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# **SUTRI NAMA & INDOBUS**

Sustainable Urban Transport Programme

# Operational Plan, Monitoring & Evaluation Guideline

Road-Based Urban Public Transport Services

Final Report 2020





Ministry of Transportation Republic of Indonesia Directorate General of Land Transportation



#### Operational Plan, Monitoring & Evaluation Guideline Road-Based Urban Public Transport Services

A guide for service provider operators

#### **Final Report**

2020

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### Introduction

The activity of preparing the Operational Plan, Monitoring, and Evaluation Guidelines intend to develop a draft guideline that used as a reference by stakeholders relating to the implementation of road-based urban public transport services. Guideline for Operations Plan, Monitoring, and Evaluation of Road-Based Urban Public Transport Services expected to be able to answer problems in the field in order to facilitate service managers in realizing effective and efficient transportation services.

The activity of preparing the Operational Plan, Monitoring, and Evaluation Guideline expected to provide full benefits, especially for the Government that will organize Urban Public Transport and, in general, to the public.

#### Author

### **Executive Summary**

The Operational Plan, Monitoring, and Evaluation Guidelines consist of three (3) sections: Policy Review Regarding the Implementation of Road-Based Urban Public Transport, Literature Review and Best Practice, and Analysis of Operational Plans, Monitoring, and Evaluation of Road-Based Urban Public Transport Services.

#### Review of Road-Based Urban Public Transport Policy

Four regulations guide the operational plan, monitoring and evaluation of road-based urban public transportation in Indonesia, including PM Number 27 of 2015 and PM Number 29 of 2015, which serves as a guide to monitoring and evaluation of road-based urban public transport. PM Number 15 of 2019 and SE.02 / AJ.205 / DRJD / 2015, which become guidelines for urban public transport operational plans. The regulation becomes the basis for the central government, regional government, and the private sector in the implementation of Urban Public Transport. Local governments can make adjustments by issuing provincial and district/city level regulations. For example, several regional-level rules are governing operational activities, monitoring, and evaluation of urban public transport, namely North Sumatra Governor Regulation No. 31 of 2014 and DKI Jakarta Governor Regulation No. 33 of 2017. In the implementation of this regulation will lead to the issuance of Standard Operating Procedures (SOP ) and Minimum Service Standards (SPM) related to operational, monitoring, and evaluation of urban public transport.

#### Road-Based Urban Public Transport Service Plan

Several components need to consider related to urban public transport operational activities, both referring to existing regulations and the results of studies that have conducted. We need to plan operational plan activities as best as possible because it will be closely related to the services that will be received by the public as users of urban public transport services. That is an effort to increase the number of vehicle users compared to private vehicles that occur in many urban areas. The following is an urban public transport operational planning that needs to be considered by the government and service provider operators.

- a. Route Plan
- b. Cost and Operation Management

- c. Fare and Revenue Management
- d. Customer Orientation
- e. Human Resource Development
- f. Operator Efficiency

#### Road-Based Urban Public Transport Service Monitoring and Evaluation

After operational activities, the next step is the process of evaluation and monitoring in the implementation of urban public transportation. There are several components in the implementation of monitoring and evaluation activities, which include: implementation mechanism, reporting system, and the violation of SOP and SPM as a performance evaluation material. The following are the stages of the monitoring and evaluation activities in the implementation of urban public transportation. Monitoring and Evaluation of Urban Public Transport consists of:

- a. Monitoring Implementation Structure
- b. Monitoring Activities Enforcement and Report
- c. Monitoring of Operating Standard
- d. Violation of SOP and SPM
- e. Performance Evaluation

### Acronyms

Artar Kota Antar Provinsi or Inter-province bus services AKDP Antar Kota Dalam Provinsi or Intra-province bus services AUP Angkutan Umum Perkotaan or urban transport BBG Bahan Bakar Gas or fuel gas BRT Bus Rapid Transit CCTV Closed Circuit Television CNG Compressed Natural Gas GPS Intelligent Transportation System ITS Intelligent Transportation System IN0 Infasructure, Vehicle, and Operation KPBU Kerjasama Pemerintah dengan Badan Usaha or Public Private Partnership IRT Parturan Menteri or Ministerial Regulation RPJMN Rencana Pembangunan Jangka Menengah Nasional or Medium-term national development plan SIM Standar Nasional Indonesia or Indonesia national standardization	AKAP	
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SPM	SPM	
Standar Pelayanan Minimum or minimum service standards		Standar Pelayanan Minimum or minimum service standards

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### **Existing Regulation and Policy Review**

Four regulations guide the operational plan, monitoring, and evaluation of roadbased urban public transport in Indonesia, including PM Number 27 of 2015 and PM Number 29 of 2015 which serves as a guide to monitoring and evaluation of urban public transport. PM Number 15 of 2019 and SE.02 / AJ.205 / DRJD / 2015, which guide the urban public transport operational plan. The regulation becomes the basis for the central government, regional government, and the private sector in the implementation of Urban Public Transport. Local governments can make adjustments by issuing provincial and district/city level regulations. For example, several regional-level rules are governing operational activities, monitoring and evaluation of urban public transport, namely North Sumatra Governor Regulation No. 31 of 2014 and DKI Jakarta Governor Regulation No. 33 of 2017. In the implementation of this regulation will lead to the issuance of Standard Operating Procedures (SOPs) and Minimum Service Standards (SPM) related to operational, monitoring, and evaluation of the implementation of urban public transport.

#### A. PM Number 27 of 2015

Regulation of the Minister of Transportation Number 27 of 2015 concerning Amendment to the Regulation of the Minister of Transportation Number 10 of 2012 concerning Minimum Standards for Road-Based Mass Transportation Services. Indicators of Minimum Urban Public Transport Standards Services established include:

- 1) Security
  - a. Security at bus stops and supporting facilities
    - Lighting lamps
    - Security officer
    - Security breaches information
  - b. Protection on the Bus
    - Vehicle Identity
    - Driver identification
    - Danger signal lights
    - Lighting lamps
    - Security officer
    - The use of window film following applicable regulations

#### 2) Safety

- a. Vehicle Operating SOP
  - Vehicle worthiness
  - Safety equipment
  - Health facilities
  - Emergency response information
  - Grip facility for standing passengers
  - Passenger exit and or entry
  - speed is limiting tool
  - safety belt
  - tire condition and size
  - curtain rails in the window
  - driver's break time
- b. Emergencies handling SOP
- c. Infrastructure safety SOP
  - Traffic equipment
  - Pool facilities

#### 3) Convenience

- a. Convenience at bus stops
  - lighting lamps
  - room temperature control facilities
  - cleaning facilities
  - floor area per person
  - Ease up / down passenger facilities
- b. Comfort in the Bus
  - lighting lamps
  - transport capacity
  - room temperature control facilities
  - cleaning facilities
  - floor area to stand per person
  - smoking ban

#### 4) Affordability

- a. Ease of movement of passengers between corridors
- b. Feeder route integration availability
- c. Fare

#### 5) Equality

- a. Priority seat
- b. Particular room for wheelchair
- c. Floor slope and unique texture

#### 6) Orderliness

- a. Waiting time
- b. Traveling speed
- c. Time stopped at the bus stop
- d. Service Information
- e. Bus arrival time information
- f. Access in and out of bus stops
- g. Bus stop information to be skipped
- h. The accuracy and certainty of bus arrival and departure schedules
- i. Bus trip disruption information
- j. Payment system

In the implementation of mass public transportation, monitoring and evaluation will be carried out based on these Minimum Service Standards indicators., evaluation, and monitoring carried out regularly every 6 (six) months to ensure the fulfillment of the Minimum Service Standards. The evaluation is carried out by the Director-General, the Governor, or the Regent / Mayor by forming a team whose members consist of technical, legal, and public transport associations. The results of monitoring and evaluation reported to the Minister. Urban public transport operators who violate the Minimum Service Standard provisions will subject to administrative sanctions in the form of written warnings, license suspension, and revocation of licenses. Accurately, Monitoring and Evaluation activities are carried out periodically by:

a. Director-General for road-based mass public transportation in urban areas that transcends provincial boundaries

- b. Governor for road-based mass transit in urban areas that transcends district/city boundaries within a province
- c. Regent for road-based mass transit in urban areas within the district
- d. Mayor for road-based mass transit in urban areas in urban areas

#### B. PM Number 29 of 2015

Regulation of the Minister of Transportation Number 29 of 2015 concerning Amendment to the Regulation of the Minister of Transportation Number 98 of 2013 concerning Minimum Service Standards for Transportation of People with Public Motor Vehicles in Routes used to regulate public transport monitoring and evaluation standards consisting of cross-border transport, AKAP, AKDP, Urban Transport, and Rural Transport. Substantially, this regulation has the same contents as PM Number 27 of 2015 but has a difference in the types of public transport modes where PM Number 27 of 2015 is devoted to road-based mass public transportation modes. This Ministerial Regulation also used in the issuance of regulations on the implementation of mass public transportation at the regional government level together with PM Number 27 of 2015.

#### C. PM Number 15 of 2019

Regulation of the Minister of Transportation No. 15 of 2019 concerning the Implementation of Transportation of People with Public Motor Vehicles in Route mandates the general plan of the urban public transport route network to at least contain:

a. The origin and destination of each route

The origin and destination locations of each urban route can be in the form of activity centers and settlements within urban areas.

b. Route stopover

A stopover in the form of bus stops or signs for public transportation stops that are traversed by each route.

c. Road network that is traversed by the route

Each urban route in the city area can be a national road network, provincial road network, and district/city road network. The preparation of the Urban Route Network General Plan is guided by:

- national road traffic and transport network master plan;
- provincial road and traffic network master plan; and
- district/city road network and traffic network master plan.

d. Estimated demand for Urban Transport Services

Determination of the estimated number of public transport services for each route done by considering:

- Estimated trip generation and attraction in each urban area zone
- Mode share
- e. Total number of Urban Transport vehicle

Determination of the number of needs of Urban Transport vehicles in the city area of each route includes the type, type, capacity, and number of vehicles that prepared every day and the frequency of trips that served within a particular time. Determination of the number of Urban Transport vehicle needs for each route done by considering:

- estimated trip generation and attraction in each zone;
- route length and travel time needed safely and economically; and
- types of economic and non-economic transport class services.
- f. Route determination

Route determination of each route done by considering::

- estimated trip generation and attraction in each zone; and
- road class
- g. The preparation of the Urban Route Network General Plan within the city area is carried out by the mayor after coordinating with the relevant agencies through the district/city road traffic and transportation forum.

#### D. SE.02/AJ.205/DRJD/2015

Circular of the Director-General of Land Transportation Number SE.02 / AJ.205 / DRJD / 2015 concerning Approval for the Establishment of a Public Route Network Plan (RUJT) used as the basis for an urban public transport operational plan. In the case of a general route network plan, this regulation has the same contents as PM Number 15 of 2019. However, there are additions wherein the preparation of the route network and the need for urban public transport vehicles must pay attention to:

- a. Regional layout
- b. Level of demand for transport services
- c. Ability to provide transportation services
- d. Availability of traffic networks and road transportation

- e. Conformity with road class
- f. Transport intramodal cohesiveness
- h. Transport intermodal cohesiveness

#### E. North Sumatera Governor Regulation Number 31 of 2014

The Government of North Sumatra has issued North Sumatra Governor Regulation Number 31 of 2014 to facilitate the center of economic activity in North Sumatra. Governor Regulation Number 31 Year 2014 refers to PM Number 27 of 2015 and PM Number 29 of 2015. There are additions to the minimum service standard for mass public transportation, even though in terms of substance, it is still following the contents in the Minister of Transportation Regulation. The regulation of monitoring and evaluation, in general, has the same substance as the Ministerial Regulation. However, there are adjustments to the indicators given there are additions to the Minimum Service Standards.

#### F. DKI Jakarta Governor Regulation Number 33 of 2017

Governor Regulation of the Special Capital Region of Jakarta Number 33 of 2017 concerning Minimum Service Standards for Transjakarta Public Transport Services has a substance that refers to PM Number 27 Year 2015 and PM Number 29 Year 2015. The substance used has the same contents as the Ministerial Regulation, both in basic terms stipulating operational plans as well as monitoring and evaluation of the implementation of Transjakarta services.

Regulation	Additional Content		Legal Basis	
DKI Jakarta	1. Security and bus stops supporting facilities	1.	PM Number 15	
Governor	include: of 2019			
Regulation	a. Security officer 2. PM Number 27			
Number 33 of	b. Security breaches information of 2015			
2017	c. Closed Circuit Television (CCTV) 3. PM Number 29			
	2. Security in the Bus include: of 2015			
	a. Vehicle identity;			
	b. driver's ID and vehicle crew uniform;			
	c. emergency signal lights;			

#### Table 1 Additional Content on Regional-Government Level Public Transport

Regulation	Additional Content		Legal Basis
	<ul> <li>d. bus officers (on-board officers);</li> <li>e. the use of window film following the provisions; and</li> <li>f. closed-circuit television (Closed Circuit Television / CCTV).</li> <li>3. The Company implements SPM following the contract</li> </ul>		
North Sumatera	1. Vehicle Standard	1.	PM Number 27
Governor	a. Vehicle exterior		of 2015
Regulation	b. Vehicle interior	2.	PM Number 29
Number 31 of	2. Service Operation Standard		of 2015
2014	a. operation standard by the transportation		
	agency		
	b. operation standard by the primary operator		
	3. Safety Standard		
	a. Occupational health		
	b. Bans		
	c. Accident handling		
	4. Customer Service Standard		
	a. Customer service		
	b. information		
	5. Reporting Standard		
	a. Reporting mechanism		
	b. Fleet management system		

Source: Author Analysis, 2020

### Literature Review

The process of Operational, Monitoring and Evaluation of Urban Public Transport can be seen based on studies that have been done and based on practices that have applied in the field.

#### A. Study Related to the Implementation of Urban Public Transportation

Urban public transport, according to the National Medium-Term Development Plan (RPJMN) 2020-2024, is the backbone of urban transportation in Indonesia. However, the condition of urban public transportation is currently declining amid the community's dependency on using private vehicles. Many impacts caused by the rise of the use of private vehicles compared to using public transportation include traffic congestion, environmental problems in the form of pollution or from the economic side, which is more beneficial if using public transportation.

Law Number 22 Year 2009 states that the government has the role of coaching and organizing in ensuring the availability of urban public transportation. It is necessary to review the process of operation, monitoring, and evaluation plan in the implementation of urban public transportation. With that, the mechanism of regulation, control, and supervision, as well as the implementation of Urban Public Transport, can take place effectively to ensure the sustainability of the provision of urban public transportation services.



**Figure 1 Mechanisms for Managing Urban Public Transport** Source: Directorate of Public Transportation at the Ministry of Transportation, 2019

Government intervention is needed to prevent the failure of the urban public transport system. The government has the highest position because the government can

develop policies and regulations that must be carried out by other stakeholders in the provision of urban public transportation. These government interventions are carried out through 3 (three) policies, in which the three will strengthen one another in order to provide comfortable, safe, and affordable urban public transportation following minimum service standards. The condition of urban public transport is currently terrible, so that more people use private vehicles. That is following what is mandated in Law Number 22 Year 2009 Article 138, that the government is responsible for organizing public transportation. Each of these interventions has goals, as explained in each section. The three interventions that can be carried out by the government are as follows:

## a. The government bears the most significant risk in providing urban public transport;

The basic principle of risk allocation is the risk imposed on those who can control it. Thus, each actor will be able to carry out their functions and bear the burden following their abilities. The purpose of this intervention is that each stakeholder has their respective responsibilities following their main tasks and functions in organizing urban public transportation. The government that has the most power, the risk it receives, is also the greatest. The government will be present as a regulator, planner, and conduct evaluation and monitoring of urban public transport.

Risk Type	Size (Value for Money)	Financial Ability, HR, Power	Actor	Task
Total Revenue vs.	Big	Strong	Pemerintah	Planning:
<ul><li>Operating Costs:</li><li>Surplus or deficit?</li><li>Public service</li><li>Service Quality</li></ul>	(Billion)			Route, Standard, Supervision, License, Marketing
Operational	Medium	Moderate	Operator	Vehicle:
Disorders:	(Tens -			
	Hundred			How to operate,
				Efficiency,

Table 2 Risk Sharing in Urban Public Transport Operations

Fleet procurement,	s of			Competition,
Organization &	millions)			Marketing
Management,				
Manpower,				
Operations &				
maintenance				
Road Disruption:	Small	Weak	Crew	Run Routes,
	(Maximu			Schedules, Be Careful
Accident, vehicle	m			
disturbance, traffic	millions)			
disturbance				

Source: Directorate of Public Transportation at the Ministry of Transportation, 2019

## b. The government grants licenses to public transport companies that can meet minimum service standards;

The provision of this license intended to guarantee the implementation of public transportation following minimum service standards. That will have an impact on the community as users of public transportation services, which hopes to encourage people to use public transportation compared to using private vehicles.

- □ Licensing of urban public transport services in Indonesia has adopted a quality licensing system. This quality licensing system replaces the previous system, namely, quantity licensing. In the quality licensing system, the Government through a designated agency or contracting body contracts to provide licenses for operators who can meet the minimum service standards for public transport services with particular vehicle operating costs.
- **D** Permit in the form of contract documents and electronic cards consisting of:
  - Decree of permit for the administration of transportation;
  - Declaration of ability to fulfill the obligation to service transportation following the permit granted; and
  - Surveillance card.
- □ Holders of operating licenses for people on Route must::
  - ✤ Implement the conditions specified in the operating license granted;
  - Comply with the minimum service standard provisions; and
  - ✤ Implement a safety management system.

c. The government gives priority to public transportation so that it has an advantage over private vehicles.

After providing guarantees for public transportation facilities by granting licenses, in this section, the government provides the infrastructure that supports urban public transportation such as special lanes. So that it can give the advantages of urban public transportation when compared to using private vehicles. Some provisions in government regulations to give priority to urban public transportation are as stated in Law Number 22 Year 2009.

- Provisions regarding the protection of urban public transport are regulated in Article 158 of Law No. 22 of 2009 which regulates that mass transportation must be supported by:
  - Bus with mass transport capacity;
  - Khusus Special lane;
  - Other public transport routes that do not coincide with the transportation routes;
  - ✤ Feeder transport.
- Article 108 Paragraph (1) provides that the amount of public transport subsidies given to a particular route based on:
  - Difference between operating costs incurred with operating income obtained by the Public Transport Company; or
  - Operational costs for the transportation of people incurred by individual transportation companies if income taken by another party appointed by the subsidy provider.

# B. Study of Monitoring and Evaluation of the Implementation of Passenger Public Transport

The implementation of urban public transportation involves three points of view, namely users of transportation services (passengers), operators, and the Government as a regulator. An overview of the users of transportation services is accessibility, short waiting times, and affordable tariffs, while from the operator side, it relates to the benefits that can obtain. The regulator's point of view is maintaining a balance between the provision of transportation services with the development of needs. One way to maintain the intended balance is to conduct monitoring and evaluation in the implementation of the urban public transport.



Source: Directorate of Public Transportation at the Ministry of Transportation, 2019 Figure 2 Monitoring and Evaluation of Urban Public Transportation

As explained earlier, in the stages of the process of monitoring and evaluating the implementation of urban public transport, there are several interrelated stakeholders. To realize the implementation of monitoring and evaluation activities that are appropriate, structured, and have comprehensive indicators for the results of monitoring and evaluation, each stakeholder must perform their roles and responsibilities as well as possible, which are complemented by methods in these activities. The components in monitoring and evaluating the implementation of urban public transport must be clear and measurable. On the other hand, indicators of the benefits of the existence of urban public transportation must also be clear and measurable as well. The following are the roles of each stakeholder in the Implementation, Monitoring, and Evaluation of Urban Public Transport.

Level	Stakeholder	Stakeholder Role
Strategic	Central Government /	Development & Implementation Framework
	Regional Government	• The Role of Public Transport Supports City
		Vision
		• Tariffs & Subsidies
		Public Transportation Planning (Route
		Network & Operational Service Targets)
		Monitoring and Evaluation
Tactical	Contracting Agency	System Development
		• SOP
		Contract with Operator
		Ticketing System

Table 3 The Role of Stakeholders in the Implementation, Monitoring, and Evaluation of Urban Public Transport

Level	Stakeholder	Stakeholder Role
		Information Systems
		Monitoring and Evaluation of SPM
		Operations Control
		Marketing and Service Socialization
Operational	Operator	Fleet Procurement
		Provision of Services
		Fleet Operations

Source: Directorate of Public Transportation at the Ministry of Transportation, 2019

#### C. Mass Transport Service Operational, Monitoring & Evaluation Practice

Operational and monitoring/evaluation can also see from the applications in the field. In this case, we use three examples as a reference, namely the implementation of operational, monitoring, and evaluation policies carried out by Semarang City and Malang City.

