# Cross-Sector Transportation Authority for Jakarta Metropolitan Area

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**Abstract**: Metropolitan areas in developing countries especially in emerging countries are facing chronic traffic congestion in conjunction with low service level of public transportation. On the other hand, the recent transportation policies such as a bus rapid transit (BRT) could be a breakthrough even though coordination of several governmental agencies is prerequisite. This paper proposed the conceptual framework of the metropolitan coordinating body in urban transportation for developing countries and identified issues in the process of formulating the body. Three directions of coordination; consolidation, independence and comprehensiveness are identified. The points of coordination in developing countries were also examined. Finally, taking the Jakarta Metropolitan Area as an example, issues of cross-sector and cross-boundary coordination, obstacles and required efforts for establishing the transportation authority and strategy for establishing it were clarified with chronological events.

*Keywords*: Cross-Sector Coordination, Metropolitan Planning Organization, Public Administration; Transportation Authority

## 1. INTRODUCTION

Urbanization is a global trend in developing countries. Some metropolitan areas such as Jakarta of Indonesia and Delhi of India have already exceeded population of 10 million. Rapid population growth surpassed the development of urban infrastructures such as water supply, electricity, waste management etc. This creates a gap between supply and demand. Transportation is no exception.

Metropolitan areas in developing countries, especially in emerging countries, are facing chronic traffic congestion in conjunction with a low service level of public transportation. For instance, the number of cars increased by a factor of two and that of motorcycles increased 4.6 times in the Jakarta Metropolitan Area in the decade from 2000 (Statistics Jakarta, 2010a).

In developing countries, the transportation measures with the least initial investment are preferred by local authorities. The typical one is point-based traffic control measures such as installation of traffic signals, improvement of intersection structures and construction of flyovers. Though these measures are usually replaced by large-scale road network development projects such as road widening and construction of expressways; many examples in the world proved that these measures might accelerate motorization. Thus, it is widely accepted that improvement of the public transportation network is essential for metropolitan areas either in developed or developing countries. To boost ridership of public transportation, a dense network comprised of trunk routes and feeder services as well as connection between several modes of public transportation has to be developed with the coordination of a number of stakeholders.

In some metropolitan areas in developing countries, sectionalism is still prevalent. In addition, the size of the local government does not cover the whole metropolitan area. This inconsistency complicates the transportation problems.

On the other hand, the recent transportation policies such as transit-oriented development (TOD), bus rapid transit (BRT) and traffic demand management (TDM) could be a breakthrough for transportation problems in developing countries even though coordination of several governmental agencies, transit operators and residents are prerequisite for these policies. For instance, BRT requires coordination between road authorities and transit operators. Although there are several best practices in the world such as Curitiba in Brazil, not all the cities of developing countries succeeded in implementing these polices. One of the major causes might be lack of coordination among all stakeholders, especially governmental agencies.

However, research on metropolitan-wide cross-sector coordination of transportation authorities in metropolitan areas are mainly in developed countries such as metropolitan planning organizations in the United States of America (USA) (Bond and Kramer, 2011; Miller et al., 2011) except for a few case studies such as India (Agarwal and Chauhan, 2011).

This paper summarizes coordination schemes in metropolitan transportation with examples from throughout the world in both developed and developing countries. In consideration of the characteristics of developing countries such as rapid motorization, financial constraints, unregulated public transport markets, and inadequate legal background, the problems and issues on coordination in urban transportation in developing countries are also identified. Finally, by utilizing a case study in the Jakarta Metropolitan Area, this paper aims to clarify procedures and obstacles in establishing a coordinating body.

## 2. METROPOLITAN TRANSPORTATION COORDINATION SCHEME FOR DEVELOPING COUNTRIES

### 2.1 Directions (Axes) of Coordination

With examples of coordinating bodies in both developed and developing countries, several aspects of the level of coordination; consolidation, independence and comprehensiveness are identified. This section clarifies these three axes of coordination in the context of urban transportation.

#### 2.1.1 Consolidation – Fragmentation (Powerful Coordinating Body – Powerful Participants)

Due to the collective characteristics of a coordinating body, the authority of the coordinating body as well as the power of participants plays a key role in the decision making process of the body. This is also dependent on the degree of autonomy of the local governments. While dependency on funding and human resources of a coordinating body are also relevant to the decision making process, the dependency shall be described in the following section.

Metropolitan areas usually exceed the size of a single local government. With regard to an integrated management of transportation modes, a single government for a metropolitan area may be efficient as there is only one decision maker in the area such as Singapore while sectionalism remains. A single government in a metropolitan area might be one of the most powerful and consolidated bodies. Despite the efficiency of a single government body, the management of the body can be complicated if the size of the organization is large enough to exacerbate sectionalism.

