

# BRUNEI DARUSSALAM

Country : -

Brunei Darussalam

Designation and Organization:-

Public Work Department ,Ministry of Development &  
Land Transport Department, Ministry of Communications

Seventh Regional EST Forum in Asia

23 – 25 April 2013

Bali, Indonesia



# Presentation outline

## Initiatives on Bangkok 2020 Declaration

### •Strategies to SHIFT towards more sustainable modes – PUBLIC TRANSPORTATION

#### – Improve Public Transport Services

- Logistic
- Operational

### •IMPROVE – CLEANER FUELS AND TECHNOLOGIES, INSPECTION AND MAINTENANCE

#### – Fuel Standard

#### – Vehicle Inspection

### •CROSS CUTTING – SAFETY

#### – Act and Regulations

# Strategies to SHIFT towards more sustainable modes – PUBLIC TRANSPORTATION

- **Improve Public Transport Services**

- **Logistic:**

- Build new Central Bus Station (franchise bus, inter district, inter state / BIMP – EAGA) – construction start 2013.
    - Build new Bus Terminal. Construction start 2013.
    - Increase number of Shelter Bus Stop.

# Improve Public Transport Services

- **Operational**

- Improve connectivity, routes
- Extend operating hours
- Improve waiting time
- The bus conditions / type of bus
- Colour of the bus according to route
- End of year 2013 – Tender will be open for New Franchise bus (New colour code – according to route, low floor type of bus, electronic signage etc)

# Brunei-Muara Public Bus Routes

## Shopping Areas

- Bandar Seri Begawan:**  
 Yayasan Complex - Bus 01  
 Kianggeh Market - All Buses  
 Kianggeh Food Court - Bus 01  
 Kianggeh Waterfront  
 Tams Selera Alam
- Gadong:**  
 The Mall - Bus 20,01  
 Centerpoint - Bus 20,01  
 Pasar Malam - Bus 01
- Batu Bersurat:**  
 Soon Lee Megamart - Bus 20,21  
 Happy Star - Bus 20,21
- Batu Sate:**  
 First Emporium - Bus 01  
 YMRM Boutique - Bus 01
- Kiulap:**  
 Seri Kiulap Mall - Bus 20  
 Hua Ho Supermarket - Bus 20  
 RBC Express Fastfood - Bus 20,22
- Mabohat:**  
 Supasave Toys 'R' Us - Bus 01A
- Mengalati:**  
 HSD - Bus 01  
 NBT/Bisni - Bus 01
- Beribi:**  
 Sumbangsh Maia - Bus 21  
 Supasave - Bus 21
- Kimah:**  
 D&R Kimah - Bus 22  
 Giant Supermarket - Bus 22
- Mukim Berakas:**  
 Time Square/Airport Mall/Citi Square - Bus 23,24  
 DeWinn Complex - Bus 34  
 Manggis Mall - Bus 34  
 Warisan Kompleks - Bus 38
- Tanjong Bunut:**  
 Hua Ho Tanjong Bunut - Bus 55,56,42,45  
 Home Centre - Bus 55,56,42,45
- Sengkuring:**  
 Hua Ho Sengkuring - Bus 55,56,42,45
- Muara:**  
 Pekan Muara - Bus 33  
 Muara Centre - Bus 33  
 Muara Beach - Bus 33  
 Senas Beach - Bus 33

