MOLTS: Multinational Operators for Local Transport Services

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Abstract: This paper first introduces the concept and the status quo of Multinational Operators for Local Transport Services (MOLTS) such as Arriva, Keolis, Transdev, and Veolia Transport, operating independent public transport systems in a number of countries. Their operation in the European context, including American and Oceanic, is encouraged by four motivations; their business model itself as “Low-Risk Low-Profit Business with Authorities”, size and nature of the MOLTS, legislative unity to allow the “low-risk low-profit business with authorities”, and specialized feature of the MOLTS for tram. Thereafter, the Asian context is analyzed, in which the MOLTS focuses on the development of the new urban railway network. The “Low-risk Low-profit Business with Authorities” foundation is not established overall, yet it is possible in some regions. Specialized features are appearing in railway operations in Asia.

Key Words: Public Transport, Operators, Multinational Business, Globalization

1. INTRODUCTION

Historically, public transport is provided by local operators; Seoul’s public transport has been provided by operators in Seoul, just as Shanghai’s has been provided by operators in Shanghai, and Singapore’s has been provided by operators in Singapore. This is more or less the same everywhere in the world; public transport is by nature rooted in localities.

Contrary to this general assumption, however, since the 1990s, several “global” players have appeared in the world of public transport. The players, which are transport operators, are developing their businesses into a number of countries. For example, a French public transport operator Veolia Transport is operating in 30 countries at the moment. Veolia is spreading to most of the continents – it is operating the tram network of Bordeaux in France, the subway network of Stockholm in Sweden, suburban train networks of Melbourne in Australia, regional trains of many states in Germany, suburban local buses of Santiago de Chile, and so on. In Asia, Veolia Transport will operate Seoul Metro 9, on behalf of Rotem, and Mumbai Metro 1, on behalf of Reliance Infrastructure, as well as bus operations in Nanjing, China, on behalf of Nanjing Zhongbei Group. These kind of “global” undertakings on public transport operations started in the late 1990s, and continue to expand now.

In this paper, the global players for local public transport are called “Multinational Operators for Local Transport Services” or its acronym “MOLTS”. Through extensive literature research and interviewing, the backgrounds of development in Europe and Asia, as well as the status quo are analyzed. This paper takes a comparative approach between the European context (including Europe, Americas and Oceania) and the Asian context. The Next two sections describe European context. In the section two, the major MOLTS and their operating
locations in the world are described. In the section three, motivation of their international expansion in the European context is discussed, from the viewpoint of legislative situation and circumstances; furthermore, motivations by transport modes and by headquarter countries are analyzed. Section four is concerned with the status quo in Asia. Section five analyzes and discusses the background of development in Asian context. Section six draws a conclusion of this entire paper. The entire section two and the section 3.1 and 3.2 are updates from the authors’ previous publications in Japanese.

2. STATUS QUO OF THE “MOLTS”

2.1 Literature Review: What are “MOLTS”?
In this chapter, first the term “MOLTS” is defined. Then, as a form of an update of the authors’ previous publications in Japanese, operators which can be called “MOLTS” are introduced, and their operating locations are shown.

The concept of MOLTS is first presented by Frérot (2000), who was at that time the general director of Connex, today’s Veolia Transport. Examples of international expansion of a French MOLTS VIA-GTI, which is today’s Keolis, are presented in a book by Perrot and Chatelus (2000), yet the focus is limited to a context of infrastructure development. There is little research focusing on the international expansion of public transport operators. An exceptional one is a conference presentation by Alexandersson and Hultén (2005); they first dealt with the concept of “MOLTS” and demonstrated that both earlier and later deregulation could lead public transport operators to expand internationally in Europe thorough a comparison among the United Kingdom, France, Germany and Sweden. The first comprehensive studies from a worldwide perspective are, to the best of the authors’ knowledge, the series of publications by the authors in Japanese (Shibayama, 2007; Shibayama and Ieda, 2007; Shibayama and Ieda, 2008a; Shibayama and Ieda, 2008b).

Recent literature includes Burmeister (2008), which introduced the recent German context. This shows that several French and British MOLTS, as well as German operators which appeared recently, are active in the German market. Koide (2008) mentions in his review of the EU transport policy that Dutch, German, and French railway operators are investing in British railway franchise, and he points out that several British transport operators should be called “Multinational General Transportation Business”. Moreover, Minami (2005) mentions French operator’s international expansion in his introduction of French public transport in Japanese. Gronneck (2003) also mentions French MOLTS, yet this is in a context of the French “reintroduction” of trams, occurring since the 1980s.