The Singaporean Land Transport Authority (LTA), a statutory board under the Ministry of Transport, is in charge of planning, policy making, implementation, operation and maintenance of rail, road and bus transportation (LTA, 2012). In addition, road safety, vehicle licensing and management of car demand such as electronic road pricing are covered by the LTA (TfL, 2012). Transport for London (TfL) of the United Kingdom is also a comprehensive statutory body under the Greater London Authority in charge of operation of public transportation, highway construction and management including congestion charging and vehicle licensing (TfL, 2012). Some Metropolitan Planning Organizations (MPOs) of the USA are in charge of planning and fund channeling of transportation projects from the federal government (Bond and Kramer, 2011). Since the LTA and TfL are sole bodies in charge of transportation in their respective metropolitan areas, they are considered as some of the most powerful bodies in their areas. MPOs in the USA are also considered as a relatively strong type of coordinating body due to the function of planning and fund channeling.

In the case of a powerful coordinating body, the body can promote transportation policy taking metropolitan-wide aspects into consideration.

On the contrary, some countries value autonomy of the local governments or line ministries. In these countries, the participants of the coordinating body are more powerful. An ad-hoc meeting of the limited stakeholders is the simplest form of coordination. In some cases, the meetings weigh much on information exchange rather than consensus building of relevant agencies. Periodical coordinating meetings or provisional coordinating committees/boards/commissions are slightly consolidated coordination.

Since these fragmented forms of coordination require limited budget and human resources, they are applied in many developing countries. This infringes neither autonomy of the local government nor jurisdiction of the central government agency. This form of coordination might be adequate for the areas with low population and few economic activities due to the small amount of cross-boundary traffic and cross-mode traffic. These coordinating meetings also can be a basis for networking of government officers in charge of transportation. However, the larger the transportation problem is, the more difficult it is for participants to solve it as it requires close communication and consensus building among all the relevant stakeholders. In consideration of the gap between the speed of infrastructure development and the growth of the population and economy in developing countries, a more consolidated coordinating body is required in some rapidly developing metropolitan areas. This type of less consolidated coordinating body is observed in many cities.

In India, all the cities with a population of a million or more have to establish UMTAs (Unified Metropolitan Transport Authorities) to ensure proper coordination and integration of transport plans (Agarwal and Chauhan, 2011). Although the UMTAs are initiated by the federal government of India and recommended in the National Urban Transport Policy, the

UMTA does not have the authority to sanction or reject funds for any investment, except for Hyderabad.

### 2.1.2 Independent – Hosted (Dependence of Resources of a Coordinating Body)

While some coordinating bodies for urban transportation have their own funding resources and their own full-time staff, the others are dependent on financial and human resources from participating organizations such as the national government or the largest city in the metropolitan area (Bond and Kramer, 2011). In this paper, the former body is defined as an independent body and the latter one is defined as a hosted body. This dependence on resources also differentiates the characteristics of the coordinating body.

Since the independent coordinating body relies on neither a specific area of the region nor on a specific mode of transportation, the body can be impartial. The permanent staff of the body can plan and implement long-term transportation policies from a standpoint of metropolitan transportation. There is, however, a risk of conflict of interest between the body and the participating organizations, and this may perplex the situation. The policy directions as well as management of the body also are dependent on how to elect the top official and the directors of the body.

Funding can be an issue for an independent organization as it cannot expect funding from hosting agencies. The organization is recommended to have fixed funding resources such as an earmarked tax and/or unrestricted subsidy from the central government.

In general, characteristics of the hosted organization are the opposite of the independent body. It is evident that the management and policy directions of the body rely on the hosting agency. If a hosting agency leads the body giving consideration to the metropolitan-wide and cross-sector points of view, the management will be smooth.

If the hosting agency is the central government or an upper level local government with jurisdiction containing whole of the metropolitan area, the governance of the organization can be metropolitan-wide although there is a risk that the policy may be affected by sectionalism of the hosting agency. It is also a concern that the autonomy of the region cannot be assured. If there are plural hosting agencies, confrontation of the hosting agencies may bring the organization to a halt.

In general, the consolidation and independence of the coordinating body are correlated. Figure 1 illustrates the relationship between independence and consolidation and examples in the world. The consolidated body requires independent financial and human resources to smoothly implement their policies. Typical examples are the Singaporean LTA and London's TfL.

However, hosted organizations can be fragmented as well as consolidated. Some coordinating bodies hosted by central governments might have authority strong enough to implement transport policy. The examples are the Indonesian JABODETABEK Transportation Authority (JTA) (JICA and CMEA, 2012) which will be described in the following chapter and the Japanese Metropolitan Transportation Council in some metropolitan areas. The others are some hosted fragmented organizations such as the Indian UMTA (Agarwal and Chauhan, 2011). However, it is assumed that there would be only a limited number of independent as well as fragmented coordinating bodies. A fragmented body requires neither independent human resources nor funding. A fragmented coordinating body is usually hosted by participating organizations.

