1.0 INTRODUCTION

The Competition Reforms in Key Markets for Enhancing Social and Economic Welfare in Developing Countries (CREW) project is being implemented by Consumer Unit and Trust Society (CUTS) with support from DFID (UK) and BMZ (Germany), facilitated by GIZ (Germany). It is aimed to:

- To enhance international understanding of the benefits from, and best practices in, effectively implementing competition regimes in developing countries
- To develop and test a methodology (with indicators) for assessing the efficacy of competition regimes in achieving impacts on developing country consumers and producers
- To advocate to national stakeholders and international development partners for according greater importance to competition policy and law issues, in the national development agenda
- To sustain the momentum on fast-tracking competition reforms, gained from stakeholder awareness, understanding about the benefits and participation in related process in developing countries

The study is on two sectors (i) staple food and (ii) passenger transportation, across four countries: Ghana, India, The Philippines and Zambia. This concept note gives highlights on the bus transport industry in Ghana, the policy reforms that have been undertaken and the impacts on competitive markets, the approach to the study in terms of data collection and the analytical framework.

2.0 TRANSPORTATION IN GHANA

Transport plays a key role in the economic viability of the country. An efficient transport system is required to access economic opportunities through the efficient use of capital at the macro level for economic growth and improved livelihood and poverty reduction at the micro level. Transport Sector Goals: The transport sector
goals as stated in the National Transport Policy (NTP) which aims at focusing on the efforts being made in the transport sector to achieve Ghana’s strategic objectives for growth and poverty reduction. The Transport sector is made up mainly of road transport, maritime and water transport, civil aviation and rail. Road transport is the major carrier; 98% of freight and 95% of passenger traffic carriage.

About 4.75 million passengers are moved annually by road in Ghana by about 1,300,000 Vehicle fleet. Trip purpose by bus varies between work, health, educational, leisure and social related travel and average passenger spends 17 to 25 percent of their income on transport. The major challenges in the industry include poor/ lack of market regulation, over supply of low capacity mini buses, excessive use of second hand vehicles and poor service quality. Bus Transport Service: Passenger buses constitute about 60% and there are about 18 buses per every 1000 people..

2.1 CHARACTERISTICS OF THE BUS TRANSPORT INDUSTRY IN GHANA

2.1.1 Legal basis for Jurisdiction

Under the Local Government Act (No.462 of 1993), road passenger transport is a devolved responsibility the Metropolitan, Municipal or District Assemblies (MMDA’s) of Ghana. In 1969, all urban passenger transport services (of whatever ownership) were consolidated into the Omnibus Services Authority by means of the Omnibus Services Authority Decree (NLCD 337). The Omnibus Services Decree (NRCD 71 of 1972) repealed this legislation, but retained the Omnibus Services Authority with the sole objective of bus service provision in its specified areas. This body was then later converted into OSA Transport Ltd under legislation covering the commercialisation of parastatal enterprises. The regulatory powers originally granted to the Omnibus Services Authority were transferred to a new Licensing Authority to be responsible for the licensing of all motor vehicles intended for use as omnibuses within a prescribed area.
The Licensing Authority determined, *inter alia*: routes and parking places of buses owned by public or private organisations or persons; fares to be paid by passengers on such buses; and types of buses to operate on particular routes in any prescribed area. The Omnibus Services (Amendment) Decree (NRCD 181 of 1973) authorised the use of Byelaws (rather than Bulletin notices) for the notification of specific route details, and such byelaws also covered offences and penalties with regard to the license conditions.

Each of the local assemblies issues its own permits for the operation of commercial passenger transport services in its area, and their validity is accepted in the territory of the neighbouring assemblies. Permits are issued on demand to any vehicle meeting the basic requirements of roadworthiness, and having a properly qualified driver. These permits are for the whole licence area, and are not tied to specific routes. Though these powers enable the administrative specification of passenger transport network for a specified area within the local a regulatory vacuum exists for the sector jurisdiction since the Decree was never in fact implemented. Thus there is self-regulation introduced by the Ghana Private Road Transport Union. In practice, an intending operator needs to join a branch of one of the controlling unions so as to access the right to operate its designated routes. The exception to this arrangement is public owned Metro Mass Transit Ltd, which appears to be operating as though entitled to the powers granted to the defunct OSA Transport Ltd but without operating permits for its areas of service.

