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 which operate public transport in a number of countries. Their operation in the European context, including American and Oceanic, is encouraged by four motivations, namely: their business model itself as "Low-Risk, Low-Profit Business with Authorities”; size and nature of the MOLTS; legislative unity to enable 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 urban railway network. The “Low-risk, Low-profit Business with Authorities” foundation is not established overall but possible in some regions. Specialized features are appearing in railway operations in Asia.

Keywords: 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 that of Singapore 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.

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

In this paper, the global players for local public transport are called “Multinational Operators for Local Transport Services” or ‘MOLTS’, for short. Through extensive literature research and interviewing, the backgrounds of development of MOLTS in Europe and Asia and their 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 cover the European context. In Section 2, the major MOLTS and their operating
locations in the world are described. In Section 3, the 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 4 is concerned with the status quo in Asia. Section 5 analyzes and discusses the background of development in Asian context. Section 6 draws conclusion of this paper.

2. STATUS QUO OF THE 'MOLTS'

2.1 Literature Review: What are ‘MOLTS’?

In this chapter, the term ‘MOLTS’ is defined first. 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 identified.

The concept of MOLTS is first presented by Frérot (2000), who was at that time the general director of Connex, now known as Veolia Transport. Examples of international expansion of a French MOLTS VIA-GTI, known today as Keolis, are presented in a book by Perrot and Chatelus (2000) but the focus is limited to the 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) in which they first dealt with the concept of ‘MOLTS’ and demonstrated that both earlier and later deregulations could lead public transport operators to expand internationally in Europe through a comparison study 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. Groneck (2003) also mentions French MOLTS; however this is in the context of the French “reintroduction” of trams since the 1980s.

Classical local public transports around border areas are by nature operated in two or more countries thereby connecting neighboring regions. For example, local trains between Vienna, Austria and Bratislava, Slovakia, are operated in two countries, but the 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 service continuing into Johor Bahru, Malaysia, yet the entire line is operated by a Singaporean operator. In both cases, operations are continued from one country to another to connect two bordering regions. However, MOLTS have different characteristics. As mentioned earlier, they are operating in several public transport systems which are not connected physically. MOLTS can be defined as public transport operators characterized by the following:

(1) Operating several public transport systems independent of each other in several
countries, regardless of transport modes; and
(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 as shown in Table 1. Among the eight, Veolia Transport,
Arriva, Keolis, and Transdev have outstanding characteristics as MOLTS. The basic
characteristics of the eight MOLTS are also shown in the table. They are operating almost all
sorts of public transport among which, trams, trains, and buses are their main operating
transport modes.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Headquarter</th>
<th>No. of countries in operation</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%) Caisse des dépôts et consignations (10%) Natixis Asset Management (7%) Groupama (6%) Électricité de France (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Stocks are partly on Euronext (Paris) and NYSE (New York)</td>
</tr>
<tr>
<td>Arriva</td>
<td>United Kingdom</td>
<td>10</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Stock on London Stock Exchange</td>
</tr>
<tr>
<td>Transdev</td>
<td>France</td>
<td>9</td>
<td>Caisse des dépôts et consignations (68%) 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%) Société Nationale des Chemins de fer Français (SNCF, 47%)</td>
</tr>
<tr>
<td>Comfort-DelGro</td>
<td>Singapore</td>
<td>5*</td>
<td>DBS Nominees Pte Ltd (26%) Singapore Labour Foundation (12%) DBSN Services Pte Ltd (12%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Citibank Nominees Singapore Pte Ltd (9%) United Overseas Bank Nominees Pte Ltd (7%) HSBC (Singapore) Nominees Pte Ltd (6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Stock on Singapore Exchange</td>
</tr>
<tr>
<td>FirstGroup</td>
<td>United Kingdom</td>
<td>4</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Stock on London Stock Exchange</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></td>
<td></td>
<td></td>
<td>*Stock on London Stock Exchange</td>
</tr>
<tr>
<td>Stagecoach</td>
<td>United Kingdom</td>
<td>2***</td>
<td>(Unknown at the moment of research)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Stock on London Stock Exchange</td>
</tr>
</tbody>
</table>

Veolia Transport, the largest MOLTS, is a transport division of Veolia Environnement.
Veolia Environnement has four public service divisions, namely: 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. Along with those
mentioned earlier in the introduction, their operation includes the following: 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 part of Bogota; Ferry services around Corsica Island in France as well as in northern Norway; commuter trains around Boston, etc. Other than public transport, it is also 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, etc.

