



BIVAC VIS AND DVLA ROADWORTHINESS INSPECTION FOR GHANA

**PREPARED :
VEHICLE INSPECTION TEAM(GHANA)**

**PRESENTED BY :
LEE RAYMOND BARBER
(ENG.TECH,MSOE,MIRTE,LCG)**



**B I V A C
INTERNATIONAL**

MARCH 2013

Move Forward with Confidence



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VERITAS**

INTRODUCTION



- ▶ BIVAC (Bureau Veritas Inspection Valuation Assessment and Control) International Ghana Limited is a fully registered Ghanaian company incorporated as an inspection company under the laws of the republic of Ghana.
- ▶ BIVAC International Ghana Limited has links with BIVAC international of the Bureau Veritas Group Of France



Leadership Position



Our Reputation

- ▶ Bureau Veritas is one of the world's leading providers of import control and inspection services. Established in 1828 Bureau Veritas has wide experience in Vehicle Inspection Service.

Our Network

- ▶ Our global presence offers you the convenience of International expertise combined with local service where needed.



Brand & recognition



Our Personalized service

- ▶ Bureau Veritas adapts its services to the clients needs. Bureau Veritas has developed and implemented several IT solutions to make the service more efficient.

Our Recognition, Certification and Accreditation

- ▶ Bureau Veritas is certified ISO 9001:2000 and is the first inspection body in the world to have its network accredited ISO 17020:1998 within the scope of its Pre-Shipment Inspection and Verification of Conformity activities.
- ▶ Active member of IFIA (International Federation of Inspection Agencies), Bureau Veritas is also a member of CITA (International Motor Vehicle Inspection Committee).



Business Challenge



- ▶ Many countries insist that motor vehicles comply with national environmental and safety standards.
- ▶ Governments are now becoming more focused on implementing legislation to reduce road accidents and the environmental impact of non-compliant vehicles.
- ▶ It is widely accepted that vehicles should be subject to regular technical inspection at pre-set intervals throughout their life.

Solution



What is Vehicle Inspection Station (VIS)?

- ▶ VIS is a technical inspection service for vehicles. It is performed in accordance with national legislation / regulation and international standards for environmental protection.
- ▶ VIS is essential for countries that wish to ensure that vehicles being used on their roads comply with the national regulations and any other required national standards.
- ▶ VIS may also be used to control the safety and compliance of imported used vehicles.

Our Motor : SAVING LIVES, SAFER ROAD, CUTTING CRIME AND PROTECTING THE ENVIRONMENT



BIVAC VIS ORGANISATION CHART

GM

PERSONAL ASSISTANT TO GM



GIFTY OWARE

QUALITY CONTROL



THEOPHILUS LARYEA



ROBERT DAMSON

ACCOUNTANT



RICHARD OHENE

IT DEPT.



EDWARD LARBI

MAINTENANCE DEPT.



FRANK ADUBOFFOUR

FOREMEN



CLEMENT TAMAKLOE



JOSEPH BOADI

TEAM SUPERVISOR



CHARLOTTE OPPONG

INSPECTORS



•Marshalls



•SYLVESTER AGYPONG



•FRANCIS TETTEH

•Drive



• ISAAC BARNES ODOOM

•1. EBENEZER FRIMPONG

•2. EMMANUEL KOJO

•3. THOMAS AWUNI

•4. EDMUND PREPRAH

•5. ANTHONY K. FRIMPONG

•6. KWAKU GYABI ROCKSON

•7. EMMANUEL MENSAB

•8. EMMANUEL LARTEY-WILLIAMS

•9. OSEI KARIKARI

•10. ABDUL RAUF SEIDU

•11. ANTHONY FRIMPONG

•12. KINGSLEY ACQUAH

•13. EMMANUEL ADOM

•14. JOSEPH BOAMAH

•15. AWUDU IBRAHIM

•Environmental Dept



•JOSEPH LEWIS



•ROBERT T SOSU

VEHICLE INSPECTION TEAM - GHANA

- Our **Quality Controllers, Foremen and Inspectors** are qualified and experience **Technicians** who have been trained to inspect vehicles to **United Kingdom (UK Standards)** by

LEADING UK VEHICLE INSPECTION/TRAINING
DIRECTOR.

- **VIS** Staff have undergone the following training:

1. Light and Heavy Vehicle inspection
2. ADR(Bulk Road Vehicles)
3. Health, Safety and Environment
4. Actia Muller Equipment Calibration
5. Industrial Fire Fighting
6. Verification of Conformity and
7. First Aid

Note: Equipment calibration is done every three months

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VEHICLE INSPECTION TEAM - GHANA



- ▶ Vehicle Inspection Quality Controllers are trained to ensure that vehicle inspections are carried out in an effective and efficient manner, following all appropriate standards and to provide a high quality service to members of the general public
- ▶ Ensure inspection staff comply with Health and Safety standards
- ▶ Help and advice customers with queries relating to technical standards and deal with front line testing queries, ensuring a high standard of service



HISTORY OF DVLA GHANA





HISTORY OF DVLA



- ▶ **DVLA** was established in 1999 by Act 569 of Ghana's parliament.
- ▶ The act allowed the authority to have a semi-autonomous status in the public sector organization under the Ministry of Transport.
- ▶ The authority is responsible for ensuring safety on Ghanaian roads.
- ▶ The authority before the enactment of the **DVLA** Act was called Vehicle Examination & Licensing Division (VELD).