### 2.1.2 Type of Transport Service Mix Operated

The bus transport service mix operates four levels of service. The type of service can be categorised into 4 main segments, namely urban with intracity/intercity service, express service, rural-urban and rural service. Currently an operation in each jurisdiction is optional to an operating service. No consideration is given as to whether there is a market need for the additional permit, or to the potential consequences of oversupply in the sector.
2.1.3 Service Providers

The service providers in the bus transport industry consist of public transport companies and private bus operators. The public transport companies have Government being the majority share holder with dominant influence and subsidized fares. Currently the only public bus company is the Metro Mass Transport Service. The private sector is made up of individual transport operators regulated mostly by transport unions who charge various fees for the usage of bus terminals, set fares, allocate routes and carry out self-enforcement on their operations, regardless of transport needs and efficiency. The estimated number of transport unions is over seventy but the largest is the Ghana Private Road Transport Union (GPRTU). There are also free floating private transport operators who do not subject to operational rules by any union. An overview of the characteristics of bus transport service provision is provided in the immediate subsections.

1. Vehicle ownership and management: There are two major types of bus ownership-public and private bus ownership. The Government of Ghana through the Ministry of Transport and other institutions incorporated the Metro Mass Transit limited (MMT) to operate mass transportation services in March, 2003 under the Ghana Companies Code 1963, Act 179. The Government of Ghana owns 45% shares, 2.5% shares in Treasury and the remaining 52.5% shares are held by incorporated bodies’ i.e. private investors. These private investors include State Insurance Company (SIC), National Investment Bank (NIB), Ghana Oil Company limited (GOIL), Agricultural Development Bank (ADB), Prudential Bank Limited (PBL) and Social Security and National Insurance Trust (SSNIT). Most private bus operators (9 out of 10) drivers do not own the vehicle. Majority of the vehicles have single unit ownership especially those engaged in intracity service and only a few intercity service operations such as VIP OA etc. have larger fleet sizes with independent management arrangement. In the first scenario, vehicle owner is a semi-passive investor with no direct involvement in its day-to-day operation. Generally commitment to the industry is not strong and operators may withdraw from it when faced with major problem.
2. **Vehicle purchase and finance:** The fleet currently owned by Metro Mass Transit Ltd has been acquired through donor grants, concessional funding and government funding with no terms of payment but as Government subsidies to the operation of the company. Most operators finance their vehicles using traditional channels through down payment or the "work and pay" system, which predominates among mini-buses. A large number of the private buses are imported second-hand vehicles due to the inability to afford new vehicles. Other sources are from leasing facilities from banks and insurance companies at stipulated commercial rates or special arrangements through government initiatives with high default rates. Only a few operators use these facilities.

7. **PPP options in the transport sector:** Public Private Partnership for (PPP) for transport infrastructure and service development is an arrangement “whereby the private sector provides infrastructure assets and services that traditionally have been provided by government. The purpose is to ease the financial burden of the public sector and also tap into the competences of the private sector in terms of efficient management. The forms of PPP’s include market oriented and non market oriented PPP’s. The first is defined in terms of commercial arrangements for profitability by the private sector. The second is deliberately done with flexible regimes which private sector will normally not risk, to meet the equity needs of the vulnerable in society.

The guiding principles for PPP applications include value for money; risk allocation; affordability; accountability; transparency; local content & technology transfer; competition; ownership and safeguarding public interest and consumer rights. Market oriented PPP’s involves the allocation of responsibilities, risks, and profits. It’s modalities vary depending on the functions given to the private sector, such as designing, constructing, operating, managing, financing, and maintaining the ownership of the asset. Non market oriented PPP’s are based on social mechanisms through flexible and reliable contractual arrangement. An example is the Public-Private-Civil Society Partnership arrangement under the MMT. Commercially focused PPP include the Market Based PPP Models as operated by the private sector.
A draft policy framework has been prepared and some advisory institutions have been established for the market based model. Currently, there are a number of PPP options under consideration. The major constraints include:

- High commercial risks given the low effective demand
- Limited knowledge about best practice and scaling up
- Lack of business experience of traditional entrepreneurs

3. **Facilities and equipment:** The Metro Mass Transit Ltd has a headquarters with basic requisites for the operation of a fleet of large urban buses such as a large parking area, a covered workshops building, and a suite of offices and other operational buildings as well as operational depots spread in different parts of the country. Facilities for the informal sector are however, generally limited in terms of bus terminals, parking spaces, workshops etc.

4. **Operational Practices:** The MMT operates on defined routes with scheduled services for the inter city transport but unscheduled services for intracity transport. The informal sector has a wide range of operating practices. Emphasis is on short-term cashflow for the owner based on daily hire rates that leave little margin for the driver after meeting his unavoidable costs. This leads to deferral of repair expenditure on the vehicle and avoidance of preventive maintenance. Operating procedures are designed to maximize their own returns rather than prioritize customer needs. Distribution of routes among operators remains a major issue. It is often decided without reference to transport needs. It is a subject of frequent disputes among various unions. There is no centralized bus routing and scheduling plan for most private sector operation. The route network has developed over time on an ad hoc basis as demand has been identified. The only exception is the independently managed inter city service which has scheduled service with advanced ticketing systems etc.

