

Annex

Bills Committee on Rail Merger Bill
Follow-up to meeting on 30 November 2006

- (a) **A paper to explain how property profits have been taken into account when the railway corporations set the initial fares of the relevant new railways, and to account for such a significant policy change. The paper should preferably include extracts of statements, if any, made by the Administration and MTRCL in this regard in the past; any supplementation in the light of the above policy change to the Administration's replies to Hon LAU Kong-wah's questions 4 and 5 in LC Paper No. CB(1)258/06-07(04); and how property profits can be incorporated in the fares if, as claimed by the Administration, there is difficulty in estimating the profits. Where appropriate, a table covering the past 22 years should also be provided showing the years wherein fare adjustments have taken into account property profits.**

MTR Corporation Limited (MTRCL) advised that its practice with regard to initial fare setting and fare adjustment has not changed over the years and has been consistently applied. To provide a better understanding of the interaction of property development profits arising from the application of the rail-and-property model for railway development and railway fares, it is important to differentiate between the two separate stages of fare setting: viz. the initial fare setting process and the subsequent on-going (annual) fare adjustments. As demonstrated below, the process of initial fare setting has already taken into account such property development profits, whereas the on-going fare adjustments do not, and never have, taken such property development profits in any particular year into account as such profits have effectively been accounted for in setting the initial fares already.

(i) Process for Initial Fare Setting for new railway lines

- The setting of fares has historically been closely tied to the railway corporations' economic sustainability and passenger

affordability. For a railway operator to be a viable concern, it requires considerably more income than just that necessary to meet its operational cost. The rail operator must in addition be able to cover the capital cost for its assets as well as maintenance and asset replacement costs, while at the same time generate a commercial return. Members will recall that this commercial return in respect of MTRCL for taking on new railway projects, as set out in its IPO prospectus, is MTRCL's WACC (weighted average cost of capital) plus 1% to 3%. Because of the substantial capital costs for railways, fare revenues are invariably insufficient to cover the required costs and meet the required return (unless the fares are set at very high levels), thus creating a "funding gap".

— The 'funding gap' is calculated by using a financial model (generally of 50 years)

- The model incorporates, on a net present value basis (to account for the time effect on the value of money), the cash outflows and inflows which include the following:-

- Cash outflow

- capital expenditure to build the railway system and for the purchase of trains
- maintenance capital expenditure and asset replacement