### Table 4 Policy Review Operational, Monitoring, and Evaluation of Urban Public Transport Studies

Activities	Authors	Year	Policy Reference
Implementation of Trans Semarang	Anang Bakhtiar	-	PM 27 Tahun 2015
Bus Rapid Transit (BRT) Policy in			
Semarang City			
Evaluation of Performance of Public	Luciana	2018	PM 29 Tahun 2015
Transportation in Malang City	Yanuarti		

Source: Authors Analysis, 2020

Based on the results of a study of the implementation and operational planning, monitoring, and evaluation in the field, there are several findings. From learning the planned activities of providing urban transportation through Trans Semarang and Malang City Public Transport, the following are essential points to note:

- Most of the operational, monitoring and evaluation determination refers to PM 27 of 2015 concerning Minimum Standards for Road-Based Mass Transportation Services
- b. For the substance is not fixed on the components in PM 27 of 2015 only, but can develop according to needs

c. Operational, Monitoring and Evaluation uses a substance developed from several kinds of literature where the components divided into 4 (four) parts, namely: (1) Implementation, (2) Provision (3) Reporting and (4) Supervision

### Key Points Operations, Monitoring & Evaluation of Urban Public Transport

Urban public transport operational activities require monitoring and evaluation activities to determine the performance of the public transportation implementation both from the government and operator side. Based on the studies that have been carried out based on a review of related policies, study results, and practice in the field in the implementation of urban public transportation, several key points can be conclude.

#### A. Urban Public Transportation Operations

Several components need to consider related to urban public transport operational activities, both referring to existing regulations and the results of studies that have conducted. Operational planning activities need to plan as well as possible because it will be closely related to the services that will be received by the public as users of urban public transport services. That is an effort to increase the number of vehicle users compared to private vehicles that occur in many urban areas. The following is an urban public transport operational planning that needs to be considered by the government and service provider operators.

- a. Route Planning
- b. Costs and Operations Management
- c. Ticket and Revenue Management
- d. Customer Orientation
- e. Human Resource Development
- f. Operator Efficiency

#### B. Monitoring and Evaluation of Urban Public Transportation

After operational activities, the next step is the process of evaluation and monitoring in the implementation of urban public transportation. There are several components in the implementation of monitoring and evaluation activities, which include: how it implemented, the reporting system, and the violation of SOP and SPM as a performance evaluation material. The following is an explanation of each of the stages of the monitoring and evaluation of urban public transport activities.

#### **B.1** Monitoring Implementation Structure

Monitoring activities carried out every six months. They carried out throughout the network of routes operated in order to maintain the quantity and quality of services so that they can continue to run well. The monitoring activities classified into the following groups:

- a. Supervision of Activities of Drivers;
- b. Oversight Activities of Operational Standards;
- c. Oversight Activities of the provisions of the relevant laws and regulations;
- d. Supervision of SPM;
- e. Oversight Activities of Oversight and Control Officers.
- f. Expenditures Monitoring Activities and Utilization of Operational Assistance Costs

#### B.2 Reporting and Enforcement of Monitoring Activities

It is necessary to have accuracy in reporting from bus operators to Urban Public Transport Providers to ensure the availability of the best sustainable services for users, which divided as follows:

- a. Complete data of bus conditions
- b. Passenger complaint data
- c. Driver performance data (Accident Report History)
- d. Operational Plan implementation data (Trip, Ritase, Trip per Route, and Kilometer of Bus Travel)
- e. Data regarding accidents that occur and their causes

#### **B.3** Monitoring of Operating Standards

BUS OPERATORS are required to comply with the Standard Operating Procedures established by the TRANSPORT ORGANIZING AGENCY, by taking into account the principles of proper public transport management and designed so that the operation of the Public Transport Service can provide services that are fast, precise, safe, comfortable, and inexpensive, to the community as its users.

- a. Bus Standards
- b. Operating Standards
- c. Standard Kilometer Recording Standards
- d. Safety Standards

- e. Accident Management Standards
- f. Customer Service Standards
- g. Reporting Standards

#### B.4 Violation of SOP and SPM

One of the main functions of monitoring activities is to ensure the proper and correct application of Standard Operating Procedures (SOPs) and Minimum Service Standards (SPM). Therefore, in order to provide a warning that the application of Standard Operating Procedures (SOP) and Minimum Service Standards (SPM) can run well and smoothly, a sanction mechanism is needed for violations of Standard Operating Procedures (SOP) and Minimum Service Standards (SPM).

a. Sanctions for violations

Sanctions for violations are divided into 4 (four) categories, as follows:

- Sanctions for violations committed by the Driver;
- Sanctions for violations committed by Bus Operators;
- Sanctions for violations of the provisions of the relevant laws and regulations; and
- Sanctions for violations of Public Transport Service Minimum Service Standards
- b. How to Apply and Calculate Sanctions
- c. Procedure for Implementing Sanctions

#### **B.5** Performance evaluation

The performance evaluation process carried out to determine with certainty the level of achievement of results, progress, and constraints encountered in the implementation of Activities, to then used as input for improvement. In carrying out this evaluation, indicators need to assess the achievements of the evaluation results. Evaluation indicators used are as follows:

- a. SPM that has been determined based on Government Regulation Number PM. 27 of 2015 concerning Minimum Road-Based Mass Transportation Service Standards
- b. Amount of sanctions given to Operators for SOP and SPM Violations
- c. Number of accident occurrences
- d. Passenger Achievements

### **Operational Plan**

#### A. Review of Urban Public Transport Operational Plans Best Practices

The Public Transportation Operation Plan can take lessons from Trans Milenio in Bogota, which is an urban transportation system with the BRT model, which is currently in the spotlight and a positive example for other big cities, especially for developing countries including Jakarta. A concrete example seen from the success of Trans Milenio in transporting 2.4 million passengers per day. Trans-Jakarta was also inspired by Trans-Milenio Bogota, which was first built and operated long before and was a huge success. TransJakarta considered to have a significant increase due to the achievement of 1 million passengers per day in early 2020, where TransJakarta built-in 2004. Even so, the two examples of best practices have differences following the characteristics of each region and do not rule out the possibility to developed to be able to improve transportation services, urban general.

#### A.1 Transjakarta

Transjakarta is the first BRT system in Southeast Asia, which opened in 2004. Trans Jakarta is an example of the development of urban public transportation with the BRT system, which widely used as a reference by other regions, especially in Indonesia. The following is a detailed description of TransJakarta operations.

	<ul> <li>Combined Closed Trunk and Direct Service systems with integrated feeder services</li> <li>High platform for passengers to get on and off the main corridor</li> <li>Procurement of buses by the public sector and operations by the private sector</li> <li>Operational Achievements 1 million passengers / day</li> </ul>
City Characteristics	<ul> <li>Jakarta is the capital and largest city in Indonesia, with the ninth-largest urban population density in the world.</li> <li>Jakarta has an area of 661,52km2, an urban population of 8,792,000, and a population density of 13,300 / km2.</li> <li>Road traffic is weighty, especially during rush hour due to high urban population density</li> </ul>

#### Table 5 Transjakarta Profile

	• Indonesia's per capita GDP (2006) is US \$ 3,900	
Situation "Before"	• Between 1985 and 1993, the number of daily passengers from	
TransJakarta	the suburbs to Jakarta quadrupled.	
	• In 1998, 24.5% of total trips made by car, 26.2% by motorbike,	
	and 49.3% by public transportation (most of which use buses).	
	• In the late 1990s, the average annual growth rate in vehicles	
	was more than 9%.	
	High congestion.	
	• The bus system in Jakarta uses route licenses granted by the	
	government to different operators without coordinating	
	services on the route or regulating service quality, frequency,	
	reliability, or safety.	

Source: Author Analysis, 2020

Transjakarta is a Bus Rapid Transit (BRT) transportation system designed as a mass transportation mode supporting capital activities that is very crowded. Transjakarta is a BRT system with the longest path in the world (251.2 km). It has 243 BRT stations (previously called shelters) spread over 13 corridors, which initially operated from 05.00 - 22.00 WIB, and now operate 24 hours in some corridors. As a model that widely used as an example of the development of urban public transportation in Indonesia, Transjakarta has the following operational service characteristics.

Component	TransJakarta
Characteristics of BRT Schemes	At present, TransJakarta has 13 main corridors and 250 routes. Of
	the 250 routes operating, 54 are the main BRT routes, 14
	Transjabodetabek routes, 72 Integration routes, 13 Royaltrans
	routes, 69 Mikrotrans routes, 21 Public housing routes, and 7
	Tourism Transport routes (TransJakarta, 2020).
Cost Scheme	US \$ 16 million / km (DKI Jakarta Government Regulation
	Number 62 Year 2016)
Frekuensi Tinggi dan Jam	High Frequency and Long Operating Hours
Operasi yang Panjang	

#### Table 6 TransJakarta Operational Characteristics

Component	TransJakarta
Stations with High Elevation	A station with a high platform provided to get passengers up and
Connected to the Sidewalk	down faster. In most cases, the station is connected to the sidewalk
	by a pedestrian bridge.
Newly acquired bus with a	The total capacity of each maxi bus (100) and articulated buses
capacity of 100	(140)
Increased Traffic Congestion on	Closed bus lanes converted from existing mixed traffic lanes
Mixed Traffic Lines	without regulatory control. As a result, even after new buses
	operated on new bus lines, almost all buses that initially run along
	the corridor continue to operate on mixed traffic lanes that are
	parallel with bus lanes. Removal of this existing bus significantly
	increases congestion on mixed traffic lanes.
Cheap but Limited Distance	The reasonable fare is only around Rp. 3,500 (US \$ 0.30), lower
Services	than other air-conditioned buses in the corridor. However,
	standard air-conditioned buses go further. Average air-
	conditioned buses have fares> Rp. 15,000
Limitation of Requests and	Although demand along TransJakarta Corridor 1 is higher than
Revenues	projected, it is still less than half of the total public transport
	passengers in the corridor due to the lack of a feeder system. As a
	result, revenue is only able to cover operational costs but not
	enough to cover bus procurement costs.
Capacity Limitation	TransJakarta corridor capacity is only 6,000
	people/hour/direction, compared to other BRT systems in the
	world, such as Curitiba and Quito, which have a capacity of 12,000
	people/hour/direction, and Bogota with a capacity of 35,000
	people/hour/direction on two lines. One of the main reasons for
	Transjakarta's low capacity is the relatively small size of its buses.
	Another reason is that buses and bus stations only have one door,
	thus reducing the speed of going up and down.
City responsibilities for	In the TransJakarta organizational structure, the implementing
infrastructure and bus	agency is the Jakarta City Government, while the operating body
procurement	is the operator body, which is a public authority. The operating
	agency operates buses purchased by the city government during
	the period of their operating contract. Therefore, all financial costs

Component	TransJakarta	
	and risks of the system have been borne or subsidized by the city	
	government.	
Demand is Expected to Increase	Although the first bus corridor opened only 12.9 km, additional	
After Opening New	bus routes/corridors has been operated. When other	
Route(s)/Corridor(s)	route(s)/corridor(s) are open, demand for the first lane expected	
	to increase significantly. Therefore, it is essential to increase	
	capacity in the initial corridor.	
Procurement of Advertising	In order to improve the services of PT Transportation Jakarta	
Service Providers on	(Transjakarta), companies need to be strengthened with non-ticket	
TransJakarta Buses	revenue or non-fare box revenue ("NFB") through the	
	optimization of assets, especially on buses operated by	
	Transjakarta in the form of revenue from advertising media.	
	• The advertising partner will manage 1.521 bus units	
	operating on all routes owned by Transjakarta.	
	• Advertising partners are required to do revenue sharing	
	(revenue sharing) with Transjakarta at a minimum of 70%	
	(seventy percent) of advertising gross revenue (gross	
	revenue sharing);	
	• Advertising partners are required to offer/propose a	
	minimum annual income guarantee against point no. 2	
	(two) above.	
	• Trasiakarta requires Advertising Partners to submit a	
	signing fee of at least IDR 20 000 000 (Twenty Billion	
	Rupiah) paid upfront after being declared the winner	

Sumber : BRT Guide ITDP, 2020

#### Lesson Learnt from TransJakarta

► Large capacity buses with more than two doors needed for the BRT system. The main reasons why TransJakarta's capacity is much smaller than other BRT systems in the world are its limited bus capacity and slow up and down movements caused by a limited number of doors. Large capacity buses with separate doors for up and down have provided to increase corridor capacity through the BRT project.

- ► Feeder systems are essential for capturing passenger demand. The lack of Transjakarta feeder systems results in less competitive compared to other private buses that run further, and passenger demand is barely enough to cover operational costs.
- ► Buses must be purchased and owned by bus operators. TransJakarta is an example where all financial costs and risks of the system have been borne by the Government, with operating entities having no responsibility. This system problem resulted from the operator body not having a strong incentive to maintain the bus, so the bus had problems in terms of routine maintenance.
- ► <u>Technical training for bus operators is crucial to introduce the BRT system in</u> <u>developing countries that have no experience with modern bus operating</u> <u>systems.</u> The operator agency has difficulty with scheduling, estimating the workforce needed, and conversely estimating costs and managing business because none of the five companies that formed it operated as modern bus companies in the past. Training and technical support should provide to operators before the opening of the BRT.
- The introduction of bus lanes without regulatory steps in the corridor increases traffic congestion on mixed lanes. To reduce traffic congestion on both bus lanes and mixed lanes through BRT projects, regulatory measures such as prohibiting bus operations on mixed lanes that run parallel to bus lanes, as well as increasing capacity on bus lanes, are essential.

#### A.2 Trans Milenio

Trans Milenio, Bogota (Colombia): Bus System Similar to Curitiba with Several Improvements, Appears in Three years. The entire system, which consists of four phases, is planned to cover 95% of the urban area over 28 years to meet the mobility needs of the majority of the population. Trans Milenio is a closed trunk and feeder system, including an extension of the 388 km trunk route to serve 5.5 million passengers/day. In 2002-2003, TransMilenio phase 1, which consisted of three main corridors with a total length of 42 km and seven feeder routes with a length of 346 km, began operations. Phase 2, consisting of three main corridors, a total of 43 km, was opened in 2005. Transmilenio is now planning a third phase of the main route to have at least 80% of the city's population within 500 m of the mainline. The following is a description of Trans Milenio's operations in Bogota.

	<ul> <li>Exclusive bus lanes designed for trunk and bus feeder lines</li> <li>Control bus quantity</li> <li>Express and local services on two lines in each direction</li> <li>Frequent bus services at 2-3 minute intervals</li> <li>High-speed BRT system 26 km/hour</li> </ul>
City Characteristics	<ul> <li>Bogota has an area of 1,587 km2, an urban population of 6,778,691, and a population density of 22,300 / km2.</li> <li>Mountains surround the city.</li> <li>The city layout dates back to colonial times with a square layout adopted from Spain.</li> <li>Colombia's per capita GDP (2006) is US \$ 8,600.</li> </ul>
Situation "Before" Trans Milenio	<ul> <li>In 1994, the city had too many (22,000) small and old, but highly polluting units, which were controlled by more than 60 loosely formed "companies" or "associations."</li> <li>Buses have an average age of 14 years and an average occupancy of only 45%.</li> <li>The average trip takes 1 hour 10 minutes due to the low speed of the bus system.</li> <li>Private vehicles use 95% of available road space for only 19% of all motorized trips.</li> <li>70% of particles released into the atmosphere come from cellular sources. One thousand two hundred deaths per year caused by pneumonia related to air pollution.</li> </ul>

#### Table 7 Trans Milenio Profile

Source: Author Analysis, 2020

TransMilenio is a mass transportation system in Bogota, Colombia, which opened to the public since December 2000. Based on the model used in Curitiba, Brazil, TransMilenio consists of several stations along the main road. Users pay tickets at the station and wait for the arrival of the bus, whose door opens along with the sliding glass door of the station. An exclusive bus lane on each side of the station allows express buses to pass without stopping while other buses stop to raise or lower passengers. Transmilenio has the following operational service characteristics.

Component	Trans Milenio
Characteristics of BRT Schemes	The entire system, which consists of four phases, is planned to
	cover 95% of the urban area for 28 years, to meet the mobility
	needs of the majority of the population. The system is a trunk and
	feeder, as well as a closed system, including an extension of the
	388 km trunk route to serve 5.5 million passengers/day. In 2002-
	2003, TransMilenio phase 1, which consisted of three main
	corridors with a total length of 42 km and seven feeder routes with
	a length of 346 km, began operations. Phase 2, consisting of three
	main corridors, a total of 43 km, was opened in 2005.
	Transmilenio is now planning a third phase of the main route to
	have at least 80% of the city's population within 500 m of the
	mainline.
Cost Scheme	Public funds for phase 1 (42km of corridor trunks and 346 km of
	feeder roads) amount to US \$ 297 million, which is equivalent to
	planning and infrastructure. They are used to build exclusive bus
	lines, closed bus stations, terminals, control centers, parts of the
	Global Positioning System (GPS), and sidewalks and bicycle lanes
	in the same corridor.
Two Exclusive Lines in Each	In the main-lane, TransMilenio uses two special lanes in each
Direction	direction and operates express and local services. Express operates
	at 26 km per hour in the outer lane and stops at certain stations
	only. Local services operate at 21kph, in the inner lane, and stop
	at all stations. This system facilitates the transfer between two
	services.
Public Control over Bus	The city government regulates TransMilenio S.A., which is a state-
Operations	owned company for planning, management, and control of the
	operation of the TransMilenio bus system. Existing bus
	companies forced to reorganize and form four companies, which
	finance the procurement of new large buses under government
	supervision. Also, at the same time as giving the four companies
	operating legal rights to operate TransMilenio buses, the city
	moved all existing private buses to parallel corridors to limit the

### Tabel 8 Trans Milenio Operational Characteristics

Component	Trans Milenio	
	number of buses on the busway. The city also gives TransMilenio	
	the right to reduce the total number of bus kilometers in the	
	system to maximize the potential profitability of the corridor.	
Bus Procurement and Operation	TransMilenio does not require operating subsidies and generates	
without Subsidies	significant profits for its operators. Operating companies are paid	
	around US \$ 2.2 / km from the bus services provided. Also, the	
	procurement of new large buses financed by private operators.	
Subsidies for Public Investment In the TransMilenio financial structure, public fu		
in Planning and Infrastructure	planning and infrastructure. For the development of the BRT	
	system, the district established a sustainable financing process by	
	allocating 50% of the fuel surcharge and also obtaining funding	
	commitments for the project by the national government. Phase 1	
	financed with fuel surcharges, contributions from the Central	
	District sector, World Bank credit facilities, and national	
	government subsidies.	
Detailed planning for	For phase 1, TransMilenio invested around US \$ 1 million in	
developing a financially	traffic demand modeling and planning studies to estimate the	
sustainable BRT system	demand for public transport trips that developed for the three	
	initial corridors. Cities implement a BRT system based on these	
	studies, which works well in building a financially sustainable BRT	
	system.	
Dramatic increase in Busway	At the start of the project, based on estimated demand, bus sizes,	
Capacity	and bus occupancy maximized, reaching a maximum reduction in	
	transit service costs per passenger-kilometer. Larger buses	
	installed and the number of buses decreases. As a result,	
	transportation capacity, which was 30,000 people/hour per	
	direction before implementation, increased to 45,000	
	people/hour.	
Bus Fares Rise without Public One year before the system opened, TransMilenio calcu		
Appeal	costs needed to achieve financial self-sufficiency based on	
	estimated demand. According to calculations, the cost required for	
	TransMilenio is equivalent to US \$ 0.40, while the private bus at	
	that time is US \$ 0.30. Then, one year before its opening, Bogota	
	agreed to increase the regular bus fare from US $0.30$ to US $0.40$	

Component	Trans Milenio	
	for private buses operating in Bogota. There were many loud	
	protests against the tariff increase applied by private bus operators,	
	but when TransMilenio opened, people became accustomed to the	
	new fares. Also, because the fees for TransMilenio are the same as	
	private buses but traveling with TransMilenio is much faster and	
	higher quality, these independent private operators quickly lose	
	passengers on parallel routes and reduce service.	
High Frequency and High-	Both express and local services on the baggage lane operated at 2-	
Speed Bus System	3 minute intervals during peak hours. The frequency of the feeder	
	bus is about five minutes. Also, express bus speeds are 26 km / h,	
	and local services are 21 km / h, while the average bus speed	
	before TransMilenio opens is 18 km / h.	
Control Bus Supply by Smart	Intelligent Transport System (ITS) is one of the elements that	
Transportation Systems	enable effective TransMilenio operations, which operates a	
	control center that oversees services. Each articulated bus	
	equipped with a GPS and processing unit that reports its location	
	every six seconds. The control center also receives information	
	from the turnstile that reports the number of passengers entering	
	and exiting. Bus supply and service requests are then coordinated	
	and managed in real-time.	
Bus stations are like subway	TransMilenio stations such as train or subway stations, with many	
stations	doors, boarding vehicles, collecting tariffs at station entrances,	
	electrical information signs showing arrival times for vehicles, and	
	partitioning of glass doors between stations and vehicles. This	
	system allows passengers to ride smoothly, allows convenient	
	operation, and improves service levels.	

