FIRST AFRICAN CONFERENCE OF ROAD MAINTENANCE FUNDS

TECHNICAL SEMINAR

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PERFORMANCE MONITORING INDICATORS

Presented by:

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Tools Proposed

Road Fund Description Sheet

- no apparent updating
- invariables (status, date of creation, role, etc.)

Road Fund Monitoring Tables

- annual updating
- to be drawn up in 2 stages :
 - Easily identifiable indicators
 - Indicators requiring research

Test Countries

Benin – Ghana – Togo

French-speaking / English-speaking

Older road funds / younger road funds

Different political and economic backgrounds

I - Description Sheets

The Beninese Road Fund

- 1 Name: ROAD FUND
- 2 Date of Creation: 1985
- 3 Legal status: Private body
- 4 . Headquarters: Cotonou
- 5 Organization:
 - Supervision Agency : ???
 - Board :

| * Members = | Public = | Private = |
|-------------|----------|-----------|
| * Members = | Public = | Private = |
| * Members = | Public = | Private = |
| | | |

- Executive Staff :
 - * Director / Administrator
 * Financial Director
 * Administrative Director
 Hiring method
- 6 Working scheme
- 7 Eligible roadworks to be financed :

Road maintenance under the MTPT

8 – Programming Process:

Writing up of the maintenance program by the DNERPR, verification by the Road Fund, approval by the Board, technical implementation by the DNERPR

- 9 Revenue:
 - * Tariff policy: ???
 - * Revenue breakdown:

earmarked resources, the Fund own resources, subsidies, outside contributions, co-operation, donation and legacy funds, local loans, other...

10 - Revenue collection

Earmarked revenue: based on an agreement between the Road Fund and the State / Concession Fees: defined in the concession agreements

11 – . Disbursement procedure:

After completion of the maintenance works by the small firms, and acceptance by the DNERPR

12 – Oversight and Auditing

Yes: by Private Accounting Firms

THE GHANA ROAD FUND

1 – Name: ROAD FUND

2 – Date of Creation: 1997

3 – Legal status: ???

4 - Headquarters: Accra

5 – Organization: Supervision agency: Highways & Transportation Ministry

- Board :

| * Surveillance Council = 13 | Public = 5 | Private = 8 |
|-----------------------------|------------|-------------|
| * Members = | Public = | Private = |
| * Members = | Public = | Private = |

- Executive Staff:

| * Director / Administrator | Hired from the private sector |
|----------------------------|-------------------------------|
| * Financial Director | Hided from the private sector |
| * Administrative Director | Hired from the private sector |

6 - Working scheme

The Secretariat is responsible for revenue collection and disbursement

7 - Eligible roadworks to be financed:

routine and periodic maintenance/ upgrading and rehabilitation / road safety activities

8 – Programming Process:

The road authorities to submit the work programs to the Council's approval. The road authorities to sign contracts and to clear the monthly statements. The road authorities to report to the Secretariat.

9 - . Revenue:

* Tariff policy:

* Revenue breakdown:

earmarked resources, the Funds own resources, subsidies, outside contributions, co-operation, donation and legacy funds, local loans, other..

10 – . Revenue collection :

Collection of the fees and transit rights by the customs services, and tolls by the Expressways Agency

11 – Disbursement procedure:

Variable according to the routine or periodic road maintenance (advances or transfers to make part payments).