5. **Quality of Service:** The operation of the MMT is characterized by poorly designed depots and packing lots, unavailability of seating and shade for passengers, uncertain
departure/arrival schedules of MMT and unbalanced or poor mix of intra to intercity service. The state of private transport operation imposes high costs on the economy in terms of high Vehicle Operation Costs (VoC), long uncomfortable commuting times that ruin the productivity of workers. Terminals are poorly designed, planned and in unkempt conditions. There is high queuing time at loading points especially during the peak hours. There is low vehicle utilization, high breakdown and low frequency of service. Others are overloading, high accident rate, high traffic congestion and pollution in some cities since comprehensive transport planning is not given as much importance it deserves

6. Market Structure: There is no entry barrier. The liberal regulatory / institutional environment does not enhance healthy competition and growth of the industry. The MMT is characterized by adverse impacts of the Social pricing policy through price stabilization function and GOG control of review of rates as well as Massive leakage of revenue due crude ticketing practices resulting in huge revenue loss affecting fleet maintenance and operational sustainability. There is competition between individual transport operators because of free entry and exit. There is no route franchise, this creates conflicts in some situations. Since 1990’s Ghana agreed with World Bank to deregulate transport fares. However, fares are indirectly controlled by governments in a manner which tend to satisfy social rather than economic factors. For example fuel prices are determined in relation to crude oil. This system of inconsistent price determination for fares and fuel prices leaves management of private transport always in deficit. There is complete absence of governmental policies to regulate the activities of the operators but the formation of a new Transport Authority is being formed.

2.2 CONSUMER DEMAND CHARACTERISTICS

A study by Aidoo N. A. et al (2013), defined the transport service attribute important to consumers to include fare structure; waiting time for bus before departure; announcement and information on services; reliance, schedule adherence; cleanliness of the bus station; cleanliness of bus interior/exterior; availability of shelters;
comfortability of bus seats; convenience; bus driver’s/conductor’s behaviour; crime rate at the bus station; frequency of bus breakdown and bus traffic safety record. Of all the attributes affordability turns to be the major concern of most transport users. According to the Ghana Living Standards Survey (GLSS) an average public transport passenger spends between 17 to 25 percent of their income on transport.

2.3 KEY MINISTRIES AND GOVERNMENT DEPARTMENTS

2.3.1 Ministry of Transport (MoT)

The Ministry was established in January, 2009 by re-aligning the functions of the erstwhile Ministries of Aviation, Harbours and Railways and the Road Transport Services. Its policy is to create an integrated, cost effective, safe, secure and sustainable transportation system responsive to the needs of society, supporting growth and poverty. It has oversight responsibility for fifteen (15) agencies. It is faced with many operational and human resources challenges. Also, the increasingly diverse array of organisations involved in transport sector decision making means that coordination, communication and reporting activities are complex. It aims to increase capacity and resources and wishes to introduce new skills, operating systems and behaviour.

2.3.2 Ministry of Roads and Highways

It formulates the requisite policies, monitors and evaluates programmes and projects and aims to provide affordable, integrated, safe, responsive and sustainable road transport network that will meet the economic, social and environmental needs as well as national and international standards. It’s main agencies are the Ghana Highway Authority (GHA), Department of Urban Roads (DUR) and the Department of Feeder Roads (DFR).
i. **Ghana Highway Authority (GHA):** The Authority was originally established in December 1974 by NRC Decree 298. In December 1997, the Ghana Highway Authority Act 540, was re-enacted reflect changes that have occurred in the road sector. The Act 540 gives the Ghana Highway Authority, the mandate for Planning, development, management and administration of the trunk road network in the country. Its mission is to provide a safe and reliable trunks road network at optimal cost by taking advantage of modern technology in the road building and new income generating methods to facilitate socio-economic development in the country.

ii. **Department of Urban Roads (DUR):** The DUR was created in 1988 as a civil service organisation through an administrative order. The DUR is to assist in building capacity in the MMDAs to provide quality urban road transport system for the safe mobility of goods and people.

iii. **Department of Feeder Roads (DFR):** The DFR was created in 1981 as a civil service organisation under the Ministry of Works and Housing by an administrative order. Its main functions are:

   - to ensure the provision of safe all weather accessible feeder roads at optimum cost
   - to facilitate the movement of people, goods and services
   - to promote socio-economic development, in particular agriculture by the provision of accessible feeder roads.

