks: ESIA approval delays, Environmental compliance requirements | Mitigation: Early engagement with Ministry of Environment, Compliance with national environmental framework and DFI standards, Comprehensive ESIA with meaningful consultation, Environmental compliance monitoring plan

Environmental and Social Safeguards

This project will be carried out in accordance with environmental and social requirements, in accordance with national and international regulations. | Comprehensive safeguards framework: Applicable standards: Chad national environmental legislation (Code de l'Environnement), IFC Performance Standards (PS1-PS8 as applicable, particularly PS1 Environmental/Social Assessment, PS2 Labor, PS3 Resource Efficiency/Pollution, PS4 Community Health/Safety, PS₅ Land Acquisition/Resettlement, PS6 Biodiversity), World Bank Environmental and Social Framework (ESF), AfDB Integrated Safeguards System (ISS) | ESIA requirements: Full Environmental and Social Impact Assessment including: Baseline environmental and social conditions (air quality, water, biodiversity, land use, demographics, livelihoods, cultural heritage). Impact identification and assessment (construction and operational phases), Alternatives analysis, Stakeholder consultation (minimum 2 rounds in project-affected communities), Environmental Management Plan (EMP) with mitigation measures, monitoring plan, budget, responsibilities, Climate vulnerability assessment and adaptation measures, Cumulative impacts assessment | Resettlement Action Plan (RAP): Socio-economic census of affected persons, Inventory of affected assets (land, structures, crops, businesses), Compensation framework at full replacement cost, Livelihood restoration programs, Vulnerable persons assistance, Consultation disclosure, Grievance redress mechanism, **RAP** and implementation budget and schedule, Independent RAP monitoring | Labor and working conditions: Core labor standards compliance (ILO conventions), Worker health and safety protocols, Prevention of child labor and forced labor, Worker grievance mechanism, Gender-based violence prevention | Community engagement: Project Information Disclosure, Consultation throughout project cycle, Feedback and grievance mechanism, Local content and employment opportunities, Community development initiatives | Institutional arrangements: Environmental and Social Officer in PIU, Independent environmental monitoring consultant, Regular safeguards reporting to DFIs, Annual safeguards audit, Stakeholder Advisory Committee

Sponsors

Government of the Republic of Chad; Primary sponsor: Ministry of Infrastructure, Opening up and Road Maintenance (lead ministry) Supporting national institutions: Ministry of Finance and Budget (financing coordination), Ministry of Environment and Fisheries (ESIA approval), Directorate-General for Transport Infrastructure (project executing agency), Chad Road Fund (maintenance financing), National Road Safety Agency | Regional sponsors: CEMAC Commission (regional integration framework), ECCAS (Economic Community of Central African States) - providing technical assistance for project preparation, African Union/AUDA-NEPAD (PIDA program oversight) | Partner country: Central African Republic - Ministry of Transport and Civil Aviation (bilateral coordination for corridor management, border infrastructure, joint traffic facilitation) | Local stakeholders: Logone Oriental and Moyen Chari Regional Governments, Mbaïkoro and Bekoninga local authorities, Border communities and traditional leaders, Transport operators associations, Farmers and traders associations

Investors

Target multilateral DFIs (90% of funding - USD 137.7M): African Development Bank/African Development Fund (ADF): Target USD 50-60M concessional loan (2% interest, 30-year maturity, 10-year grace) - Primary DFI given Chad's ADF eligibility and AfDB regional transport portfolio | World Bank/IDA: Target USD 35-45M IDA credit (1.25% service charge, 38-year maturity, 6-year grace) - Strong World Bank engagement in Chad transport sector | Islamic Development Bank (IsDB): Target USD 15-20M concessional loan - IsDB active in Chad, strong transport portfolio | Arab Bank for Economic Development in Africa (BADEA): Target USD 5-10M concessional loan | Bilateral development partners: Agence Française de Développement (AFD): Target USD 15-20M mix of grant and concessional loan - France

traditional partner in Sahel transport | KfW (Germany): Target USD 10-15M concessional loan - German development cooperation active in Chad | European Union: Target USD 5-10M grant from EU-Africa Infrastructure Trust Fund or EU budget support | JICA (Japan): Target USD 5-8M concessional loan or grant - Japanese infrastructure support in Africa | Regional development finance: BDEAC (Central African States Development Bank): Target USD 5-8M - Regional bank for CEMAC projects | CEMAC Infrastructure Fund: Target USD 3-5M grant | Government of Chad: USD 15.3M (10%) counterpart funding

Contractors & Operators

Construction contractors (to be procured via international competitive bidding): Target contractor profile: International or regional civil works contractors with proven experience in road projects USD 100M+, Previous African road construction experience (preferably Sahel/Central Africa), Technical capacity: Asphalt plant, concrete batching, earth-moving fleet, Quality management systems, Minimum 10-15 years experience, Examples of potential bidders: International (Sogea-Satom/VINCI, Colas, CCECC, CRBC, Sinohydro), African regional (RAZEL-BEC, SOGEA, CGC, SATOM), Joint ventures with local contractors for local content | Supervision consultant: International consulting firm for construction supervision, quality assurance, safeguards monitoring (12-15 specialists covering: resident engineer, materials engineer, environmental specialist, social specialist, quantity surveyor, works inspectors) | Engineering design consultant: Detailed engineering, ESIA, tender documents preparation (currently TBD, to be procured) | Maintenance operator (post-construction): Likely performance-based maintenance contract with specialized road maintenance company or government Road Maintenance Fund direct operations | Local contractors for routine maintenance with training and equipment support

