

Application Form of EASTS IRG

Date of Submission: 2013/08/16

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4. Keywords (Maximum: 5 words)

Asian Cities
Public Transport
End User Perception
Quality Indicator
Comprehensive Quality Management

5. Purpose and Mission of IRG:

In developing Asia megacities, the extremely high rate of urbanization and the relatively lower level of economic development make public transport the most suitable and sustainable mode. Public transport shall, therefore, continuously meet the requirement of supply side for higher capacity and increasingly respond to demand side need of accessible, affordable, fast, and reliable mode. Unfortunately, these cities are facing a declining trend of public transport share (Parikesit and

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Susantono, 2013). For examples, bus shares in Jakarta and Bangkok have decreased from 50% to 20% and 30%, respectively, for the past decade. In Hanoi and Hochiminh City, despite service improvements and continuously increased subsidies, bus shares increased modestly from 3% to 10% during the same period (Parikesit and Susantono, 2013; Tuan, 2012). Deteriorating *service quality*¹, unmet customer needs, and a lack of an effective *quality management*² system for public transport explain for the decline and the marginal increase of public transport share (Chhavi Dhingra, 2011). While there is a lot of emphasis on new and expensive infrastructure development to meet the supply gap in public transport, softer and often low-cost interventions like improving service quality and carefully considering customer perception are totally neglected. There is no mechanism that exists to assess if the available public modes are fulfilling their expected roles and meeting various the standards regarding accessibility, affordability, convenience, enjoyment, integration, reliability, safety, comfort, and so on. In most cases, there are no standards (Chhavi Dhingra, 2011). Experiences from developed countries show that to compete against private transport, public transport must continuously improve its quality and enhance the service it offers to regain passengers (Morichi and Acharya, 2013). Total quality management for public transport appears to be a viable solution to increasing the profitability and/or cutting the subsidies and meeting the public demand for better quality service. Therefore, there is a strong need for studies on practices and issues of the quality of public transport services and quality management for public transport in Asia and around the world in order to support a sustainable development for public transport. Quality management for public transport was examined in past studies (QUATTRO, 1998; TRB, 2004; TRB, 1999; TRB, 1994), however, these studies focused on measuring and assessing quality of transport service (MAX, 2006). In other words, most previous studies considered mainly assessment tools. There are a few researches that examine other important aspects of the quality management, including the processes and their interdependencies in public transport, the stakeholder participation in these processes and their expectations. More urgently, there have been hardly such studies in Asia.

The purpose of this study is two-fold. Firstly, it aims to understand the current state of public transport service quality and the regulatory framework for managing the quality of public transport services. The current ways of measuring, monitoring, assuring and improving the quality in Asian cities are also examined. Secondly, from this understanding, the study will recommend a framework and measures for quality management of public transport with consideration to socioeconomic conditions and level of public transport development for each of the studied cities.

The specific objectives include:

- (1) Reviewing the state-of-the-art of quality management in public transport industry;
- (2) Comparatively exploring and evaluating the quality of public transport in different cities, which will be classified by the level of personal income and the level of public transport development, in Asia and around the world, focusing on the product and process aspects;
- (3) Identifying stakeholders participated in the service processes and understanding their

¹ Here, quality generally means features of a product or service which meet customer need and thereby provide customer satisfaction (Juran, 1999).

² Quality management (QM) is all the activities of the overall management function that determine the quality policy, objective and responsibilities and implement them by means such as quality planning, quality control, quality assurance and quality improvement within the quality system (ISO 9000:2008).

expectations in different cities;

- (4) Defining the goals and quality objectives of public transport system for each period of socioeconomic and public transport development;
- (5) Establishing quality management framework for public transport in developing cities;
- (6) Proposing the applications for a number of selected cities in Asia.

Studied cities are selected based on their levels of development of public transport infrastructure (i.e., the amount of reserved public transport right of way for the different modes of public transport) and levels of personal income (or GRP/capita). It is believed that such factors may predetermine the offered service quality and the formulation of the quality management system across cities. As developing cities further develop their economy and continuously improve their public transport system, they will find the practices and issues of service quality and quality management for public transport in other developing cities and developed ones highly relevant.

Case studies tentatively include:

- Developing cities: Kathmandu (Nepal), Hochiminh City (Vietnam), Manila (Philippines), Jakarta (Indonesia), Bangkok (Thailand), Kuala Lumpur (Malaysia), and Shanghai (China) (for comparison);
- Developed cities: Seoul (Korea), Taipei (Taiwan), Singapore, Melbourne (Australia), and Tokyo (Japan) (for lesson learning).

6. Target year for completion (Research period is suitable within four years.):

The study is expected to be completed by 2017 (for about 3 years)

7. Research plan:

The study will be implemented over a period of three years with a series of activities as tentatively proposed as follow:

(Oct, 2013 - Sep, 2014) To pursue Objectives 1 and 2:

- Scoping of study on principles and practices of quality management for public transport;
- Collecting data and building a database on service performance and quality management tools and policies across selected cities;
- Comparatively evaluating the existing quality of public transport across the studied cities by applying the product- and process-based approaches;
- Identifying shortcomings and causes.

(Oct, 2014 - Sep, 2015) To pursue Objectives 3 and 4, and hold a Stakeholder Workshop at EASTS Conference in 2015:

- Identifying stakeholders who participate in planning, implementing and operating phases across groups of cities that are classified by the levels of economic and public transport developments;
- Conducting structured interview surveys on both present and potential customers to understand and compare their expectations across a number of selected cities;
- Holding a Stakeholder Workshop at EASTS Conference in 2015;
- Defining the goals, quality objectives and quality criteria for public transport by group of cities.

(Oct, 2015 - Sep, 2016) To pursue Objectives 5 and 6:

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- Establishing the quality management system for each group of cities and for each period of development within each group. An appropriate management system will consider all possible strategies for improving service quality, actions for improvement, cost-effectiveness assessment, and selection of doable measures;
- Recommendations/applications for a number of selected cities (covering both developing and developed ones)

(Oct. 2016 – Sep, 2017) To submit a Final Study Report and hold a Dissemination Workshop at EASTS Conference in Sept 2017.

8. Expected research funds (ex. ICRA (Research grant of EASTS), etc.

The Study wishes to apply for ICRA-A (ICRA for incubating research) to support data collection, surveys, printing, publications and research meetings. Application for other funds that are available in Asian countries and the world will be also considered.

9. References:

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[9]. Tuan, V.A. (2012). Long-term strategies for motorcycle management in Asian Cities, ITPS Transport Policy Studies' Review, Vol. 14, No. 4, 2012 Winter, pp. 72-80, 2012 (in Japanese).

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