About The Inter-Modal Transport Data-Sharing Programme

The Inter-Modal Transport Data-Sharing Programme is a proposed research programme that will commence with a conference and convene a Working Group to explore alternative data sharing models and framework conditions in unlocking and supporting intermodal transport in Hong Kong. Doing so will drive the local development of smart city applications such as traffic management, electric and autonomous vehicles. It will put long-term urban planning and sustainability policies on a more evidence-based and data-driven footing.

PROGRAMME UPDATE

Good news from two sources

First, the University of Hong Kong has agreed to submit the proposal on intermodal transport data sharing to the Innovation & Technology Fund (ITF). We are hopeful that the application will be approved, and the year-long research programme can commence before too long. The core research team consists of Prof Zhou Jiang-ping of the Faculty of Architecture, Dr John Ure, Director of the Technology Research Project (TRP), and senior researchers, Dr Jenny Wan, Waltraut Ritter, Andrew Pickford and Terry Graham. Over twenty transportation companies and vendors have expressed their support for the programme as have many government departments and public bodies. It is an issue that the Hong Kong Government has rightly highlighted as a step towards smart city management and as a means of evidence-based policies to combat emissions pollution.

Second, and prior to the ITF reviewing the application, we are delighted to announce that KMB has offered to sponsor the second phase of the intermodal transport data-sharing research programme (the Interim Research Phase) when the first phase (the Preparatory Research Phase), sponsored by MTR, is concluded this month. The findings of the Preparatory Research Phase will be presented at two workshops in late May, one arranged for government agencies and one for the transportation companies and interested stakeholders. These forums are currently being scheduled from dates between 27th and 29th May or 3rd June, and emails will be sent out to stakeholders to see which dates work best for them. We are in discussion with the MIT-Hub at the HKPC to see if their venue will be available on those dates.
INTERIM RESEARCH

The key components of the Interim Research Programme will be:

1. What are the main trends shaping innovation in transport services, operational efficiencies and sustainable mobility, and how might innovation lead to transformative mobility in Hong Kong to address social issues such as pollution and smart city management?

2. What data exists in Hong Kong today that could be relevant to the development of new transport services and sustainable mobility -- and what are the gaps in data provision?

3. What and who are the sources of transport data in Hong Kong/GBA and how is such data shared, including ticketing events and MaaS data.

4. What experiences of inter-modal transport data-sharing/inter-operable transport projects are available in the EU and elsewhere that can have relevance to Hong Kong in terms of smart city management. The cities under immediate consideration are Stockholm, MTR operates there and takes part in data-sharing), Helsinki (open data and MaaS pioneer), Vienna (for innovative walkability concepts), Berlin (for phasing out private cars and inter-modal data-sharing).

Informed by the findings of the preparatory research phase, the deliverables of the interim research phase include a summary report on mobility trends, the results of a data gap analysis and a catalogue of relevant, quality-assessed mobility-related data sources in Hong Kong/GBA that could underpin the development of future multi-modal services.

INDUSTRY DEVELOPMENTS & INSIGHTS

Here we have set out several developments that may be of interest and relevance.

Report: Could Mobility as a Service solve our transport problems?

On 27 March the London-based Institution of Engineering & Technology (IET) published a report entitled 'Could Mobility as a Service solve our transport problems?' which introduces the principles and a potential roadmap to introduce MaaS, a potential revolution in the way that transport services are provided.

Air Quality: Where Does Hong Kong Stand?

The Clean Air Network has provided the following overview of where Hong Kong currently stands in terms of the quality of air, based upon the Environment Bureau HKSAR Government (June 2017) Clean Air Plan for Hong Kong 2013-17 Progress Report.

In general, the air pollution has improved compared to year 2012. During 2012 – 2016, there was a 30% reduction in concentration of major pollutants at ambient and roadside level including particulate matters (PM), nitrogen dioxide (NO2), and sulphur dioxide (SO2).

However, the improvement trend has been narrowed since 2016 with signs of PM and NO2 worsening. Especially, the roadside air quality remains hazardous. For last two decades, the roadside concentration level of NO2 has been doubled the World Health Organization's recommended safe level (annual average concentration- actual:80ug/m3 or above; safe: 40ug/m3). The level of ozone (o3) has also soared to 20 years high.
This represents significant public health cost. According to the estimate of Hedley Environmental Index of the University of Hong Kong, in 2018 alone, the air pollution caused over 1,600 premature deaths, HK$20 billion economic loss, 2.3 million doctor visits and 116 thousand hospital bed days.

**Global CO2 Growth Speeds Up**

Global carbon dioxide emissions, mostly from China, India and the US, rose to a record 33 billion tons in 2018, up 17% over 2017, the fastest rate of growth since 2010 according to the International Energy Agency. Although renewables rose by 7% this was only enough to meet 45% of the growing demand for energy. Renewables account for around 26% of global energy production. Coal account for one-third of the increased emissions in 2018. In what becomes a vicious circle, global warming creates its own demand for more energy, such as air conditioning. There is a clear input-output dilemma that has to be resolved. The use of clean energy consumption, such as the use of electric vehicles, which reduces roadside emissions, needs to be matched with clean energy production. Using coal power stations to produce more electricity becomes self-defeating. While roads for motor vehicles are heavily subsidised by public expenditure, often to the point of chronic congestion, it is even more important now to see social investment in clean energy production. For Hong Kong, that will mean a growing reliance upon supplies of renewable energy from Mainland China... could that be part of the GBA agenda?

**COMMUNICATIONS PREFERENCES**

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