### 2.3.3 Other Stakeholders:

Other Stakeholders include:

- Driver and Vehicle Licensing Authority
- National Road Safety Commission
- Ghana Road Transport Coordination Agency
- Metropolitan, Municipal and District Assembly
- Transport operating unions
3.0 LEGISLATIVE INSTRUMENTS ON TRANSPORT

The operation of all road vehicles is governed by the Road Traffic Regulations (LI 953 of 1974) and the Road Traffic Offences Regulations (LI 952 of 1974). These regulations respectively deal with the registration, licensing, use and construction of vehicles in general (and of commercial vehicles in particular) and codify offences in these regards. Their powers derived from the recently repealed Road Traffic Ordinance (No. 55 of 1952), which has been replaced by the Road Traffic Act of 2004. Unfortunately this document is not yet available from the government printers, and so has not been examined in detail. However it is understood that the Act empowers the creation of new regulations, but that the existing legislative instruments are to remain in force for the time being until this is done. (IBIS Transport Consultant Ltd., 2005). The major policy and regulatory frameworks in the sector include

1. Road Traffic Ordinance 1952: Gives regulations on (i) licensing including driving license, taxi and passenger lorry license, roadworthiness certificate, number plates, marks on commercial vehicles; (ii) Vehicles, opening doors, alighting, reversing, obstruction, parking and stopping, traffic signs, police traffic control, overcrowding front seat; construction of vehicles, vehicles in dangerous condition; (iii) commercial vehicles overcharging, table of fares, excess passengers, seats etc

3. LI 2180 of July 2012 include revoked regulations on the following:
   (a) Road Traffic (Roadworthiness) Regulations, 1972 (LI 780);
   (b) Road Traffic Regulations, 1974 (LI 953);
   (c) Road Traffic Offences Regulation, 1974 (LI 952); and
   (d) Road Traffic (use of Liquified Petroleum Gas) Regulations, 1994 (LI 1592).

3.1 Key Documents and Plans


A national transport policy covering all modes of transport was adopted in 2008. A corresponding implementation programme was then prepared. However, a range of decision and processes were necessary for Ghana’s economic and transport planners to formulate strategies and prioritise interventions. Objectives comprise:

- Improve transport infrastructures through a sound planning framework owned by a Ghanaian planning group.
- Develop capacity in the area of policy implementation and planning in the transport sector.
- Integrate environmental aspects in transport policy making.


Plan is the first in Ghana to utilise an integrated economic and transport planning methodology to identify investment priorities based on the future demand for transport. The Plan aims to support the Government’s strategy-lead approach to development planning. The Plan includes strategies and actions to be undertaken
between 2011 and 2015 for all modes of transport including many institutional and regulatory measures aiming to improve performance and bring about better integration throughout Government’s transport planning environment.


Effort has been made to harmonize the performance review sector objectives set out in the Ghana Shared Growth and Development Agenda (GSGDA). The Strategies reflect the 7 Goals set out in the NTP, GSGDA:

- Establish Ghana as a transportation hub for the West African Sub-Region.
- Create and sustain an efficient transport system that meets user needs.
- Integrate land use, transport planning, development planning and service provision.
- Create a vibrant investment and performance-based management environment that maximizes benefits for public and private sector investors.
- Develop and implement a comprehensive and integrated policy, governance and institutional frameworks.
- Ensure sustainable development in the transport sector.
- Develop adequate human resources and apply new technology.

3.2 RELEVANT SECTORAL REFORMS IN THE TRANSPORT INDUSTRY

This section of the report reviews relevant policies that have direct implication on competition in the bus transport market. These are in three segments. That is policy issue on operational system with controlled prices, an operational system with a commercialized with pricing being determined by supply and demand and profit. The third issue is on the effect of operational change for improved service on quality of service. The section as part of the review of these issues discusses key issues to be investigated with research questions and hypothesis. An overview of possible data relating to each issue to be collected and the collection mechanism is also indicated.
3.2.1 Policy statement 4.2.4.3 of NTP (2008): Government will invest in transport and subsidise transport services

1. Strategic Objective
The objective is to mainly provide social benefits in terms of affordability which is important to most transport users targeting the most vulnerable and excluded groups in the country. The strategic action undertaken included establishment of one large national operator providing services in the form of the Metro Mass Transport Service whereby government owns majority shares and provides bus fleets as subsidies for the operations with controlled pricing.