## Traveller's Note

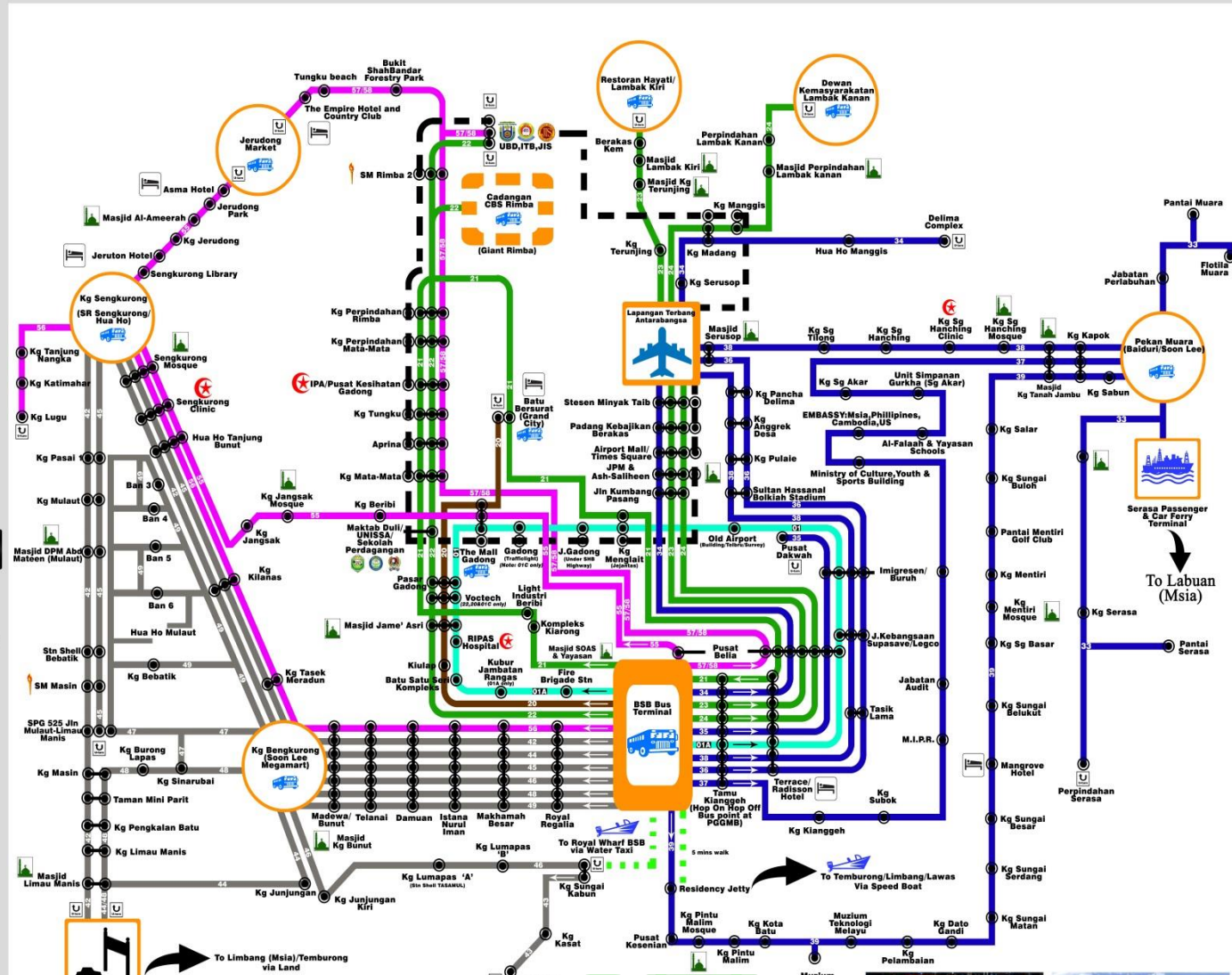
- Brunei International Airport  
 -Buses 23,24,34,35,36,38
- Kuala Lurah  
 -Buses 42,44
- Kuala Belait/Tutong District (Via Proposed Rimba Terminal)  
 -Buses 22,57
- Kianggeh Jetty  
 -Bus 39
- Labuan/Kg Memambok (Kota Kinabalu) (Via Muara Passenger/Car Ferry Terminal)  
 -33,37,38,39

## Hotels

- Terrace Hotel - All Buses  
 River View Hotel - Buses 01,21,23,24  
 Traders Inn - Buses 21  
 Brunei Hotel - All Buses  
 Radisson Hotel - All Buses  
 Centerpoint Hotel - Buses 01,20  
 Kiulap Plaza Hotel - Buses 20  
 Palm Garden hotel - Buses 20  
 Asma Hotel - Buses 55  
 Holiday Lodge Hotel - Buses 55  
 De Angrek Hotel - Buses 36  
 De Angrek Hotel - Buses 36  
 Times Hotel - Buses 23,24,34,35,36,38  
 Mangrove Hotel - Bus 39  
 The Empire Hotel and Country Club - Bus 57,58

## Places Of Interest

- Brunei Royal Regalia - All Buses  
 Jame' Asr Hassanul Boikiah Mosque - Bus 01,20,22  
 Sultan Omar Ali Saifuddin Mosque - All Buses  
 Tasik Lana Recreational Park Brunei - Bus 01  
 Muzium - All buses  
 Jerudong Park Playground - 55  
 Shahbandar - 57,58  
 Daruaan - 42,44,45,46,48,49,56



## Bus Route's Colour Key

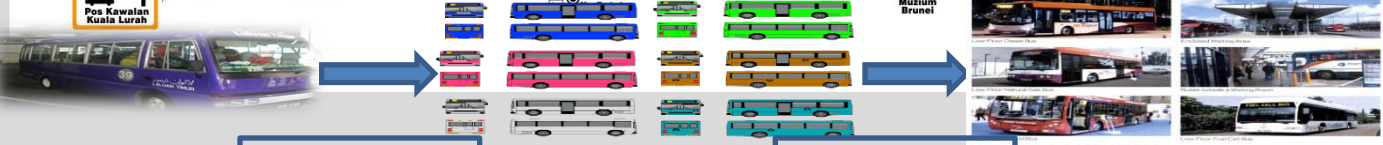
- Bus no. 01A
- Bus no. 01C
- Bus no. 20
- Bus no. 21
- Bus no. 22
- Bus no. 23
- Bus no. 24
- Bus no. 33
- Bus no. 34
- Bus no. 35
- Bus no. 36
- Bus no. 37
- Bus no. 38
- Bus no. 39
- Bus no. 42
- Bus no. 43
- Bus no. 44
- Bus no. 45
- Bus no. 46
- Bus no. 47
- Bus no. 48
- Bus no. 49
- Bus no. 55
- Bus no. 56
- Bus no. 57
- Bus no. 58
- New Route: Northern Circular Route (NCR)