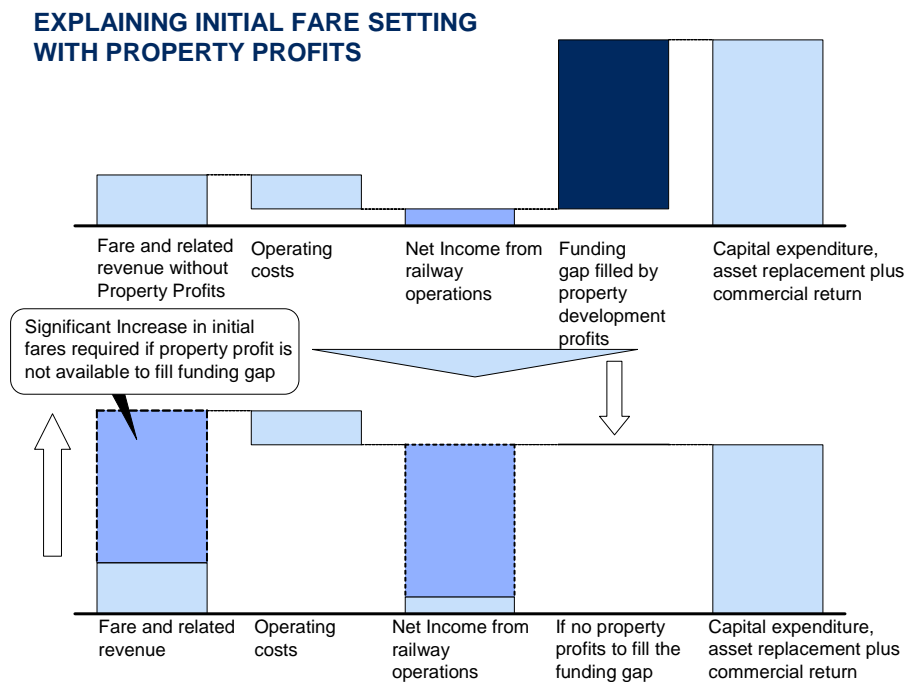
- Cash inflow

- net cash income from rail (the multiple of patronage and fares) and related business (excluding property development) being revenues from such businesses less operating costs

- The discount rate used to calculate the net present values of these cash flows is the commercial return noted above. Any negative gap resulting from the difference between the cash inflow and cash outflow is the 'funding gap'.

- The ‘funding gap’ for MTR projects in the past has been filled by profits from property development¹ arising from the relevant projects. If such property income had not been included, MTRCL would have had to set the initial fares at much higher levels.

Exhibit 1



- What this means is that profits from property development rights have already been taken into account when setting the initial railway fares.
- As envisaged in the rail-and-property model, the bulk of property development profits are earned in the early years of a new railway project. This explains why there is a perception problem among some people that the railway corporations are seen to be earning huge profits in those years. The fact remains that these profits have already been taken into account to fill the ‘funding gap’ to support the ‘rail and related business’ portion, which inevitably would be in a loss position until it

¹ MTRCL is only granted the right to develop properties. It is still required to pay for the construction and related costs, and the land premium.

fully matures. Once there cease to be any new property development profits because of completion of all the property developments, the system would then have to rely solely on the previously earned property development profits and the ‘rail’ profitability to sustain it over the remaining long operating period of the railways.

(ii) Annual Fare Adjustments with Fare Autonomy

The two railway corporations consider economic conditions, competition and whether the services are value for money as key factors in annual fare adjustments. They advised that as property development profits attributable to the application of the rail-and-property model, wherever applicable, have already been taken into account in setting the initial fares, they have never taken such property development profits into account in subsequent fare adjustments, as this would, in effect, be double-counting of such profits.

With regard to the special case in 1994 when Kowloon-Canton Railway Corporation (KCRC) froze its fares having regard to the patronage growth and the position of its cash requirements at that time, the property development profits that contributed to its satisfactory cash position (specifically, these were profits from Man Lai Court in Tai Wai, Sun Yuen Long Centre in Yuen Long and Hanford Garden in Tuen Mun) were attributable to sites allocated to KCRC long ago for railway operation (e.g. railway terminus) which subsequently were turned into property development sites of KCRC after the KCRC had, through established procedures, applied for and obtained approval for changing the land use of those sites for property development. Hence the profits generated from property development on those sites were outside the context of the application of the rail-and-property model as they were not intended to bridge any “funding gap”. As such, the deployment of such profits had been a matter for KCRC to decide, taking into account its financial and operating positions at the time.

The granting of property development rights to railway corporations is

one of the options for closing the funding gap of railway projects which are not financially viable. There is no question of a “policy change” as alleged in above. It is relevant to note that the Panel on Planning, Lands and Works and the Panel on Financial Affairs have held a joint meeting on 24 May 2005 which discussed inter alia Government’s policy in relation to the granting of property development rights to railway corporations. In response to a question raised at the meeting, the Government issued a written response to the Legislative Council which recapitulated Government’s policy in this respect as follows: [c.f. item (b) of LC Paper CB(1)1261/05-06(01)] –

“The grant of property development rights is one of the options for closing the funding gap of railway projects which are not financially viable. The grant of property development rights is intended to bring to the shareholders commercial returns commensurate with the risks involved in investing in a new railway project which would otherwise be non-viable and not to be pursued. It is not intended to subsidize the rail fares for a particular project.”