Classical local public transports around border areas are by nature operated in two or more countries, connecting neighboring regions. For example, local trains between Vienna, Austria and Bratislava, Slovakia, are operated in two countries, but same rolling stocks are thoroughly operated in two countries by two different operators; the Austrian part is operated by ÖBB (Austrian Federal Railway) and the Slovakian part is operated by ŽSR (National Railway of Slovakian Republic). Another example is a Singaporean bus continuing into Johor Bahru, Malaysia, yet entire part is operated by a Singaporean operator. In both case, operations are continued from one country to another to connect two bordering regions.

However, “MOLTS” have different characteristics. As mentioned in the introduction, they are operating in several public transport systems, which are not connected physically. “MOLTS”

can be defined as public transport operators with both of the following two characteristics:

**Characteristics of MOLTS**

1. Operating several public transport systems independent of each other in several countries, regardless of transport modes.
2. Declaring in their website or in other publications that they are operating in one or more countries outside of their headquarter countries, and using their unified brand name for operations as much as possible.

### 2.2. Eight Major “MOLTS” in the World

The authors’ previous research (Shibayama, 2007; Shibayama and Ieda, 2008b) revealed that there exist eight major MOLTS, which are shown in the Table 1. Among the eight, Veolia Transport, Arriva, Keolis, and Transdev have outstanding characteristics as MOLTS. The basic characteristics of the eight MOLTS are shown in Table 1. They are operating almost all sorts of public transport, among which trams, trains, and buses are their main operating transport modes.

The largest MOLTS Veolia Transport is a transport division of Veolia Environnement. Veolia Environnement has four public service divisions: Veolia Water for water supply, Veolia Energy for electricity and heating, Veolia Environmental Services for waste management service, and Veolia Transport for transport service. Veolia Transport, as a corporation, is a 100%-owned subsidiary of Veolia Environnement. Veolia is headquartered in Paris, France. Veolia Transport is operating in 30 countries at the time of research. Their operation includes:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Headquarter</th>
<th>No. of operating countries</th>
<th>Main shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veolia Transport</td>
<td>France</td>
<td>30</td>
<td>Capital Research &amp; Management Company (12%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Caisse des dépôts et consignations (10%)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Natixis Asset Management (7%)</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Groupama (6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Électricité de France (4%)</td>
</tr>
<tr>
<td>Arriva</td>
<td>United Kingdom</td>
<td>10</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td>Transdev</td>
<td>France</td>
<td>9</td>
<td>Caisse des dépôts et consignations (68%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Régie Autonome des Transports Parisiens (RATP, 25%)</td>
</tr>
<tr>
<td>Keolis</td>
<td>France</td>
<td>8</td>
<td>Axa Private Equity and Caisse des Dépôts et placement di Quebec (52%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Société Nationale des Chemins de fer Français (SNCF, 47%)</td>
</tr>
<tr>
<td>Comfort-DelGro</td>
<td>Singapore</td>
<td>5*</td>
<td>DHS Nominees Pte Ltd (26%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Singapore Labour Foundation (12%)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>DBSN Services Pte Ltd (12%)</td>
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<td></td>
<td></td>
<td></td>
<td>Citibank Nominees Singapore Pte Ltd (9%)</td>
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<td></td>
<td></td>
<td>United Overseas Bank Nominees Pte Ltd (7%)</td>
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<td></td>
<td></td>
<td></td>
<td>HSBC (Singapore) Nominees Pte Ltd (6%)</td>
</tr>
<tr>
<td>FirstGroup</td>
<td>United Kingdom</td>
<td>4</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td>National Express</td>
<td>United Kingdom</td>
<td>2**</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td>Stagecoach</td>
<td>United Kingdom</td>
<td>2***</td>
<td>(Unknown at the moment of research)</td>
</tr>
</tbody>
</table>

* Not including taxi business in Malaysia and Vietnam
** Not including school bus operations in the US and Canada
*** Not including tourist bus tour operations in the US

Source: Shibayama and Ieda (2008), updated with annual reports of the MOLTS
along with the ones mentioned in the introduction, LUAS trams in Dublin, Ireland, buses in the Slovenian coastal region, as well as in Croatia, Serbia, and in other countries, BRT (Bus Rapid Transit) in Las Vegas and a part of Bogota, Ferry services around Corsica Island in France as well as in northern Norway, commuter trains around Boston, and so on. Other than public transport, it is running cargo trains between France and Germany, operating shuttle buses between terminals and aircrafts in some airports in France, the French division of EuroLines intercity bus networks, and so on.