For instance, the Osaka-Kobe metropolitan transport council (or "koutsu shingi kai" in Japanese), the advisory committee to policy makers in the region, is requested by the director of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in charge of

transportation in the region to discuss metropolitan transportation issues and to formulate public transportation development policy for the region (MLIT, 2012). Tokyo and Nagoya metropolitan region also have similar councils (MLIT, 2012). The councillors are academic experts, attorneys, the head of a consumer group and a chief editor of a newspaper company. Provisional councillors are governors of prefectures in the metropolitan area, and executives of public transport operators. The secretariat of the council is hosted by MLIT. Although the council is nominally the place for discussions and it does not have legal binding power, the policy directions prepared by the council have significant meaning in terms of development of new transit lines because the policy directions are the key criteria for the subsidy to a new transit development project. This policy direction is also taken into consideration for issuance of transit operation licenses. Since participants of the council meetings are almost all key stakeholders in urban transportation issues, it is assumed that the policy directions of the council are the regional consensus. However, the council meeting is virtually dependent on MLIT. Although the council's funding as well as human resources for the secretariat are hosted by MLIT, the council's decisions have influence in implementation of transport policy. In this sense, the council is somewhat consolidated compared with the Indian UTMA (Agarwal and Chauhan, 2011) and Indonesian BKSP (Jakarta Metropolitan Cooperation Body) (JICA and BAPPENAS, 2004; JICA and CMEA, 2012) which will be described in the following chapter.

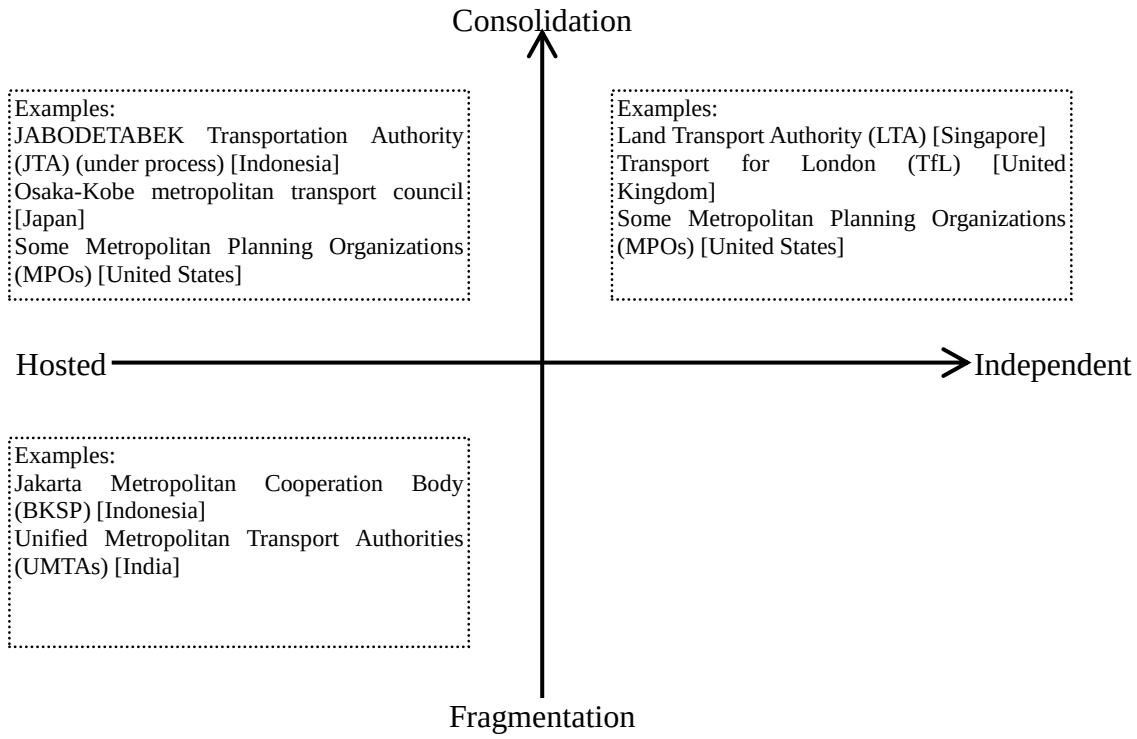


Figure 1. Relations of Consolidation/Fragmentation and Independence/Hosted

### 2.1.3 Comprehensiveness (the number of participants)

Since each sub-sectors of transportation such as railways, buses and roads is closely related, it is recommended that the transportation coordination body should cover all the sub-sectors. This can increase the number of participants of the coordinating body. The number of participants, sectors and local governments is a key factor that determines the activity of the coordinating body. Although the coordinating body, with participation of all relevant sectors

and all local governments in the metropolitan area, can implement cross-sector transportation policy such as transportation demand management, it requires tough and dense negotiation among all of them. In contrast, less coordination is required in the case of the body with a limited number of participants such as coordination among public transport operators.