- (b) The Administration claimed that if it was to adopt the same approach used for calculating the productivity gain of the franchised bus industry in Hong Kong to measure the productivity performance of the railway industry, it would yield to a negative result of –2.6% per annum, which meant that the rate of increase in revenue was slower than the rate of increase in costs for the same period for the railways. Please provide details to explain the relevant formula.**

The approach adopted in calculating the productivity gain of the franchised bus industry in Hong Kong is to measure the output of the franchised bus industry by total fare and non-fare revenues of all franchised bus companies and the input by their total operating costs. Non-fare revenues that relate to bus operation are included in the calculation. The industry-wide productivity gain is derived by using the ratio of output to input. The change in productivity of the franchised bus industry for the purpose of the fare adjustment mechanism (“FAM”) for the franchised buses is assessed by reference to

the data from a 10-year period, by comparing the ratio of the total fare and non-fare revenues (i.e. output) to the total operating costs (i.e. input) based on the data from the latest 5-year period with the corresponding value from the preceding 5-year period. The productivity gain for the franchised bus industry calculated on this basis is 0.51% per annum, and with half of the productivity gain to be shared with bus passengers, the fare adjustment formula for franchised buses would deduct a productivity factor of 0.3%, thereby moderating future bus fare increase (or increasing the level of future bus fare reduction, as the case may be) by 0.3%.

If we were to adopt the same approach as described above for calculating the productivity gain of the railway industry in Hong Kong comparing the data for 2000 – 2004 with the data for 1995 - 1999, it would result in –2.6% per annum. As we explained previously, the calculation result of a negative productivity gain for the railway industry is due to the special characteristics of the industry which involves heavy investment and long payback period. If we were to adopt this negative productivity gain figure as the basis for the FAM formula for MergeCo, it would have the effect of amplifying future rail fare increases or decreasing the level of rail fare reduction. We have therefore decided not to adopt this approach for determining the productivity factor in the FAM formula for MergeCo. To better protect the interest of the travelling public, we have, through detailed negotiations with MTRCL, come up with the proposed FAM for MergeCo whereby the fare adjustment formula would deduct a productivity factor of 0.1% from the 6th year of the merger. This would have the effect of moderating future rail fare increase (or increasing the level of future rail fare reduction, as the case may be) by 0.1%.

- (c) **Details on actual adjustments of individual fares of MTR Corporation Limited (MTRCL) in 1996, which featured an overall fare increase rate of 6.9% with deviation from the overall rate from +13.1% to –6.9%.**

Relevant extract of MTRCL's press release issued in March 1996 which outlined the details of individual fare changes with effect from 1 May

1996 is given in Appendix I. The overall MTR fare increase rate for that year was 6.9%. Three individual MTR fares remained unchanged in that year, and hence they represented a deviation of –6.9% from the overall fare adjustment rate. These individual MTR fares are the (i) minimum adult single journey fare of \$4.0, (ii) concessionary stored value fare of \$2.5 and (iii) concessionary single journey fare of \$3.0. On the other hand, the concessionary single journey fare of \$5.0 was increased \$6.0 after rounded to the next 50 cents, based on the corresponding new stored value fare which was increased from \$4.9 to \$5.8. This represented a deviation of +13.1% from the overall adjustment rate for that year.

- (d) Further details on the synergies of the rail merger amounting to \$450 million per annum and the basis of calculation, in particular those synergies coming from the areas of procurement and support functions.**

As explained in our written response to a question from this Bills Committee recently, synergies of the rail merger were identified via a detailed review conducted jointly by the two corporations, supported by a management consultant. Each functional area common to both MTRCL and KCRC was examined in a 3-step process:

Step 1 – Activity Analysis

- Comparison of functions and activities
- Comparison of key performance indicators
- Identification of best practices

Step 2 – Synergy Calculation

- Bottom up calculation of manpower requirements for each activity
- Revenue, non-staff cost and capex synergies calculated in absolute, or percentage terms (assumed that synergy could be full realized at the time of assessment)
- Calculation of implementation costs (both one time capex and recurring costs)

Step 3 – Ramp up

- Time scale required for implementation worked out
- Ramp up to full synergy determined based on timescale for implementation and associated capital expenditure required.