a) Strategies
i. Apply subsidies in a transparent manner, targeting the most vulnerable and excluded Groups.
ii. Ensure equity in funding transport infrastructure and services for all modes
iii. Develop criteria for modally and geographically equitable development of infrastructure
iv. Develop criteria for targeting transport services subsidies.

b) Background
The Omnibus Services Authority Decree of 1969 nationalised all City, Municipal, Urban and Local Council bus undertakings within one unitary body responsible both for the planning and the provision of public transport services. The Omnibus Services Decree of 1972 then split these two functions by creating a separate Licensing Authority to regulate the omnibus sector. The Omnibus Services Authority continued in existence but with the sole objective of bus service provision in its specified areas. Later legislation concerning the commercialisation of service delivery bodies within the public sector resulted in its restructuring as OSA Transport Ltd.

Both the Omnibus Services Authority Decree and the Omnibus Services Decree exempted the Authority from such taxes, rates and duties as the Commissioner for
Finance may direct. All buses, their spare parts and non-consumable equipment, imported by the Authority shall be exempted from import duties. These, together with fuel and lubricants, purchased locally shall be exempted from purchase and sales taxes. The Authority is also exempt from income tax. Taken together, these concessions are a very significant subsidy for the Authority and acted as a strong barrier to competitive market entry. 2000, Government administration re-affirmed the market liberalisation of the economy, and the primacy of the private sector in actual service delivery.

Examples of strategies implemented included product diversification for competitiveness such as the divestiture of State Transport Company and procurement of vehicles for Transport Unions. In 1996 Government decided to privatise its passenger transport undertakings, which by then also included the State Transport Corporation and City Express Services Ltd. However it was unable to find any buyers for these businesses at the same, which resulted in their continuing decline in the absence of public investment in rolling stock and other assets.

Government decided to sponsor the establishment of a new public transport undertaking as a quasi-private business and to undertake rolling-stock procurement on its behalf. In the urban passenger transport sector, the priority was given to improving services through investment in appropriate rolling stock that would focus on the reintroduction of large buses onto the route network.

The Government equity was subscribed by the transfer to MMT of the physical assets of OSA Transport Ltd, which had since been put into liquidation. Metro Mass Transit Ltd (MMT) has been established as a private commercial undertaking, but with the Government of Ghana holding 45% of the equity through equal shareholdings by the Ministries of Roads and Transport, and Local Government and Rural Development. The Social Security and National Insurance Trust, the National Investment Bank, the State Insurance Company and the Prudential Bank hold the balance of equity. Only the last
of these can truly be regarded as a private-sector enterprise, and so MMT is under clear Government control.

Initial rolling stock was provided by a donation of 164 second-hand Fiat-Iveco buses from Italy, and the allocation of 75 DAF chassis (to be bodied by Neoplan in Kumasi) from an existing public procurement under concessional finance. Clearly Metro Mass Transit Ltd, as currently constituted and equipped, enjoys an unfair competitive advantage in relation to existing private operators, and acts as a barrier to market entry for any new investor. Some form of restructuring, possibly into a business leasing buses to private operators, will be required to reconcile this initiative with the stated Government policies on private supply in the service sectors of the economy.

d) Research Question
(i) How does a controlled pricing bus operation service impact on competition in the bus transport service.
(ii) What is the implication on consumer demand
(ii) Is there enough evidence about consumer benefits that justifies creation of MMT by the Government of Ghana, and all the support it has received?
(ii) Does this put other players out of business?
(ii) What implication has such a decision by the Government of Ghana had on private players who intend to enter the intra-city bus transport market?

e) Data sources
(i) Consultations with Management of MMT service
(ii) Interviews with private operators
(iii) Perception survey of passengers using MMT
(iv) Consultations with Government Agencies
3.2.2 Sector Medium-term Development Plan (SMTDP)-2012-14 of 20111, Section 4.2.12: Metro Mass Transit (MMT)

i. GOAL 2: Improve and increase the level of (bus) services in cities and towns with increasing population and transport needs.

ii. Page 34 Para. 1: Metro Mass Transit provides bus services throughout Ghana. Government requires these services to be affordable and include free services to school children.

The marketing benefit is to provide competitive bus fares as alternative for the vulnerable road users and to control price hikes profit making private bus transport operators.

Justification: Mass transit transport service is considered to be the most effective means of addressing urban transport needs globally. It is considered to be critical in addressing transport needs of the country but has been challenged over the years with continuous failures of earlier efforts due to the inability to balance commercial service provision and social obligations.