Legal and Financial Advisors

Transaction advisors (required for project preparation): Financial advisor: Infrastructure finance specialist for: Financial modeling and economic analysis, DFI financing structuring and syndication, Government fiscal impact assessment, Affordability analysis, Support to financing negotiations, Estimated cost: USD 200-400K | Legal advisor: International law firm or specialized transport legal consultant for: Review of concession/implementation agreements, Financing agreements drafting support, Procurement advice, Compliance with DFI legal covenants, Estimated cost: USD 150-300K | Technical advisors: Transport economist: Traffic demand modeling, HDM-4 economic analysis, Cost-benefit analysis, Estimated cost: USD 100-200K | Environmental specialist: ESIA preparation, safeguards framework, Estimated cost: USD 150-250K (included in ESIA budget) | Social specialist: RAP preparation, stakeholder engagement plan, Estimated cost: USD 100-150K | Procurement advisor: Support to PIU for DFI-compliant procurement, Bid document preparation, Evaluation support, Estimated cost: USD 80-120K | Funding for advisors: Project Preparation Facility (PPF) from AfDB/World Bank, ECCAS technical assistance, Government budget, Reimbursable from project financing once approved | Institutional capacity: Establish dedicated Project Implementation Unit (PIU) with: Project coordinator,

Financial management specialist, Procurement specialist, Environmental/social officers, Engineers, M&E specialist

WAY FORWARD

Investment Ask

USD 137,748,600 or 90% to be searched Total financing requirement: USD 153,054,000 | Donor/DFI financing sought: USD 137.7M (90%) comprising: Concessional loans: USD 95-110M (AfDB/ADF USD 50-60M at 2%, 30 years, 10-

year grace + World Bank IDA USD 35-45M at 1.25%, 38 years, 6-year grace + IsDB USD 15-20M at 2-3%, 25 years, 7-year grace) | Grants and TA: USD 27-42M (AFD USD 8-12M + KfW USD 5-8M + EU USD 5-10M + JICA USD 5-8M +

CEMAC Fund USD 3-5M) | Regional DFI loans: USD 8-13M (BDEAC USD 5-8M + other) | Government of Chad contribution: USD 15.3M (10%) comprising: Cash counterpart: USD 8-10M (budget allocation over construction period), In-kind contributions: USD 5-7M (land for right-of-way, tax/customs exemptions for project equipment, security provision, local materials where feasible) | Project preparation financing (separate/advance): USD 2-4M for: Detailed engineering studies, ESIA and RAP, Transaction advisory, PIU establishment - Sources: AfDB/World Bank PPF (reimbursable), ECCAS TA programs, Government, To be reimbursed from main project financing | Financing instruments: Sovereign loans to Government of Chad, On-lending to Road Fund or PIU, Sovereign guarantees, Grants via budget support or direct project financing, Technical assistance, Blended finance structures combining loans and grants to improve concessionality | Urgency: Critical financing mobilization required in 2025 to enable 2026 project launch and meet Chad's NDP infrastructure targets | Strong pipeline project ready for DFI Board approval subject to preparation completion

Next Steps

Funding Search Immediate actions (Q1-Q2 2025): Launch comprehensive investor roadshow: Presentations to AfDB (HQ Abidjan, Regional Office N'Djamena), World Bank (HQ Washington, Country Office N'Djamena), IsDB, BADEA, AFD, KfW, EU, JICA, Prepare investor presentation package: Project concept note, Preliminary cost estimates, Socio-economic rationale, Alignment with DFI strategies, Request for financing expressions of interest Engage AUDA-NEPAD/PIDA Coordination Unit for AU high-level endorsement and DFI advocacy | Participation in infrastructure investor forums: Luanda Financing Summit 2025 (October 28-31) - critical opportunity for DFI engagement and financing commitments | Africa Investment Forum | Other regional infrastructure financing platforms | Project preparation (Q2-Q4 2025, contingent on preparation

financing): Mobilize Project Preparation Facility from AfDB/World Bank/ECCAS, Recruit transaction advisors (financial, legal, technical), Establish Project Implementation Unit (PIU) in Ministry, Initiate detailed engineering studies (topography, geotechnical, hydrological), Launch ESIA and RAP preparation with community consultation, Prepare detailed financial and economic models (HDM-4 analysis), Develop detailed implementation plan and procurement strategy | Financing closure (Q3-Q4 2025): Finalize DFI appraisal missions and due diligence, DFI Board presentations and approvals (AfDB, World Bank, IsDB boards), Negotiation and signature of financing agreements (target December 2025), Government budget allocation for counterpart funding | Postfinancing (2026 onwards): Procurement launch, Construction commencement, Implementation per timeline | Key contacts for investor engagement: Secretary General, Ministry of Infrastructure: Antoine MBOUNADE, mbounade_nadji@yahoo.fr, +235 66295237, DG Transport Infrastructure (project executing agency), Ministry of Finance (financing coordination), AUDA-NEPAD Infrastructure Division for PIDA framework support

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