DVLA GHANA VISION STATEMENT



“To be a reputable organization with internationally accepted standards for driver and vehicle licensing”

DVLA GHANA MISSION STATEMENT

“Driver and Vehicle Licensing Authority(DVLA) exists to ensure best practices for licensing drivers and vehicles to promote road safety and environmental sustainability, while pursuing Integrity, Excellence, Professionalism and Reliability in service delivery”



PRIVATE PARTICIPATION IN ROADWORTHY INSPECTION



► *The Road Traffic Regulations, 2012 (L.I. 2180) Section 6(3)*

(3) The Licensing Authority may for the purpose of the examination

a) designate a private motor vehicle testing station where motor vehicle examination may be conducted.

- BIVAC Vehicle Inspection Station (VIS) is one of the stations mandated to inspect PRIVATE and GOVERNMENT vehicles for Roadworthiness and First Registration.
- The BIVAC Station is Strategically positioned on outskirts of Accra to reduce City congestion and environmental safety issues.
- Other services rendered by BIVAC are Vehicle Audit, Accident Reporting
- DVLA have staff at the VIS who issue Roadworthy Stickers to passed vehicles only.

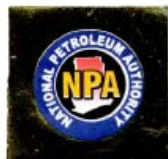


PRIVATE PARTICIPATION IN ROADWORTHY INSPECTION



- BIVAC and DVLA monitoring team ensure the stickers issued corresponds to passed vehicles.
- BIVAC work hand in hand with DVLA, National Petroleum Authority, Environmental Protection Agency and Ghana Standard Authority, Unions to gradually increase Vehicle conditions.

NPA LETTERS



NATIONAL PETROLEUM AUTHORITY

House No 11, 5th Circular Road, Cantonments, Accra

C.P.M.B.
C.T. Accra

Tel: (+233) 302 766 195/6
Fax: (+233) 302 766 193

Email: info@npa.gov.gh
Website: www.npa.gov.gh

NPA/IML/BRV/01/12

February 11, 2013

The Managing Director
Bivac International Limited
Accra

Inspection of Over-aged Bulk Road Vehicles (BRVs).

After several consultations with stakeholders on the phasing out of over-aged Bulk Road Vehicles, it was decided that BIVAC International Limited be authorized as the sole inspection company to undertake inspection of all BRVs above twelve (12) years but not exceeding twenty (20) years, engaged in the haulage of petroleum products.

This is in view of the fact that, the Company's facility is equipped with the most up-to-date technologically advanced automated testing equipment maintained to the highest standard with no human interface. Additionally, a spacious car park is available to accommodate a reasonable number of BRVs and a waiting room where drivers can observe the testing processes.

The above notwithstanding, the Authority will accept the inspection certificate of a BRV with age not exceeding twelve (12) years from all the approved inspection companies i.e. Trust Logistics (VCL Haulage Ltd), Road Safety Limited and Bivac International Limited. Please note that, all BRVs above twenty (20) years will not be licensed by the Authority in 2013.

Alexander Mould
Chief Executive

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INTERNATIONAL

NPA LETTERS



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NPA/IML/BRV/01/12

February 11, 2013

To: see distribution list

Registration of Bulk Road Vehicles (BRVs) for 2013

The NPA began the implementation of the phasing out of all over-aged Bulk Road Vehicles (i.e. BRVs above 12 years) in 2012. The programme, however was deferred as a result of consultation with stakeholders to determine the way forward.

The Authority has commenced the registration of all Bulk Road Vehicles (BRVs), in line with the methodology for the phasing out programme. As per the programme, 60% of a transporter's fleet of BRVs engaged in the haulage of petroleum products in the country should not exceed twelve (12) years by the end of 2012.

As part of the registration process, the Authority will accept the inspection certificate of a BRV with age not exceeding twelve (12) years from all the inspection companies. **However, a BRV above twelve (12) years but not exceeding twenty (20) years, will have to be duly inspected by Bivac International Limited, located at Amasaman and declared safe for the haulage of petroleum products before the said BRV will be licensed by the Authority. You are requested to note that, all BRVs above twenty (20) years will not be licensed by the Authority.**

Additionally, all OMCs/LPGMCs are requested to provide letters of sponsorship for their transporters as part of the documentation requirements for the registration process as detailed in the format attached.

Please take note of the above and act accordingly.

Alexander Mould
Chief Executive

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DRIVER AND VEHICLE LICENSING AUTHORITY

PUBLIC NOTICE

The Authority wishes to inform Fleet Operators, Vehicle Owners, Drivers and the motoring public that four (4) Vehicle Testing Stations (VTS) have been authorized to test vehicles for the purpose of roadworthiness and environmental protection.