Considering the balance among the number of participants, emergency of transportation issues, impact of transportation problems, policy options to be taken, political condition and required legal basis etc., to some extent, compromise might be required.

### 2.2 What Should be Coordinated in Developing Countries?

There has been research on coordination in public transportation. For instance, Miller et al. (2011) identified six aspects of coordination in public transportation; infrastructure, schedules, information, fare payment and special events and emergency coordination in the United States. In addition to coordination within the public transportation, current transportation policy options require cross-sector coordination such as transportation demand management and transit-oriented development.

In developing countries, coordination is more complicated as the government institutions have to harmonize their policies with a limited amount of financial and human resources on relatively poor infrastructures with unsound institutional framework under unstable political conditions and largely fluctuating economies.

Six major factors of coordination for urban transportation are examined below taking cross-sector and metropolitan-wide aspects in developing countries into consideration.

#### 2.2.1 Institutional framework

Although there is usually an institutional and legal framework for an existing mode of transportation such as a railway, a bus line or a road, even in developing countries; the ones with a metropolitan point of view are rare. Political instability also affects metropolitan transportation policy such as frequent change in segregation of responsibility and restructuring of governmental institutions. In addition, the situation becomes much more complicated in the case of post-conflict areas due to intervention from the military. Some metropolitan areas in developing countries do not have an institutional framework for new modes of transportation such as a bus rapid transit (BRT) or new transportation policies such as transportation demand management.

#### 2.2.2 Coordination with urban planning

Transit-oriented development (TOD), which promotes mixed and compact land use around transit stations, is a key policy option to promote environmentally and economically friendly transportation systems. TOD requires close coordination between public transportation network development and land use plans. The walking environment around the transit stations also has to be developed.

#### 2.2.3 Infrastructure development

In most developing countries, development of urban transportation infrastructures is considered as significant, however, it usually cannot catch up with the rapid population and economic growth. Due to the huge initial investment required for transportation infrastructures, coordination is required at the planning stage of transportation infrastructure.

In addition to transportation infrastructure development toward TOD, the following coordination for infrastructure development is essential.

Consistency of metropolitan transportation network: If a missing link or bottleneck exists, the network does not function. The need for consistency of the road network arises at the boundary of local governments. For instance, a section of a road is defined as an arterial road while the adjacent section of the same road within a different local government is defined as a secondary road. It is also observed that the number of lanes of a road often varies at the boundary of local governments

Land for transportation: A strip of land is scarce in urbanized areas. The complex land acquisition and relocation processes make it difficult for the government to acquire land in some countries. There would be no other choice than to share lands in some sections among several transportation modes. The typical example is BRT which requires a dedicated lane although the initial investment is small. The existing roads and rivers are rare sources of strips of land for transportation. A coordinated plan for utilizing these lands is required.

Transit stations and bus terminals: These are key transportation infrastructures for promoting use of public transportation. Several modes of public transportation as well as an access road to the stations, station plaza, a park and ride facility and the terminals should be developed in a coordinating manner.

Specifications of Public Transportation: If direct through operations of several railway operators is required, technical specifications of public transportation have to be consistent. This is also critical in case of vertical and horizontal separation of railway operation and infrastructure management.

### 2.2.4 Transportation demand management (TDM)

Especially in emerging countries, infrastructure development cannot catch up with the rapid economic growth. Transportation demand management (TDM) can be an effective and expeditious policy option. Several TDM measures such as electronic road pricing, mobility management and parking fare control require high levels of communication.

### 2.2.5 Funding scheme

Due to the limited funding of developing countries, a variety of financial resources would be necessary. The road pricing or fixed property tax for urbanized areas can be alternatives. Needless to say, these policies require coordination among governmental agencies as well as revision of laws and regulations.

### 2.2.6 Operation of public transportation

In addition to the infrastructure of public transportation, service integration is required for operation and maintenance. Miller et al. (2011) categorized transit service integration practice components into schedules, fare payment, information, and special event and emergency in addition to infrastructure. A variety of examples in the United States are described in the paper of Miller et al (2011), these advanced examples are recommended to be applied in developing countries.

## 3. ESTABLISHMENT OF CROSS-SECTOR TRANSPORTATION AUTHORITY FOR JAKARTA METROPOLITAN AREA

### 3.1 Jakarta Metropolitan Area and Transport Issues

The Jakarta Metropolitan Area, called JABODETABEK, is a large-scale metropolitan region with a population of 28 million, and consists of DKI (Special Capital District) Jakarta and eight local municipalities. Its gross regional domestic product (GRDP) is estimated at Rp. 1,056,000 billion (US$ 111.9billion) or 19 per cent of the national gross domestic product (GDP) (as of 2010) (Statistics Indonesia, 2010a; Statistics Indonesia, 2010b), showing that the Jakarta Metropolitan Area is strategically the most important region of the nation.