Source: Asian Development Bank, 2008

#### Lesson Learnt from Trans Milenio

Bus-based mass transit systems can be built and operated more efficiently than railroad systems in urban areas. A significant achievement of TransMilenio is that it established a bus-based mass transit system with a transport capacity of 45,000 people/hour in each direction and operates at high speed, on time, with frequent and convenient services, and with relatively low capital costs. It shows that buses operating on the surface using vehicles with rubber tires, without electricity, can be used for high-quality systems.

- Public funds for TransMilenio are only used for planning and infrastructure but do not yet require operational subsidies, funding for bus procurement, or city bank guarantees. This long-term economic and financial sustainability beyond initial capital investment achieved because it is the main objective of the planning process from the beginning to the implementation.
- ► Firm control by one public entity enables well-coordinated bus operations. TransMilenio S.A. is a single state-owned company that carries out planning, management, and control of the operation of the TransMilenio bus system. It also operates a control center and controls the number of buses. All companies that operate buses provide bus operations according to the direction of TransMilenio S.A. and paid per operation km. This firm control by one public entity has brought success to TransMilenio's operations.
- Connection with the existing road transportation system is essential for the <u>BRT system.</u> Efficient connections with existing road transportation systems, such as feeder buses, improve service quality, and passenger comfort.
- ► **ITS makes bus operations more effective.** TransMilenio controls the supply of buses to meet service demand to maximize the benefits of the corridor with ITS at the control center of the system.

#### A.3 Comparison Between Transjakarta and Trans Milenio Operational Plan

Based on the results of operational benchmarks of urban transport that have carried out, namely, seeing Transjakarta and Trans Milenio, which are the best practices of urban public transport. Both of these examples have differences from several aspects related to operations following the characteristics of their respective regions. That is not only physical but related to social and economic aspects. The following is a comparison of Transjakarta and Trans Milenio operational plans.

Component	TransJakarta	Trans Milenio
Route Type	Combined Closed Trunk and Direct	Exclusive bus lanes designed for
	Service system with integrated feeder services	baggage lanes and feeder bus lanes

Table 9 Comparison Between TransJakarta and Trans Milenio Operational Plan

Component	TransJakarta	Trans Milenio
Service Range	from 5:00 to 11:00 at night. Seven routes have a limited overnight service that provides 24-hour operations.	4:30 in the morning and ends at 11:00 at night
Operating Period	Monday - Sunday	Monday - Saturday (with Sunday service if requested)
Minimum <i>Headway</i>	<ol> <li>Headway plan, which is no more than 10 minutes during peak hours for corridors with a small number of passengers and no more than 5 minutes in corridors with high demand.</li> <li>Headway accuracy, tolerable standard deviations should not be more than 2 minutes in a busy corridor and no more than 4 minutes in a quiet corridor.</li> <li>The maximum passenger boarding and alighting time is 20 seconds</li> </ol>	Services start at around 4:30 a.m. to 5:00 a.m., and end at around 12:50 a.m. until 1:15, depending on the channel and service. Express services stop at 40 to 60 percent of stations, while super-express services stop at less than 20 percent of stations. These two types of "all-day services" usually end at 8:00 at night. Alternatively, 10:00 p.m. A two-minute headway is typical during peak periods for each service channel, which results in a combined headway as low as 13 seconds at a busy station along the trunk corridor. Off-peak service placed a maximum of 10 minutes.
Average Operational Speed	15 km / h (with a maximum of 40 km / h, especially in elevated corridors)	The implementation of TransMilenio has increased the average travel speed of public transport by around 15km / hour to 26.7 km / hour
Bus Stop Placement	Every 700 m	Every 500 m
Fare	Initially, the customer only did a ticket transaction with Tap In at Barrier Gate when entering the bus stop. Furthermore, on August 17, 2016, customers must also leave when leaving the bus stop. Electronic	The tariff in 2019 is 2,400 Colombian pesos for a single trip (around € 0.67 or US \$ 0.78). The card uses a contactless smart card system (MIFARE), and several trips can be purchased using one card.
Component	TransJakarta	Trans Milenio
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Usera (whole system)	money balances only deducted when Tap Enter (enter the bus stop). There are no tariff changes related to the implementation of Tap Out. By taping out, the customer has helped Transjakarta get data about the customer's destination location. This data used to optimally improve routes and services according to the needs of loyal Transjakarta users. TransJakarta rates: 5am - 7am = Rp 2,000 07:00 AM - 24.00 PM = Rp. 3,500 24.00 PM - 05.00 AM = Rp. 3,500 1 million / day (2020)	2.4 million / day (2018)
Bus Capacity per unit Number of buses	<ul> <li>Mercedes-Benz and Hino Tunggal (85 passengers)</li> <li>Scania and Mercedes-Benz Maxi (100 passengers)</li> <li>Standard articulated bus (140 passengers)</li> <li>1,347 buses, consisting of single buses and articulated buses</li> </ul>	TransMilenio menggunakan bus gandeng di koridor trunk dan bus 40 kaki pada rute feeder. Bus gandeng memiliki panjang 19 meter dengan kapasitas hingga 160 penumpang (48 tempat duduk). 1,685 buses, with an additional 777 feeder buses
System Lengths	251.2 kilometers (the longest BRT route in the world)	114.4 kilometers

Source: Author Analysis, 2020

## B. Development of Urban Public Transport Operational Plans

Based on the results of a review of previous urban public transport operational plan activities, several components can develop going forward. The operational plan is part of a strategic urban transportation policy that usually establishes the basis of aspects of the business (business) and feasibility of the service system. The operational plan will determine the scope of the system and service level standard, so it will significantly affect the planning and design of infrastructure and facilities such as bus stop dimensions, vehicle capacity and type, route conditions, and tariff policies.

The business model must also be able to estimate the required service coverage and financing for those services, which ultimately determines the amount of the commercial tariff (the total actual cost divided by the estimated number of passengers). If there is a government policy to set public tariffs below the commercial rates, the government must prepare a replacement for the difference in the shortage of commercial rates, which commonly defined as subsidies for users.

## B.1 Route Plan

Urban public transport route planning is generally designed on main corridors (arterial roads) to ensure high travel speeds and operating reliability. To serve the travel generating areas through collector roads generally use feeder services, so that urban public transport service routes are simple and easily understood by users and do not need to take a circular route that has the potential to reduce total travel speed. A good route system design will be able to optimize travel time, and ease for most trips and significantly reduce operational costs. Therefore an active route network can be achieved if it meets the following basic principles:

- a) Minimizing the number of transfer passengers;
- b) Setting up regular/local, patas and express services in the service system;
- c) Cut several service routes to focus on segments that have high demand.

Several criteria met in determining service routes in order to meet the principles of efficiency and effectiveness. These criteria include:

- a) Consider the minimum requirements (minimum requirements);
- b) Minimize route overlap;
- c) Following the geometric characteristics of the road;
- d) The length of the route is restricted (in the context of the commute travel time);
- e) Take the same route for a round trip / avoid loop routes; and
- f) Avoiding terminals (terminals) end of service in the downtown area.

For ensure the achievement of the magnitude of demand on urban public transport routes, several locations or areas with significant potential trip generation need to be linked as follows:

- a) Central business district;
- b) Schools and colleges;
- c) Shopping centers;
- d) Hospitals and other primary health care facilities;
- e) Entertainment/recreation and sports centers;
- f) Inter-city (regional) transportation facilities such as airports, ports, railway stations, bus terminals);
- g) High density residential and commercial areas.

The length of the service route must be limited to ensure the reliability of the operation determined from the commute time of not more than 2 (two) hours and if forced to a maximum of 3 (three) hours, taking into account the criteria in determining urban public transport routes. That is base on an assumption because each traveler will choose the minimum distance, time, and cost or a combination of the three. (Suwardjoko Warpani, 1990). Also, it is related to driver fatigue. The number of service routes in a corridor adjusted according to the size and demand characteristics of the related corridor but needs to be limited to make it easier for users to recognize the services available in the corridor. In principle, the number of service routes needs to designed to a minimum, with the consideration that it is better to provide less high-frequency services than many low-frequency services. If necessary, branching routes should not exceed 2 (two) routes for each main route. An example is the case of the Transjateng service and the failure of Trans Mamminasata, which is a semi-BRT system between cities with a long route, so it felt to be less effective.

For direct public services/trunk urban public transportation services are generally carried out on the road network that becomes the backbone of urban areas or corridors that have a very high potential for generation and traction. If the urban public transport operational plan operated with the Trunk and Feeder pattern in a corridor, then the structure of the operating route network needs to be reorganized with various approaches as follows:

a) Urban Public Transport Corridor is the main lane (Trunk) with an infrastructure system that matches its operational design

- b) Conversion of several routes that connect areas outside the coverage of the Urban Public Transport corridor and can function as feeders and operate them in an integrated manner through the transaction system and the use of lanes & stops both full and partial
- c) Conversion to regional services based on area (not route) services and functions as feeders and does not have to be fully integrated (system and physical)



Source: Processed from various sources



#### **B.2** Costs and Operations Management

Understanding of this aspect is not limited to managing systems and providing services but is actively developing service patterns and growing businesses. Costs and operations management are closely related to the planned design of urban public transport service operations. That will have an impact on the amount of cost required and how to perform service management following the desired operating service targets. Some variables that need to be considered related to the cost and management of urban public transport services are as follows:

a. System Operating Pattern

Restrictions on the number of operators and vehicles in the Urban Public Transport system can have a significant impact on vehicle travel speed, the environment, and the aesthetic quality of the system. The pattern of operations that limits the number of operators and fleets in urban public transport service corridors defined as a closed system. This closed system is usually related to the BRT service system, which is carried out by one operator in one corridor. The number of operators, the number and specifications of the fleet are determined based on the open auction process to get excellent service quality for users. Conversely, if many operators involved in one type of service, it will have a negative impact related to the services provided. That will not have an impact on tariffs, because the government has determined tariffs.

The pattern of operation that does not apply restrictions on the number of operators, fleets, and specifications is defined as an open system so that all types of fleets and existing services can use the urban public transport service corridor. That is usually for the BRT transport service system, which mixed with other public transport services or regular public transport without BRT. In this case, the factors of tariff, comfort, and quality of service will determine the passengers in choosing the transportation used.

b. Network and Service Design

Reference to design the concept of operation and service network structure in a corridor that established for the operation of the urban public transport service system used as an initial reference, but ideally based on demand analysis according to the conditions of each city. Meanwhile, to determine the location or characteristics of the area/corridor following the operating patterns and structure of the urban public transport service network.

c. Route Design

This route will be related to the length of urban public transport services as the operating service target. That will also affect the amount of costs required to administer urban public transportation.

#### d. Service Design

Service frequency and distance between bus stops are complementary aspects of the physical design features of the entire urban public transport service system. This service design can include a single route, a group of routes, and the entire urban public transport service network. The preparation done in stages in line with the development of the infrastructure. There are several types of services in the operational network of urban public transport services that grouped into system categories (such as BRT) or non-BRT and whether or not integrated tariffs.

e. Range (Operating time) Services

The time (day and hour) of the Urban Public Transport Service system defines the range of services provided for one day/week/month/year. Ideally, this operational time concept designed as carefully as possible as applied to rail-based urban public transit (MRT, LRT). That is to guarantee users that urban public transport services will always be available at any time without needing to see the schedule whether the required services are available or not. Although service time ranges for urban public transport service routes designed in stages, it strongly recommended to be fully implemented throughout the day and throughout the week so that the image of the urban public transport service system (which is similar to BRT or MRT / LRT services) is maintained.

f. Service Frequency

The service frequency principally designed according to the amount of demand in the service corridor and the size of the vehicle used for each type of service in the same corridor (route). However, the design of these service frequencies must still meet service standards, such as for rail-based urban public transportation and minimum service standards set by the local (or national) city government for the BRT system. However, ideally, service frequency is calculated to ensure service capacity achieved according to the amount of demand based on field data.

g. Estimated Type and Amount of Fleet

The capacity of the urban public transport service system designed to meet the following objectives:

- 1. Meeting the amount of demand (existing and forecast);
- 2. Achieve an average commercial speed of 25 km / h or more;
- 3. Minimizes door to door travel time from users.

- h. Estimated Number of Platforms at the service point (bus stop)
   Because the infrastructure of the urban public transport service system built in stages, in line with the increase in demand, the need for the number of platforms at a service point (Stop) in the Trunk & Feeder system can be estimated.
- Selection of Urban Public Transport Vehicle Technology
   The choice of technology, supply, and operation of vehicles is complicated and depends on different legal, operational, institutional, and strategy factors for each case. There are several stages in the selection of Urban Public Transport vehicle technology. The initial and most crucial stage involves identifying the specific needs of the project and requirements for the needs of the transport fleet. Most of the analytical processes for this determined before finalizing the technical specifications. In general, the basics for choosing a vehicle include:
  - 1) Vehicle size;
  - 2) Chassis and body configuration;
  - 3) Choice of interior design;
  - 4) Fuel and booster technology;
  - 5) Aesthetic choices;
  - 6) Vehicle docking options;
  - 7) IT systems on vehicles (steward communication, CCTV, and GPS).

## B.3 Ticket and Revenue Management

Modern urban public transport systems must base their tariff policies on clear objectives (such as service quality and sustainability) without prejudice to aspects of affordability. Basis for setting tariff policies can consider:

- Maximize revenue acquisition opportunities by creating services that passengers want to buy;
- b) Providing incentives in the form of discounts for intensive use of services, portraying urban public transport services as a lifestyle choice, guaranteeing affordable and competitive fares for commuter travelers;
- c) Give discounts to specific groups of users who need it most (elderly & students);
- d) Calculate rates based on travel distance and set appropriate and accessible rates (rounding) for customers.

Often the new urban public transport system is considered to be free of subsidies because of its efficiency and transport capacity. That is true for ideal situations and conditions, and indeed there are some systems whose operations do not require subsidies. However, various issues often found to be an operational burden, so that to be able to maintain the required service standards, the Government needs to provide support in the form of incentives to:

- a) Services that are not commercially viable (evenings, weekends). This form of service assisted by applying the concept of public service obligation (PSO) so that the government has a legal basis to provide funds for help.
- b) The interests of a broader transport policy strategy such as promoting the use of public transport through incentive policies or special tariffs (discounts) by providing compensation to cover some of the shortcomings of commercial tariffs, or providing subsidies for some cost components.
- c) Provide subsidies on specific cost components, such as subsidies for fuel.
- d) A specific policy that has an impact on additional costs such as requirements for the use of alternative fuels such as BBG or CNG.
- e) Temporary support, until the urban public transport service system, reaches a scale of service size that allows for financial independence.

Related to sources of income in organizing urban public transportation can be obtained from various sources. These sources can come from domestic APBN / APBD or other legal sources or come from foreign financing. Related to this, usually, the government will provide related costs related to the implementation of public transportation to support operators in carrying out urban public transport services. Sources of revenue that may be obtained by operators can be from the government in the form of subsidies, income from commercial development in terminals and main stops, income from advertising, and cooperation with banks related to e-ticketing.

Table 10 Identification of Funding Sources and Operational Financing forUrban Public Transport

No	Component	Source
1	Cost	a. APBN/APBD
		b. KPBU
2	Revenue	a. Operating Income (ticket)

b. Subsidies
c. Non-Operational Income
• Advertisement
Banking Cooperation ( <i>e-ticketing</i> )

Source: Author Analysis, 2020

## **B.4** Customer Orientation

Marketing is not a separate activity but an integrated part of this agency's primary duty. The following figure illustrates the relationships between divisions related to customer service issues.



Source: Adaptation from JICA, 2012 Figure 4 Relationship and Response to Customer Service Issues

Contrary to the usual situation, these institutions must manage demand-based systems so that the emphasis is on developing revenue generation and marketing with the following strategies:

- a) Stakeholder analysis for each leading group (users, car and motorcycle drivers, women, students, special needs groups, angkot, PO, the business community, schools, and universities);
- b) Developing services that meet customer needs (ease, reliability, safety, affordability) and primarily to ensure connectivity (ease of achieving objectives and modal shift options);
- c) Developing a "brand" of an attractive and easily recognizable urban public transportation service system;
- d) Develop communication strategies for particular groups;
- e) Provides a good information system and is easily understood by customers;

- f) Encourage and develop special activities for public participation;
- g) Developing concepts for the promotion of service improvement.

Because the marketing strategy is not just about carrying out marketing activities but is related to building business performance (business) institutions and then offering/selling it to customers, then as part of the strategic business development, revenue and marketing plans must include:

- a) Achievement of business performance through:
  - 1) Understanding of customer needs, business competition situation, and the expectations of the government and stakeholders
  - 2) Competency training and ability to provide excellent customer service
  - 3) Guarantees for proper operations, maintenance, safety, and security
  - 4) Providing reliable services (transaction systems and fleet operations)
  - 5) Effective marketing and information systems and good imaging institutions
  - 6) Monitoring and measurement of service performance
- b) Maintain and improve system performance through:
  - 1) Monitoring customer satisfaction and complaints;
  - 2) Monitoring of competitors;
  - 3) Measurement of the effectiveness of sales and marketing efforts;
  - 4) Identification of poor performance and taking corrective action early;
  - 5) Manage costs and continuously look for opportunities to improve efficiency;
  - 6) Development and search for opportunities to increase revenue generation;
  - 7) Efforts to maintain continuous and consistent service improvement.
- c) Revenue and marketing strategies must define:
  - 1) Position of product and service marketing and market share;
  - Profitability strategies (increasing efficiency / developing sources of revenue generation);
  - 3) Short and long term growth (growth) strategies.
- d) Distinction of "brands" through:
  - 1) Understanding of customer characteristics and expectations;
  - Understanding competitors' strengths and weaknesses and understanding market rules;
  - 3) Product differentiation through "brands" (linking "brands" with market needs).

#### **B.5** Human Resource Development

The management agency is a critical component to ensure an urban public transport service system operated optimally. Structurally, this management agency can be under a Transport Authority Agency, or it can also be directly under the leadership of a city area. This institution is autonomous in terms of planning, management, and control of bus services within the scope of the urban public transport service network system.



Source: Directorate of Public Transportation at the Ministry of Transportation, 2019

## Figure 5 Schema of Relationship Between Government and Urban Public Transport Operators

This urban public fees management agency (including its supporting service network) functions as a business unit responsible for:

- a) Route network planning and service development;
- b) Earnings income;
- c) Management of system efficiency and costs;
- d) Ensuring financial performance;
- e) Manage ticket collection and tariff policy;
- f) Manage and enforce contracts with bus operators;
- g) Fulfillment of services for customers, complaints, and public relations as well as marketing and promotion.

The duties of this institution also include:

- a) Development and implementation of revenue and marketing acquisition plans;
- b) Financial and administrative management;

- c) Benchmarking the recovery of costs from the system;
- d) Maintenance of systems and infrastructure;
- e) Analysis/evaluation and risk management;
- f) Management of contracts for bus operators.

## **B.6** Operator Efficiency

Efficiency efforts are essential for the sustainability of the system that achieved through two aspects, namely efficiency (reducing) the number of fleets operated (reducing BOK) and efficiency on the passenger side (increasing services, increasing passenger numbers, and increasing revenue). The main aspects of improving efficiency are increasing the average travel speed of vehicles that have done through the design of urban public transport service lines and bus priority settings at intersections. However, this policy is difficult to realize because a large budget is needed. Also, it is related to regional characteristics such as road dimensions that are less supportive.

## C. Urban Public Transport Operational Development Planning

Trans Milenio and Transjakarta are examples of successful urban public transport developments. Aspects related to service operations such as route planning, management, financing to human resource development considered. It aims at developing the urban public transport service system that they are planning. Based on the results of a study of the best practices on Trans Millenio Bogota and Transjakarta, the following are plans for developing urban public transport operations.