This issue will be aligned with the issue in section 3.2.1 with the following research questions.

a) Research Questions

i. How does mass public transit service impact on passenger transport needs of urban communities (in terms of Reliability, Quality and Affordability)?

ii. Is the metro mass transit service sustainable in terms of the requirements for it to provide a combination of social and commercial service in Ghana?

iii. what does it cost the government to run MMT?
b) Hypothesis

- The operation of a subsidized public mass transit service is commercially viable and sustainable in Ghana

c) Data Requirements

- Secondary data on the operations of the metro mass service in Accra from the MMT, MOT, etc
- Passenger Surveys in Accra
- MMT users in and around Accra

3.2.3 Policy statement 4.2.4.1 of NTP (2008): The private sector will be encouraged to invest in transport infrastructure and services

The rational is to explore PPP (Public Private Partnership) and ‘concession’ options for investment in transport infrastructure and services. The policy is to expand private sector investment in the transport sector in Ghana is encouraged by the government to ensure that the transport market function well with increased operational efficiency and greater financial viability. It is also due to the perception that the operational efficiency of public transport service is often lost, when political factors come into focus. Currently there are a number of private intercity bus service operators. Market benefits include expansion of investment horizon in transport business, reduction of monopoly, increased service provision and improved efficiency.

a) Research Questions

i. What is the threshold of private sector investment in intercity transport operation in Ghana?

ii. What measures have been taken by the government (legislation/programmes) to enable/facilitate such private investment/participation in the transportation sector (both transportation infrastructure and transportation services)?

iii. What are the risks and opportunities faced by potential private sector investors in the transport sector?
iv. How effective has private sector investment in passenger bus transport service in intercity transport operation been in improving passenger welfare (reliability, quality, fare)?

b) Hypothesis
Private sector investment in passenger bus service for intercity transport is not viable in Ghana.

c) Data Requirements
- Secondary data will be collected from the MOT, MOF, MRH etc.
- Data will be collected from private intercity bus operators on two major routes (Accra - Takoradi and Accra Kumasi) in Ghana

(3) Regulation 121 of Road Traffic Act 2004: Registration of Commercial Vehicle and registration Operators along specific routes
A vehicle owner or transport company shall not operate a commercial vehicle if that person or transport company does not belong to a recognized Commercial Transport Association or Union licensed by the Ministry or its accredited agents. The objective is to introduce more professionalism into the industry, enforce transport regulations effectively and improve performance standards for quality. Actions include:

- Bus service operation under precise rules set by a transport regulatory agency.
- Allocation of bus routes on the basis of transport needs through route franchising whereby a franchise will be awarded through competitive tendering process to private companies as well as the state owned enterprises. Tendering is under the responsibility of each city. Bidder's discount, will be offered from the passenger fare ceiling, proposed service frequency, and bus fleet characteristics are the main selection criteria.

Market benefits include enhanced competition between operators leading to a better, safer and lower cost in transport services etc.
a) **Research Questions:**

i. How easy is it to register with a Registration

ii. Who determines which route should be registered.

iii. How do they secure their continued operation within the Permit system

iv. Are they able to comply with Permit requirements

v. Has it optimised the number of trips operated per day, and minimised idle time at terminals

vi. Has it optimised revenue, either through direct collection or the daily rate agreed with operating crews

vii. Does it have implications on cost items, including fuel, parts and maintenance

viii. Is there capacity to monitor compliance across many routes and track sub-contracting of routes

ix. Is there ability to verify permit on-the-spot

x. Does it provide better control of floaters

- **Hypothesis**

  Effective and efficient management of Route registration is not feasible in Ghana

- **Data Collection**
  - Consultations with Transport Unions (eg. VIP, GPRTU, etc) and Operators (eg.Pergah, STC etc.)
  - Key informant surveys with transport operators and companies
  - Consultations with MMDA’s
  - Consultations with enforcement agencies such as Motor Traffic Unit of Police
A summary of the relevant reform issues in relation to the objectives of the CREW Study is summarized in Table 1.