The second largest MOLTS, Arriva, is a British firm with its origin in motorcycle dealing. Arriva’s operation is limited to Europe. In the United Kingdom, it is operating a number of bus routes including franchised routes in London, as well as two railway franchises: Arriva Train Wales and Cross Country. Other operations include train operations in the Netherlands, Denmark, Sweden, Poland, and Germany, as well as bus operations in the Netherlands, Spain, Portugal, Germany, Italy, and Czech Republic. Arriva is headquartered in Sunderland, the United Kingdom.

The third largest MOLTS, Transdev, is characterized by its public nature. Most of its equities are in the hand of Caisse des dépôts et consignations, a French national investment bank, and RATP, a state-owned public transport operator in and around Paris. In France, it operates a number of urban and intercity buses, as well as six tram networks through “société d’économie mixte” (SEM; French joint venture with authorities and private firms). For example, the well-known tram in Strasbourg is operated by Compagnie des Transports Strasbourgeois (CTS), a SEM, with a 49% share owned by Transdev. Or, in Nantes, it forms SEMITAN, a SEM, 15% owned by Transdev. In the UK, it operates several bus franchises in London as well as in other parts of the country, tram operations in Nottingham through a joint venture, and so on. In Germany, it operates regional trains through a joint venture with RATP. It operates trams in Tenerife, Spain and Porto, Portugal, as well. Furthermore, it has a joint-venture subsidiary in Melbourne to operate Yarra Tram network. Transdev is headquartered in Paris.

The fourth largest MOLTS, Keolis, is also found in Europe, as well as French-spoken regions in Canada. It operates buses in many places in France, as well as some tram networks including Lyon, Caen, and Lille. Outside of France, it operates buses in Copenhagen, Denmark, railways in Germany, and buses in the Netherlands and Belgium. In the UK, Keolis has three joint ventures for the national railway franchises: Transpennine Express, Southeastern Railway, and London Midland. In Germany, it operates regional train around Bielefeld. In Canada, it operates intercity buses in the eastern regions and public transport in Montreal. Keolis is headquartered in Paris.

ComfortDelGro is the fifth largest MOLTS based in Singapore. It owns 75% of SBS transit, operating most of the bus routes in Singapore, as well as a metro (Mass Rapid Transit; MRT) North East Line and its feeder light rails (Light Rapid Transit; LRT). It operates buses in several cities in China, including Shenyang and Shanghai. Furthermore, it has a British and Irish division; it operates several buses in the two islands including part of London network. The Australian division of ComfortDelGro includes bus operations in Sydney. ComfortDelGro has other divisions: taxi operations, vehicle inspections, bus station management and so on. Taxis are its second main business after public transport; it has taxi divisions in Singapore, China, Malaysia, Vietnam, and the UK.

FirstGroup, National Express, and Stagecoach are all British MOLTS, conducting bus and rail operations in the UK. All have North American divisions. FirstGroup owns the largest US
intercity bus operator Greyhound, as well as other small bus undertakings. It also has delegated school bus divisions in the US. National Express also has a division in the US, as well as a Spanish bus division. Stagecoach has a North American division with local bus operation. These three firms headquarter in London.

2.2 Expansion of the MOLTS in Worldwide Scope

Major operating locations of the MOLTS as of January 2009 are shown in Figure 1 for the world excluding European detail, and Figure 2 for European scope, in relation to the headquarter locations of the MOLTS.

The figures clearly show that Paris and London, where most of the MOLTS headquarters reside, are the pivots of the MOLTS business in the worldwide expansion. Paris has connections throughout the world. London has strong connections to the US and Canada, whilst no connection to the rest of the world. Singapore is a small Asian pivot for expansion. Within the bounds of Europe, however, Paris is clearly the pivot for expansion whilst London loses its position. Sunderland appears as the second largest pivot for European expansion in Britain.

Concerning the operating locations, the figures clearly show that Europe is in the central market of the MOLTS business, yet it has expanded to the Americas, Asia and Pacific regions, as well as to the Middle East. Several locations such as Réunion Island are overseas departments and territories of France with the French operators.