The Vehicle Testing Stations are as follows:

1. MESSRS BIVAC	KUNTUNSE
2. MESSRS BEN-SAM	OYIBI (ON ADENTA-DODOWA ROAD, NEAR VALLEY VIEW UNIVERSITY)
3. MESSERS SPC	NEW-WEIJA (GICEL ESTATES)
4. MESSRS VITO	DOMÉ (NEAR RAIL LINE CROSSING)

With the introduction of private sector participation in Vehicle Testing, vehicle owners and motorists would be paying two different fees. These are:

a. Vehicle Testing Fee
b. Road use fee (currently known as road worthiness fee)

With regard to road use fee, it would be the same as introduced in January 2010 under the Fees and Charges (Miscellaneous Provisions) Act, 2009 Act 793.

Private Sector Participation in Vehicle Testing is an internationally known accepted practice which contributes towards reduction in road crashes, casualty and air pollution.

The motoring public is hereby informed that vehicle testing facilities and modern testing equipment are installed in the above-named premises. These equipment would give you the status of the roadworthiness of your vehicle and therefore peace of mind.

The safety and environmental benefits in having your vehicle tested are immeasurable and incalculable.

ITEMS TO CONSTITUTE A PASS



In case of reply the
number and date of this
letter should quoted
TEL: 0302- 777460
FAX: 0302- 761917

DVLA/AD/CE/11

Your Ref. No.



REPUBLIC OF GHANA

DRIVER AND VEHICLE LICENSING AUTHORITY
P. O. BOX 9379, KIA - ACCRA

27TH JUNE 2011

20

Dear Sir,

VEHICLE TESTING AND ITEMS TO CONSTITUTE A PASS

The Board and Management of the Authority in reference to the implementation of the Vehicle Testing Scheme have identified specified primary features to which a vehicle must satisfy in order to obtain a pass certificate

These are as follows:

- (I) Brakes
- (II) Suspension Systems
- (III) Steering Systems
- (IV) Tyres
- (V) Wheels
- (VI) Lights
- (VII) Windscreen
- (VIII) Wipers
- (IX) Driving Mirrors
- (X) Emission Test

*It is to be noted that the minimum brake efficiency for the pilot period should be 50%. This implies that any failure or any item listed above constitute a failure in roadworthiness.

With regard to the Emission Test, the results should not form basis for declaring a vehicle as having failed the test. Notwithstanding the fact that, Vehicle Testing is to promote safety and reduce vehicular pollution. It is considered that for a start, vehicle owners and drivers should be advised on what to do to reduce the emission levels.

Until otherwise determined and directed the above listed features and test shall constitute the test regime during the implementation of the pilot scheme.

Please, acknowledge receipt.

Thank you.

Yours faithfully,


J.M.Y. AMEGASHIE
CHIEF EXECUTIVE

DISTRIBUTION:

BIVAC INTERNATIONAL GH. LTD

BENSAM CO. LTD

V.I.TO

SPC ENGINEERING & TRANSPORT SERVICES

NOTE

Currently the Approved inspection Manual in use is MOTOR VEHICLES:

PERIODIC INSPECTION AND TEST

GHANA STANDARD **GS:806:2005**

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BIVAC VEHICLE DELIVERY



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Technical Mandatory Steps

1. Vehicle delivery at inspection station

- The customer presents the vehicle to security at the main gate of the station
- The Marshall conducts a brief pre-inspection of the vehicle.
- The Marshall directs the customer to drive to the primary holding area.
- If the vehicle will probably fail the inspection test due to a visual defect, the Marshall directs it through the exit, this is optional as some vehicle owner want test to be carried out to know the vehicle condition.





AUTHOMATED LANES FOR VEHICLE INSPECTION



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VEHICLE REGISTRATION

Vehicle Registration—Data entry

- ▶ The customer presents the vehicle document to the Eco Bank Staff and make payment and issued with receipts.
- ▶ The customer proceed to BIVAC desk with document ,registration staff enters the information of the vehicle into the data base.
- ▶ The following are entered into the data base
 - Nature (e.g. saloon car)
 - Category (e.g. light commercial vehicle)
 - Plate number

• BIVAC
INTERNATIONAL Document date



Vehicle Registration—Data entry Cont.



- Year of manufacture
 - Owners particulars
 - Vehicle type
 - Model
 - VIN (vehicle identification number)
 - Maker
 - CC (cubic capacity)
 - Energy (fuel used)
 - Gross weight
- ▶ The following information are entered on the invoice
 - ▶ Payment (cheque, cash)
 - ▶ Tariff
 - ▶ Cheque Number
 - ▶ paid date etc
5. A bar code is generated onto the inspection pass which is given to the Client to take to his/her vehicle.
 6. The customer is given payment receipt and invoice upon request
 7. The customer is given instruction to go to waiting area.
 8. BIVAC has Primary and Secondary holding area.



VEHICLE INSPECTION PROCEDURE

INSPECTION PROCEDURE

A single barcode receipt from start to finish.

Verification of Conformity checks.