No	Component	Best Practices	Literature	Proposed Operational Plan
1	Route Plan	<ul> <li>TransJakarta</li> <li>The lack of a Transjakarta feeder system results in less competitive compared to other private buses that run further, and demand is barely enough to cover operational costs.</li> <li>To reduce traffic congestion on both bus lanes and mixed lanes through BRT projects, regulatory measures such as prohibiting bus operations on mixed lanes that run parallel to bus lanes, as well as increasing capacity on bus lanes, are essential.</li> <li>Trans Milenio</li> <li>Efficient connections with existing road transportation systems, such as feeder buses, improve service quality, and passenger comfort.</li> </ul>	<ul> <li>Minimizing the number of transfer passengers;</li> <li>Setting up regular/local, patas and express services in the service system;</li> <li>Cut some service routes to focus on segments that have high demand.</li> </ul>	<ul> <li>Services connected to the road transportation system by considering trunk and feeder routes.</li> <li>Minimize the number of transfer passengers</li> <li>Regulatory measures such as the prohibition of bus operations on mixed lanes that are parallel with bus lanes, as well as capacity building on bus lanes, are essential.</li> </ul>
2	Costs and Operations Management	<b>TransJakarta</b> TransJakarta is an example where all costs and financial risks of the system have been borne by the Municipality, with the operating entity having no responsibility. This system problem resulted from a short operating contract period; The operator body does not have	<ul> <li>System Operating Pattern</li> <li>Route Design</li> <li>Operating Hours</li> <li>Service Frequency</li> <li>Estimated Fleet Amount</li> <li>Technology Selection</li> </ul>	bus sizes maximized in achieving cost reduction and operating headway management. Tap In and Tap Out on payment card usage will help to find out the origin- destination data of passengers.

# Table 11 Road-Based Urban Public Transportation Operational Development Plan

No	Component	Best Practices	Literature	Proposed Operational Plan
		<ul> <li>a strong incentive to maintain the bus, so the bus has suffered from routine maintenance problems.</li> <li>Determination of headway based on the level of demand and rush hour hours carried out in the Trans Jakarta corridor</li> <li>Trans Milenio</li> <li>This long-term economic and financial sustainability beyond initial capital investment achieved because it is the main objective of the planning process from start to implementation.</li> <li>TransMilenio controls the supply of buses to meet service demand to maximize the benefits of the corridor with ITS at the control center of the system.</li> <li>Use of large-capacity articulated buses for efficient passenger numbers</li> </ul>		The determination of operational time based on the characteristics of the activity patterns in each urban area.
3	Ticket and Revenue Management	<ul> <li>TransJakarta</li> <li>The primary income now comes from ticket sales and government subsidies. Revenue from advertising on infrastructure is still an authorization from other agencies.</li> </ul>	<ul> <li>Maximizing revenue acquisition opportunities by creating services that passengers want to buy;</li> <li>Provide incentives in the form of discounts for</li> </ul>	<ul> <li>Perform a tariff calculation mechanism to be able to provide promotional strategies</li> <li>implementing e-ticket system equipment in all corridors with ticket sales distribution</li> </ul>

No	Component	Best Practices		Literature	Proposed Operational Plan
		<ul> <li>Companies need to be strengthened with non-ticket revenue or non-fare box revenue ("NFB") through the optimization of assets, especially on buses operated by Transiakarta in the form of revenue from advertising media.</li> <li>Trans Milenio</li> <li>Public funds for TransMilenio are only used for planning and infrastructure but do not yet require operational subsidies, funding for bus procurement, or city bank guarantees.</li> <li>TransMilenio does not require operating subsidies and generates massive profits for its operators.</li> </ul>	•	intensive use of services, portraying urban public transport services as a lifestyle choice, guaranteeing affordable and competitive fares for commuter travelers; Give discounts to specific groups of users who need it most (elderly & students); Calculate rates based on travel distance and set appropriate and accessible rates (rounding) for customers.	<ul> <li>using the Scheme and Formula for adjusting fluctuating rates that are influenced by inflation rates.</li> <li>Carry out marketing strategies by involving advertising sponsors.</li> </ul>
4	Customer Orientation	<b>TransJakarta</b> By doing Tap in and Tap Out, customers have helped Transjakarta get data about the customer's destination location. This data used to optimally improve routes and services according to the needs of loyal Transjakarta users.	►	Stakeholder analysis for each leading group (users, car and motorbike drivers, women, students, special needs groups, angkot, PO,	<ul> <li>We are estimating demand to produce a sufficient fleet size.</li> <li>They are developing special activities for the public and customers.</li> <li>Providing customer service</li> </ul>

Trans Mileniothe business community, schools, and colleges);Transmilenio estimates demand, and the bus size maximized, reaching a maximum reduction in transit service costs per passenger-kilometer. Larger buses installed and the number of buses decreases. As a result, transportation capacity, which was 30,000 people/hour per direction before implementation, increased to 45,000 people/hour.the business community, schools, and colleges);Trans Mileniothe bus size maximized, reaching a maximum reduction in transit service costs per passenger-kilometer. Larger buses installed and the number of buses decreases. As a result, transportation capacity, which was 30,000 people/hour per direction before implementation, increased to 45,000 people/hour.the business community, schools, and colleges);Trans Mileniothe bus size maximized, reaching a maximum reduction in transit service costs per passenger-kilometer. Larger buses installed and the number of buses decreases. As a result, transportation capacity, which was a0,000 people/hour.the business community, schools, and colleges);Trans Mileniotransportation capacity, which was a0,000 people/hour.the number of to ensure connectivity (ease of achieving objectives and	nal Plan
<ul> <li>b) Achieving objectives and modal shift options);</li> <li>b) Developing a "brand" of an attractive and easily recognizable urban public transportation service system;</li> <li>b) Developing communication strategies for specific groups;</li> <li>b) Providing a good information system that is easily understood by customers:</li> </ul>	

No	Component	Best Practices	Literature	Proposed Operational Plan
5	Human Besource	Translakarta	<ul> <li>Encourage and develop special activities for public participation;</li> <li>Developing concepts for the promotion of service improvement.</li> </ul>	
	Human Kesource Development	IransJakarta It takes human resources (HR) who have high competence in serving citizens in the field of public transportation. PT Transjakarta began collaborating with competent institutions in developing the quality of human resources, namely through BPSDM Transportation <b>Trans Milenio</b> TransMilenio has supported several inter-agency training workshops to improve the quality of employees and operators, including placing trained staff at each station so they can help passengers with disabilities. In 2017, TransMilenio trained 11,200 staff members and 12 operators.	Management institutions are an essential component to ensure an urban public transport service system operated optimally. Structurally, this management agency can be under a Transport Authority Agency, or it can also be directly under the leadership of a city area.	<ul> <li>Establish a Transportation Authority Institution to guarantee management.</li> <li>Collaborating with Universities and Government Institutions to improve HR.</li> </ul>

No	Component	Best Practices	Literature	Proposed Operational Plan
6	Operator Efficiency	<ul> <li>TransJakarta</li> <li>In its operation, Transjakarta is supported by several operator companies that manage the fleet that serves each corridor.</li> <li>Trans Milenio</li> <li>TransMilenio S.A. is a single state-owned company that carries out planning, management, and control of the operation of the TransMilenio bus system. It also operates a control center and controls the number of buses. All companies that operate buses provide bus operations according to the direction of TransMilenio S.A. and paid per operation km. This firm control by one public entity has brought success to TransMilenio's operations.</li> <li>The design of the system overseen by TransMilenio S.A. and based on collaboration between Institutions including the Mayor of Bogota, the FONDATT Fund for Education and Road Safety of the Secretary of Transit and Transportation), the District Institute of Culture and Tourism, Secretary of</li> </ul>	<ul> <li>Fleet Side Efficiency</li> <li>Passenger Side Efficiency</li> </ul>	<ul> <li>Develop an excellent institutional system based on the duties and functions related to operation and maintenance.</li> <li>Establish a unique Authority to avoid overlapping the duties and responsibilities of operators and managers.</li> </ul>

No	Component	Best Practices	Literature	Proposed Operational Plan
		Transportation and Traffic, Department of Planning, Secretary of Finance and Mentorvivienda.		

Source: Author Analysis, 2020

## D. Provision of Promotion Mode Integration Scheme with BRT, non-BRT Bus Services and Existing Public Transport

#### D.1 Why is Integration of Public Transportation Services Required?

National transportation development requires the support of an integrated transportation system. The transportation system must be sustainable and must not be interrupted or better known as connectivity. Current challenges in the era of the global economy, such as this, require a more effective and efficient transportation system. The form of integration and transportation connectivity in Indonesia translated in the form of a balance of efforts to encourage maximum movement (to pull) and reduce the inefficient use of vehicles, fuels, and emissions. Pull efforts are encouraged by improving quality, adding networks, and increasing public transport services. The development of new public transportation services is carried out by the IVO method. IVO is an integrated model between infrastructure (I, infrastructure) and facilities (Vehicle, vehicle) and its complement (Operation, operation).

Physical integration, marketing, system promotion, and tariff structure are the keys to success in system integration. Physical integration in the form of buildings and clear marking can make it easier for users to switch modes. Promotion and marketing done to introduce integrated systems to the public. The one-tariff system is the best integration, so users are not confused by paying multiple or different rates. In addition to integration with transportation in the city, the integration that built should also be inter-city or long-distance transportation, such as inter-city buses, train stations, or airports. Integration with inter-city services will complement an effective city transportation system.



Source: Author Analysis, 2020 Figure 6 Urban Public Transport Integration Scheme

#### D.2 Integrated Mode Transfer (Physical) Facility

To optimize Urban Public Transport Services into an efficient system, it integrated with other modes that should not consider as competitors but utilized as an extension of services. Pedestrian access is an absolute necessity to be facilitated. Pedestrian access must be appropriately provided at least for a radius of 500 meters from each stop. The pedestrian access provided must also be safe from motorized vehicles and protected from hot or rainy weather. Also, pedestrian access must make it easier for pedestrians to access buildings or shops around bus stops. Apart from walking, the use of bicycles to the nearest station is an alternative for users to reach the bus stop. However, the use of bicycles equipped with adequate infrastructure, such as bicycle lanes.

Like the pedestrian path, existing bicycle lanes must also provide users with a sense of security and comfort. Not only bicycle lanes, bicycle parking, must also be available properly. Parking provided must have good security and avoid rainy weather. Another mode that rarely integrated with Urban Public Transport services is taxis. In many big cities, taxi distribution is one of the factors of congestion that occurs within the city. The circulation of taxis in congestion not only when delivering passengers, but also when looking for passengers. To reduce taxi friction in finding passengers, taxis can be integrated with the Urban Public Transport stop so that it can be an alternative mode for users to continue their journey. Taxi drivers also do not have to go round and round to find their passengers. Traffic jams also reduced by the loss of taxi activity in finding passengers.

Some things to consider in determining the location of the transfer point are:

- The transfer point must be placed in a strategic location to facilitate the trunk-feeder system;
- Every local service area with feeder buses must be within reach of the bus stop (main route) or the train station;
- 3) The transfer point must be placed as close as possible to the main activity center in the local service area;
- The transfer point connected to the road network with a higher classification of functions;

Transfer facilities/transfer of passengers from the feeder lane to the main lane and vice versa also requires planning, management, and readiness of supporting infrastructure. Globally, three things that are planned and prepared in the construction and operation of transfer facilities include:

1) Setting passenger flow;

- 2) Provision of information systems;
- 3) Arrangement of ticket system integration;
- 4) Safeguarding security

Koneksi dari concourse MRT ke halte BRT di permukaan harus didesain lebar untuk mengakomodasi arus penumpang.

- Eskalator dua arah
   Lebar satu tangga eskalator minimal 2 meter agar penumpang dapat menyusul
- Total lebar minimal 4 meter



Source: www.transportphoto.net, 2020 Figure 7 Example of Urban Public Transport Mode Transfer Facility

#### D.3 Ticket Integration

One effort to encourage the integration of public transport services, both BRT, Non-BRT, and other public transport, is to provide an integrated ticket service system. That is to encourage convenience so that all operators can use the same platform, thus saving time and reducing costs. Another form that often used is electronic tickets or "smart cards" that can calculate different types of tickets such as daily tickets, hourly tickets during peak hours (Road Pricing), or to serve a variety of different modes both road-based and even rail-based. To support transportation businesses such as restoration outlets.

Ticket enforcement is related to the rate. Tariffs determined by government decree. Tariffs for economy class services set in units of "Rp / km" or "Rp / route" or "Rp / passenger," all with the intention that the tariff does not burden passengers, primarily because of the high-income gap in urban and regional populations.



#### D.4 Schedule integration

Schedule integration, in the form of the suitability of arrival and departure schedules of public transport which is well-informed, and allows the reduction of passenger waiting times when switching intra and between modes of transportation. There are several scenarios related to the integration of urban public transport schedules, namely:

- 1. Short Term Scenarios
  - a. Mode service scheduling uses a combination of frequency and timetable systems.
  - b. Modes redesign uses a numbering and coloring system.
- 2. Long Term Scenarios
  - a. Mode service scheduling uses a combination of frequency and timetable systems.
  - b. Modes redesign uses a numbering and coloring system.
  - c. Coordination of operators of public transportation modes by forming a public transport authority body.



Source: www.tribunnews.com, 2020 Figure 9 Examples of Integrated Facilities for Urban Public Transport Schedules in Bogota

In addition to these three aspects, namely the physical integration of modal transfer, tariff integration, and schedule integration, the urban public transport integration scheme further developed. That aims to make it easier and improve the users of public transportation. The impact caused in the future is a high shift-share model of the use of public vehicles compared to private vehicles, which will provide further benefits for the development of transportation aspects from the economic, environmental, and social aspects. Other integration developments are as follows:

- Institutional integration, namely the synergy of coordination between institutions within a framework of planning, implementation, and operation of various modes that are mutually integrated;
- Integration of implementation time (Operating Time), integrated planning time of implementation of each mode both from the planning process, development to the operation stage;
- Integration of functions, namely the integrated development plan of the function of the transportation system that built to provide great value benefits in multimodal transportation services, also integrated development and development plans by local and central governments, also between government and the public (private)
- Information Integration, a system of providing public transportation information that integrated into a database through IoT / Information technology

## Monitoring and Evaluation A. Monitoring

Monitoring is a significant activity carried out to provide information about the current conditions that occur in the field. Also, monitoring needed so that all forms of fundamental errors immediately identified, and corrective actions can take, thereby reducing the higher risk. The monitoring activities explained in the next section. In the process of monitoring and evaluation activities, there are related parties when operating urban public transport on a route/route. This monitoring process is carried out before, during operation and after operational activities are carried out, and then evaluated.



Source: Author Analysis, 2020 Figure 10 Monitoring Officers and Tasks by Operators

The government, as a regulator, also conducts monitoring and evaluation activities on the implementation of urban public transport that has been running. The primary monitoring and evaluation activities undertaken are related to the Operational Service Targets and the implementation of the urban public transport SPM. It can also be an indicator that the role of public transportation has become the people's choice in travel.

#### A.1 Implementation of Monitoring Activities

Monitoring activities are carried out at all times and carried out throughout the Route network, which operated in order to maintain the quantity and quality of services so that they can continue to run well. The monitoring activities classified into the following groups:

- a. Monitoring activities of the driver;
- b. Supervision activities on Operational Standards;
- c. Supervision activities on the provisions of the relevant laws and regulations;
- d. Supervision of SPM activities;
- e. Oversight activities of the Oversight Officer and Control.

## A.2 Reporting and Enforcement of Monitoring Activities

To ensure the availability of the best sustainable services for users of public transport services, it is necessary to have accuracy in reporting, which divided as follows:

- Bus Operators are required to report the recapitulation of the following data regularly at the latest on the 10th of every month to the Transport Administration Agency: Complete data on bus conditions and their completeness;
  - Complete follow-up report on handling or responding to passenger complaints or complaints submitted to the Bus Operator either through the passenger or the Transport Administration Agency;
  - 2) Data Driver performance data, including records of violations, accidents, rewards, and penalties that have occurred to each driver;
  - Complete report on the implementation of the Operational Plan (trip, number of ritase, trip per route, Kilometer of actual Bus Trip);
  - 4) Complete data regarding accidents that occur and their causes include, among others: (i) the place and date of the accident, (ii) the driver at the time of the accident, (iii) the condition of the victim, damage or loss suffered and (iv) the follow-up to the handling of the accident.
- b. To ensure an effective monitoring mechanism on the performance of Bus Operators, the Transport Administration Agency requires regular and comprehensive reporting on all operational activities of Bus Operators. Bus Operators are obliged:
  - Have a GPS Fleet monitoring system that complies with the standards and specifications determined by the Transport Administration Agency;

- Linking the bus operator's computerized Fleet management system to the Main Control Room so that all reporting and monitoring mechanisms for Bus Operator's operational activities can be implemented quickly, effectively and efficiently;
- Placing its Personnel in technical and operational areas in the Main Control Room.

## B. Monitoring of Operational Management of Urban Public Transport

#### **B.1** Standard Operating Procedure

In order to provide the best and uniform service to the public users of Public Transport Services, Bus Operators obliged to comply with the Standard Operating Procedures established by the Transport Administration Agency with due regard to the principles of proper public transport management and designed so that the operation of Public Transport Services can provide services that are fast, precise, safe, comfortable, and inexpensive, to the user community.

#### B.2 Bus Standard

Buses that are operated by Bus Operators before starting operation and during operation are required to meet the requirements that will be checked by officers in the field with the following completeness:

#### 1. Bus outside:

- a. The bus body is in good condition, without damage and with a color that does not fade;
- b. All bus glass in good condition, without damage and in clean condition;
- c. All bus accessories are installed and functioning correctly, including (i) all Bus lights (headlights, direction lights, brake lights, license plate lights, and reverse lights) and (ii) bumpers;
- d. The installed bus tires not retreaded tires; and
- e. All signs or stickers located on the Bus body are in good condition and can be read clearly, including (i) Route or Route Network information served, (ii) information on complaint numbers, (iii) Bus numbers and (iv) Vehicle Number Sign (TNKB).

In addition to the requirements in point a - e, the outer Bus must not be added with any material unless agreed in writing in advance by the Transport Administration Agency.

## 2. Bus Inside:

- a. The inside of the bus is clean from rubbish and dirt;
- b. Passenger and driver seats are in excellent and clean condition, and safety belts are attached to the driver's seat;
- c. Handrail facilities for service users standing (standing handgrip) and pillars of the handrail (seat hand grip) in good condition and firmly installed in sufficient quantities;
- d. The partition or partition is in good condition and is firmly attached;
- e. Glass breakers with a minimum number of 2 (two) pieces, fire extinguisher tubes, automatic door release knobs, and other safety equipment in good working condition;
- f. The trash bin and its cover are clean and firmly installed with at least 2 (two) pieces for each bus unit;
- g. Signs of guidance or prohibition information for passengers are adequately installed, including (i) prohibition of eating, drinking or smoking on the bus and (ii) an appeal to provide seats for elderly, pregnant and disabled passengers;
- h. Space for wheelchairs is available;
- i. The lighting is in excellent condition / does not break and functions with sufficient light strength according to the standards stipulated in the SPM;
- j. The bus has undergone regular maintenance accordingly and does not exceed reasonable maintenance limits following the maintenance manual given by the APM / Manufacturer and the Bus Manufacturer concerned;
- k. Buses are required to have this additional equipment with the following conditions:
  - APAR is still suitable for use, its useful life is still valid and can function properly;
  - (ii) Bus kilometer counting equipment (odometer) is functioning correctly;

- (iii) First Aid Kit in Accident (P3K) is properly installed and contains equipment consisting of at least clean cotton, iodine, small scissors, elastic plaster, sterile gauze, 70% alcohol, and plastic gloves;
- (iv) Engine indicators and overspeeding indicators are in good condition and functioning correctly;
- Air conditioners or air conditioners/air conditioners function correctly, and can maintain a stable temperature in the Bus with a maximum cabin temperature of 27° C;
- (vi) Has a spare tire that can be used, in good condition and accordance with the Bus Specifications;
- (vii) Passenger pneumatic doors are in good condition and functioning correctly;
- (viii) Communication equipment installed and functioning correctly;
- (ix) A timepiece display device and destination stop are installed and functioning correctly;
- (x) Sounding equipment for an announcement of the destination Stop is installed and functioning correctly; and
- (xi) GPS device equipment is installed and functioning correctly.

## **B.3** Operating Standards

- 1. Public Transport Services include transportation services to raise and drop passengers at designated stops along the Route or Route Network.
- 2. Bus Operators are required to provide the necessary communication system and operational control equipment and technology needed for the smooth operation of the Urban Transportation System according to the request of the Transport Administration Agency.
- 3. Bus Operators are required to provide Buses in an SGO condition of 100% of the Total Fleet. They are ready at all times to operate the Bus with the amount determined by the Transport Administration Agency, including for BKO purposes.
- 4. Bus Operations by Bus Operators follow the Operational Plan determined by the Transport Administration Agency (including start time, route, the distance

between and time between) submitted to the Bus Operator no later than the 1st (one) day of the month.