## Legend

- Bus Hub/Terminal
- Jetty for Water Taxi or Speed Boat
- Ferry Terminal
- Brunei International Airport
- Mosque
- Clinic/Hospital
- Secondary/primary schools
- Bus turning point
- Bus route starting point & direction
- Bus Stops

## Bus Operation Time & Charges:

Operation time : 6.00am to 8.00pm  
 Bus Charge : Refer to bus operators



2013      Work in Progress      2013 - 2018      The Plan in pipeline      2018 & Beyond

# Bandar Seri Begawan Bus Terminal (as Central Bus Station)



Purple Bus (Franchise bus)



# Strategies to SHIFT towards more sustainable modes

## – PUBLIC TRANSPORTATION

- **Challenges:**

- Attract to use public bus – vehicle ownership is very high, low cost associated with owning a car (price of the car, fuel, parking are cheap, easy access to car loan).
- The quality of public transport is below international standard.(not popular)



## **IMPROVE – CLEANER FUELS AND TECHNOLOGIES, INSPECTION AND MAINTENANCE**

- **Fuel standard:**
- Currently
  - Petrol (Mogas) – Euro II Level
  - Diesel Euro 1 Level
- Future (petrol & diesel)
  - Euro IV standard by 2016 (target)

# INSPECTION AND MAINTENANCE

## **Vehicle Inspection Centre (VIC):**

–Current regulations for periodical vehicle inspection (roadworthiness):

- Passenger car – age more than 7 years – Inspection annually – before Vehicle License issued.
- Commercial vehicles – age more than 1 year – every 6 months.

– Currently , 2 VIC – computerize and 2 VIC – Manual – all own and manage by Government (Land Transport Department, Ministry of Communication).



# INSPECTION AND MAINTENANCE

## Vehicle Inspection Centre (VIC):

–Initiatives - Future - by 2014 / 2015

- All VIC's will be fully computerize
- By 2014 / 2015 all VIC will be commercialize.
  - Manage and operational - run by private sector through Private Public Partnership (PPP)
  - Examples tested & inspected – Lighting, brake, exhaust emission, noise)

# Vehicle Inspection Centre



## Road Worthiness Limit Requirements

NO	INSPECTION TYPE	RECOMMENDED FIGURES / VALUE REQUIREMENTS
1	Tinted Glass Test	Light Transmission Not Less 70%
2	Side Slip Test	Mode A: 5m/km Mode B:10m/km
3	Braking Efficiency Test	
a)	Drag	10% (Over Axle Weight)
b)	Different	8% (Over Vehicle Weight)
		15% (Over Vehicle Weight)
c)	Sum (Handbrake)	10% (Over Vehicle Weight)
		20% (Over Axle Weight)
d)	Sum(Footbrake)	60% (Over Vehicle Weight)
		50% (Over Axle Weight)
4	HC-CO Test (Petrol powered Vehicle)	< 4.5% for CO Gas by volume HC < 1200 ppm for HC or (Equivalent to Euro2 for Petrol Engine)
5	Diesel Smoke Test (Diesel Powered Vehicle)	<50% HSU or ( Equivalent to Euro1 Diesel Engine)
6	Sound Level Test	
a)	Heavy Vehicle	<91 dB (A) For Truck
b)	Light Vehicle	<91 dB (A) For Car
c)	Motorcycle	<91 dB (A) For Motorcycle
7	Speedometer Test	+ 10% and -15%
8	Taxi Meter Test	Plus .7% variance of Standard Distance =10% Interval 5%
9	Above Carriage Inspection	Refer to form, List of items inspected
10	Under Carriage Inspection	Refer to form, List of items inspected

## Four VICs :-

- 1.Gadong , BSB
- 2.Tutong
- 3.Temburong
- 4.Kuala Belait

To be Commercialization

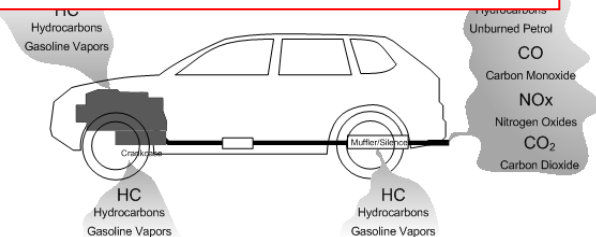
## EXHAUST EMISSION LIMIT REQUIREMENTS

### PETROL ENGINE

Brunei Requirement : 1995 -2012  
 1997 Mandatory to install Catalytic Converter for Petrol Engine  
 Emission Test Limit >4.5% CO<sub>2</sub> by Volume (Equivalent to Euro II Standard)