Veolia Transport’s operating locations spread all over the world, and this is an outstanding case. Arriva, Transdev and Keolis are focusing on Europe, while two of them have locations in North America and Australia. ComfortDelGro is focusing in Asia, yet it is gaining some part of the British and Irish markets. The other three British MOLTS, First, National Express, and Stagecoach, are focusing on the British and North American markets. There are no operating locations in Africa, and there are few in Latin America and in the Middle East.

In other words, British MOLTS headquartering in London (First, Stagecoach, and National Express) expands to the North American market. The one in Sunderland (Arriva) and the

Figure 1 Expansion in the worldwide scope Source: Shibayama and Ieda (2008), updated
French MOLTS (Veolia, Keolis, Transdev), which are headquartered in Paris, have their operating businesses in the European market, some of which have businesses in the other parts of the world as well.

In Europe, several interesting tendencies are found. First, French MOLTS are quite actively expanding internationally, while there are no foreign operators in France. Second, many locations are found in the northern part of Europe, such as in Britain, France, Germany, and Scandinavia, while in the southern part of Europe, such as the peninsula part of Italy, or in Greece and in the Iberia, there are fewer operating locations.

Figure 2 Expansion in Europe Source: Shibayama and Ieda (2008), updated
3. MOTIVATION TO EXPAND IN THE EUROPEAN CONTEXT

3.1 Introduction and Hypotheses

Why are the MOLTS keen to expand internationally? Classical management of public transport with local operators diversifies the way of managing systems around the world; operating in a number of countries means adjusting themselves to a new cultural context, which is a barrier to enter into a new market. Thus, there should be several strong motivations to expand internationally. This section deals with their motivation to expand internationally. Four possible motivations can be pointed out, two of which are intrinsic motivation, whilst the other two are circumstantial motivation, as shown below. In the following sections, these four are discussed.

**Intrinsic Motivations**

1. Public nature and the size of the MOLTS (Section 3.2)
2. “Low-Risk Low-Profit Business with Authorities” (Section 3.3)

**Circumstantial Motivation**

3. Legislative unity to realize “Low-Risk Low-Profit Business with Authorities” (Section 3.4)
4. Need for “Specialist of Tram” (Section 3.5)

3.2 Public Nature and the Size of the MOLTS to Expand

The MOLTS are assumed to be large enough to expand internationally, in terms of capital, technological diversity and elasticity, and human resources. In this section, starting from a simple question why French and British operators are actively expanding abroad as MOLTS while German operators are not (Alexandersson, 2005 etc), general French and German situations around public transport operators are first compared, and the British situation is discussed after that. In short, the German situation with a number of small undertakings divided by cities does not allow the operators to grow enough to expand internationally. Meanwhile, French and British operators have been growing through different procedures. In Germany, the public organization called “Stadtwerke” has been providing public services such as water, electricity, gas, central heating, garbage collection, and public transport. A clear example can be found in Munich; “Stadtwerke München” provides the city with water, electricity, gas, central heating, water, and public transport (through its subsidiary MVG), as well as other public services such as public swimming pools and so on. Similar situations are found in many cities in Germany. (SWM, 2009)

This is comparable with the French situation. For example, Veolia Environnement, the holding company of Veolia Transport, can be understood as an aggregation of several service divisions of “Stadtwerkes” of many cities in Germany. Keolis and Transdev can be understood as aggregation of transport divisions of the “Stadtwerkes”. In fact, 79% of public transport undertakings in France are in one of the concerns of Keolis, Transdev, or Veolia Transport (UTP, 2009). This French aggregation allows the public service providers to be large enough to expand internationally in terms of capital, technology and human resources. Meanwhile, in Germany, public service providers are divided into many municipal small “Stadtwerkes”, operating in geographically limited areas, and the firms are not large enough to expand internationally.

The British situation is slightly different in terms of forming large concerns. The privatization
of the former national monopoly British Bus meant that a number of small bus operation undertakings appeared in Britain, and they have been gradually forming several groups by merger. In the railway market, as Koide (2008) points out, British railway companies tend to merge to form larger concerns, as well as diversifying their transport modes to disperse the entire risk on their franchises.

Furthermore, this “large scale” aspect can be comparable with the investors of the MOLTS. Especially in case of the French MOLTS, the investor includes the French financial industry and public sectors. This could be understood in a context of an industrial complex and governmental or political influence to generate several “hidden” or “informal” benefits for the headquarter countries and its related industries. For example, construction of a new network, which is mentioned in the section 3.5, allows the MOLTS to form a consortium which may allow procurement of rolling stock or construction (Shibayama and Ieda, 2008). The case exists in Barcelona: Veolia participates in a consortium to build and operate a tram in the suburb with Alstom, a French rolling stock manufacturer, as well as other MOLTS including banks and local operators (Trambaix, 2009). Yet, this insight needs deeper investigation.