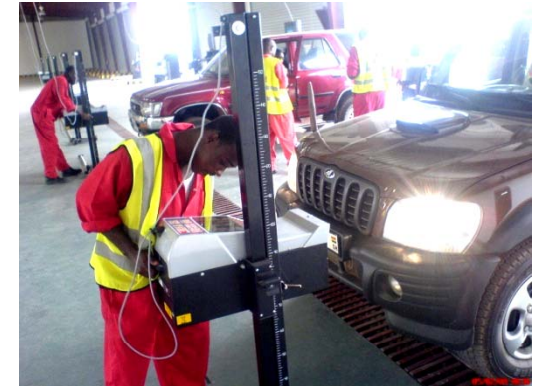
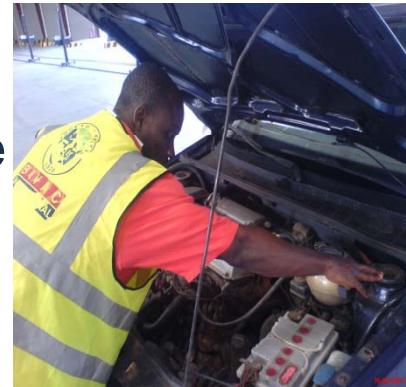
The inspection is carried out on a lane three stages by three inspectors.

STAGE 1

This stage contains the following inspections:

- ❖ Exterior
- ❖ Interior
- ❖ Lights
- ❖ Headlamp Aim
- ❖ Emission

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Reason for failure:

HC content exceeding 1200 ppm maximum for a continuous period of 5 seconds

CO content exceeding 3.5% for a continuous period of 5 seconds

INSPECTION PROCEDURE

STAGE 2

Under-Vehicle Inspection

This stage contains the following inspections:

Steering and suspension

- The wheel shaker moves the steering and suspension in various directions against the load.
- This enables the inspector to see if there is any horizontal sideways movement in any joints eg. wheel bearing free play, spring wear, security of mountings, component damage etc.



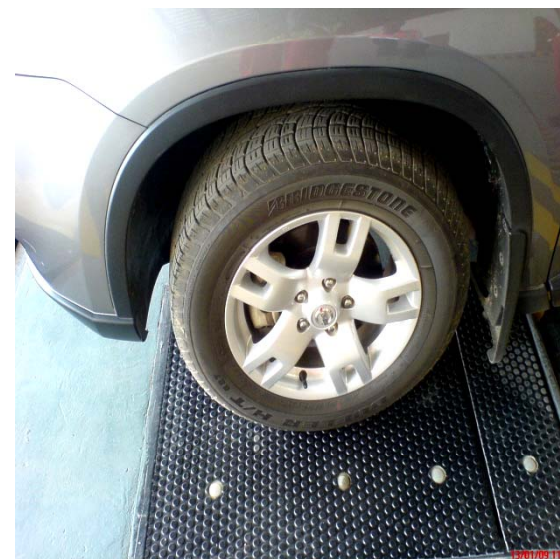
INSPECTION PROCEDURE

STAGE 3

This stage contains the following inspections:

Side Slip Test

- Side-slip is the sideways movement of a vehicle's wheels when the vehicle itself is moving forwards.
- the side-slip plate shows us, quickly, whether or not there is a problem with the front axle geometry of the vehicle.
- A reading of more than 14 is a reason for failure



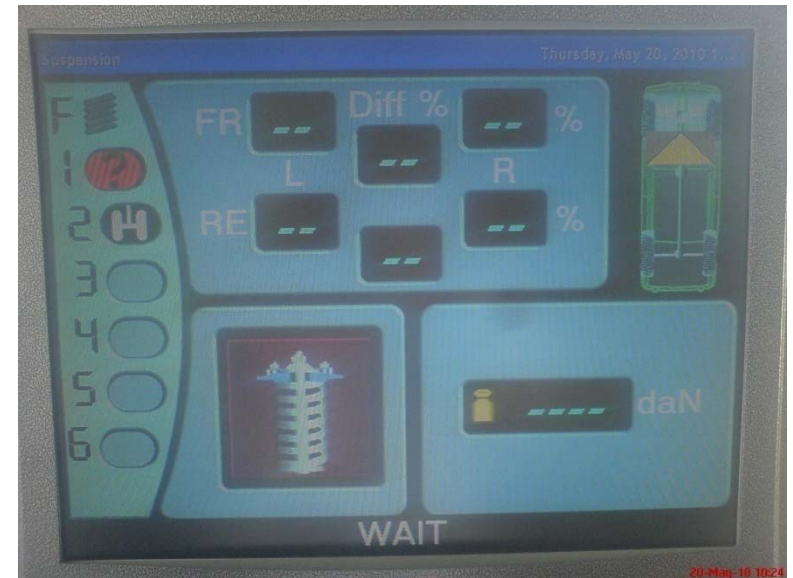
INSPECTION PROCEDURE

STAGE 3

This stage contains the following inspections:

Suspension test

- ▶ the suspension tester is a sophisticated system which automatically assesses the imbalance across the axle.
- ▶ A reading of more than **30 %** between LH and RH is a reason for failure