12 - Oversight and Auditing

Yes: external audit at the end of each fiscal year

DONNEES SUR LE PAYS ET SON RESEAU ROUTIER COUNTRY / ROAD NETWORK DATA

| N° | DESCRIPTION | UNITS | | | YEAF | s | | OBSERVATIONS |
|----|-----------------------------|------------|---|---|------|---|---|--------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 1 | Population | Millions | | | | | | |
| 2 | Currency | | | | | | | |
| 3 | GDP per inhabitant | U/Currency | | | | | | |
| 4 | Trade Balance | | | | | | | |
| | 4.1 – Import | Millions | | | | | | |
| | 4.2 – Export | Millions | | | | | | |
| 5 | Vehicle fleet | | | | | | | |
| | 5.1 – Light vehicles (LV) | U | | | | | | |
| | 5.2 – Standard Trucks (SDT) | Ŭ | | | | | | |
| | 5.3 – Super Trucks(SPT) | Ŭ | | | | | | |
| 6 | Road Network | Ŭ | | | | | | |
| Ŭ | 6.1 – National roads | Km | | | | | | |
| | 6.2 – Regional roads | Km | | | | | | |
| | 6.3 – Rural roads | Km | | | | | | |
| | 6.4 – Urban roads | Km | | | | | | |
| 7 | Network Asset Value | Millions | | | | | | |
| 8 | Preferred Road Network | IVIIIIOTIS | | | | | | |
| 0 | 8.1 – National roads | U | | | | | | |
| | 8.2 – Regional roads | U | | | | | | |
| | 8.3 – | U | | | | | | |
| | 0.0 - | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

DESCRIPTION SHEETS

THE COUNTRY AND ITS ROADS

- Presentation of the Country
 - - Borders
 - - Area and population
 - Activities
- The Road Network
 - Administrative
 Classification
 - Technical Classification
 - Preferred Network

 Strategic Objectives in terms of Transport Infrastructure

- The Organisation of Road Maintenance
 - Recent Institutional Reforms
 - Road Authorities

FICHES SIGNALETIQUES

THE ROAD MAINTENANCE FUND

Identity

- Creation and restructuring
- Legal Status

- Role
 - Missions
 - Organization
 - Eligible roadworks to be financed

Revenue

- Sources
- Collection methods

- Methods
 - Programming process
 - Financial Management
 - Oversight and Auditing

II – MONITORING MATRIX



THE BOOKS OF THE ROAD (MAINTENANCE) FUND – Stage 1 Year :

| | RE | VENUE | EXPE | NDITURE | | |
|----------------------|--|-----------|----------|--|-----------|----------|
| N° | Item | Estimated | Realised | Item | Estimated | Realised |
| № ° 1 2 | Item Carried forward The Fund own resources (Road Tariff) 2.1 – fuel fees 2.2 – toll 2.3 – overload fines 2.4 –damages 2.5 – annual road disk 2.6 – registration fees 2.7 – international transit fees Sub-total for the Fund's own resources Earmarked Revenue 3.1 –Contribution from the State 3.2 – | Estimated | Realised | Item 1 – State drawing 2 – Programmed road works 2.1 – Road authority A Routine maintenance Periodic maintenance Rehabilitation Emergency works Sub-total Road Authority A 2.2 – Road Authority B Routine maintenance Periodic maintenance Rehabilitation Emergency works Sub-total Road Authority B | Estimated | Realised |
| 4 | Sub-total of earmarked revenue Donors Grants Periodic maintenance 4.1 – Multilateral 4.2 – Bilateral Emergency Sub-total of donors grants | | | 2.3 - Road Authority C Routine maintenance Periodic maintenance Rehabilitation Emergency works <u>Sub-total Road Authority C</u> | | |

LES COMPTES (D'ENTRETIEN) ROUTIER (suite) - étape 1 Année :

| N° | RE | VENUE | | EXPENDITURE | | | | | | |
|----|-----------|-----------|----------|--|-----------|----------|--|--|--|--|
| ~ | ltem | Estimated | Realised | ltem | Estimated | Realised | | | | |
| | | | | 3 - Collection Costs Sub-total of collection costs 4 - Operations and similar Costs Sub- total of Operations and similar costs | | | | | | |
| | TOTAL | | | | | | | | | |
| | BALANCE = | | | | | | | | | |