3.3 “Low-Risk Low-Profit Business with Authorities”

Table 2 shows the recent revenue, earnings (EBIT: earnings before interest and taxes) and profitability of the top four MOLTS except Transdev, which does not publish its financial results. If the results are compared with the operational results of Tokyu Corporation (railway division), one of the largest private railway operators in Tokyo, the MOLTS’s business is relatively not as profitable. Understandably, expansion adds more revenue to the MOLTS (Arriva 2008 etc), yet it does not improve the profitability of the MOLTS. Especially, taking the generally unprofitable situation of public transport in Europe into consideration, the prospect of large profits cannot be the primary factor for them to expand internationally.

However, as explained in the next section, public transport business in the European context is often supported and intervened in by the public sector. For example, in the European Union, public transport operators make “public service contracts” with the public sector to obtain exclusive rights to provide services to municipalities or other public sector organization. This means that the primary “customer” of the public transport operators – including MOLTS – is the public sector (Veolia Transport, 2008c etc).

Table 2 Recent years’ revenue and profit of selected MOLTS

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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<tbody>
<tr>
<td>Veolia Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>€3,427</td>
<td>€3,678</td>
<td>€3,618</td>
</tr>
<tr>
<td>EBIT</td>
<td></td>
<td>€116</td>
<td>€93</td>
<td>€103</td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td>3.37%</td>
<td>2.52%</td>
<td>2.85%</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
</tr>
<tr>
<td>Keolis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>€2,419</td>
<td>€2,664</td>
<td>€2,883</td>
</tr>
<tr>
<td>EBIT</td>
<td></td>
<td>€67</td>
<td>€89</td>
<td>€125</td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td>2.77%</td>
<td>3.34%</td>
<td>4.34%</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
</tr>
<tr>
<td>Arriva</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>£1,571</td>
<td>£1,729</td>
<td>£2,001</td>
</tr>
<tr>
<td>EBIT</td>
<td></td>
<td>£111</td>
<td>£120</td>
<td>£128</td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td>7.08%</td>
<td>6.91%</td>
<td>6.40%</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td></td>
<td>2006</td>
<td>2007</td>
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<tr>
<td>Tokyo Corporation</td>
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<tr>
<td>(Railway division,</td>
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</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>-</td>
<td>¥138,202</td>
<td>¥141,882</td>
</tr>
<tr>
<td>EBIT</td>
<td></td>
<td>-</td>
<td>¥135,726</td>
<td>¥23,222</td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td>-</td>
<td>25.9%</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

Unit: Million EUR or Million GBP or Million JPY
Source: own resource with annual reports of the MOLTS
In general, business with public sector is more stable than with private sector, since the stability and solvency of the organization is higher. For example, Mr. Edward Varani, a deputy director of Veolia Transport at the time of the interview, told the author that this is an important and attractive aspect for their business.

The combination of the low-profit aspect and the general low-risk aspect of public transport business in the European context allows MOLTS “Low-Risk Low-Profit Business with Authorities”.

3.4 Legislative Unity to Realize “Low-Risk Low-Profit Business with Authorities”
The common policy of the European Commission is an important circumstance in two senses. First, it provides a unified framework for the MOLTS to operate in the same business model. Another importance is that the European legislative situation allows them “Low-Risk Low-Profit Business with Authorities,” which is an important attraction as shown in the section 3.3.

The European Commission established its common transport policy in the 1960s. The first legislative appearance was in 1969, with Regulation 1191/69 to introduce the concept of “Public Service Obligation”; authorities can impose transport operators to operate unprofitable but socially necessary public transport with comprehensive subsidies. In 1991, with its revised regulation 1893/91, the “Public Service Contract” was introduced. With this regulation, local authorities are required to make a contract with transport operators. In these regulations, authorities are responsible for public transport, and they are required to subsidize transport undertakings when public transport services necessary for society and the economy are not financially sustainable (Shibayama and Ieda 2008a). The revised version of the regulations, Regulation 1370/2007, highlights the European context of public transport:

At the present time, many inland passenger transport services which are required in the general economic interest cannot be operated on a commercial basis. The competent authorities of the Member States must be able to act to ensure that such services are provided. (European Commission, Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70, Preamble)

The series of these regulations, as well as the directive 91/440/EEC to implement the so-called vertical separation for national railways, allowed public transport operators to introduce businesses framework with public sectors. In other words, public sectors became primary customers of public transport operators. This led to the situation where ‘Low-risk Low-revenue Business with Authorities’ business model could be realized through unified transport policy in Europe, as well as reduce the operational risk of operators in the unprofitable context (Shibayama and Ieda, 2008).