### DIESEL ENGINE

Brunei 1995 -2012  
 Emission Test Limit > 50% HSU (Equivalent to Euro I Standard)



## **CROSS CUTTING – SAFETY**

- **Cross Cutting Strategies – Zero Fatality Policy**

### New Initiatives

#### **I. Driving License**

- **Amendment of Road Traffic (Driving License) regulations** – eg. To get a license to drive a commercial vehicle must has Class 3 driving license at least 1 year & age not less than 21 years old. Age more than 70 yrs – medical check up.

## **CROSS CUTTING – SAFETY**

- Improve driving curriculum – inculcate defensive driving for new drivers.
- Bus driver – mandatory to attend Defensive Driving course.
- Set up new driving school for commercial / heavy vehicles.
- Build another new Training and Test Driving Circuit.

## CROSS CUTTING – SAFETY

### II. Introduction of DEMERIT POINT SYSTEM

- Pilot project start last year (Mei 2012) and will be fully implemented by Mei / Jun 2013.
- The system is designed to ensure drivers in Brunei Darussalam to be **more disciplined, careful and complying** with existing regulations. Through this system, enforcement agencies will be able to **identify high risk drivers** who may cause danger to other road user.

## CROSS CUTTING – SAFETY

- **Speed Warning Device (SWD) for commercial vehicle** (Heavy Goods Vehicle & Public service Vehicle).
- Year 2013 / 2014 - Up grade / New SWD device – can record data the offences on speeding and driving activities, can print out by enforcement agency.
- **Mandatory** for all commercial vehicle to install SWD.
- Objectives of SWD – for the driver .....; public ....., Enforcement agency ....
  - To regulate the commercial vehicle for being over speeding.



# Speed Warning Device (SWD)

SWD



**Thank You**

# BANGKOK 2020 DECLARATION

STRATEGY	ACHIVEMENT/INITIATIVE
AVOID	CSPS Transport Study
SHIFT	Bicycle lanes Public Transport Networking
IMPROVE	Vehicle Inspection Centre Fuel Quality Hybrid Vehicles
CROSS -CUTTING	Demerit Point System

# Demerit Points System (DPS)

The Demerit Points System is a system whereby a demerit point will be awarded to a driver who commits a traffic offence and has paid a fine or compound. The **point given may lead to either a suspension or revocation of the driver's licence** depending on the severity of offence committed. This system will require offenders to undergo retest and pass both theory and practical driving test if the driver is suspended from driving for the third time.

This system allows a driver to accumulate less than 24 points within 24 months before he becomes liable for suspension. If a driver has been suspended before, he will only be allowed to accumulate less than 12 demerit points within 12 months

## 8 categories of offences :-

- 3 Points
- 4 Points
- 6 Points
- 8 Points
- 9 Points
- 10 Points
- 12 Points
- 18 Points
- 24 Points

## Major Causes of Road accidents:-

- Using mobile phone while driving
- Texting while driving
- Tailgating
- Speeding
- Reckless driving
- Disobeying traffic lights

**Introduces : in Mid 2012.**

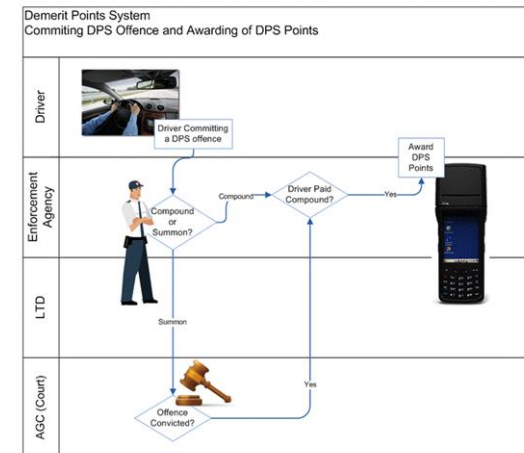
**Implemented in Three (3) Phase:-**

**Phase 1 – Trial, Educate & Road shows**

**Phase 2 - Installation of Road Cameras & CCTV**

**Phase 3 – Full Implementation and enforced**

**DPS Flowchart**



## Initiative Reward

Vehicle owners who have not committed any offence that attract demerit points and have clean record for three continuous years, he will receive a 5% insurance premium discount on top of his "Non-Claim Bonus (NCB)" from the participating insurance agencies provided that he has not made any claim on his NCB during those periods