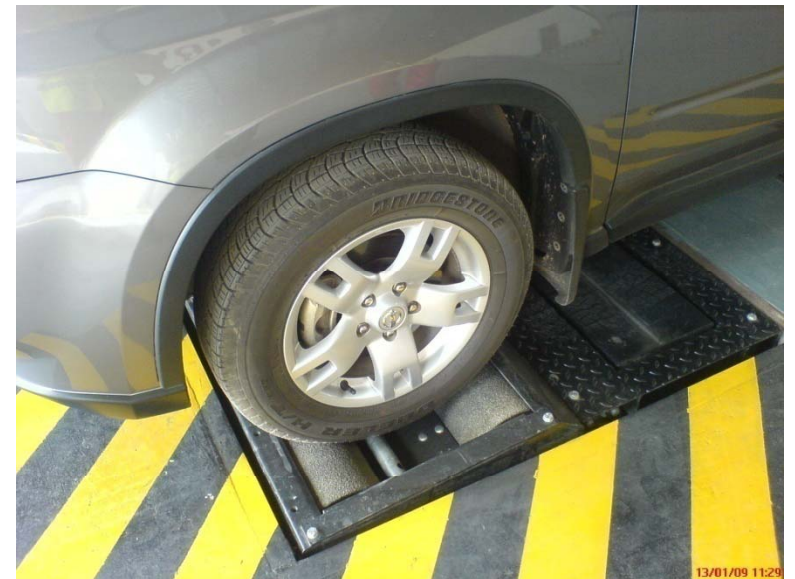
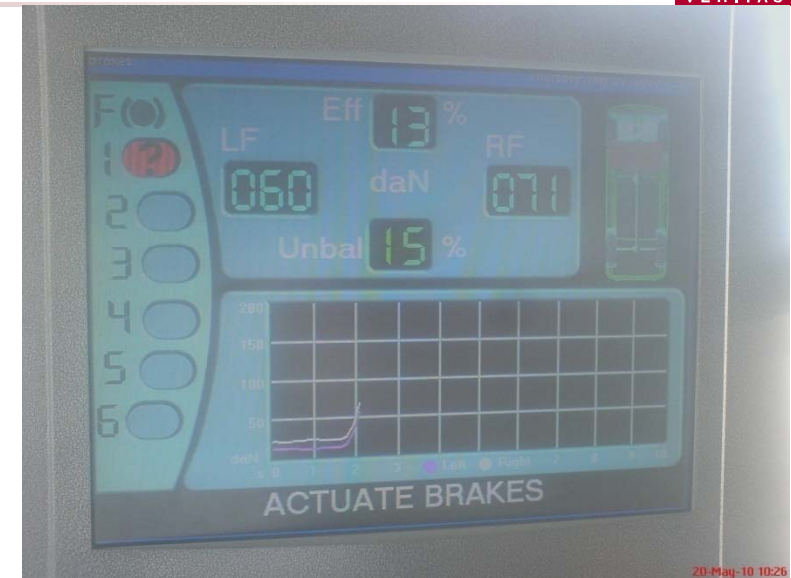
INSPECTION PROCEDURE

STAGE 3

This stage contains the following inspections:

BRAKE PERFORMANCE TEST

- ▶ the suspension tester is a sophisticated system which automatically assesses the imbalance across the axle.
- ▶ A reading of more than **30 %** between LH and RH is a reason for failure