3.5 Need for “Tram Specialists”
A Series of installations of new tram networks has fueled the MOLTS to develop themselves as specialists of tram operators. For example, in France, where a “reintroduction” of trams has happened (Groneck, 2003), 13 out of 16 newly built tram networks are operated by the French MOLTS. This section first compares the relationship between the reintroduction of tram networks and the operation by the MOLTS in Britain, France, and Germany, where there are a
number of tram networks.

Figure 3 shows the number of tram networks, which existed in September 2008, and the number of the MOLTS’ operations locations. This figure highlights that in Britain and in France, most of the tram networks were introduced after 1980, whilst in Germany most of the tram networks from the end of 19th century have been kept till today. Furthermore, in Britain and in France, most of the tram networks are operated by the MOLTS, whilst trams in Germany are not. It also shows that the operation of MOLTS first appeared in 1985.

Tram operation includes a lot of specialized undertakings such as track maintenance, personnel management, electricity, signals, and so on. There is a lot of room to introduce specialized firms. For example, Mr. Eric Chevalier, the director of the transport of the conurbation of Nantes, France, told the author in an interview that Transdev was introduced as a “specialist” of public transport operation to Nantes. Like this, the MOLTS participated as a “specialist” in the new construction of reintroduced trams. The French experience of the “return of tram” (Groneck, 2003), as well as in the other countries such as Britain, Spain, and Portugal, encouraged the MOLTS to be specialized in tram operation.

This situation around the tram operation is highlighted by the word “Development”. In this context, the MOLTS participate in tram operations in a number of cities as a specialist of operations, with its techniques and resources such as management of personnel, employee training, advertising and marketing, and so on.

A comparison with railway and bus operation highlights this more clearly. Simply, the situation of railway operations in Europe is highlighted by the word “Replacement” and of buses by the word “Absorption”.

Railway operation of the MOLTS usually takes over some part of the national railway networks, and it does not include construction of new railway lines. As Burmeister (2008) introduces in his article, the operation of the MOLTS in German railway market is, with a few exceptions, a replacement of the former monopoly DB’s operation. Parallel situations are applied to the other railway operations such as Dutch, Danish, and Polish rail operation of Arriva, as well as Swedish, Australian, and New Zealander rail operation of Veolia Transport.
Bus operation is characterized by the word “Absorption”. The MOLTS often purchase a local firm operating bus to expand the businesses. For example, Veolia Transport’s first large international expansion to continental Europe was achieved by purchasing a Swedish bus operator Linjenbuss (Shibayama, 2007). Or, Mr. Bo Karlsson, the general director of Veolia Transport Slovenia, told us in an interview that Veolia Transport often purchases a local company to enter into a new country. He pointed out that it is enchanting purchase especially when a local firm has rooms to improve profitability and cost-efficiency.

4 STATUS QUO OF THE MOLTS IN ASIA

In Asia, Veolia Transport and ComfortDelGro are now operating, or announcing their plan to operate in the coming years. Figure 4 shows the detailed locations in Asia. Following are the descriptions of the all of the operating locations of the two MOLTS in Asia.

Seoul Metro Line 9 by Veolia Transport
Seoul is constructing its ninth metro line. The line connects the Gimpo district and the center. The construction started in 2002, and the operation is starting in July 2009. The infrastructure is maintained by Seoul Metro Line 9 Corporation, and train operation will be by Seoul Line 9 Operation Co., Ltd under contractual scheme, as shown in Figure 5. The operating company Seoul Line9 Operation is 80% owned by Veolia Transport, and 20% owned by Rotem, a rolling stock supplying subsidiary of Hyundai Group. This is through a joint venture scheme, yet the major share is held by the MOLTS (Veolia Transport, 2008a).
**Mumbai Metro 1 by Veolia Transport**

Mumbai is building its first metro connecting the east-west corridor, starting its operation in 2010. The city is planning a 146.5 km metro network in total from 2006 to 2021 with three phases, initiated by the Mumbai Metropolitan Region Development Authority (MMRDA). The first phase, with 62.68 km network, started in 2006.