COVERAGE OF ROAD MAINTENANCE NEEDS – priority 1

| | | Year | 1 | Year | 2 | Yea | r 3 | Yea | · 4 | Year 5 | |
|----|---|----------------------|---|----------------------|---|----------------------|-----|----------------------|-----|----------------------|---|
| N° | ltem | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % |
| 1 | ROUTINE MAINTENANCE Total needs Needs covered by : RMF financing State financing Financing from Donors * Multilateral * Bilateral Total of the needs covered | | | | | | | | | | |
| 2 | PERIODIC MAINTENANCE Total needs Needs covered by : RMF financing State financing Financing from Donors * Multilateral * Bilateral Total of the needs covered | | | | | | | | | | |
| 3 | REHABILITATION Total needs Needs covered by : RMF financing State financing Financing from Donors * Multilateral * Bilateral Total of the needs covered | | | | | | | | | | |

COVERAGE OF ROAD MAINTENANCE NEEDS – Priority 1

| | | Year | 1 | Year | · 2 | Yea | nr 3 | Year | r 4 | Yea | r 5 |
|----|---|----------------------|---|----------------------|-----|----------------------|------|----------------------|-----|----------------------|-----|
| N° | Item | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % | Amount (millions) | % |
| 4 | EMERGENCY ROAD WORKS Total needs Needs covered by : RMF financing State financing from Donors * Multilateral * Bilateral Total of the needs covered | | | | | | | | | | |

INDICATORS OF ROAD TRAFFIC AND AGRESSIVENESS (stage 2)

| | | YI | EAR 1 | YE | EAR 2 | YEA | AR 3 | YEA | AR 4 |
|------------|---|------|--------------------------------|------|--------------------------------|------|--------------------------------|------|--------------------------------|
| № ° | DESCRIPTION | AADT | Agression equivalent SDT | AADT | Agression equivalent SDT | AADT | Agression equivalent SDT | AADT | Agression equivalent SDT |
| | NATIONAL ROADS 1.1 - Paved LV SDT SPT 1.2 – Unpaved LV SDT SPT SPT | | | | | | | | |
| 2 | REGIONAL ROADS 2.1 – Paved LV SDT SPT 2.2 – Unpaved LV SDT SPT | | | | | | | | |
| 3 | RURAL ROADS 3.1 – Paved LV SDT SPT 3.2 – Unpaved LV SDT SPT | | | | | | | | |

INDICATORS OF ROAD NETWORK PERFORMANCE (stage 2)

| | | YE. | AR 1 | YE | EAR 2 | YEA | R 2 | YE | AR 3 | YE. | AR 4 |
|----|--|-----|-------------------------|----|-------------------------|-----|-------------------------|----|-------------------------|-----|-------------------------|
| N° | DESCRIPTION | % | Travel speed (km) | % | Travel speed (km) | % | Travel speed (km) | % | Travel speed (km) | % | Travel speed (km) |
| 1 | NATIONAL ROADS 1.1 – Paved Good Fair Poor 1.2 – Unpaved Good Fair Poor | | | | | | | | | | |
| 2 | REGINAL ROADS 2.1 – Paved Good Fair Poor 2.2 – Unpaved Good Fair Poor | | | | | | | | | | |
| 3 | RURAL ROADS 3.1 – Paved Good Fair Poor 3.2 – Unpaved Good Fair Poor | | | | | | | | | | |

INDICATORS OF PERFORMANCE OF ROAD (or AGENCIES) - stage 2 Year :

| | Programming (1-6) | | | Execution and Acceptance (7) | | | Ex | Expenditure (8) | | |
|--|-------------------|-----|--------|------------------------------|-----|--------|------|-----------------|-------|--|
| | Start | End | Spread | Star | End | Spread | Star | End | Spred | |
| ROAD AGENCY (A) 1 - Collection of data 2 - Programming 3 - Submission of Program 4 - Approval of Program 5 - Bidding 6 - Notification of Work Contracts 7 - Execution and acceptance of work 7.1 - Routine maintenance 7.2 - Periodic maintenance 7.3 - Rehabilitation 7.4 - Emergency works 8 - Receipt and payment of Invoices 8.1 - Routine maintenance 8.2 - Periodic maintenance 8.3 - Rehabilitation 8.4 - Emergency works | | | | | | | | | | |