Table 1: Identified reform issues

<table>
<thead>
<tr>
<th>Reference to Policy/Legislation/Programme/Declaration</th>
<th>Provision Relevant to Crew Research</th>
<th>Issue(s) of Enquiry</th>
<th>Area of Consumer/Producer Welfare/Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Road Safety Policy</td>
<td>Government will invest in transport and subsidize transport services. Mass transportation will be prioritised in urban areas, aiming to move at least 80% of Passengers. The strategic action undertaken included establishment of the Metro Mass Transport Service.</td>
<td>How has the Introduction of the MMT impacted competitiveness of the consumer market especially in terms of pricing. Has MMT’s introduction had any impact on passengers/consumers in terms of Reliability, Quality and Fare? How does mass public transit service impact on passenger transport needs of urban communities? Is the metro mass transit service sustainable in terms of cost efficiency especially in relation to the requirements for it to provide a combination of social and commercial service in Ghana? Does this put other players out of business?</td>
<td>Provision of competitive bus fares as alternative for the vulnerable road user and to control price hikes by profit making private bus transport operators.</td>
</tr>
<tr>
<td>National Transport Policy</td>
<td>The private sector will be encouraged to invest in transport infrastructure and services where commercially viable. strategies implemented included product diversification for competitiveness such as the divestiture of State Transport Company and procurement of vehicles for Transport Unions</td>
<td>How easy is the private sector able to source for funding for transport operations. Is it cost effective How does this impact on the transport market in terms of availability, safety etc. What efforts have been made by the government to facilitate private investment in transportation infrastructure and transportation services? What is the threshold of private sector investment in intercity transport operation in Ghana? How effective has private sector</td>
<td>Benefits included reduction of expansion of investment horizon in transport business, reduction of monopoly, increased service provision and improved efficiency.</td>
</tr>
</tbody>
</table>
5.0 STUDY APPROACH

The approach to the study will include desk studies, data collection and analysis. The desk study will involve a revision of background information on the general characteristics of the transport industry in Ghana and a revision of the policy and regulatory reforms relating to bus transport in Ghana as presented in sections 2 and 3 of this report. The data collection includes both secondary and primary data collection.

5.1 Secondary Data Collection: Secondary data will be acquired through desk studies and literature review including international case studies of public transport service in both developed and developing countries to guide our case studies. Areas to be covered include:

- The overall transport policy for Ghana and the role of public bus transport services in meeting transport demand and supply;
The history/introduction of mass transit public transport systems in Ghana;

Ownership and management structure of the MMT and private bus operations;

Policy and institutional framework for the operation of the MMT and private bus transport service in Ghana; and Operations (covering routes, service mix, bus schedules, fares, daily passenger volumes, staffing, service quality, ticketing, etc., profit making, maintenance and sustainability.). Secondary data collated those to be collated are listed in Table 2.

Table 2: Secondary Data Requirements

<table>
<thead>
<tr>
<th>Identified Issue</th>
<th>Secondary Data Obtained</th>
<th>Secondary Data Yet to be Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Providers in the Bus Transport Industry</td>
<td>- Metro Mass Transport is the only Public bus transport company running both intracity and intercity bus service. It is 90 percent government owned with only 1 private share holder with subsidised fares  - The majority of bus transport is provided by private bus service at about 99 percent with commercial management  - Much of the private commercial bus sector is self-regulated by various associations</td>
<td>Form of protection, degree of commercial autonomy, service obligations and performance criteria, management and technical efficiency - investment and - business culture - Innovation and patents</td>
</tr>
<tr>
<td>Market structures</td>
<td>- Entry is by registration of vehicle with DVLA and certification of road worthiness and registration with respective District Assemblies.  - There is competition between individual transport operators because of free entry and exit.</td>
<td>Form of competition in the market, entry, product characteristics, price levels and maximum profit rates, market discipline</td>
</tr>
<tr>
<td>Institutional roles and Responsibilities</td>
<td>Goal: Provision of affordable, safe and accessible transportation system.</td>
<td>- Distributional interests in both service types - obligations - components between enterprises - Legal framework - Sectoral policy - Planning - Privatization design - Taxes and subsidies - Procurement</td>
</tr>
<tr>
<td>Status of Reform Implementation</td>
<td>Mass transport systems for moving large numbers of people at least costs have not been well developed.</td>
<td></td>
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<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- No planning and regulatory framework:</td>
<td></td>
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<tr>
<td></td>
<td>- Transport authorities take few initiatives because of limited budget, under staffing and no incentives</td>
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</tbody>
</table>

5.2 Primary Data Collection: In order to obtain first-hand information about the characteristics of the bus operation systems and to validate information obtained from the literature review/desk study, field studies will be conducted to gather information for reviewing the operations of the MMT Company and selected private operators. A mix of observation, consultations, forums/discussions, interviews and questionnaire surveys will be used to gather information for reviewing the operations of the MMT Company and other private operators.

Data will be collected from staff of the company and private operators (vehicle owners, operators/drivers, conductors, ticketing personnel, technicians, field officers, managers, union leaders etc.). In addition information will also be gathered from clients/passengers who patronize the bus transport services to determine their level of satisfaction with the quality of services. Other information will be collected from competitors to give an idea of levels of operations as well as various strategies being implemented by them. This will provide a useful information source to aid in making recommendations on improving service quality and making the company viable. The types of data to be collected include:

(i) The Organizational and Management characteristics of the MMT and selected private operators:

(ii) The Characteristics of Bus Operation System such as
- Trip and Other Characteristics
- Vehicle Fleet Characteristics
- Travel Characteristics
- Passenger Characteristics

Table 3 provides an overview of the primary data to be collected.