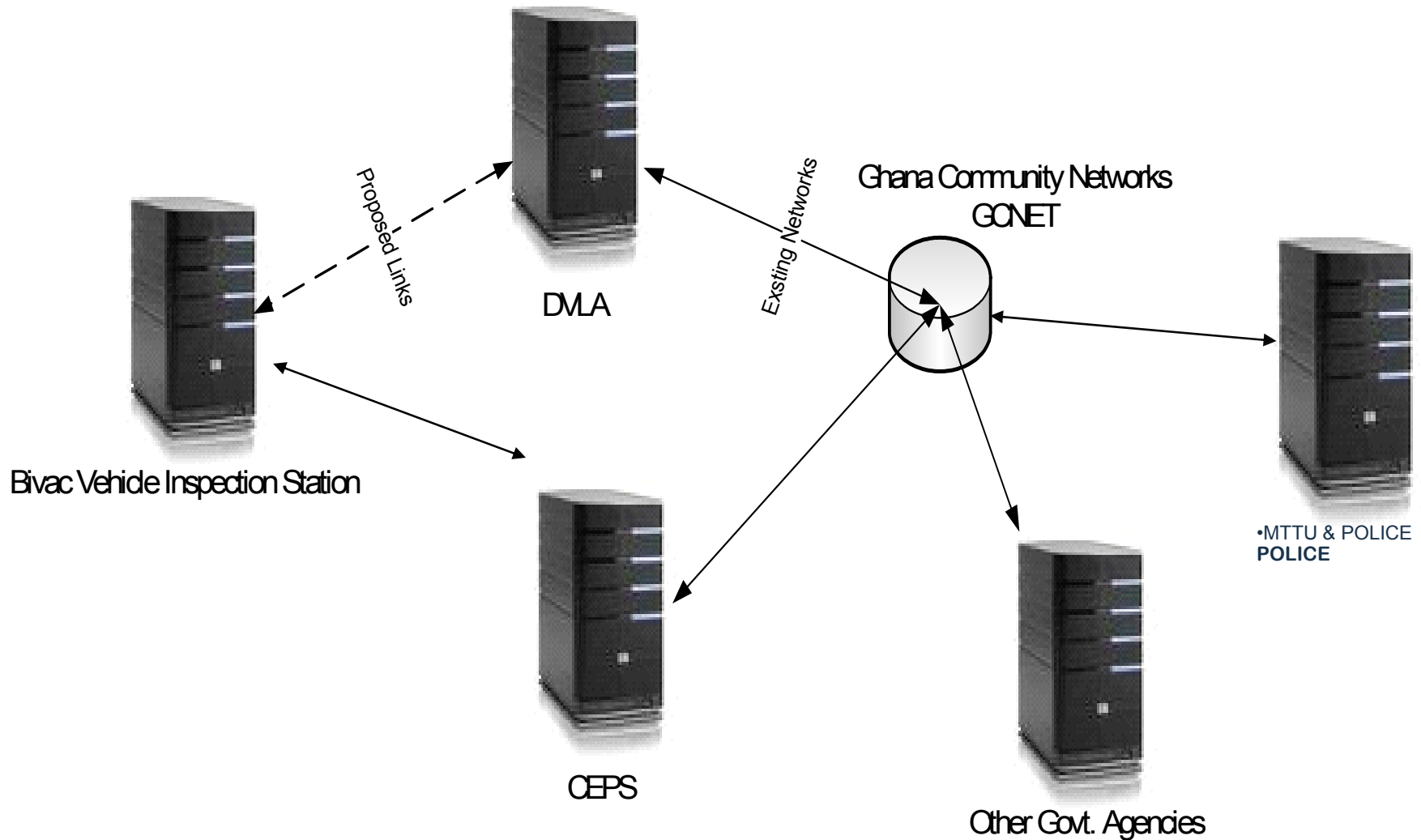


INFORMATION TECHNOLOGY

- ▶ We have competent Personnel who handle all IT issues.
- ▶ There is back-up system set in place to save all data.
- ▶ Ability to integrate data to a central server.
- ▶ Advance software that aid in real time data transmission to all DVLA Regional Offices
- ▶ Excellent networking which ensures effective and efficient accomplishment.

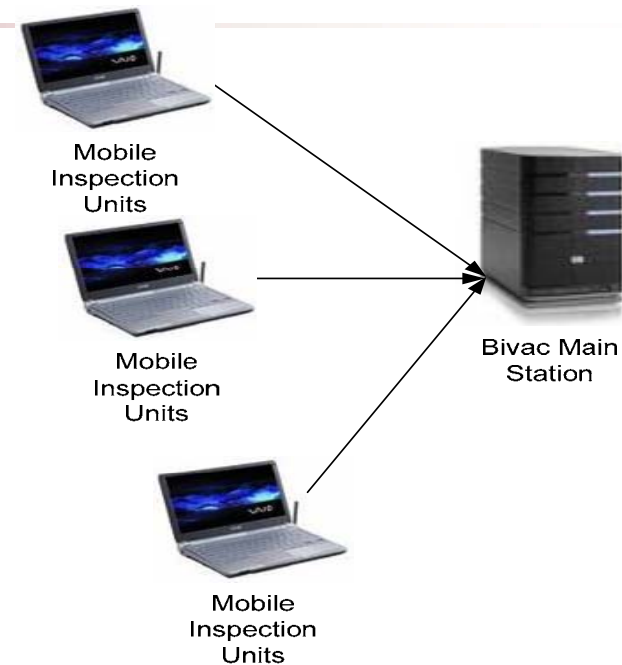


TRANSMISSION



INSPECTION PROCEDURE

- ▶ The results of each section of the inspection will be entered directly onto the IT system .In the case of the tests done by equipment it is done automatically.
- ▶ For the visual sections of the inspection, information is entered manually by the inspectors onto the system using Personal Digital Assistant (PDA).
- ▶ Inspection data is sent from the inspection lane to the quality controllers
- ▶ Quality controllers review and validate the results





CERTIFICATION



CERTIFICATION

- ▶ A complete inspected vehicle registration number appears on the certification Monitor
- ▶ The client provides receipt he has been given by the registration desk to the certification staff
- ▶ The bar code of the receipt is scanned to access the corresponding file
- ▶ If the vehicle has successfully completed all tests, the inspection report is printed and the DVLA sticker with BIVAC hologram delivered to the customer.
- ▶ If the vehicle failed the test, only the inspection report is delivered with an indication RETEST
- ▶ Passed vehicles report highlight minor defects