INDICATORS OF PERFORMANCE OF ROAD (or AGENCIES) - stage 2 Year :

| | Programming (1-6) | | | Execution and Acceptance (7) | | | Expenditure (8) | | |
|--|-------------------|-----|--------|------------------------------|-----|--------|-----------------|-----|-------|
| | Start | End | Spread | Star | End | Spread | Star | End | Spred |
| ROAD AGENCY (B)1 - Collection of data2 - Programming3 - Submission of Program4 - Approval of Program5 - Bidding6 - Notification of Work Contracts7 - Execution and acceptance of work7.1 - Routine maintenance7.2 - Periodic maintenance7.3 - Rehabilitation7.4 - Emergency works8 - Receipt and payment of Invoices | Start | End | Spread | Star | End | Spread | Star | End | Spred |
| 8.1 – Routine maintenance 8.2 – Periodic maintenance 8.3 – Rehabilitation 8.4 – Emergency works | | | | | | | | | |

PERFORMANCE INDICATORS OF SMALL FIRMS (stage 2) Year :

| | BIDDING | | | | EXECUTION | | | |
|--|--------------------|---------|---------------|----------------------|----------------|---------------------------------|------------------------|----------|
| | Offers received | Rejeted | Acceptable | Awarded respected | Time Period | Delay (Days) | Notice cancellation | Contract |
| CONTRACTOR (A) | | | | | | | | |
| 1 – Roadworks 1.1 – Routine maintenance | | | | | | | | |
| Manual work | | | XX | | | | | |
| Mechanised work | | | | | | | | |
| 1.2 – Periodic maintenance 1.3 - Rehabilitation | | | | | | | | |
| 1.4 – Emergency works | | | \mathcal{N} | | | | | |
| | | | $X \times$ | | | | | |
| 2 – Project and Design | | | \times | | \nearrow | | | |
| 3 – Supervision | | | \times | $X \Delta X$ | | | | |
| CONTRACTOR (B) | | | | | | | | |
| 1 – Roadworks | | | | | $A \square h$ | | | |
| 1.1 – Routine maintenance | | | | | HTH | | | |
| Manual work Mechanised work | | | | | | | | |
| 1.2 – Periodic maintenance | | | | | | | | |
| 1.3 - Rehabilitation 1.4 – Emergency works | | | ΔD | T T T T | | \bigtriangledown \checkmark | | |
| | | | | | | - | | |
| 2 – Project and Design | | | | | \frown | | | |
| 3 – Supervision | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | \sim | \times | | | | |

MULTIYAEAR CHARTS

The charts shall be regularly updated, at the end of each year based on the data previously entered, thereby,

allowing a post-evaluation over several years of the progress of the Road Maintenance Fund accounts, as well as the roadworks executed <u>A) The RMF Books</u>

Charts of :

Revenue Expenditure B) <u>Funded Roadworks (Realisations)</u>

Charts of:

Routine maintenance Periodic maintenance Rehabilitation

MONITORING TABLE global framework

THE COUNTRY AND ITS ROADS

 country and road network summary

- managers identification
 - Administrative classification
 - Technical Classification
 - Preferred Network

- traffic and agressivity
 - Recent Institutional Reforms
 - Road Network Mangers

MONITORING TABLE – global framework

THE ROAD MANAGEMENT FUND

Road fund I.D.

Real Revenue vs Forecast
 Needs coverage
 Revenue

MONITORING TABLE- global framework

- PERFORMANCE TOOLS

Network performance

Road Agencies performance Small firms performance