- 5. The Transport Administration Agency has the right to divert the work route of the Bus Operator as outlined in the Operational Plan or an ad hoc and temporary (ad hoc) order from the Transport Administration Agency.
- 6. The Transport Administration Agency will determine the number of Buses that will be operated on the Route or Route Network as specified in the Agreement, or at most 100% (one hundred percent) of the Bus Operator Fleet, not including 10% (ten percent) which are Buses Reserves or other amounts determined by the Transport Administration Agency.
- 7. Bus Operators must provide Buses for special needs / BKO at any time at the request of the Transport Administration Agency.
- 8. Bus Operators will get a daily operating plan that can be different from the Operating Plan according to the needs of the Urban Transportation System.
- 9. Buses operated in the Route or Route Networks are required to meet technical requirements consisting of:
  - a. Arrangement;
  - b. Equipment;
  - c. Size;
  - d. Body;
  - e. Technical design of motor vehicles;
  - f. Loading;
  - g. Use;
  - h. Coupling motor vehicles; and
  - i. Vehicle attachment.
- 10. Buses operated on the Route or Route Network must pass the roadworthiness test, which requirements determined by the minimum performance of the motorized vehicle which is measured to at least consist of:
  - a. Exhaust gas emissions;
  - b. Noise noise;
  - c. The efficiency of the primary brake system;
  - d. Parking brake system efficiency;
  - e. Front-wheel hubs;

- f. Horn sound;
- g. Transmission power and direction of the main light beam;
- h. Turning radius;
- i. Speed indicator accuracy;
- j. Matching wheel performance and tire conditions; and
- k. The suitability of the engine driving force to the weight of the vehicle, as evidenced by the possession of related licensing documents such as STNK, KIU / KP, emission test letters, and KEUR.
- 11. Bus Operators under the APM Maintenance and Maintenance Agreement are required to carry out Daily Routine Maintenance to ensure:
  - a. Each bus unit is clean every time it starts operational; and
  - b. In SGO condition.
  - 10. Bus Operators are obliged to ensure regular Periodic Maintenance and Daily Maintenance.
  - 11. Bus Operators are required to submit Monthly Maintenance Activity Reports together with Bills to the Transport Administration Agency.
  - 12. The Transport Administration Agency, through the evaluation and control team, checks the daily operation eligibility on the H-1 for the Bus that is submitted by the Bus Operator, taking into account routine maintenance and maintenance schedules.
  - 13. Bus Operators are required to send their Personnel to approve fulfillment of daily operating plans on D-1 if Bus Operators cannot provide the Bus with the amount specified in this Agreement.
  - 14. A bus is declared to meet SGO standards by the evaluation and control team of the Transport Administration Agency if the results of the assessment of the inner and outer Buses stated to have met the SPO and SPM.
  - 15. Bus Operators are required to operate Buses according to the Operation Plan schedule made by the Transport Administration Agency, which can be changed from time to time in the form of a schedule of arrival and departure of buses at each bus stop.
  - 16. Bus Operators are required to follow the Operational Plan related to the interruption of temporary operations (split) during No Busy Hours.

- 17. Bus operators are required to provide one / more LED displays or voice announcers that can function while operating.
- 18. Bus Operators are required to provide one / more CCTV on the Bus that functions while operating.
- 19. Bus Operators are required to follow instructions from the Main Control Room.
- 20. Bus Operators are required to operate Headway following what is determined by the Transport Administration Agency (schedule).
- 21. Bus Operators are obliged to ensure that their drivers comply with all instructions of the Transport Administration Agency as the sole controller of the operation of the Bus after entering the Route or Route Network.
- 22. The Transport Administration Agency must regulate that its officers may not enter passengers exceeding the capacity of the Bus that used for Public Transport Services, namely for non-trailer Maxi Buses with a maximum capacity of passengers according to technical specifications.
- 23. The Transport Administration Agency determines the location and departure of the first Bus.
- 24. Buses start operating in the Route or Route Network at 05:00 WIB or other times as determined by the Transport Administration Agency.
- 25. The last bus departs from the location of departure at 22:00 WIB or other times determined by the Transport Administration Agency.
- 26. The Transport Administration Agency determines the location and return of the Last Bus.
- 27. When starting operations, Bus Operators are required to submit Pre-Operational Inspection Sheets (LPSB) in the format determined by the Transport Administration Agency that has been signed by an Employee at the level of the chief of the technical section that has been filled in by the Driver to the Transportation Agency Control Officer at Initial stop of departure.
- 28. The Transportation Management Agency must also sign the LPSB.
- 29. Drivers are required to have a Driving License (free B1 SIM for Single Bus / Maxi Bus / Medium Bus / Low Deck Bus and free B2 SIM for Articulated Bus).
- 30. 30. Drivers in operating Buses must have a Driver's Certificate.
- 31. Drivers are required to use seat belts when operating a Bus.
- 32. Drivers are not permitted to carry or use narcotics / dangerous drugs/liquor.

- 33. Drivers are not permitted to carry firearms, sharp weapons and explosives while on duty.
- 34. Drivers are prohibited from eating / drinking/smoking while driving the Bus or in other places, other than the bus stop (the last bus stop on one Route / Route Network).
- 35. Drivers prohibited from leaving or getting off a bus during their term of service without a strong reason or permission from the Controlling Officer.
- 36. Drivers are required to wear standard uniforms and equipment as stated in the Driver Standard (including letters and KIP) and place the Driver's name card / ID and Driver's driver number in the Driver's room.
- 37. Bus Operators / Employees must behave and say politely to passengers.
- 38. Drivers are not permitted to request or let on-board withdraw money from passengers on the Bus, except for Feeder Public Transport Services, Integration Services, and Other Public Transport Services using the fare payment method on the Bus.
- 39. The maximum bus speed during operation in the Route or Route Network is 50 km/hour (fifty kilometers per hour), except on toll roads, the speed can reach a maximum of 60 km/hour (sixty kilometers per hour).
- 40. Drivers in operating a bus must do the following:
  - a. Use the specified lane;
  - b. Do not use the rightmost lane, except when it will overtake or change direction (except for BRT System Services or according to conditions or routes determined by the Transport Administration Agency;
  - c. Stopping the Bus during passenger and descent; or
  - d. close the Bus door while the Bus is running.
- 41. Drivers must take care and pay attention to the safety and security of Buses and passengers, pedestrians, and other road users as well as the assets of the Transport Administration Agency in the Route or Route Network.
- 42. Drivers are required and able to operate appropriately (including editing) voice announcer devices on each Bus, display panel, radio communication, GPS, and others determined by the Transport Administration Agency.

- 43. Drivers prohibited from turning around in the middle of a Route / Route Network unless they have received instructions from the Main Control Room or the Controlling Agency of the Transportation Administration Agency.
- 44. Drivers must carry out instructions in connection with the headway, speed, route, and sedimentation of the Main Control Room and the Controlling Agency of the Transport Administration Agency.
- 45. Drivers prohibited from stopping other than at a designated place, settling, dropping passengers aside at the stop, or passing through a network other than those specified in the Route Permit, as well as routes to and from the pool/depot/gas station without reasons that accounted.
- 46. Drivers prohibited from parking the Bus in a place or location that has been expressly provided or designated by the Transport Administration Agency.
- 47. Drivers are required to give a signal with the direction lights when going to turn, move lane or move to the side (left or right sign lights).
- 48. Drivers must install safety triangles or danger warning lights when stopping or parking in an emergency.
- 49. Drivers are required to stop the Bus so that the Bus door is directly in front of the bus stop, with a distance of 10 to 30 cm (ten to thirty centimeters) from the edge of the bus stop.
- 50. 50. Drivers must stop Buses at Bus stops to raise and drop off passengers with a stop time of at least 20 (twenty) seconds and according to the instructions of the Transport Administration Agency and must open or close the door after receiving an order from the Transportation Operator Agency on board).
- 51. Drivers must not transport passengers when the Bus refills or instructed to split.
- 52. Replacement of Drivers with Backup Drivers in the event of a violation of administrative SPOs will carry out at the bus stops at each Route or Route Network.
- 53. Replacement of Drivers with Backup Drivers in the event of a violation of the SPO that is operational to the operation of the Bus or the occurrence of an accident done at the nearest bus stop from the location of the violation.
- 54. Bus Operators are not permitted to assign Drivers in two consecutive shifts or for 4 (four) consecutive hours without breaks, which adjusted to operational needs. The rest can only do at the bus stop.

- 55. Bus Operators are required to carry out shifting of drivers in locations that have been determined by the Transport Administration Agency following applicable working hours. Each Driver given a break that is determined by the Transport Administration Agency.
- 56. Bus Operators are required to stop or rest Buses at locations designated by the Transport Administration Agency in the context of a push-pull or split system.
- 57. Bus Operator Officers who will enter the shift may not be at the bus stop and must wait at another place determined by the Transport Administration Agency. Bus Operator Officers who finish shift duty must immediately leave the bus stop.
- 58. If a Bus breaks down / road break down on Bus Operation Day, the Bus Operator is subject to sanctions, and the Bus evacuated no later than 30 (thirty) minutes after the incident from the Route or Route Network.

The Transport Administration Agency, through field officers ("Field Officers"), can repatriate or stop Bus operations within Operating Hours that are deemed not to meet the conditions stated in this SPO.

- 59. Field Officers can check randomly related to operational activities and completeness of buses in the field by bringing a Letter of Assignment from the Transport Administration Agency.
- 60. Field Officers can repatriate or stop Bus operations in the event of one or more incidents including:
  - a. The bus broke down or was not roadworthy due to negligence of maintenance and care by the Bus Operator;
  - b. Bus violates according to the Agreement;
  - c. Other things that considered to cause problems in the operation of Public Transport Services;
  - d. Bus Repatriation, but not limited to procedures:
    - i. The driver stops the bus at the location designated by the Field Officer;
    - ii. The driver then assists the Field Officer who is authorized to record the following data in the Minutes of the Operation Bus Stop in a format determined by the Transport Administration Agency, either due to technical problems or technical damage or accident:

- Recording of the day, date and time of repatriation including bus body number and vehicle number as well as the reason for repatriation of the bus, full name and identity of the driver driving the returned bus;
- If when discharged, the location of the Bus is at the base/end of the Route or Route Network, the recording of the Bus Mile Kilometer is as indicated by GPS data;
- 3) If when discharged, the position of the Bus is on its way to the end of the Route Network route or the end of the Route, then this incomplete trip will not be recorded as a Kilometer of Travel;
- e. As a follow-up to the making of Minutes for the Operation Bus Stop made in the format determined by the Transport Administration Agency, the Field Officer will prepare the Minutes in the format as determined by the Transport Administration Agency.
- 61. The Public Transport Service Agency in exercising its authority as a manager of Public Transport Services can issue instructions to Bus Operators to immediately replace Buses that are operating with Reserved Buses to ensure the availability of Public Transport Services after receiving reports from Bus Operators or Drivers and authorized officers in the format Minutes of Reserve Bus Operations in the format determined by the Transport Administration Agency if the following matters:
  - a. The bus has damaged, both light and oppressive, that cant repaired immediately, and the bus is not eligible to operate normally again within a maximum period of 60 (sixty) minutes from the time the damage occurred. The damage must make in the form of an official report in the format determined by the Transportation Administration Agency. In the event of damage, the Bus Operator and Driver must immediately remove the Bus from the Route or Route Network and then immediately report it to the Transport Administration Agency;
  - b. The bus had an accident, which resulted in the Bus being detained as evidence by the Police, as stated in the Minutes in a format determined by the Transport Administration Agency. Bus Operators try to make the Bus
can be operated with a loan and use it with the approval of the Police. The Bus Operator incurs costs incurred for the borrowed use fee;

- 62. If the Bus Operator cannot immediately fulfill the instructions of the Transport Administration Agency to replace the Bus with a Reserved Bus, the Transport Operator Agency must first notify the Bus Operator, have the right and authority to request other Bus Operators both from the same or different Route Networks to replace the bus in question in the framework of BKO.
- 63. If the Bus Operator changes the operating Bus without obtaining prior instructions from the Transport Administration Agency, the Bus Operator is subject to sanctions.
- 64. If there are buses that have suffered severe damage or accidents and cant repaired so that they operated again, the Bus Operator must immediately report in writing to the Transport Administration Agency to repair the Bus according to specifications immediately. This agreement within a period agreed in writing by the Parties with the provisions no later than 1 (one) month from the date of the Minutes, without prejudice to the number of SGO Fleet that must be provided by the Bus Operator.
- 65. Transport Operator Agency by considering the situation in the field and the context of efficiency, has the right at any time without or after receiving reports from operating officers and field officers in the Transport Administration Agency in the form of Minutes determined by the Transport Administration Agency, giving instructions to the Bus Operator to reduce or increase the number of Buses operating in order to guarantee the comfort and availability of Public Transport Services.

### **B.5** Standard Kilometer Recording Standards

- Bus Operators are obliged to ensure that their drivers comply with the Bus Daily Travel Kilometer recording standards set by the Transport Administration Agency.
- 2. Bus Operators are required to make a daily Driver's Road Order (SPJ) Driver which at least contains the following data:
  - a. Route Networks and Routes served;
  - b. Driver's name and Bus number;

- c. The hours and kilometers listed on the odometer for each bus exit and return to the depot;
- d. Other activities or records related to Bus activities, if deemed necessary.
- Kilometer Registering Officers from the Transport Administration Agency print Driver Orders (DO) that contain the service routes for each Bus.
- 4. Bus Operators must agree on Raw Kilometers for each Ritase that is run.
- 5. Bus Operators must ensure that GPS devices operate at all times and place their Employees in the Main Control Room of the Transport Administration Agency.
- The number of Ritase, as recorded in GPS data, is multiplied by the Standard Kilometer to be the basis for calculating Kilometer Bus Transit.
- 7. Kilometers traveled achieved through the implementation of the Operational Plan will be calculated, verified every day in the Main Control Room, and evaluated annually by the Transport Administration Agency for each Bus operating as stipulated in this Agreement.
- In addition to the provisions in the Agreement, the Work Volume also calculated with the following conditions:
  - a. It is given to every Bus on Bus Operation Day without any damage, strike, and return of the Bus due to damage, strike and return due to sanctions.
  - b. It does not count if the Bus discharged because of the path sterilization (emptying or cleaning of the Route Network from vehicles other than the Bus) and maintenance.
  - c. If, due to the actions of the Bus Operator, several Buses are operating outside the Operational Plan without the written approval of the Transport Administration Agency, then the Bus Operator is subject to sanctions following the provisions.
- 9. Based on calculations, verification, and evaluation of Work Volume,
- 10. The Transport Administration Agency will notify the Bus Operator in writing every 6 (six) months, the results of the Work Volume evaluation containing the following:
  - a. Number of Kilometers traveled per Bus achieved in the relevant month and the total / accumulative number for the current 6 (six) months;
  - b. Lack of total work volume for the month and total/accumulative in the current 6 (six) months.

11. If the Bus Operator cannot reach the Kilometer of Trips according to the Operational Plan in the current month due to the negligence of the Bus Operator, the application of sanctions following the provisions applies.

### **B.6** Safety Standards

In order to maintain the safety of passengers using Public Transport Services, Bus Operators required to comply with the following rules:

- Bus Operators are obliged to ensure that Occupational Health and Safety (K3) is appropriately understood, cared for, implemented, and socialized by all parties involved in implementing Bus operations.
- 2. Bus Operators are required to complete and maintain that all Buses are always equipped with safety equipment including the following: (i) glass-breaking hammer, (ii) fire extinguishers with a minimum size of APAR level, (iii) automatic door unlock button, and (iv) a set of First Aid Accident (First Aid) equipment.
- 3. For the safety of passengers, buses and other road users, while operating Drivers prohibited from doing among others the following:
  - a. Breaking traffic lights;
  - b. Open the passenger door other than at the bus stop;
  - c. Driving a bus in the Route Network with speeds exceeding 50 km / h (fifty kilometers per hour), except on toll roads, the speed can reach a maximum of 60 km / h (sixty kilometers per hour);
  - d. Perform sudden braking/deceleration, except in an emergency;
  - e. Drive the Bus by ignoring the safety factors;
  - f. Drive the Bus too close to the vehicle in front of it, except in traffic conditions that are not possible;
  - g. Operate the bus without turning on the lights both inside and outside of the lights at night or in weather conditions or certain conditions that require the installation of the lights outside the Bus;
  - h. Operate Buses outside the Route or Route Network, except in emergencies, situations that require so or on instructions from the Transport Administration Agency;
  - i. Drive the Bus while using a cell phone (cellphone) or listen to music with a headset; and

j. Open emergency doors, except in emergency conditions or based on instructions from the Transport Administration Agency.

### B.7 Accident Management Standard

For handling accidents that result in injury or death of a Third Party:

- Referring to the procedure for investigating and investigating official cases of the Indonesian National Police.
- 2. In the event of an accident, the bus concerned must stop, unless there is a situation that endangers the safety of the driver and passenger so that the bus is not allowed to stop.
- In the event of an accident, the Driver concerned required to immediately report the accident to the Bus Operator control center, the Controlling Officer in the Main Control Room, and the Official Field Operator of the Transportation Administration Agency.
- 4. Drivers must cooperate with on-board officers on the Bus and other authorized personnel for among others (in order according to priority):
  - a. Checking the condition of victims (service users/passengers) and prioritizing their safety,
  - b. Checking the condition of the crew (Driver, onboard, Transportation Administration Agency staff, Bus Operator Employees on the Bus), and prioritizing safety;
  - c. Checking the condition of third parties/residents around the accident site and prioritizing their safety;
  - d. Checking the condition of the bus and its equipment and prioritizing its safety; and
  - e. Provides information to complete accident reports created by Bus Operators.
- 5. Bus Operators report detailed data on accident victims to the Transport Administration Agency at the latest 2 x 24 hours (twice twenty-four hours), which information includes: the victim's full name, gender, address, telephone or e-mail number, telephone number or e-mail the victim's closest relative who can contact, the type of accident, a complete description of the accident, a complete

description of the condition of the accident victim and a description of the action to prevent the accident by the Bus Operator.

6. Bus Operators are required to provide humanitarian assistance and make peace efforts against accident victims / their families no later than 30 (thirty) Calendar Days from the date of the accident event, regardless of insurance whether or not the incident has been received as the subject of coverage, as follows: (i) for the victim injuries are assisted in the form of medical expenses; and (ii) the victims are assisted in the form of funeral costs, in addition to the rights of victims based on the Agreement and the laws and regulations governing accident insurance in force.

### **B.8** Customer Service Standards

To ensure customer satisfaction of users of Public Transport Services, Bus Operators are required to provide the following services:

- Bus Operators are obliged to respond and take action on complaints and complaints both on the behavior of the Driver and on the condition of the Bus, the level of safety and comfort of the Bus within 2 x 24 (twice twenty-four) hours from the receipt of the complaint and the complaint mentioned above.
- 2. Bus Operators must report at the latest Monday every week on complaints and complaints as well as responses and actions taken by Bus Operators both on the driver's behavior and the condition of the Bus, the level of safety and comfort of the Bus and advice -the recommendations from the community to the Transportation Administration Agency in writing, including in the form of preventive measures to ensure that the same thing will not happen again.

### **B.9** Reporting Standards

1. To guarantee the availability of the best sustainable services for users of public transport services, Bus Operators are required to report recapitulation of the following data regularly at the latest on the 10th of the month to the Transport Administration Agency:

a. Complete data on bus conditions and their completeness;

- b.Full report on follow-up handling or response to passenger complaints or complaints submitted to the Bus Operator either through the passenger or the Transport Administration Agency;
- c.Driver performance data, including records of violations, accidents, rewards, and penalties that have occurred to each driver;
- d.The full report on the implementation of the Operational Plan (trip, number of ritase, trip per route, Kilometer of actual Bus Trip);
- e. Complete data regarding accidents that occur and their causes include, among other things: (i) the place and date of the accident, (ii) the driver at the time of the accident, (iii) the condition of the victim, damage or loss suffered and (iv) the follow-up to the handling of the accident.
- To ensure an effective monitoring mechanism on the performance of Bus Operators, the Transport Administration Agency requires regular and comprehensive reporting on all operational activities of Bus Operators. Bus Operators are obliged:
  - a. Have a GPS Fleet monitoring system that complies with the standards and specifications determined by the Transport Administration Agency;
  - b.Linking the bus operator's computerized Fleet management system to the Main Control Room so that all reporting and monitoring mechanisms for Bus Operator's operational activities implemented quickly, effectively and efficiently;
  - c. Placing its employees in technical and operational areas in the Main Control Room.

### C. Category of Violation of Operations and SPM Standards

One of the main functions of monitoring activities is to ensure the proper and correct application of Standard Operating Procedures (SPO) and Minimum Service Standards (SPM). Therefore, in order to provide a warning that the application of Operating Procedure Standards (SPO) and Minimum Service Standards (SPM) can run well and smoothly, it is necessary to sanction mechanisms for violations of the Standard Operating Procedure (SPO) and the Minimum Service Standard (SPM).

Sanctions in the form of cutting Kilometer Travel in the month in which the violation occurred, sanctions reduction in Work Volume, sanctions to Bus Operators, and obligations

for Bus Operators to impose sanctions in the form of administrative, disciplinary or dismissal of employees responsible.

As an affirmation, that all sanctions for violations of SPO and SPM will be imposed directly on Bus Operators without the need for a warning letter or court decision.