Veolia Transport will operate Mumbai Metro 1 through a joint venture with the Indian company Reliance Infrastructure, with 70% shareholding. Like the case of Seoul, the joint venture makes a contract with the company for infrastructure concession. The largest difference compared with Seoul is that the counterpart of the contract, Mumbai Metro One Private Limited, is also a joint venture of Veolia Transport (Veolia Transport, 2008b). Mumbai Metro One is a Special Purpose Vehicle (SPV) incorporated to implement the first metro corridor. It is 69% owned by Reliance Energy, 5% by Veolia Transport, and 26% by the MMRDA (Veolia Transport, 2008b; Reliance - ADA Group, 2008).

![figure 6](Image)

Figure 6 Organizational structure of Mumbai Metro Line 1 operation Source: Own resource

**Buses in Nanjing by Veolia Transport**

Veolia Transport China made an agreement with Nanjing Zhongbei to establish a joint venture in 2008. It is reported that Veolia Transport China Ltd. holds a 49% stake of the joint venture, and 51% is in the hands of Nanjing Zhongbei Group. The company groups together the transport activities of Nanjing Zhongbei. The joint venture will operate buses in six cities for 30 years. Nanjing Zhongbei is partly owned by the city of Nanjing as its main shareholder and partly as a public company on the Shenzhen stock exchange since 1996.

**Chinese bus services by ComfortDelGro**

In Shenyang, ComfortDelGro owns two subsidiaries, Shenyang ComfortDelGro Bus Co., Ltd and Shenyang ComfortDelGro Anyun Bus Co., Ltd. The former is a wholly-owned subsidiary, whilst the latter is a joint venture. The former operates 27 routes with 716 buses, and the latter operates 18 routes with 511 buses. In Shanghai, an associate Shanghai Shenxin Bus Service Ltd is operating 18 routes with 460 bus fleets. In Suzhou, 70%-owned Suzhou Comfort Passenger Transportation Co., Ltd operates a Suzhou-based intercity route to Changshu.

**Singaporean MRT, LRT and bus by ComfortDelGro**

All the public transport operation of ComfortDelGro in Singapore is through a subsidiary SBS Transit, 75% share of which is held by ComfortDelGro. It operates the MRT (Mass Rapid Transit) North East Line, the Sengkang and Punggol LRTs (Light Rapid Transit, which feeders the MRT to residential areas), connecting to the MRT, and buses on 242 routes.
5 ASIAN CONTEXT OF THE MOLTSES’ BUSINESS

5.1 Asian Characteristics of the Global Players’ Business
The development of the MOLTS in Asia is not to the same extent as in the European context. The following characteristics in the Asian context are found.

Three Asian Characteristics
(1) Diverse Platform for Public Transport Operation and Prosperity of Public Transport
(2) Railway in “Development” Phase in Asia
(3) Less Attractiveness of Diversification

5.2 Diverse Platform for Public Transport Operation and Prosperity of Public Transport
Asian public transport is characterized by its higher extent of usage (Kenworthy, 2008). This Asian “prosperity of public transport” allows each country or city to manage its own public transport by itself; the need to cooperate to form a common platform is not as strong as in the difficult European context. It does not motivate the nations to establish a common platform, allowing the operators to expand their business in a ubiquitous business model.

In the European context, earlier motorization led to public transport systems facing a severe situation to financially sustain them. The European Commission and its member states have established policy- and government-initiated management of public transport in Europe (Shibayama and Ieda, 2007). Furthermore, a single international organization, the European Commission, played a role to establish the common policy to tackle the difficulty together.

Meanwhile, in Asia, the conditions around public transport in general are not as critical as in the European context. A lot of public transport networks, notably the ones in so-called “mega cities” are often sustainable without subsidies. For example, in Tokyo, mass transit is highly profitable because of the numbers of passengers, so that private operators can finance themselves without any subsidy for their operations. The same situation exists in many large cities in Asia. This “prosperity of public transport”, as well as later motorization and highly dense urban structures in Asia, has provided fewer competitors for public transport.

This does not lead Asia to a single unified situation around public transport operation like in Europe. Platforms of public transport operation are diverse and operators need to adjust themselves to localities. This means the operators are exposed to a phase of “trial and error” to enter into a new market, which makes a barrier for the operators. As well, for the authorities, this trial and error is needed to accept foreign operators.