The second largest MOLTS, Arriva, is a British firm with its origin in motorcycle dealing. Arriva’s operation is limited within 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 and in French-speaking regions of 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, namely: 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 and operates most of the bus routes in Singapore, and 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 which 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, etc. Taxi operation is its second main business after public transport. It has taxi divisions in Singapore, China, Malaysia, Vietnam, and in the UK.

FirstGroup, National Express, and Stagecoach are all British MOLTS conducting bus and rail operations in the UK. All of them 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 divisions in the US.
and in Spain. Stagecoach has a North American division with local bus operation. These three firms are headquartered in London.

2.2 Expansion of the MOLTS in Worldwide Scope

The major operating locations of MOLTS in the world excluding those in Europe as of January 2009 are shown in Figure 1. Figure 2 shows MOLTS’ European expansion in relation to the headquarters’ locations.

![Figure 1. Expansion in the worldwide scope](image)

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, and 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 headquartered in London (First, Stagecoach, and National Express) expand to the North American market. The one in Sunderland (Arriva) and the 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. The other two British MOLTS, First and National Express, have their operating businesses in the UK, Ireland, and some parts of Europe, including France and Spain. Suzuki and Sumitomo are focusing on Japan, whilst their operating businesses are limited to the domestic market.
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](image-url)

*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 in the way of managing systems around the world. Operating in a number of countries means adjusting themselves to a new cultural context, which is considered to be a barrier when entering into a new market. Thus, there should be several strong motivations to expand internationally. This section deals with their motivations to expand internationally. Four possible motivations can be pointed out, two of which are intrinsic ones, whilst the other two are circumstantial in nature. In the following sections, these four possible motivations 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 afterwards. 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. 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, 2008). 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. Moreover, the firms are not large enough to expand internationally.
The British situation is slightly different in terms of forming large corporation. 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 corporation, 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 the public sectors. This could be understood in the 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, the construction of a new network mentioned in 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). However, 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.

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>€3,427</td>
<td>€3,678</td>
<td>€3,618</td>
</tr>
<tr>
<td>EBIT</td>
<td>€116</td>
<td>€93</td>
<td>€103</td>
</tr>
<tr>
<td>Profitability</td>
<td>3.37%</td>
<td>2.52%</td>
<td>2.85%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>€2,419</td>
<td>€2,664</td>
<td>€2,883</td>
</tr>
<tr>
<td>EBIT</td>
<td>€67</td>
<td>€89</td>
<td>€125</td>
</tr>
<tr>
<td>Profitability</td>
<td>2.77%</td>
<td>3.34%</td>
<td>4.34%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>£1,571</td>
<td>£1,729</td>
<td>£2,001</td>
</tr>
<tr>
<td>EBIT</td>
<td>£111</td>
<td>£120</td>
<td>£128</td>
</tr>
<tr>
<td>Profitability</td>
<td>7.08%</td>
<td>6.91%</td>
<td>6.40%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>¥138,202</td>
<td>¥141,882</td>
</tr>
<tr>
<td>EBIT</td>
<td>¥35,726</td>
<td>¥23,222</td>
</tr>
<tr>
<td>Profitability</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

However, as to be explained further in the next section, public transport business in the European context is often supported and intervened 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 organizations. This means that the primary “customer” of the public transport operators – including MOLTS – is the public sector (Veolia Transport, 2008c etc).