The surge in the number of passenger cars and motorcycles is astonishing (Kawaguchi et al., 2010; Yagi et al., 2012). The number of registered passenger cars in the Jakarta Metropolitan Area increased by a factor of two and that of motorcycles increased 4.6 times between 2000 and 2010. As a result, travel speeds of major arterial roads in the CBD decreased roughly 20% from 2000 to 2007 (estimates from JICA and BAPPENAS 2004; and JETRO, 2008). Chronic congestion in JABODETABEK costs up to 5.5 trillion rupiahs annually (JICA and BAPPENAS 2004).

### 3.2 Public Administration of Transportation Sector

#### 3.2.1 Two levels of sub-national governments and decentralization

The Republic of Indonesia has two levels of sub-national governments. The upper level is provinces, and the lower level is regencies and cities. The laws on local governance (Law No. 32/2004 and Law No. 33/2004) and the direct election of heads of a local government, started in 2005, significantly promoted decentralization while actual governmental functions, especially the function of provincial governments, remain unclear (UNDP, 2009). Although regencies and cities granted their legal authority except for foreign policy, defense, public security, system of law, and monetary policy under the new laws on local government, most of the local governments are heavily dependent on financial assistance from the central government. Among the 428 trillion rupiahs (US$ 46 billion) of expenditures of local governments, 309 trillion rupiahs (US$ 33 billion) are funded by the central government whilst the expenditure of the central government reached 629 trillion rupiahs (US$ 67 billion) (except for subsidies to the local governments). The size of the largest province of Indonesia in terms of expenditures of provincial governments, DKI Jakarta Province, was only 22 trillion rupiahs (US$ 2 billion) as of 2009 (Statistic Indonesia, 2010a).

The Jakarta Metropolitan Area comprises DKI Jakarta Province, 1 regency and 2 cities under Banten Province, and 2 regencies and 3 cities under West Java Province. The 5 cities under DKI Jakarta Province have limited autonomy compared with other regencies/cities. Mayors of the cities under DKI Jakarta are not directly elected. Banten Province is in the purview of 8 regencies/cities including 3 regencies/cities under the Jakarta Metropolitan Area and 5 regencies/cities outside of the Jakarta Metropolitan Area, and West Java Province is in the purview of 26 regencies/cities. Therefore, the governors and government officers of Banten and West Java Province cannot fully share their time for the Jakarta Metropolitan Area. As seen in most metropolitans, population growth of suburban areas has surpassed that of urban centers. This implies the difficulty of reaching consensus among the three provincial governments. Thus, coordination meetings among officers of provinces and regencies/cities in the metropolitan area might conclude with compromised and reactive options.

Table 1. List of Regencies/Cities in the Jakarta Metropolitan Area

| Province | Regency/City |
|---|---|
| DKI Jakarta Province | North Jakarta City |
| | South Jakarta City |
| | Central Jakarta City |
| | East Jakarta City |
| | West Jakarta City |
| West Java Province | Bogor Regency |
| | Bekasi Regency |
| | Bogor City |
| | Bekasi City |
| | Depok City |
| Banten Province | Tangerang Regency |
| | Tangerang City |
| | South Tangerang City |

### 3.2.2 Administration by sector

Several ministries of the central government and two levels of local governments in the Jakarta Metropolitan Area except for the 5 cities under DKI Jakarta Province have departments by sector. This significantly increases the number of stakeholders of the transportation sector. In the case of road construction, jurisdiction is determined by type of roads such as national roads, provincial roads and roads under regency/city. However, all the currently operating railway lines are operated by a sole state-owned railway operator in Indonesia, PT. Kereta Api (PT. KA), under the jurisdiction of the central government while the revision of the railway law in 2007 allows local governments and their subsidiary bodies to plan, construct and operate railways (Wachi et al., 2011). In terms of buses, inter-provincial buses are licensed by the central governments, and inter-city buses are licensed by the provincial government in principle. Bus route licenses within a regency/city are issued by the regency/city government. However, buses between DKI Jakarta province and the other two provinces in the Jakarta Metropolitan Area can be licensed by the provincial governments. Urban planning and land use planning administration systems also have their own systems. As such, the jurisdictions are complicated regarding sectors of transport. In addition, jurisdictions of relatively new types of transport policies such as transit-oriented development (TOD) and traffic demand management (TDM) are not clear.