5.3 Railway in “Development” Phase
The second Asian characteristic is that rail transit is in the phase of “Development” as in the cases of Seoul and Mumbai; in Europe tram operation is often connected to construction of a new network. Tram operation by the MOLTS is not found in Asia. Bus operations are similar both in Asia and in Europe; MOLTS are often purchasing local companies both in Asia and in Europe. This overall situation is summarized in Table 3.

Asia, with its dense population and the developing situation, provides with more opportunities to “develop” new public transport networks. This allows the MOLTS, as well as existing Asian domestic operators, to expand to the newly developing or future urban railway networks. Furthermore, the MOLTS have several experiences in railway operation; in other words, the MOLTS have “specialized” feature for rail as well as for tram operation. For
example, Veolia Transport has its subway operation in Stockholm, Keolis used to operate suburban trains around Stockholm, and ComfortDelGro is operating a metro in Singapore.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Europe</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tram</td>
<td>Development</td>
<td>N/A</td>
</tr>
<tr>
<td>Rail</td>
<td>Replacement</td>
<td>Development</td>
</tr>
<tr>
<td>Bus</td>
<td>Absorption</td>
<td>Absorption</td>
</tr>
</tbody>
</table>

5.4 Less Attractiveness of Territorial and Modal Diversification

In the Asian context, public transport operators have possibilities to develop themselves within their headquarter cities, and do not need to take risks to expand internationally. Furthermore, the risk of losing business suddenly is extremely low, as contract-based systems such as franchising have not in general been introduced. These may hinder the motivation of Asian public transport operators to expand internationally.

The Asian situation of public transport management does not include the possibility to lose existing contracts. This leads Asian operators not exposed to this risk, or to the motivation to diversify their customers. On the contrary, in the British context, which includes franchise contracts, with renewal after certain term such as seven or ten years, operators face the possibility that they will lose their business suddenly in certain areas (Koide, 2008). Likewise, in the European context, where the public service contracts are introduced, operators have the same kind of risk. This encourages the operators to diversify their business.

Furthermore, Asia in general has larger room to develop. The economic boom in China and India could attract the operators from outside Asia. However, the boom provides local operators with the opportunity to develop themselves within their headquarter territory. This will hinder Asian operators to expand beyond the territorial border.

5.5 Application of the MOLTS to the Asian Context

Despite the less-motivating situation in Asia discussed above, the Asian context still provides the existing MOLTS – and the existing operators in Asia – with applications of the concept of the MOLTS. With the general higher usage of public transport in Asia (Kenworthy, 2008) taken into consideration, the business model of MOLTS has many opportunities in Asia.

As argued in the section 5.3, an application of the MOLTS concept to railway operators provides opportunities for exchanging and transferring experiences in the “Development” phase of mass transit. In particular, this can be practiced where the development of a railway network is necessary for future development as well as for a sustainable transport system.

Furthermore, the development model of a mass transit system combined with retailing and real estate development on a spontaneous private basis, such as the ones seen in Tokyo, can be applied to the concept of MOLTS. Several Asian operators specialize in this business model, which can motivate people to use public transport.

Another application is to tramways and BRTs (Bus Rapid Transit). In Asia, these are not well introduced at the moment. However, the concept of MOLTS in terms of experience transfer reduces a barrier for the introduction of these modes in case these are needed in the future.
6. CONCLUSION

In this paper, the following five points have been discussed. First, the concept and status quo of the MOLTS in the world and in Europe are shown; eight MOLTS are significant in the market, and they are spreading worldwide as well as across Europe. Second, backgrounds of expansion of the MOLTS are discussed; the financial point is not so strong, whilst the unified legislatives in Europe with risk reduction fueled the MOLTS to expand in the European context. Specialized feature of the MOLTS, as well as the headquarter countries’ situation with aggregated public service providers, are other driving force of the diversification. Third, status quo in Asia is organized; there are five cases in China, South Korea, Singapore, and India. Finally, the expansion background in Asia is analyzed. The Asian situation is characterized by “Development” for railways and this will be a possibility for application for the MOLTS, as well as other applications.

Several points, such as the qualitative analysis of the headquarter countries’ situation discussed in the section 3.3, and the relationship between the public and industrial investors and the MOLTS’s expansion, are left unsolved. These are the future challenge of this research.

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**ADDENDUM**

On 23 Jul 2009, Veolia Transport announced on its website a planned equal merger with Transdev. This alters the status quo shown in the context of future development, subject to a definitive agreement of the firms and to an approval of the merger by the regulatory bodies.