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DVLA

TEST REPORT

BIVAC
INTERNATIONAL



Version 004.01

TEST KIND Test : Light vehicle private	TEST DATE 22/02/2013	REPORT NUMBER 1301149151	STICKER # PASS
--	--------------------------------	------------------------------------	--------------------------

Failed test REPORT NUMBER DATE	TEST RESULT : PROBLEMS DETECTED 1 - Problems detected : 0 2 - Minor problems detected : 0 Document: Vehicle registration document
---	--

TEST CENTER IDENTIFICATION CENTER NUMBER: 00000001 CENTER NAME: BIVAC INTERNATIONAL GH LTD ADDRESS: PMB ACCRA NORTH KUTUNSE-GT. ACCRA Tel:0243690437
--

CENTER STAMP

VEHICLE IDENTIFICATION Plate license: GR9149Z Date: 22/02/2013 Initial circulation date: 01/01/2007 Gross weight: Make: MITSUBISHI Type: STATIONWAGON VIN: JMYLRV96W8J001072 Energy: DIESEL Odometer: 117279 Model: PAJERO Colour: Blue CC: 2800

OWNER Full name: CFAU Address: PO box-Town:

RESULT PASS Name and signature: <i>Fletcher Theophilus Long</i>
--

Measures :	Front	Rear
Steering Steering(Max.14)	+1.0	
Shock absorber imbalance(Max.30%)	9	10
Vertical forces Axle	1032	1174
Service brake Brake force max. imbalance(Max.45%) Overall efficiency(Min.50%)	L:340 R:315 7 59	L:330 R:313 5
Parking brake Efficiency(Min.16%)	23	
Pollution Smoke opacity (Max.3) Mesure 1 : 71 m-1 Mesure 2 : m-1		
Lights :	L:Correct R:Correct	

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VERITAS

PASS REPORT WITH SECURITY

FEATURES:

1. STAMP
2. SIGNATURE
3. EMBOSSMENT
4. HOLOGRAM
5. REPORT NUMBER
6. OTHERS SECURITY FEATURES

THAT IS KEPT BETWEEN DVLA AND
BIVAC VIS

DVLA

TEST REPORT

BIVAC
INTERNATIONAL



Version 004.01

TEST KIND	TEST DATE	REPORT NUMBER	STICKER #
Test : Light vehicle private	07/02/2013	1301148701	FAILED

Failed test	TEST RESULT : PROBLEMS DETECTED
REPORT NUMBER DATE	<p>1 - Problems detected : 2 1.3.1.1 STOP LIGHTS : Not working correctly and/or effectively or affected by another lamp L 3.5.7 SERVICE BRAKE PERFORMANCE : Unable to test</p>

TEST CENTER IDENTIFICATION
CENTER NUMBER: 00000001 CENTER NAME: BIVAC INTERNATIONAL GH LTD ADDRESS: PMB ACCRA NORTH KUTUNSE-GT. ACCRA Tel:0243690437

CENTER STAMP

VEHICLE IDENTIFICATION	
Plate license: GW15Z	Date: 07/02/2013 Initial circulation date: 01/01/1992
Gross weight:	Make: TOYOTA Type: PICKUP
VIN: JT4VD22E7S0002586	Energy: GASOLINE
Odometer: 142418 Kms	Model: T100
Colour: Green	CC: 3400

OWNER
Full name: PHILIP AMANKWAH YEBOAH Address: PO box-Town: 19703 ACCRA

RESULT
FAIL

Name and signature

Measures :	Front	Rear
Steering		
Steering(Max.14)	-0.7	
Shock absorber		
Imbalance(Max.30%)	6	4
Vertical forces		
Axle	1059	767
Service brake		
Brake force max.	L:267 R:178	L:- R:-
Wheel/wheel brake force L:438 R:414		L:- R:-
Imbalance(Max.45%)	32	
Pollution		
CO slow : 0 CO : (Max.3.5) 0 HC : 00000		
Lights :	L:Correct R:Correct	



FAILED REPORT WITH SECURITY FEATURES:

1. STAMP
 2. SIGNATURE
 3. EMBOSSMENT
 4. HOLOGRAM is issued to pass report
 5. REPORT NUMBER
 6. OTHERS SECURITY FEATURES
- THAT IS KEPT BETWEEN DVLA AND BIVAC VIS