Although the conventional coordination method of ad-hoc meetings among adjacent local governments on a specific topic such as a license permits of cross-boundary buses is effective for consensus building of a few stakeholders, it cannot be applied to metropolitan-wide urban transport policy making such as consistent expressway and railway network planning, transportation infrastructure development, urban planning, etc. A typical example is open space for infrastructure development. Since limited open spaces, which can minimize land acquisition, can be made available for transportation infrastructure development, cross-sector coordination is required to avoid overlapping. Priority of land use shall be considered from the viewpoint of metropolitan transportation.

## 3.3 Current Coordinating Scheme

The current coordinating body in the Jakarta Metropolitan Area is fragmented and dependent

on participating organizations. BKSP (Jakarta Metropolitan Cooperation Body, *Badan Kerja Sama Pembangunan Jakarta, Bogor, Depok, Tangerang, Bekasi, dan Cianjur* in Indonesian) is a standing body for solving urban problems among the several local governments in the metropolitan area. While the body initiates and facilitates the meetings for specific urban problems among relevant agencies, decisions are made by mutual agreement among all participants. BKSP does not have any authority in the decision-making process. Thus, it could not function as a body for planning transportation from a metropolitan point of view. The body provides the place for discussion rather than clarifying responsibility.

BKSP fully depends on participating provinces for its financial and human resources. It is not soundly funded to perform its full responsibilities as an institution to draw an integrated plan for the entire region, considering the total amount of funds and the restricted usage of them (JICA and BAPPENAS, 2004).

Therefore, highly controversial issues are sometimes directly discussed and decided by direct talk between two governors or handed over to the central government rather than through discussion with BKSP. Even for formation of the urban plans initiated by the central government, consensus building takes a long time for a series of discussions among a number of stakeholders. For instance, the presidential decree on the spatial planning of the Jakarta Metropolitan Area and surrounding regions took around five years to build a consensus among relevant agencies.

### 3.4 Proposal of Consolidated and Independent Authority for the Metropolitan in 2004

In response to the request of the Government of Indonesia, the Japan International Cooperation Agency (JICA), the official agency responsible for the implementation of international cooperation of Japan, conducted "the Study on Integrated Transportation Master Plan (SITRAMP)" (JICA and BAPPENAS, 2004) in the Jakarta Metropolitan Area from November 2001 to March 2004. The overall objective was to identify possible policy measures and solutions to develop sustainable transportation systems in the Jakarta Metropolitan Area with a focus on encouraging public transport usage and improving the mobility of the people. The comprehensive transportation master plan has been formulated and institutional reform, which proposed establishment of an urban transportation cross-sector authority, is a part of the master plan.

The proposed transportation authority would have comprehensive authority on planning, implementation and operation of roads and railways. The authority also would issue route permits of buses. It was also expected to be upgraded to a more comprehensive urban planning and implementing authority that would be in charge of urban planning and development in addition to transportation referring to some examples of MPOs in the United States. It was expected that the proposed transportation authority would be established under the leadership of the National Development Planning Agency (BAPPENAS) expecting to implement the projects proposed in the SITRAMP transportation master plan. However, the SITRAMP master plan was not transformed into a presidential decree.

The proposed transportation authority was not realized due to several reasons. Because the project was funded by a foreign donor, the end of the project meant termination of funding for the study team and all the activities. The government was not capable of funding or assigning human resources toward long discussion over the establishment of the authority with strong leadership.

BAPPENAS was not fully in charge of implementation and coordination of the master plan but only planning and financing. The coordinating ministry of economic affairs (CMEA) was in charge of coordinating issues related with more than one government body such as a

ministry or a local government. This complicated jurisdiction allocation obscures the responsibility of government authorities.

In terms of timing, interests of the government agencies and the public shifted more to mega-projects such as a mass rapid transit, bus rapid transit, a monorail, electronic road pricing, etc. that can directly attract interest. As a result, most of these projects were not implemented on time except for bus rapid transit, which was constructed under the strong leadership of the governor.

The demanding target of creating a powerful and independent authority that required revision of laws and regulations on transportation also demotivated government officers.

### 3.5 Project toward Establishment of Coordinating Body

The central and local governments of the Jakarta Metropolitan Area (JABODETABEK) area have managed to alleviate the congestion; however, they had only implemented approximately 20% of the projects planned by SITRAMP on schedule as of 2010 (JICA and CMEA, 2012). For instance, the development of new roads in DKI Jakarta was limited in this decade due to land acquisition problems, etc. Although, the Jakarta Metropolitan Area has a railway network in the CBD and suburban areas, these infrastructures are not utilized to their maximum potential.

Taking this background into account, the JABODETABEK Urban Transportation Policy Integration (JUTPI) Project commenced in 2009 for the purpose of revising the SITRAMP master plan and supporting establishment of the transportation authority, namely the JABODETABEK Transportation Authority (JTA). The JUTPI project was a joint program between CMEA and JICA. With technical assistance, mobilization of experts and operational cost from JICA, the joint project team was required to achieve their target according to major milestones of the project.