### **D.** Performance Evaluation

The performance evaluation process is carried out to determine with certainty the level of achievement of results, progress and constraints encountered in the implementation of Activities, to then be used as input for improvement. In carrying out this evaluation, indicators needed in assessing the achievements of the evaluation results. Evaluation indicators used are as follows:

- Minimum Service Standards that have been established based on Government Regulation Number PM. 15 of 2019 concerning Minimum Service Standards for Transportation in Routes;
- 2. Amount of sanctions given to Operators for SPO and SPM Violations
- 3. Number of accident occurrences
- 4. Passenger Achievements

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Department for Business, Energy & Industrial Strategy

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Economic Affairs SECO

NAMA Support Projects (NSP)

# **SUTRI NAMA & INDOBUS**

Sustainable Urban Transport Programme

# Operational Plan, Monitoring & Evaluation Guideline

Road-Based Urban Public Transport Services

Annex 2020





Ministry of Transportation Republic of Indonesia Directorate General of Land Transportation



## Operational Plan, Monitoring & Evaluation Guideline Road-Based Urban Public Transport Services

A Guide for Service Provider Operators

### Annex

2020



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### 1. Minimum Service Standards Monitoring & Evaluation Form

	Comitor Storedard		E	Examination		
No	Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
1	Keamanan					
	a. Security in bus waiting facilities and supporting	Lighting	100% of all lights are functioning in the waiting bus facility			
	facilities	Security officer	1 Security Officer at the waiting bus facility			
		Service Center Telephone Number Information	A minimum of 2 stickers informs the call center at a strategic location			
		CCTV	A minimum of 1 (one) CCTV is available at the Bus waiting facility			
		Number of criminal acts in bus waiting facilities	Per 500,000 customers there is a recapitulation of the number of criminal acts in bus waiting facilities			
	b. safety on the bus	Bus Identity and Bus Routes	Availability: a. Identity and Route on the first a. b. Identity and Route on the			
		Emergency alert light button in the driver area	back of the bus Emergency Light Button availability on the bus			
		Lighting lights in the bus	100% lighting on the bus works.			
		Driver attributes such as Uniform, ID Card Driver and Driver	Pramudi uses identity attributes such as seragam			

			F	Examination		
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		Identity Board placed on the Bus Dashboard	(name & number) used as Pramudi's ID Card and Pramudi's Identity Board placed above the Bus Dashboard.			
		Use of Window Film	Maximum use of window film with 60% darkness both for the front, side, and back of the bus.			
		Security officer	Availability of at least one (1) Officer per unit of a vehicle.			
		CCTV	Availability of 1 (one) CCTV on the Bus			
		Number of criminal acts on the bus	Availability of Recapitulation Number of criminal acts in buses per 250,000 km of Urban Public			
2	Keselamatan		Transport Operator services.			
	a.Safety in terms of Human aspects	Vehicle Operating SOP	Sustainability of Vehicle Operation SOPs in terms of minimum Vehicle SOP Violations Based on the minutes of the event Driver's sanctions imposed on Operators / Self- Management do not exceed an average of 1000 Km / Corridor / Month / (Bus Operators / Self-Management). (Lampiran: Berita Acara dan Rekapitulasi)			
		emergencies	Management reviewed by			

			E	Examination		
No	o     Aspects   Service Standards		Minimum Conditions	Realizati on	Reached (Yes No)	Information
			Violation of SOP Implementation based on Minutes of Bus / Self- Management Operators (Attachment)			
		Driver's Rest Hour	The driver rests at least 30 minutes after driving the vehicle 4 (four) consecutive hours following operational needs (including when refueling).			
			Availability: Driver's timeshift report that includes the driver's operational schedule, rest hours, and other provisions.			
	b. Safety from the Bus Car aspect	Vehicle Feasibility	Fulfillment 100% roadworthy (Appendix: Vehicle Worthy Test Form)			
		Safety Equipment	Emergency rescue facilities in danger, installed in an easily accessible place equipped with information on how to use stickers, and at least include: a. Glass breaking hammer with a minimum of 2 (two) pieces; b. Fire extinguisher; and			

			Examination			
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
			c. Automatic door opener button.			
		Medical facility	First Aid Equipment (First Handling in Accidents) consisting of at least from - clean cotton, - iodine,			
			- small scissors, - elastic plaster,			
			- sterile gauze, - 70% alcohol,			
		English	plastic gloves.			
		information.	information in the form of stickers containing telephone numbers and SMS complaints posted at strategic locations and easily seen			
		Service stand user grip facilities.	The availability of standing aids with the right amount and conditions 100% with technical standards			
		Exit and service user entry.	Exit / Entry Door is available and can function correctly.			
		Front	Front tire is not retreading			
		Indicator overspeeding.	Speed limiting device installed and functioning properly			

			Examination			
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		seat hand grip	Handrails are attached to each seat's back on the left and right of the outer seats.			
		Electricity for audiovisual.	Available Cables According to SNI Standards			
		Safety belt on the driver's seat.	Seat belts mounted on the driver's seat.			
	c.Infrastructure	Traffic equipment and road transportation.	Availability of road signs and markers supporting urban public transport operations			
		Vehicle storage and maintenance facilities (pool).	Availability and conditions 100% functioning according to technical standards			
3	Convenience					
	a. Bus Stop and Supporting Facilities Bus Stop	Lighting	A minimum of 100 Lux and 100% functions according to technical standards.			
		Room temperature and air ventilation facilities.	Maximum room availability and temperature of 270C when using AC (air conditioner).			
		Cleaning facilities	There is 1 (one) trash bin, 1 (one) bucket, 1 (one) broom, 1 (one) mop tool, water availability.			
		Floor area per person	Judging from the size of the area with the provisions of 4			

			Examination			
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		Facility to ease up / down service users.	org / m2 (rush hour); 2 org / m2 (not busy hours). The difference in floor height between the bus and the stop is a maximum of 20 cm.			
	b. Bus	Lighting.	100% functioning according to bus specifications.			
		Carrying capacity.	A maximum of 100% according to the carrying capacity in terms of the number of transports.			
		Room temperature control facilities				
		Cleaning facilities.	(For example Passenger Transport for 45 people including passengers and crew of transportation services)			
		Floor area to stand per person	Availability and conditions of a maximum temperature of 270C when using AC (air conditioner).			
4		Prohibition of smoking.	There is a minimum of 2 (two) bins accompanied by a lid			
4	Affordability					

			E	Examination		
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		Rates	The tariff value is following the Decree on Tariffs at affordable prices			
5	Equality					
		Priority Chair Particular room for wheelchairs.	A minimum of 4 (four) seats per unit of large bus vehicle and a minimum of 2 (two) units for medium bus vehicles as Feeder Transport. Particular wheelchair room is available for service users			
		Floor slope and	who use wheelchairs Sloping floor access is			
		unique texture.	available to the bus stop access to bus stops, which makes it easy for service users who use wheelchairs, people with disabilities (disabled), older adults, and pregnant women.			
6	Orderliness					
		Departure time interval	Conditions of departure from the starting point of departure are: a. A maximum of 7 minutes during peak hours; b. maximum of 15 minutes during off- peak hours;			

			Examination			
No	Service Standard Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		Waiting time	<ul> <li>c. AMARI is determined based on service needs</li> <li>Waiting time for service users to wait for the arrival of the vehicle at one stop:</li> <li>a. A maximum of 7 minutes during peak hours;</li> <li>b. maximum of 15 minutes during off-</li> </ul>			
		Travel time	peak hours; c. AMARI is determined based on service needs Travel time per corridor			
			conditioned on the following conditions: a. busy time; b. no busy hours (in minutes)			
		Traveling speed.	The maximum speed is 50km / hour for both peak and non-peak hours			
		Stop time at the bus stop	The bus stops at peak hours of at most 45 (forty-five) seconds and 60 (sixty) seconds at non-peak hours.			
		Service information loading: a. Bus stop name and transit stop plan	AvailableInformationServices in the form of visual,audio, writteninformationboards(brochures/pamphlets);			

			Е	Examination		
No	Service Standard Aspects	Service Standards	ards Minimum Conditions	Realizati on	Reached (Yes No)	Information
		<ul> <li>b. Arrival and departure schedules</li> <li>c. Departments /routes and corridors</li> <li>d. Queue lines, corridor and terminal shifts</li> <li>e. Rates</li> <li>f. Map of Service Corridor</li> <li>Networks</li> </ul>	placement is easy to read and visible; Good condition and functioning; and can go through internet media.			
		Vehicle arrival time information.	Information is available Information in electronic form, must be placed in a strategic and easy to read place; Good condition and functioning; and Bus arrival schedules conveyed via TV display media.			
		Access in and out of stops. Route/route	Exit access and entry space is sufficient according to technical standards Available information in the			
		information to be served. Accuracy and certainty of vehicle	form of visuals that placed in strategic places and audio that clearly heard. The maximum delay limit is 10 (ten) minutes from the			

	Coming Chandrad		Examination			
No	Aspects	Service Standards	Minimum Conditions	Realizati on	Reached (Yes No)	Information
		arrival and departure schedules.	specified schedule, AMARI, following operational plans.			
		Vehicle travel interruption information.	Information on the causes of bus arrival schedule delays in the form of notice boards or displays for security, operational, and safety disturbances.			
		Payment system.	<ul> <li>A standard service is available</li> <li>a. Smart Card</li> <li>b. Manual and smart card;</li> <li>c. Smart card (tap) inspection device or machine when using a smart card;</li> <li>d. 1 (one) barrier officer, who can double as a cashier.</li> </ul>			

### 2. Table of Output and Monitoring Activity Reporting

Standard	Sub Standard	Description	Indicators
1. Security	Security at the departure of	bus departure and waiting facilities	Output:
	the waiting bus facility and its	and supporting facilities supported	At least 95% of the lights are
	supporting facilities	with equipment and resources for	functioning, and there is 1 security
		security needs including lighting, task	task force and 2 stickers that
		force and service center telephone	inform the call center numbers
		number information	placed in strategic locations
			Results:
			The number of passengers who
			become victims of crime for every
			10,000 passengers who enter the
			bus departure

Standard	Sub Standard	Description	Indicators
	Security on the bus	Facilities support the bus for security	Output:
		needs which include bus identity,	1. Identity of bus numbers and bus
		driver identity of emergency	routes are available at the front and
		indicator lights, lighting, window film	back of the bus
		for bus windows	2. button for emergency lights in
			the stewarding area
			3. The lighting inside the bus is
			100% functioning
			4. The steward uses the identity
			attribute (name & number), which
			used as the Pramudi ID Card and
			the Pramudi Identity Board, which
			placed on the Bus Dashboard.
			5. Window Film Max. 60%.
			Results:
			The number of passengers who are
			victims of criminal acts on the bus
			for every 10,000 passengers
2. Safety	The safety of people on a bus	Buses operated according to SOPs	Output:
	concerning bus operations	for bus operations and emergency	SOPs are available and
		response	implemented to:
			The driver/assistant driver reads
			the manual (how to deal with
			emergencies) just before the bus
			operates from the starting point of
			the bus departure
			Emorroupy Posponso which
			includes how to deal with broken
			doors fires strikes as well as a
			midebook (How to Hand Out
			Emergency Conditions) for
			passengers available in each
			passenger seat
			Passenger sour
			Results:

Standard	Sub Standard	Description	Indicators
			Number of victims due to accidents or incidents on the bus
	Safe drivers who have certificates as well as health	The driver is in a healthy physical condition	Output:
	and driving hours		Blood pressure ranges from 90/60 mmHg to 120/80 mmHg. The pulse rate ranges from 60-100 times per minute HDL cholesterol levels of at least 60 mg / dL and LDL levels less than 100 mg / dL Blood sugar ranges from 70-100 mg / dL
		the driver has the knowledge to recognize service routes, emergency response, and service	Already have a certification from the authorities, has a tiered certification
		driver resting time, in order to keep the driver's condition in top condition	For drivers who have driven a total of 8 hours in one trip / trip it must be rested and replaced with a backup driver
			Results: Reducing the risk of drivers experiencing illness, increasing customer security and safety
	Safety on the bus in connection with an accident or incident	Checking the vehicle to be operated	Output: Procedure for checking the vehicle's health before operating and the vehicle's checking procedure after the operation.
			Checks are carried out by officers who have the competence to guarantee the vehicle is operational Results:

To ensure that the vehicle is in a condition ready for operation (SGO).         Traffic Accident Insurance.       Output:         Proof of payment of a traffic accident insurance program on each vehicle for:       1. customer;         2. driver; and       3. third party.         Results:       Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer       • A speed limiting device is installed that vehicle properly and comfortably for the customer	Standard	Sub Standard	Description	Indicators
condition ready for operation (SGO).         Traffic Accident Insurance.       Output:         Proof of payment of a traffic accident insurance program on each vehicle for:       1. customer;         2. driver; and       3. third party.         Results:       Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer       • A speed limiting device is installed that is functioning				To ensure that the vehicle is in a
(SGO).         Traffic Accident Insurance.         Output:         Proof of payment of a traffic accident insurance program on each vehicle for:         1. customer;         2. driver; and         3. third party.         Results:         Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				condition ready for operation
Traffic Accident Insurance.       Output:         Proof of payment of a traffic accident insurance program on each vehicle for:       1. customer;         2. driver; and       3. third party.         Results:       Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer       • A speed limiting device is installed that is functioning properly and comfortably for the customer				(SGO).
Finite Freedom managed       Despite         Proof of payment of a traffic accident insurance program on each vehicle for:       1. customer;         1. customer;       2. driver; and         3. third party.       Results:         Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer			Traffic Accident Insurance.	Output:
Buses are reliable and are equipped       Output:         Buses are reliable and are equipped       Output:         With facilities for safety, health, information for reporting emergency       Buses are required to pass the eligibility test         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				Proof of payment of a traffic
Buses are reliable and are equipped       Output:         with facilities for safety, health, information for reporting emergency       Output:         with facilities for safety, health, information for reporting emergency       • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				accident insurance program on
Buses are reliable and are equipped       Output:         With facilities for safety, health, information for reporting emergency       Output:         Susses are reliable and are equipped       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the eligibility test       Susses are required to pass the eligibility test         Susses are required to pass the driver can control the vehicle properly and confortably for the customer				each vehicle for:
2. driver; and         3. third party.         Results:         Guarantee the reimbursement of costs resulting from a traffic accident at the time of service.         Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions       Output:         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				1 customer
Buses are reliable and are equipped       Output:         with facilities for safety, health, information for reporting emergency conditions       Buses are required to pass the eligibility test         • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				2 driver: and
Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions				3. third party
Results: Guarantee the reimbursement of costs resulting from a traffic accident at the time of service. Buses are reliable and are equipped With facilities for safety, health, information for reporting emergency conditions  • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				5. tilld party.
Guarantee the reimbursement of costs resulting from a traffic accident at the time of service. Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditions • A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				Results:
costs resulting from a traffic accident at the time of service.Buses are reliable and are equipped with facilities for safety, health, information for reporting emergency conditionsOutput: • Buses are required to pass the eligibility test• A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				Guarantee the reimbursement of
accident at the time of service.Buses are reliable and are equippedOutput:with facilities for safety, health, information for reporting emergency• Buses are required to pass the eligibility testconditions• A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				costs resulting from a traffic
Buses are reliable and are equippedOutput:with facilities for safety, health, information for reporting emergency conditions• Buses are required to pass the eligibility test• A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer				accident at the time of service.
<ul> <li>with facilities for safety, health,</li> <li>Buses are required to pass the eligibility test</li> <li>conditions</li> <li>A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer</li> </ul>			Buses are reliable and are equipped	Output:
<ul> <li>information for reporting emergency</li> <li>eligibility test</li> <li>A speed limiting device is</li> <li>installed that is functioning</li> <li>properly, so that the driver can</li> <li>control the vehicle properly and</li> <li>comfortably for the customer</li> </ul>			with facilities for safety, health,	• Buses are required to pass the
<ul> <li>conditions</li> <li>A speed limiting device is installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer</li> </ul>			information for reporting emergency	eligibility test
installed that is functioning properly, so that the driver can control the vehicle properly and comfortably for the customer			conditions	• A speed limiting device is
properly, so that the driver can control the vehicle properly and comfortably for the customer				installed that is functioning
control the vehicle properly and comfortably for the customer				properly, so that the driver can
comfortably for the customer				control the vehicle properly and
				comfortably for the customer
• Safety facilities: 100%				• Safety facilities: 100%
functioning and placed in an easily				functioning and placed in an easily
accessible location with				accessible location with
information stickers on how to use				information stickers on how to use
the facility. The least available				the facility. The least available
• 2 (two) light extinguisher tubes				• 2 (two) light extinguisher tubes
(APAR) weighing 3 (three) kg each				(APAR) weighing 3 (three) kg each
and the tubes are colored /				and the tubes are colored /
reflective and made from dry				reflective and made from dry
powder				powder
• At least 2 (two) Glass Breaking				• At least 2 (two) Glass Breaking
Hammer on each vehicle				Hammer on each vehicle
• At least 1 set of health facilities				• At least 1 set of health facilities
(P3K) is available on the bus. The				(P3K) is available on the bus. The
contents of P3K are: 1. Bandage. 2.				contents of P3K are: 1. Bandage. 2.

Standard	Sub Standard	Description	Indicators
			Gauze is rolled and sterile. 3.
			Safety pins. 4. Latex gloves. 5.
			Tweezers. 6. Scissors. 7. Povidone-
			iodine solution for disinfecting
			wounds. 8. Alcohol-free cleaning
			wipes. 9. Antiseptic cream or
			ointment. 10. Ointment burns.
			• Min. There are 2 stickers
			containing telephone number
			information to report emergencies
			• Damri Call Center Number
			Results:
			Number of accidents or incidents
			that occur in buses for every
			250,000 Km of service
	Infrastructure	Information on Evacuation Plans &	Output:
		Evacuation Flow	1. Provide evacuation information
			2. Simplify the evacuation process
			and emergencies
			3. Provide security and safety
			4. Evacuate customers
			5. First aid facilities
			6. Sufficiently protected from
			danger
			7. Map of evacuation routes
			8. Communication facilities are
			adequate
			9. Evacuation rooms especially for
			groups of babies, pregnant
			women, disabled
			10. Evacuation route
			Results:
			Number of victims due to
			accidents or incidents that occur at
			the location of departure /
			the location of departure /

Standard	Sub Standard	Description	Indicators
			destination bus for every 250,000 Km of service.
		There must be land available for	Output:
		parking and bus maintenance	• There is a pool / depot for
			parking and bus maintenance.
			• Vehicle storage and maintenance
			facilities (pool).
			1. Garage
			2. Repair shop
			3. Driver rest area
			Results:
			Number of victims due to
			accidents or incidents that occur
			on bus service routes for every
			250,000 Km of service.
3. Comfort	At the departure point and	Lighting in departure and bus waiting	Output:
	bus waiting facilities and	facilities for the convenience of	The lighting inside the departure
	their supporting facilities	passengers	and bus waiting facilities is at least
			95% functioning and meeting the
			standards.
			Results:
			Lighting inside departure and bus
			waiting facilities meets
			implementation standards (min
			100 Lux)
		Air ventilation and control facilities	Output:
		at the departure point and bus	Availability of temperature control
		waiting facilities for passenger	and air ventilation (air
		comfort	conditioning, tan, or air
			ventilation). It air conditioning is
			used, the max temperature inside
			me departure point and the bus
			implementation standards (May 27
			° C)
			C) Results
			results.