Table 3: Primary Data Requirements

<table>
<thead>
<tr>
<th>Identified Issue</th>
<th>Data Type</th>
<th>Data Source/method</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and Regulation of bus Transport Industry</td>
<td>- Governance and institutional capacity</td>
<td>MRT, MRH, MMDAS, Insurance Companies, Unions</td>
<td></td>
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<tr>
<td></td>
<td>- Competence to plan, administer, regulate and guide industry development, and monitor outcomes</td>
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<tr>
<td>Service Providers</td>
<td>- Capital availability</td>
<td>MMT</td>
<td></td>
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<tr>
<td></td>
<td>- Specialisation</td>
<td>- Selected private intercity bus operators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nature of competition</td>
<td>- Selected private intra-city bus operators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Commercial performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Operational performance</td>
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<td></td>
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<tr>
<td></td>
<td>- Financial performance</td>
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<td></td>
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<tr>
<td></td>
<td>- Route Registration</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Continued operation within the Permit system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Compliance with Permit requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Demand Characteristics</td>
<td>Level of bus Patronage</td>
<td>MMT intercity bus users</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trip purpose: Work, Education, Health, Leisure, Social</td>
<td>MMT intra-city bus users</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumer demand based on Level-of-Service, Affordability travel time, waiting time, availability based on service frequency, Comfort, Reliability, Safety, Security and Passenger demand response</td>
<td>Intercity private bus users</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Intra-city private bus users</td>
<td></td>
</tr>
</tbody>
</table>

5.3 **Survey Locations and Sampling Strategy:** Data was collected in to represent each service mix as proposed below:

1. Study on Subsidized Public Mass Intra City Transport
   
i. Sample frame: The sample frame will include the MMT as a service provider and the passengers who use it on selected major routes on which the MMT bus service operates both intercity and intracity.
ii. Sample Size- Fifty selected passengers (50) each for the two service operation types.

2. Study on Private Sector Investment in Bus Transport

i. Sample frame: The sample frame will be vehicle operators, union representatives, and passengers within both intercity and intracity bus routes.

ii. Sample Size: Two (2) intercity private bus operators each for intracity and intercity bus service along with their respective unions and Fifty (50) passengers who patronize the services of these operators.

3. Study on Route Registration

i. Sample frame: The sample frame will be private intercity and intracity bus operators in Ghana.

ii. Sample Size: Two (2) intercity and two (2) intra city private bus operators alongside Fifty (50) who patronize the services of these operators.

4. Study Location: As much as feasible all categories of studies will be conducted on the same routes for purpose of fair comparison. The following are the proposed routes for the studies.

1. Intracity Service: Potential routes for the study include Accra Central to Accra North; Accra Madina Adenta route, Accra Central to Accra South;

2. Intercity Service: Accra - Kumasi; Accra - Takoradi; Accra -Aflao road
6.0 ANALYTICAL FRAMEWORK

The basis of the study analysis is to determine the impact of a commercialized and non-commercialized bus transport operation and how it is managed in terms of competitiveness for better performance to meet consumer demand.

The analytical framework will be based on a passenger demand and preference analysis using binary logistic analysis to determine passenger need. Then an operator performance analysis will be conducted based on conditions of work and market structures. A gap analysis of consumer needs, operator performance and the role and performance of relevant institutions and agencies will be conducted through an analytical comparative framework yet to be defined. The results will be used as basis for the development of an Effective Performance Framework and Implementation capacity development framework for effective reform implementation. A schematic presentation of the analytical framework is presented in Figure 1.

Figure 1: Analytical Framework

The analytical issues to be addressed include the following:

1. Potential competitors are operators with existing services and facilities in or near the incumbent’s area of operation.
2. Areas of Potential competition, the constraint on incumbent operators from the threat that nearby rivals might redeploy or expand their existing services and restart competition.

3. Aspects of competitive factors within the control of bus operators

4. Where there is head-to-head competition on a substantial part of a route

5. Competitive constraint on bus operators

6. Impact of completion on consumers and the factors for consumer behavior

7. Impact of competition on new entry; the constraint on incumbent operators’ current behavior; and the threat of new entrants competing with them.

8. The level of completion constraint on bus operators

9. The level of particular flows that local markets will reach before there will no competition

10. Level of competition sustainability
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