The project team had a series of discussions on establishment of the authority as shown in Table 2. Milestones of JTA Establishment. The number of meetings held during the project reached more than 80. Though it took more than one year to disseminate importance of the project and the idea of the metropolitan transportation authority, called the JABODETABEK Transportation Authority (JTA), the concept gradually gained political support. The Vice President of the Republic of Indonesia instructed line ministries as well as local governments to take actions to alleviate traffic congestion in Jakarta in September 2010. Through focus group discussions and workshops among related agencies hosted by the presidential working unit for development monitoring and control (UKP4), seventeen steps were consolidated into twenty action plans for 2010–2014. The action plan includes establishment of JTA and the revision of the SITRAMP master plan. The action plan includes a detailed time schedule and the responsibility of each institution.

At the early stage of the project, the alternative of a consolidated (powerful) and independent JTA, which would implement almost all the metropolitan level land transportation policies, was discussed. The alternative was, however, discarded considering the required amendment of a number of laws and the huge size of the planned JTA, which might be too large to be efficient. Since independence relies on funding resources, possible funding resources were examined. Though revenue from the planned electronic road pricing (ERP) can be an option for funding, there was the argument that revenue from a specific area of the metropolitan can be used for the entire metropolitan area. As a result of discussions, the funding from the central government was considered as a financial resource of JTA. This means that the JTA organization became consolidated but will be hosted by the central government.

There were discussions on the influence of the central government. A local government was against the idea of the central government-hosted authority because it might distort policy making. However, it was widely accepted that it is much fairer for the coordinating ministry of the central government to host the authority rather than a specific local government.

In terms of sector of transportation, relatively new types of transportation policies such as transit-oriented development (TOD) and traffic demand management (TDM) can be the central role of JTA. This can avoid a conflict of interest between JTA and participating organizations.

Table 2. Milestones of JTA Establishment

| Date | Milestones | Contents |
|---|---|---|
| July, 2009 | Commencement of the Project | The project started. |
| September 2, 2010 | Vice President's Meeting on Traffic Congestion in Jakarta | "Establishment of JTA" was included in the 20 action plans for alleviation of traffic congestion. |
| October 2, 2010 | Focus Group Discussion (1) | With participation from both central and local government agencies, the necessity of JTA was discussed. The participants agreed to expedite the process of establishing JTA. |
| December 12, 2010 | Focus Group Discussion (2) | Dissemination of the JTA concept to government officers<br>Action plan<br>"Establishment of JTA" was included in the 20 action plans for alleviation of traffic congestion.<br>Example of coordination among government agencies<br>Transportation in JABODETABEK<br>Draft Presidential Decree of JTA<br>Schedule for establishment of JTA |
| March 3, 2011 | Relevant Director General Meeting (1) | Concept of the draft presidential decree for establishing JTA |
| April 21, 2011 | Relevant Director General Meeting (2) | Discussion on the draft presidential decree for establishing JTA<br>JTA and transportation master plan |
| May 10, 2011 | — | Submission of the draft presidential decree on establishing JTA from the Coordinating Minister of Economic Affairs to the President |
| November 16, 2011 | Relevant Director General Meeting (3) | Discussion on consistency with existing laws and regulations<br>Relationships between the draft master plan and JTA |
| December 30, 2011 | — | Submission of the draft presidential decree on establishing JTA from the Coordinating Minister of Economic Affairs to the President |

Based on the above discussion, the following draft presidential decree was prepared (JICA and CMEA, 2012). In short, the proposed JTA will be in charge of planning, a part of implementation and evaluation of urban transportation projects. Though it is assumed that most of the projects will be implemented by existing agencies, JTA will have the authority to give permission on implementation of the projects and JTA will be in charge of acquiring the budget from the central government.

Table 3. Summary of Proposed Presidential Decree of JTA (Draft)

| Item | Contents |
|---|---|
| Objectives | 1. Improvement of public transportation service to support economic development<br>2. Provision of efficient and effective transportation network to ease centralization and to foster suburban centers |
| Position | The proposed JTA is a non-ministerial government institution lead by the minister-level commissioner directly under the president |
| Major Tasks | Preparation of plan and activity program<br>Improvement of facilities and infrastructures<br>Implementation of transportation demand management (TDM)<br>Transit-oriented development<br>Monitoring and evaluation of the projects<br>Budget planning |
| Executives | Commissioner (non-civil servant can be nominated)<br>Secretary<br>Deputy Commissioner for Planning and Cooperation<br>Deputy Commissioner Transportation System Development<br>Deputy Commissioner Monitoring and Evaluation<br>Inspector General<br>Note: All the executives and staffs are civil servant except for commissioner |

### 3.6 Expected Outputs of the Proposed JTA and Issues

The proposed draft presidential decree on JTA would be a core organization for urban transportation in the Jakarta Metropolitan Area. Due to JTA's function of planning metropolitan transportation, it would coordinate all the stakeholders and inconsistency of transportation planning might be reduced. It is also expected that monitoring and evaluation of the master plan might improve performance of the master plan implementation.