Standard	Sub Standard	Description	Indicators
		Facilities for cleanliness of departure and bus waiting facilities for passenger comfort	The temperature in the departure and bus waiting facilities meet the implementation standards (need for air conditioning), max 27 ° C Output: At least 1 trash can is available Results: • departure and waiting facilities for clean buses (interior & exterior) that are free of dirt, including dust, rubbish and odors. • Visually the original surface of
			<ul> <li>the material is clear, rough, and clear and odorless.</li> <li>Walls, window panes, doors and roof surfaces of departure and waiting facilities are free of dirt, rubbish, liquid waste or pictures and are odorless.</li> <li>Results:</li> <li>Customer satisfaction survey</li> </ul>
		Passenger satisfaction with the level of density in the departure and bus waiting facilities	Output: The max number of passengers in the departure and bus waiting facilities is 2 people / m2 (Non- Peak time), 4 people / m2 (Peak time)
		Facilities to facilitate passenger boarding and departure from the point of departure and waiting facilities to the bus	Results: Passenger satisfaction with density Output: Difference (distance) between departure and waiting facilities with bus max 15 cm. Results:

Standard	Sub Standard	Description	Indicators
		Quality staff services (ticket clerk, Barrier, Task Force, flight attendant, security, control and communication center)	The number of accident victims due to the gap (gap) between the departure and waiting facilities with the bus for every 500,000 passengers Output: The requirements are stated in the SOP Services that are available, implemented and complied with
		Lounge facilities Room / place provided for customers and customers before boarding the bus (closed room and / or open space)	Results: Customer satisfaction survey Output: Lounge facilities are equipped Availability: 1. The waiting room facilities are clean, comfortable and odorless. 2. Comfortable seating 3. Smoking Area
		Facilities for conducting clean and comfortable worship	Results: Customer satisfaction survey Output: Availability according to environmental conditions. In addition, it must also be available: 1. Clean water facilities; 2. Air freshener 2 (two) right and left sides 3. Air Conditioning (Fan / AC)
		Facilities buy customers' needs for drinks and food	Results: Customer satisfaction survey Output: There are places for selling drinks and food (canteen). Ensuring food and drinks sold are healthy and hygienic

Standard	Sub Standard	Description	Indicators
		Battery Charging Facilities and Information on bus car trip interruptions	Results: Customer satisfaction survey Output: Charge the gadget Availability: 1. There are at least 6 (six) electrical terminals; 2. Battery charging facility; 3. Easy to reach placement of
			<ol> <li>Easy to reach, placement of facilities; Provide information on the causes of delays in bus schedules related to security, operational, and safety disturbances.</li> <li>Clearly heard by customers. Information is conveyed continuously to service users.</li> </ol>
	In the bus	Lighting in the bus	Results: Customer satisfaction survey. Output: Lighting on the bus is at least 95% functioning and meets technical
		Clean and comfortable sanitation facilities, in order to meet customer needs	standards. Results: Customer satisfaction survey Output: Clean toilet / washroom facilities equipped with: 1. Air freshener 1 (one) fruit 2. 1 (one) trash bin 3. One hand washing soap 4. Camphor hanging type 1 (one) per toilet
			Results:

Standard	Sub Standard	Description	Indicators
			Customer satisfaction survey
		Bus carrying capacity	Output:
			• Max passenger number based on
			bus capacity as specified
			• The highest is 100% according to
			the carrying capacity.
			a. For Large Buses:
			• Seat configuration 2-2
			• Seat configuration 2-1 2.
			b. For Medium Buses
			c. For Micro Buses
			Results:
			The bus does not exceed its
			carrying capacity as specified in the
			display on the bus.
		Seats for customers according to the	Output:
		type of service provided while	• The seat base material is made of
		maintaining safety aspects.	foam and functions the seat well
			• Seat distance Measured from the
			front of the seat back to the back
			of the seat back in front of it:
			a. Large Bus:
			1. At least 80 cm
			2. At least 100 cm
			b. Medium Bus: At least 76 cm
			• Seat numbers must be available
			according to the number of seats
			available and depends on the
			number of seats available.
			Results:
			• Increase the comfort of
			customers in traveling
			• Customer satisfaction survey
		Temperature in the bus for passenger	Output:
		comfort	

Standard	Sub Standard	Description	Indicators
			The availability of air conditioning
			as a regulator of the temperature in
			the bus, 20-240C
			Results:
			Customer satisfaction survey
		Bus cleanliness	Output:
			• Minimum 2 trash bins available
			• The bus inside and out is clean of
			rubbish including dust, dirt and
			odors.
			• Interior cleanliness including
			floors, walls, windows, doors,
			seating and panels. Interior
			cleanliness means that the surface
			of the original material is clearly
			seen as nothing that prevents both
			particles, as well as liquid and solid
			waste. The interior also doesn't
			smell.
			• Exterior cleanliness means all the
			exterior parts of the bus, body
			walls, windows, doors and other
			equipment. The original material
			clearly saw nothing blocking both
			the particles, and the liquid and
			solid waste.
			Results:
			Customer satisfaction survey
		Floor area per person on the bus	Output:
			Percentage of people on the bus as
			the allowable carrying capacity.
			Results
			Customer satisfaction survey
			Customer sausracuon survey

Standard	Sub Standard	Description	Indicators
		Helmsman reliability. Passenger satisfaction for braking, acceleration and release of the brake pedal	Output: Pramudi has passed the required bus operational test.
			Results: Refer to the customer satisfaction survey; satisfaction with the braking, acceleration and deceleration processes
	Ease of getting information	Convenience for passengers or potential passengers to get service information by telephone	Output: Information availability
			Results: Passenger satisfaction levels are based on an independent survey.
	Ease of submitting suggestions and complaints	The ease with which passengers submit complaints and suggestions in a measurable manner:	Output: • Availability of required forms • Time to respond.
		Forms are available at every departure and bus waiting facilities; Reports / feedback is given in less than 2 x 24 hours:	Results: Customer satisfaction survey.
		Passengers are satisfied in submitting complaints and suggestions	
	Easy access to and from the bus	Max time needed by the passenger from the end of the ramp to the point of departure, including waiting facilities.	Output: Maximum time required by passengers is 5 minutes
			Results: Customer satisfaction survey
4. Affordability	Affordable Cost	The Government determines the fees charged to customers for a single trip at affordable prices on the entire Urban Public Transport Operator Network.	Output: The application of the tariff value is following the Decree on the Tariff
			Results:

Standard	Sub Standard	Description	Indicators
		Service users are satisfied with affordable costs	Customer satisfaction survey
5. Equality	Priority seat in the bus	Seats on the bus prioritized for disabled passengers, elderly, children, and pregnant women.	Output: Min 4 seats are marked and used for priority passengers on the bus Results: Priority passengers can use the
	Space for wheelchairs	Facilities for wheelchair users at departures and waiting facilities and on buses	Output: Areas for wheelchairs are available on the bus as well as for all departure and waiting facilities.
			Results: Wheelchair users can use transport services
	The slope and texture of the floor	bus departure and waiting facilities can be accessed by passengers using wheelchairs, disabilities (including visual impairment), older adults and pregnant women	Output: Floor slope and texture (not slippery) suitable for users with different abilities including users with vision problems and priority passengers
			Results: Priority passengers can quickly enter the departure and bus waiting facilities
6. Orderliness	Waiting time for passengers for bus arrivals at departure and bus waiting facilities	The time needed for passengers to wait for the arrival of the bus at the departure and bus waiting facilities	Output 1: Max wait time is 7 minutes during Peak time and 15 minutes during Non-Peak Results 1: The bus leaves the terminal
			according to the neadway plan.

Standard	Sub Standard	Description	Indicators
			Result 2:
			The accuracy of the bus departure
			interval determined between the
			time of bus departure from the
			place of departure and waiting
			facilities.
			Output 2:
			Average travel speed may 40
			Km/hour on average at neak
			times and max 60 Km/hour on
			average at peak times and still
			follow the applicable traffic rules
			such as maximum/minimum
			speed limit signs.
			Results:
			Bus travel time according to plan
			Output 3:
			Achievement of time to disembark
			and raise passengers at departure
			and bus waiting facilities (Max 5
			minutes)
			Results:
			Customer satisfaction survey
			Output 4:
			Information is available in the
			form of bulletin boards or
			brochures placed in strategic
			locations within the departure and
			waiting facilities. In locations with
			adequate infrastructure,
			audiovisual, and internet media
			used.

Standard	Sub Standard	Description	Indicators
			Results: Customer satisfaction survey
	Real-time information about bus arrivals at departure and bus waiting facilities	Real-time information about bus arrivals at departures and bus waiting facilities that improved in the system and infrastructure	Output: Real-time information is available about bus arrivals at departure and bus waiting facilities in an audiovisual format that is easy to read and at strategic locations
			Results: Customer satisfaction survey
			Output Availability of information through audio-visual media on the bus about the departure and waiting facilities that are being and will pass.
			Results: Customer satisfaction survey
			Output: Information about bus trip disruptions (time and type of disruption) that immediately conveyed via notice boards or displays)
			Results: Customer satisfaction survey
			Output Information on how and where to buy etiquette is available at agents, counters, and websites.

Standard	Sub Standard	Description	Indicators
			Results:
			Customer satisfaction survey
			Output
			Availability of at least 1 entrance
			for e-ticket gate users equipped
			with a card reader that works well
			on the bus.
			Results:
			Reducing queue time and making
			it easy for customers to get tickets
			based on the Customer
			Satisfaction Survey
			Outent
			Output:
			a. Percentage of field in operation
			b. Age of the venicle.
			Results:
			Customer satisfaction survey
	Reliability of the fleet	The maximum number of service	Output:
		disruptions caused by bus	Number of operational
		disruptions is 10 for every 20,000 km	disruptions per 200,000 km of
		of service	service
			Results:
			Customer satisfaction survey

### 2. Form of Minutes in Monitoring and Evaluation

## NEWS REDUCTION / ADDING / RETURNING BUSINESS OPERATIONS (BA. 01)

Based on the consideration of the situation and conditions in the field and or the bus experiencing interference and in the context of efficiency. It is necessary to reduce/add/return buses that are operating:
Date/ time \_\_\_\_\_\_

Hour : \_\_\_\_\_\_ Reduction / addition / repatriation \*) Name Pramudi"s : Bus Number : Last KM : \_\_\_\_\_\_ Location : \_\_\_\_\_\_ Location : \_\_\_\_\_\_ Information : \_\_\_\_\_\_ Assignment( \*\*) - Ordered to rest / go home ....... / to Pool PT ...... - Ordered to rest / go home Because ...... - Ordered to operate at the bus stop ...... (Substitute / Addition)) Operator Officer PT...... Control Officer

.....

\*) Strike out unnecessary

\*) Circle
#### NEWS

#### **REPORTING / EVIDENCE FOR VIOLATION OF SPO / SPM**

### (BA. 02)

Based on the consideration of the situation and conditions in the field and the bus is experiencing interference. Reduction/repatriation of buses operating is necessary: Date/ time : \_\_\_\_\_ Hour : Reduction / addition / repatriation \*) Name Pramudi"s : Bus Number : Last KM : Location : Information : Assignment( \*\*) - Ordered to rest / go home ..... / to Pool PT ..... - Ordered to rest / go home Because ..... - Ordered to operate at the bus stop ..... (Substitute / Addition)) Control Officer Operator Officer PT..... ..... \*) Strike out unnecessary

\*) Circle

#### NEWS

### **OPERATION OF BUS HELP / RUTE APPROACH / TRANSPORTATION**

### (BA. 03)

In the context of service to service users in accordance with the situation on the ground, it is necessary to carry out the operation of the assistance bus / route route / pathway:

Date and time	:		
Hour	:		
Body Number	:		
Departs Km. Start / Hou	r :		
Back Km. Start / Hour:	:		
Location	:		
Ordered to carry out oper	rations / ser	vices by route::	

Jakarta,....

Pet. Control	OPERATION OFFICERS	OFFICER
	OPERATORS PT	ODOMETER RECORDER

(.....) (.....)

### NEWS

## EVIDENCE OF VIOLATION OF VIOLATION STANDARD OPERATING PROCEDURES (BA. 04)

As of today, the date (date	e / month /	year) / /, the Controlling Officer under	r this sign:
Name	: _		
Position	: _		
Job Location / Place	: _		
Based on observations in	the field and	/ or complaints from the community,	have found violations committed by
bus operators with the fol	lowing info	mation:	
Name / Position	:		
Operator PT.	:		
Bus Number	:		
KM During Service:	:		
KM During Service:	:		
KM During Service:	:		
Thus this Official Report	is actually m	ade to be used properly. Jakarta, <b>Date:/</b>	./
Violator		Act	Operator Officer PT

## 3. Types of Sanctions for Monitoring and Evaluation Activities

<b>No</b>	Violation Description Drivers raise / lower Passengers or people at locations other than the special Busway Stop along the Route / Route Network without the approval or instruction of the Main Control Room or the Controlling Agency of the Transportation Administration Agency	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and Driver OPERATORS
2	Drivers who operate buses do not have training certificates for driving mass transportation	150 Km
3	The bus rotates direction in the middle of the Route / Route Network without instructions from the Main Control Room or the Transportation Management Agency	150 Km
4	The bus crashed into a bus stop (except the pier)	<ol> <li>The bus removed from the Route / Route Network</li> <li>150 Km</li> <li>Bus Operators are obliged to bear all the costs of repairing/replacing bus stops</li> <li>Mechanism: the estimated cost of repairs provided by the infrastructure section of the Transport Administration Agency is the basis for the Transport Administration Agency to deduct Bills</li> </ol>
5	The bus crashed into the dock, resulting in the rubber dock detached	<ol> <li>Bus Operators are required to bear all costs of repair/replacement of docks</li> <li>50 Km</li> </ol>

# a. Sanctions for violations committed by drivers

		Sanctions, Kilometers Sanctions,
No	Violation Description	and Rp. Sanctions on BUS and
		Driver OPERATORS
		<ol> <li>Mechanism: the estimated cost of repairs provided by the infrastructure section of the Transport Administration Agency</li> </ol>
		is the basis for the Transport Administration Agency to deduct the Bill
6	Drivers driving the Bus improperly following the assessment of the Transport Administration Agency and carrying out activities that cause concentration disturbances, including but not limited to Drivers using cell phones/head sets / listening to music using cell phones/head sets in the wheelhouse when operational, turn on the radio or sound, song or music device when operating the Bus, except as required for the implementation of the Urban Transportation System by the Transport Administration Agency	150 Km
7	The driver is proven to carry and or use narcotics / dangerous drugs/alcohol	<ol> <li>Bus Operators are required to terminate employment with the Driver concerned</li> <li>Drivers processed following applicable legal provisions</li> <li>600 Km</li> <li>Cutting the Work Volume of 600 Km to the bus operated</li> </ol>
8	Drivers are proven to carry firearms, sharp weapons and explosives while on duty	<ol> <li>Bus Operators are required to terminate employment with the Driver concerned</li> <li>Drivers processed following applicable legal provisions</li> <li>600 Km</li> <li>Cutting the Work Volume of 600 Km to the bus operated</li> </ol>

No	Violation Description	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and Driver OPERATORS
9	Except for Feeding Public Transport Services, Integration	
	Services, Transjabodetabek Transport Services, and Other Public	
	Transport Services using the fare payment method on the Bus,	300 Km
	Drivers request or allow passengers to pay fares on the Bus or	
	let the On-Board withdraw money from passengers on the Bus	
10	The driver crashed into a fellow Bus	1. Buses are removed from the Route
		/ Route Network, except Buses
		that are not defective in accordance
		with the assessment of the
		Transport Administration Agency
		2. Drivers replaced with Backup
		Drivers
		3. 150 Km
11	Drivers drive Buses with speeds above 50 Km per hour (except	1. 150 Km
	on toll roads, speeds can reach a maximum of 60 km per hour)	2. Cutting the Work Volume of 150
		Km against the Bus that is operated
12	The bus runs out of fuel (gas/diesel) during operation which	1. For gas-fueled buses: 100 Km
	results in a strike	2. For diesel-fueled buses: 250 Km
13	The driver does not carry out instructions concerning the	1. The bus removed from the Route /
	headway, speed, route, and sedimentation of the Main Control	Route Network
	Room and the Controlling Agency of the Transport	0 450 17
	Administration Agency	2. 150 Km
14	Drivers driving Buses in violation of traffic signs or road	
	markings, including but not limited to violating the prohibition	250 Km
	of traffic signal command devices, related to road transportation	
15	The driver drives the Bus outside the Route / Route Network	1. 100 Km
	without permission from the Transport Administration Agency	2. Cutting the Work Volume of 100
	or Main Control Room	Km to the bus being operated

No	Violation Description	Sanctions, Kilometers Sanctions,
INU	Violation Description	Driver OPERATORS
4.6		
16	The Driver or BUS OPERATOR does not report problems that	
	occur on the Bus engine which results in disruption of the related	100 Km
	Bus service/operation within 1x24 hours	
17	The driver eats / drinks/smokes while driving the Bus or in other	1. 250 Km
	places, other than at the bus stop (the last stop on a Route /	2. Cutting the Work Volume of 150
	Route Network)	Km against the Bus that operated
18	The driver made a mistake in approaching the dock at the bus	
	stop, so the distance between the door of the bus and the dock	
	is more than 30 cm (thirty centimeters) which does not meet the	50 Km
	safety and comfort requirements of passengers when stopping at	
	the bus stop	
19	The driver leaves or disembarks from the bus during his term of	
	duty without a strong reason or permission from the Controlling	150 Km
	Officer	
20	Drivers do not wear standard uniforms and equipment as stated	
	in the Driver's Standards (including letters and KIP), and on the	150 Km
	Bus there is no Driver name card/card and Driver's driver	130 Km
	number placed in the Driver's room	
21	Driver / Employees Bus Operators behave and say	400 17
	disrespectfully to passengers	100 Km
22	The driver does not stop other than at the designated place,	
	settles, unloads passengers other than at the stop, or crosses the	
	network other than those specified in the Route License, nor	150 Km
	does the route depart and return to the pool/depot/gas station	
	/ SPBG without reasons that accounted.	
23	Drivers park the Bus in a place or location that has been	
	expressly provided or designated by the Transport	50 Km
	Administration Agency	

		Sanctions, Kilometers Sanctions,
No	Violation Description	and Rp. Sanctions on BUS and
		Driver OPERATORS
24	Drivers are unable to maintain distance according to SOP on	50 <i>V</i> m
	Route / Route Networks	50 Km
25	Drivers intentionally disrupt the operation of the Urban	
	Transportation System (including slowing the Bus, eating more	50 Km
	than 15 minutes in the schedule determined by the Transport	
	Administration Agency in the Operational Plan)	
26	Driver driving a Bus without a Driving License (SIM B1 is	1. If the Driver does not have a valid
	standard for Single Bus / Maxi Bus and SIM is B2 for Articulated	SIM, the Driver dismissed, and the
	Bus)	BUS OPERATOR is subject to a
		250 Km penalty
		2. If the Driver does not carry a SIM,
		the BUS OPERATOR is subject to
		a 150 Km penalty, and the Driver
		replaced with a Backup Driver
27	Drivers do not prioritize the safety of other road users on mixed	1. Backup Drivers replace drivers
	traffic sections	2. 100 Km
28	Driver driving a bus that does not meet the technical	
	requirements related to technical requirements consisting of ::	1. The bus was sent home
	a. Arrangement	
	b. Equipment	
	c. Size	2. Kilometers Travel days not
	d. Body	counted
	e. Technical design of motor vehicles;	
	f. Loading	
	g. Use;	3 50 Km
	h. Coupling motor vehicles; and	5. 50 Mil
	i. Vehicle attachment	

No	Violation Description	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and Driver OPERATORS
29	Drivers driving Buses that do not pass the roadworthiness test, which requirements are determined by the minimum performance of motorized vehicles measured at least consist of:	<ol> <li>If these documents not carried, they will be subject to a Kilometer of Sanction 50 Km</li> </ol>
	<ul> <li>a. exhaust gas emissions;</li> <li>b. noise noise;</li> <li>c. primary brake system efficiency;</li> <li>d. parking brake system efficiency;</li> </ul>	<ol> <li>If these documents are no longer valid / not owned, a Kilometer of Sanction of 250 Km imposed</li> </ol>
	<ul> <li>e. front wheel blades;</li> <li>f. the sound of the horn;</li> <li>g. transmit power and direction of the main light beam;</li> <li>h. turning radius;</li> </ul>	3. The bus sent home
	<ol> <li>accuracy of speed indicators;</li> <li>suitability of wheel performance and tire conditions; and</li> <li>suitability of drive engine to vehicle weight;</li> <li>as evidenced by having relevant licensing documents such as STNK, KIUKP, emission test letters, and KEUR.</li> </ol>	4. Kilometers Travel days are not counted
30	Drivers violate traffic movement rules or procedures for stopping and parking	50 Km
31	The driver violates the rules of coupling and attachment with other vehicles	50 Km
32	Drivers do not use seat belts	100 Km
33	Drivers do not turn on the headlights (big) at night and certain conditions	50 Km
34	The driver does not give a signal with the direction lights when going to turn, change lanes or move sideways (left or right sign lights)	50 Km
35	Drivers race on the road	<ol> <li>Backup Drivers replace drivers</li> <li>150 Km</li> </ol>

No	Violation Description	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and Driver OPERATORS
36	Drivers do not install safety triangles or danger warning lights when stopping or parking in an emergency	50 Km
37	<ul><li>The driver does not do the following:</li><li>a. use the designated lane; or</li><li>b. do not use the rightmost lane, except when it will overtake or change direction (except for the BRT</li></ul>	1. Backup Drivers replace drivers
	<ul><li>System Service or according to conditions or routes specified by the Transport Administration Agency); or</li><li>c. does not stop the bus during boarding and unloading passengers; or</li><li>d. Do not close the bus door as long as the bus is running.</li></ul>	2. 50 Km
38	Drivers due to negligence result in traffic accidents with damage to vehicles and goods	<ol> <li>The bus removed from the Route / Route Network</li> <li>Drivers replaced with Backup Drivers</li> <li>150 Km</li> </ol>
39	Drivers due to negligence result in traffic accidents with minor injuries and damage to vehicles and goods	<ol> <li>The bus removed from the Route / Route Network</li> <li>The Bus Operator bears all costs incurred</li> <li>Drivers replaced with Backup Drivers</li> <li>250 km per violation</li> <li>100 Km per victims of minor injuries</li> </ol>
40	The driver because of his negligence resulted in a traffic accident with seriously injured victims	<ol> <li>The bus removed from the Route / Route Network</li> <li>The Bus Operator bears all costs incurred</li> <li>Drivers are replaced with Backup Drivers</li> </ol>