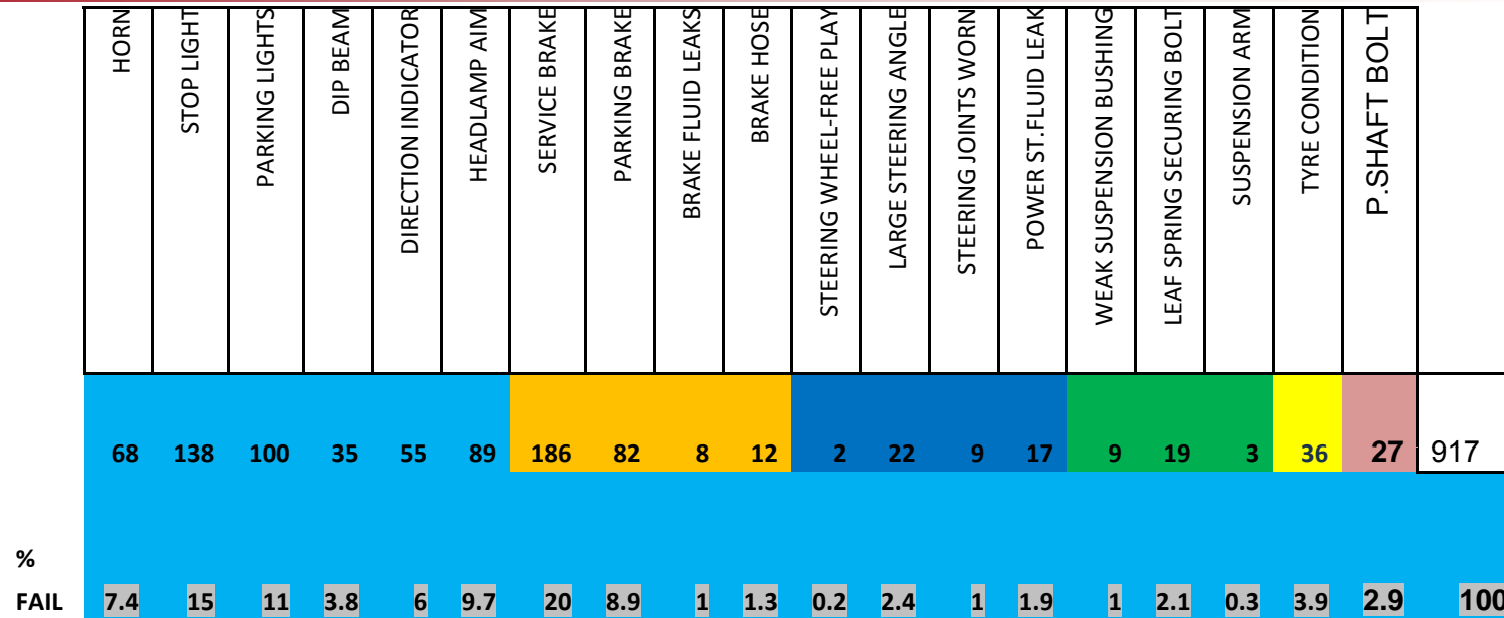
PASS/FAIL ANALYSIS



► ANALYSIS

- Pass rate for inspection use to be **87.3%** which has now increased to **91.13% passed** with minor defects.
- **8.87% failed** with major and minor defects.
- This is as a results of continues education given to clients on roadworthiness of their vehicles.
- Out of the total failure, majority were vehicle coming for the renewal of their roadworthy certificate. Failed reports were issued to the clients to have the defect repaired. The vehicle returned to BIVAC for a RETEST
- Grouped issues such as Lights, Horn (i.e Electricals) account for of All

VEHICLE UNIT FAILURE ANALYSIS



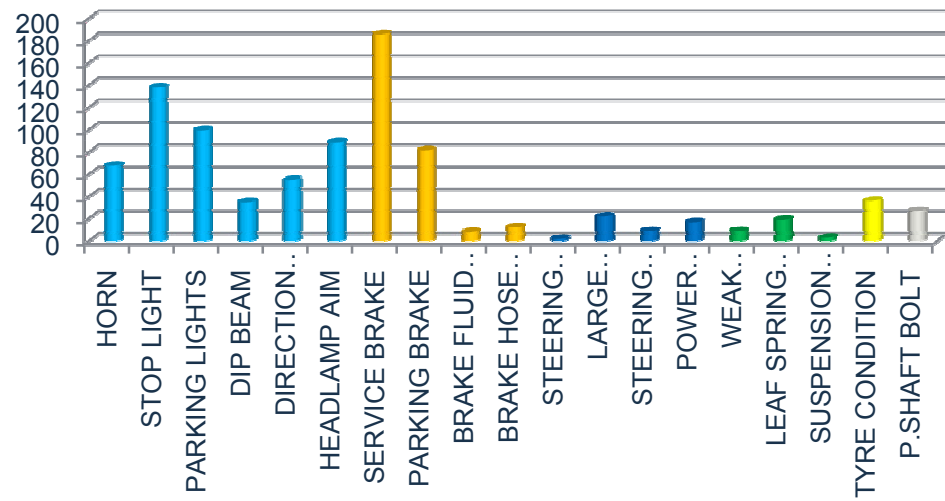
Group Issues such as Lights and

Horn(ie. Electricals) account for 52% of all failure.

31% Braking Efficiency + Mechanical Faults

5.5% Steering Faults,3.4% Suspension,

3.9% Tyres and 2.9% Drive Shafts.



CONCLUSION



- ▶ Vehicle Inspection and Road safety is a global concern
- ▶ We insist on our knowledge of African Authorities and the necessity to adapt European standards in order to improve acceptance of individual African countries for the improvement of road safety in general.
- ▶ Ensuring continues training on standards, business ethics and Quality, Safety, Health and Environment through out Inspection bodies in Africa will match value for service.



END