However, there are some issues to be solved. First of all, JTA would be established by the presidential decree. This implies that it cannot revise any laws and acts. Thus, negotiation would be required between JTA and the existing ministries to transfer authorities and funding etc. For instance, if the JTA wish to transfer the authority of planning railway transportation in the region from Ministry of Transportation, Negotiation would be essential. It is also noteworthy that the presidential decree can easily be revised and nullified by the next president

The funding source of JTA is also a concern. Although the draft presidential decree describes that JTA shall use budget of the central government, there is no guarantee on the amount of the budget of JTA. Toward steady implementation of the master plan, additional earmarked funding sources such as the fuel tax and electronic road pricing (ERP) are recommended for the JTA.

Although the executives and the staff from a private sector were assumed at the initial stage of the project, all the executives and the staff except for the commissioner will be civil servants. By receiving staff from the central and local governments, transfer of authority will be smooth. The civil servants also can formulate their policy from long-term perspective. However, significant improvement in performance of the staff cannot be expected.

The autonomy of local governments is improving in Indonesia. There is no clear description on who decides the transportation policy in case of discrepancy between the commissioner appointed by the president and the directly elected governor.

The issues above should be clarified as soon as the establishment of the JTA.

### 3.7 Lessons learned

Toward establishment of the JTA, lessons learned on the process of establishment of the JTA are described below.

It is obvious that consensus building of more than 30 stakeholders consumed time and efforts. Roughly 80 times of meetings were held to discuss the JTA including five director-general-level core meeting. One particular difficulty was that participants of the series of meetings for JTA, especially for high-ranking officers, were not the same person. Though the representative of each organization attended the meeting, their information was not always consistent due to internal miscommunication. It is recommended to hold the preparatory meeting and information dissemination as much as possible to avoid unnecessary discussions. These continuous efforts of coordination require operational funding and human resources. Supports from the central government funding as well as bilateral or multilateral donors are essential.

Considering the size of the metropolitan area, politics is not negligible. In case of JTA, CMEA effectively utilized the vice president's meeting on action plans of transportation in the region by inputting the idea of JTA to policy makers in an appropriate manner and timing. However, the risk of a politician to make political capital of this needs to be considered.

In addition to the discussion on an ideal form of a coordinating body, consistency with existing laws and regulations has to be taken into account. For instance, laws, regulations and a funding scheme on autonomy and decentralization determines the role of participants.

As enactment usually requires a long political process, and compromise is necessary to some extent to expedite the process. One alternative is to establish a coordinating body under current laws and regulations. After that, the established coordinating body can take over the task of the enactment.

It is also noteworthy that the coordinating body can lead other participants in the relatively new types of transport policy such as TOD and TDM.

## 4. CONCLUSIONS

This paper proposed the conceptual framework of the metropolitan coordinating body in urban transportation, mainly for developing countries, and identified issues in the process of formulating the body.

Based on the examples from throughout the world, three directions of coordination; consolidation, independence and comprehensiveness are identified. Taking the level of autonomy and the impact of transportation issues into account, the appropriate level of consolidation, independence and the number of participants shall be chosen.

As almost all the developing countries are facing typical problem of lack of financial and human resources, unsound institutional framework and unstable political conditions etc., the points of coordination in developing countries such as an institutional framework, coordination with urban planning, infrastructure development, transportation demand management, funding scheme and operation of public transportation were examined.

Besides the metropolitan transportation coordination scheme, issues on establishing the coordinating body were clarified utilizing the example in the Jakarta Metropolitan Area. The consolidated and hosted coordinating body was proposed in the Jakarta Metropolitan Area, as it was the most comprehensive and powerful body within the current legal framework. It was revealed that strategic and continuous consensus building activity taking political condition, condition of decentralization, legislative scheme and key sector, which require a high level of

coordination, into account are essential for establishing the authority.

For further studies, detail coordination strategy for each component of transportation policy which demands dense coordination of government agencies, such as transit-oriented development, bus rapid transit and transportation demand management shall be examined. The relationship with autonomy, urban planning and transportation in developing countries also should be studied.

## ACKNOWLEDGEMENTS

This paper summarizes a part of the "*JABODETABEK Urban Transportation Policy Integration Project*" by the Japan International Cooperation Agency (JICA) and the Coordinating Ministry of Economic Affairs, Indonesia with special assistance from other relevant authorities in charge of transportation in the Jakarta Metropolitan Area. The authors would like to show gratitude to all of them.

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Note: Currency rate of 1 U.S. dollar = 9,434 rupiahs as of July 2012 was applied throughout this paper.