	Sanctions, Kilometers Sanctions,	
No	Violation Description	and Rp. Sanctions on BUS and
		Driver OPERATORS
		4 800 km per violation
		5 150 Km per visiting of minor
		inimia
41		1 The left of the provide
41	The driver due to negligence resulted in a traffic accident that	1. The bus removed from the Route /
	resulted in another death	
		2. Drivers are processed in
		accordance with applicable legal
		provisions
		3. All costs incurred are borne by the
		Bus Operator
		4. Drivers replaced with Backup
		Drivers
		5. 1.250 Km per violation
		6. 1.000 Km per the victim died
42	The driver intentionally drives the bus in a way or condition that	1. Bus Operators are required to
	endangers lives and goods	terminate employment with the
		Driver concerned
		2. Drivers replaced with Backup
		Drivers
		3. 100 Km
43	The driver intentionally drives the Bus in a manner or condition	1. The bus removed from the Route /
	that results in a traffic accident with damage and goods	Route Network
		2. Bus Operators are required to
		terminate employment with the
		Driver concerned
		3. 200 Km
44	The driver intentionally drives the bus in a way or condition that	1. The bus removed from the Route /
	results in a traffic accident with victims of minor injuries and	Route Network
	damage to vehicles and goods	2. Bus Operators are required to
		terminate employment with the
		Driver concerned
		3. 250 Km per violation

No	Violation Description	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and
		Driver OPERATORS
		4. The Bus Operator bears 150 Km per number of victims of minor
45	The driver intentionally drives the bus in a way or circumstance	1 The bus removed from the Boute /
43	resulting in a traffic accident with seriously injured victims	Route Network
		2. Bus Operators are required to terminate employment with the Driver concerned
		3. 1.000 Km per violation
		4. 700 Km per number of victims seriously injured, and the Bus Operator bears all costs incurred
16	The driven interaction the driven declaration encoded at the second	due to the accident
40	results in another person's death	1. The bus removed from the Route /
	results in another person's death	2 Bus Operators are required to
		terminate employment with the
		Driver concerned
		3. Drivers processed following
		applicable legal provisions
		4. 2.000 Km per violation
		5. The Bus Operator bears 1,250 Km
		per number of victims killed, and
		all costs incurred
47	The driver involved in a traffic accident intentionally does not	1. The bus removed from the Route /
	stop the bus, does not provide help, or does not report a traffic	Route Network
	accident to the nearest National Police of the Republic of	2. Bus Operators are required to
	Indonesia	terminate employment with the
		2 Driver concerned
		3. Drivers processed following
		4. 3.000 Km per violation

No	Violation Description	Sanctions, Kilometers Sanctions, and Rp. Sanctions on BUS and Driver OPERATORS
		<ol> <li>1,250 Km per number of injured victims, 3,000 Km per victim died, and all costs incurred are borne by the Bus Operator</li> </ol>

## b. Sanctions for violations committed by bus operators

No	Violation Description	Sanctions / Kilometers Sanctions and Rp. Sanctions
1.	Bus Operators do not operate part / all of the Fleet for unclear reasons, resulting in disruption of Public Transport Services (including but not limited to Driver rallies).	400 Km multiplied by the number of days the Bus Operator does not operate part / all of the Fleet multiplied by the number of Buses that do not operate per day according to the Operational Plan determined by the Transport Administration Agency. Then if within 1 x 24 hours the Bus Operator still cannot operate part / all of the Fleet, then for the sake of the sustainability of public services, the operation of the Public Transport Service on the Route / Route Network will be taken over by the Transport Administration Agency.
2.	Measuring devices such as odometer, tachometer is found to be damaged / not functioning correctly.	<ol> <li>The bus removed from the Route / Route</li> <li>Network 100 Km.</li> </ol>
3.	Bus Operators cannot fulfill the number of SGO Buses following Article 6 of this Agreement.	<ol> <li>1. If a Bus Operator fails to meet the SGO (including the provision of a Reserve Bus) for more than 3 (three) consecutive Calendar Days, the Work Volume reduced by calculation: Reduction of Work Volume due to SGO not achieved = (number of Bus units, not SGO) x (Daily Travel Kilometer) x (number of days not SGO calculated from the first day, not SGO)</li> <li>2. The maximum accumulative number of days the Bus unit is not in the SGO condition, as referred to in</li> </ol>

No	Violation Description	Sanctions / Kilometers Sanctions and Rp. Sanctions
		<ul> <li>number 1 is 60 (sixty) Calendar Days. If it has passed the maximum number of days of the non-SGO Bus unit, the Bus Operator is subject to a sanction of 70% (seventy percent) of the maximum capacity of the Bus, which is 120 (one hundred and twenty) passengers multiplied by ten Ritase times the applicable ticket price multiplied by the number of Buses no SGO per day</li> <li>3. As an affirmation, after the 60 (sixty) Calendar Days period above has passed, then: <ul> <li>The fleet reduced by 1 (one) bus unit; and</li> <li>The work volume reduced by 1 (one) Bus unit proportional to the remaining Term of the Agreement.</li> </ul> </li> </ul>
4.		<ol> <li>Non-Kilometer Production Bus in question on that day not counted</li> <li>100 Km.</li> </ol>
5.	The bus failed to operate before operating on the Route / Route Network due to technical/mechanical faults.	<ol> <li>The bus removed from the Route / Route Network</li> <li>Kilometer of Bus Trip that fails to operate is calculated from the last recording at the initial Stop / End Stop until the last Stop that has been reached by the Bus. The distance between shelters calculated using the calculation of the standard distance of shelters that have been determined by the Transport Administration Agency</li> <li>50 Km</li> </ol>
6.	The bus failed to operate while operating in the Busway Corridor / Route due to technical/mechanical problems.	<ol> <li>100 Km</li> <li>If the Reserved Bus can only be operated more than 30 (thirty) minutes after the bus replacement instruction is issued by the Transport Management Agency, an additional Kilometer of Sanction of 50 Km will be imposed.</li> </ol>
7.	Bus Operators cannot provide Backup Buses when there are Buses that they operate in	250 Km.

No	Violation Description	Sanctions / Kilometers Sanctions and Rp. Sanctions
	have experienced damage before or when	
	operating on Routes or Route Networks.	
8.	Bus Operators replace Buses that are operating without obtaining prior instructions from the Transport Administration Agency.	<ol> <li>Kilometer Travel Bus not counted, and the Bus is considered not operating on that day</li> <li>150 Km</li> </ol>
9.	Buses operate outside the Operational Plan without written approval from the Transport Administration Agency.	250 Km.
10.	The Bus Operator changes the Route / Route Network without prior approval or instructions from the Transport Administration Agency.	<ol> <li>The Kilometer of Buses over the number of operating Buses determined by the Transport Administration Agency does not count, starting from the highest Kilometer of Mileage.</li> <li>The Bus Operator Work Volume is reduced by 250 Km for each excess number of buses operated without the permission of the Transport Administration Agency.</li> </ol>
11.	Bus Operators operate Buses exceeding the number that determined without the permission of the Transport Administration Agency.	100 Km.
12.	Delay in operating services without a reason that can be accepted by the Transport Administration Agency.	50 Km.
13.	The bus found to be dirty/unclean outside / inside because not washed.	50 Km.
14.	The exterior of the Bus/body The bus was found in a damaged, dented, and scratched state, which was not a result of an accident that tolerated on the day the condition discovered.	100 Km.

No	Violation Description	Sanctions / Kilometers Sanctions and Rp. Sanctions	
15.	One / more of 2 (two) units of Light Fire Extinguishers (APAR) and 2 (two) units of APAR Bombs in the engine cabin (for gas-fired buses) are not available according to the specified amount and have expired.	<ol> <li>Bus Operators are still required to repair Buses according to APM directives</li> <li>1.000 Km</li> </ol>	
16.	Bus Operators were found negligent or neglected maintenance, maintenance, or repair activities according to APM advice and the Vehicle Maintenance Manual.	<ol> <li>Bus Operators are given 1 (one) written warning during the Term of Agreement</li> <li>If the Bus Operator continues to violate after the first warning given, then the Bus Operator is subject to a Kilometer of Sanction of 100 Km per Bus for which the LED display or voice announcer does not function</li> </ol>	
17.	One / more LED displays or voice announcers do not function when operating.	<ol> <li>If the delay or does not function more than 15 minutes, then a Kilometer of Sanction of 50 Km is imposed on each event;</li> <li>If the GPS does not operate at all, then the Bus is considered not operating; and</li> <li>Kilometer of Bus Trip, which calculated Kilometer based on GPS data of the Transportation Administration Agency.</li> </ol>	
18.	The Global Positioning System / GPS on the Bus does not function during operation or not monitored in the Main Control Room of the Transport Administration Agency.	<ol> <li>Bus Operators are given 1 (one) written warning during the Term of Agreement</li> </ol>	
19.	One / more CCTVs on the Bus do not function when operating (through random checks).	<ol> <li>If the Bus Operator continues to commit violations after the first warning given, the Bus Operator is subject to a Kilometer of Sanction of 500 Km per Bus for which the CCTV is not functioning</li> <li>Bus Operators given 1 (ope) written warning during</li> </ol>	
20.		the Agreement	
21.	The communication tool does not function while operating.	1. If the Bus Operator continues to commit violations after the first warning given, then the	

No	Violation Description	Sa	nctions / Kilometers Sanctions and Rp. Sanctions
			Bus Operator is subject to a Kilometer of Sanction
			of 75 Km per Bus for which the communication
			device does not function
		2.	1500 km

### c. Sanctions for violations of the provisions of the legislation

### Law 22 of 2009 concerning Road Traffic and Transport (Law No. 22/2009)

No	Rules that violated	Sanctions / Kilometers Sanctions and Rp.	
140	Kules that violated	Sanctions	
	Article 308		
1	Bus Operators do not have permits to carry public	150 Km	
1	transportation on routes or deviate from the specified	150 Km.	
	permits.		
	Article 309	1. Bus Operators are required to	
2	Bus operators do not insure their responsibilities for	pay/compensate for losses suffered by	
2	compensation for losses suffered by passengers or third	passengers or third parties; and	
	parties.	2. 100 Km.	
3	Article 313		
	Bus Operators do not insure vehicle crews and	50 Km.	
	passengers.		

Minister of Transportation Decree No. KM 35 of 2003 concerning Organizing Transportation of People on the Road by Public Transportation (KM No. 35/2003)

No.	Rules that violated	Sanctions / Kilometers Sanctions and Rp. Sanctions
	Article 101 paragraph (1)	
1.	The Transport Administration Agency has received	150 Km
	information from Dishubtrans or other competent	
	authorities that Bus Operators who have obtained Route	

No.	o. Rules that violated		Sanctions / Kilometers Sanctions and Rp.
			Sanctions
	License	es violate Article 101 KM No.35 / 2003,	
	includi	ıg:	
	a.	Not reporting if changes in company ownership	
		or changes in company domicile;	
	b.	Not reporting transport operational activities	
		every month;	
	c.	Does not pay compulsory contributions to	
		accident insurance;	
	d.	Not returning the Route Permit document after	
		the change occurs; and	
	e.	Transporting passengers does not fit the	
		specified capacity.	

### Regional Regulation No. 5 of 2014 concerning Transportation (Regional Regulation No.5 /

2014)

No.	Rules that violated		nctions / Kilometers Sanctions and Rp. Sanctions	
	Article 249			
1.	Drivers park in public spaces belonging to a road without	50 F	Km.	
	parking markers and parking signs.			
	Article 250			
	Drivers do not wait, raise and drop off passengers at			
2	Busway stops, except for Feeder Public Transport	50 K	50 Km.	
2.	Services, Integration Services, Transjabodetabek	501		
	Transport Services, and Other Public Transport			
	Services.			
	Article 258	1.	Bus Operators are required to terminate	
	The driver does not stop at the crossing between the		employment with the Driver	
3.	train and the road when the signal has sounded, and the		concerned;10.000 Km; dan	
	railroad doorstop closed, and there are other signals as a	2.	The Bus Work Volume reduced by 80,000	
	sign of prohibition.		km.	

Regional Regulation No. 12 of 2003 concerning Traffic and Transport of Roads, Railways, Rivers and Lakes and Crossings in DKI (Perda No. 12/2003)

No.	Rules that violated	Sanctions / Kilometers Sanctions and / or Rp. Sanctions
1.	Article 105 Bus operators do not follow the rules regarding the age limit of public transport vehicles set by the Governor.	200 Km.
2.	Bus Operators do not have a Transport Business License issued by the Head of the Transportation Agency.	200 Km.
3.	Bus Operators do not renew Business License Cards annually.	200 Km.
4.	Bus Operators do not rejuvenate buses that are not roadworthy and exceed the age of the vehicle.	150 Km.

# d. Sanctions for Violations of Minimum Service Standards for Public Transport Services

No.	Rules that violated	Sanctions / Kilometers Sanctions and Rp. Sanctions
	The driver drives a bus that does not have a vehicle	1. The bus discharged;
1	number and route name in the form of LED displays on	2. Kilometers traveled days are not counted;
1.	the windshield, rear glass, inside, right side according to	and
	the number of doors, left side.	3. 150 Km.
2	The danger signal light button placed in the Driver's	50 Km.
۷.	room does not function when the Bus is operating.	
3.	The lights on the Bus do not function when operating.	100 Km.
	Bus window films do not follow the rules regarding the	
4	percentage of light penetration on vehicle windows set	100 Km
4.	by the Transport Administration Agency, which is a	
	maximum of 60% per Bus unit.	
5.	Bus Operators employ Drivers for more than 4 (four)	1. Drivers replaced with Backup Drivers; and
5.	consecutive hours, which adjusted to operational needs.	2. 100 Km.
	The bus does not have complete safety equipment (glass	250 Km.
6.	breaker hammer, 2 pieces, vehicle extinguisher, and	
	automatic door release button).	

No.	Rules that violated	Sanctions / Kilometers Sanctions and Rp. Sanctions			
7.	The bus not equipped with health facilities that used for accident emergency handling in the form of first aid kits (First Handling in Accidents) consisting of at least clean cotton, iodine, small scissors, elastic tape, sterile gauze, 70% alcohol, plastic gloves, during operation.	50 Km.			
8.	Buses are not equipped with emergency response information in the form of stickers containing telephone numbers and SMS complaints posted at strategic locations and easily seen, at least 2 (two) stickers per vehicle when operating, following the Implementation Guidelines for Installing Complaints Info Number Stickers.	50 Km.			
9.	Standing hand grip passengers on the Bus are less in number than those specified in the technical specifications and do not function properly.	50 Km.			
10.	The exits and entrances on the Bus open when the Bus is in a state of motion or one / more pneumatic doors/passenger entrances do not function when the Bus is operating.	50 Km.			
11.	There are no spare tires on the Bus, or the Bus uses one or more tires and wheel bolts that do not comply with safety standard regulations, including but not limited to the use of retread tires for the front tires of the Bus.	<ol> <li>The bus removed from the Route / Route Network</li> <li>100 Km.</li> </ol>			
12.	The seat handgrip in the Bus is insufficient and does not function properly.	50 Km.			
13.	The bus does not have a safety belt on the driver's seat.	50 Km.			
14.	Temperature control facilities on the Bus do not function, or the temperature on the Bus exceeds 27°C.	<ol> <li>The bus returned to the Depo / Pool;</li> <li>150 Km.</li> </ol>			
15.	The bus does not have cleaning facilities in the form of trash bins with at least 2 (two) covers.	50 Km.			
16.	The information sign sticker not installed following the provisions of the Transport Administration Agency	50 Km.			

No.	Rules that violated	Sanctions / Kilometers Sanctions and Rp. Sanctions		
	(such as Bus number, ban on eating and drinking and			
	smoking, seat priority information) on the Bus.			
17	There are no priority seats for disabled people, older			
	adults and pregnant women on the bus, or the amount is			
	less than specified in the technical specifications			
	determined by the Transport Administration Agency.	50 Km.		
17.	Bus Medium = 4			
	Single Bus = 8			
	Maxi Bus = 8			
	Articulated Bus = 12			
18.	There is no particular room for wheelchairs on the bus.	100 Km.		

### e. How to Apply and Calculate Sanctions

The Transport Administration Agency has the right to impose these sanctions unilaterally to Bus Operators, and Bus Operators are required to comply with them. If in one case that occurs in one particular Bus unit the Bus Operator commits more than 1 (one) violation as mentioned in the table above, then this sanction is accumulative with a maximum Kilometer of Sanctions per day per unit of Bus that imposed on the Bus Operator is equal to 1.5 (one and a half times) violation with the highest Sanction Kilometer, except for sanctions imposed as a result of a severe violation determined by the Transport Administration Agency, then the Kilometer of Sanction is still calculated even though it exceeds the maximum limit. Serious violations are violations with a Kilometer of Sanction value of more than or equal to 700 km per incident per Bus.

### f. Procedure for Implementing Sanctions

The procedure for applying sanctions is as follows:

- The Transport Administration Agency, through its Control Officers and their employees and passengers and the public, receives reports of violations committed by Bus Operators against Standard Operating Procedures.
- 2. The Transport Administration Agency will confirm the violation to the Control Officer or the passenger or community who reports.

- 3. The Transport Administration Agency shall assign its Control Officers to fill in the Minutes of the Standard Operating Procedure Violations in the format determined by the Transport Administration Agency.
- Minutes of Daily Sanctions (H + 1 operation) are verified and signed by the Operational Control Manager of the Transport Management Agency and Employees appointed by the Bus Operator.
- 5. The Minutes of Daily Sanctions will be the legal documentation for the Transport Administration Agency in recapitulating the Total Kilometer of Sanctions and Work Volume and becomes the basis for cutting Revenue payments.
- 6. Without prejudice to the above provisions, Bus Operators must submit documentation related to the application of sanctions against Drivers no later than 5 (five) Calendar Days from the date of the Minutes of Violation. The Transport Administration Agency has the right to request additional documents for sanctions against the Driver if deemed necessary.
- 7. The Transport Administration Agency will blacklist drivers who are subject to dismissal sanctions.

# 4. Form Rekapitulasi Sanksi dan Pelanggaran Operator Atas SPO dan SPM

NO	OPERATOR	NO BODY	RUTE / KORIDOR	WAKTU	TANGGAL	BERITA ACARA (BA)	DESKRIPSI PELANGGARAN	KATEGORI PELANGGARAN SESUAI (SPO) DAN (SPM)	SANKSI (KM)	NAMA PRAMUDI	PENINDAK	LOKASI KEJADIAN
1												
2												
3												

## 5. Urban Public Transport Vehicle Feasibility Sheet

Lembar Pemeriksaan	:
Hari/Tanggal	:
Nomor Bodi/Kendaraan:	
KM	:
Nama PT	:

No	Part	Examination			
110		Amount / Condition	Information		
1	Vehicle Data Match (periodic administrative				
	test period of the vehicle)				
2	Visual Vehicle Construction (deficiencies in the				
	form of suction, collision marks)				
3	Order Platform is a condition check				
4	The driving force is in the form of condition				
	and performance checks				
5	Disposal system in the form of checking				
	conditions and performance				
6	Power Successor				
7	Wheel system				
8	Suspense system				
9	Steering gear				
10	Brake system				
11	Lights and light-reflecting devices				
12	Supporting components include:				
	- Speedometer				
	- Rearview mirror				
	- Glass Eraser				
	- Horn				
	- Seatbelt				

No	Part	Examination			
110		Amount / Condition	Information		
	- Fender				
	• - Bumper				
13	Vehicle Body (consisting of observation, visual				
	inspection)				
14	Vehicle equipment and supplies consist of				
	visual inspection and observation				
15	Implementation of Mechanical Vehicle Tests				
	includes:				
	- Flue Gas Emission Test				
	- Speedometer test				
	- Main Light Test				
	- Horn and Noise Test				
	- Test Front Wheel Buds, Vehicle Weight, and				
	Brakes.				

### Vehicle Testing Service Requirements

1. First-Time Testing

- a. STNK Photocopy
- b. Original vehicle registration together with a photocopy
- c. Photocopy of ID card
- d. Type Test Certificate
- e. Photocopy of Test Type Registration certificate (from the person in charge of production)
- f. Building Design Certificate (from Dirjenhub Darat and Certificate of Test Results)
- g. Transportation and Tourism Transport Permit
- h. Letter of Tera (for Taxi Meters, Tanks and Kend Vehicles that use Gas Fuel)
- 2. Periodic Vehicle Testing 6 (six) months
  - a) Photocopy of STNK
  - b) Photocopy of KTP
  - c) Test Book