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 aspects. 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 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” with which 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.


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.

![Figure 3. Development of existing tram networks and MOLTS](image)

Tram operation includes a lot of specialized undertakings such as track maintenance, personnel management, electricity, signals, etc. 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. In such a way, 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, etc.

A comparison of railway operation with bus operation highlights this more clearly. Simply, the situation of railway operations in Europe is highlighted by the word “Replacement” and that 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 by 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 buses to expand the businesses. For example, Veolia Transport’s first
large international expansion to continental Europe was achieved by purchasing a Swedish bus operator Linijenbuss (Shibayama, 2007). And, Mr. Bo Karlsson, the general director of Veolia Transport Slovenia, told the author in an interview that Veolia Transport often purchases a local company to enter into a new country. He pointed out that a purchase is attractive 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 plans to operate in the coming years. Figure 4 shows the detailed locations in Asia. The descriptions of the operating locations of the two MOLTS in Asia are as follows:

Figure 4. MOLTS’ operating locations in Asia

**Seoul Metro Line 9 by Veolia Transport**

Seoul is constructing its ninth metro line. The line connects the Gimpo district and the city center. The construction started in 2002, and the operation started in July 2009. The infrastructure is maintained by Seoul Metro Line 9 Corporation, and trains are operated by Seoul Line9 Operation Co., Ltd under contractual scheme, as shown in Figure 5. This operating company 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 but the major share is held by the MOLTS (Veolia Transport, 2008a, Schwandl, 2004).

Figure 5. Organizational structure of Seoul Metro Line 9 operation
Mumbai Metro 1 by Veolia Transport

Mumbai is building its first metro connecting the east-west corridor and will start its operation in 2010. The city is planning a total of 146.5 km metro network 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. Similar to the case of Seoul, the joint venture makes a contract with the company for infrastructure concession. The main 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).

![Organizational structure of Mumbai Metro Line 1 operation](Source: Authors)

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, namely: Shenyang ComfortDelGro Bus Co., Ltd. and Shenyang ComfortDelGro Anyun Bus Co., Ltd. The former is a 100%-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 operations of ComfortDelGro in Singapore are through a subsidiary SBS Transit, 75% share of which is held by ComfortDelGro. It operates MRT (Mass Rapid Transit) North East Line, the Sengkang and Punggol LRTs (Light Rapid Transit, which feeders the North East Line to residential areas) and 242 bus 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 characteristics found in Asian context are the following:

1. Diverse Platform for Public Transport Operation and Prosperity of Public Transport;
2. Railway in “Development” Phase in Asia; and
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 (Shibayama and Ieda, 2007). It has to be noted that a single international organization – the European Commission – played an important 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 number of passengers, such 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 is considered as a barrier. 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 the rail transit system is in the phase of “Development” as in the cases of Seoul and Mumbai. In Europe, tram operation is often connected to the construction of a new network. Tram operation by the MOLTS, however, 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 development trends, provides 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 3. Comparison of European and Asian contexts for each major mode

<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 the cities they are headquartered, and they 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 to the situation that Asian public transport operators are neither exposed to aforementioned risks nor motivated 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 is in general has larger potential of development compared to Europe or North America. The economic boom in China and India could attract the operators from the outside of 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 the region.

As argued in 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 themselves in this business model which could motivate people to use public transport.

Another application is on tramways and BRTs (Bus Rapid Transits). 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, five key points have been discussed. First, the concept and status quo of the MOLTS in the world and in Europe are presented. 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 forces of the diversification. Third, status quo in Asia is presented. 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.

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

REFERENCES


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ADDENDUM

On 5 May 2010, Veolia Transport and Transdev reached to a definitive agreement for an equal merger, followed by an approval of European Commission (EC) on 12 August 2010. On 27 August 2010, Deutsche Bahn completed its purchase of Arriva plc after a conditional approval by EC to separate its German subsidiary. These will alter the status quo shown in this paper.