Based on the above approach, it was estimated that when all synergies are fully realized, they would amount to about \$450 million per annum net of recurring implementation costs.

The majority of synergies identified would come from the following three areas:

- Transfer of best practice and operations synergies (about \$160 million per annum), for example:
 - Improved scheduling of engineering work
 - Implementation of total station operation
 - Implementation of group station management
 - Combining operations at interchange stations
 - Combining Customer Service Centres and ticket offices
 - Consolidation of fault reporting centres
 - Adopting Rapid Response Unit concept
 - Centralising maintenance of electronic components
 - Improved energy management
 - Reorganisation of stores
- Procurement (about \$140 million per annum), for example:
 - Contract bundling
 - Cash handling
 - Station cleaning
 - Catering
 - Spares
 - IT equipment
 - Wider implementation of e-tendering
 - Increased use of alternative sourcing
 - Review and rationalisation of specifications
 - Increased volume of procurement of spares
 - Consolidating insurance

- Support functions (about \$150 million per annum), for example:
 - Streamlining of overlapping functions
 - Reduction of overheads
 - Combining of training facilities
 - Reduction in annual reporting
 - Consolidating and integrating IT systems and equipment
 - Consolidating financial processes
 - Reduction in representation required at industry groups and meetings
 - Reorganisation of transport planning
 - Consolidation of marketing costs
 - Integration of customer service hotlines

Whilst as explained by the railway corporations at the last meeting held on 30 November 2006, they were unable to provide detailed breakdown of synergies amount in each functional area as synergies may come from overlapping functions and it is not appropriate to apportion the estimated amount into each and every different function areas, they have endeavoured to provide further details on the synergy estimation in respect of procurement and support functions as requested. The further details are given in the following:

Procurement

- The procurement synergies come primarily from contract bundling which involves aligning the expiry dates of existing contracts that are similar in nature. When they are next put out to tender, these contracts can be combined (bundled) giving greater purchasing power and leveraging the economies of scale that the contractors and suppliers will be able to achieve thereby delivering cost savings for MergeCo.
- Approximately 68% of the total procurement synergies will be derived from supply contracts (e.g. contracts for the supply of spare parts for railway systems, railway equipment, IT equipment, consumables, office supplies, etc.), 15% from service contracts (e.g. contracts for catering services at staff canteens in headquarters buildings and depots, cash handling, station cleaning, IT services,

maintenance, insurance, etc.) and the remaining 17% from the procurement process (e.g. e-tendering, allowing tenders to be submitted and processed via the internet, rationalisation of stock holdings, rationalisation of specifications, etc.).

- Both railway corporations have previously conducted similar procurement exercises on a standalone basis. The amount of synergy savings estimated under the procurement heading for MergeCo is based on the amount of savings achieved (in terms of percentage of the combined contract value) by the two railway corporations in similar contract review exercises in the past that applied to the larger contracts that MergeCo is expected to be able to award after the rail merger. A management consultant with experience of similar mergers overseas who was engaged to provide professional advice in the synergy evaluation exercise also supported the corporations' estimation of procurement synergies.
- The total procurement expenditure of both railway corporations in 2005 was \$3,229 million (\$1,340 million for KCRC² and \$1,889 million for MTRCL³), hence the total procurement synergy estimate represents a saving of slightly over 4%.

Support functions

- In respect of the support functions, approximately 60% of the estimated synergies are expected to be derived from streamlining of overlapping functions.
- The other 40% is derived from reduction of support overheads, for example:
 - only having to prepare and publish one annual report.
 - only having to operate one customer service hotline
 - consolidating similar types of training in one location thereby reducing the facilities and equipment required

² Note 5 to the financial statements of KCRC's annual report – Electricity and fuel, stores and spares consumed, material costs, repairs and maintenance, Octopus cards usage fees, cost of services acquired and others.

³ Note 6 to the accounts of MTRCL's annual report – Energy and utilities, stores and spares consumed, repairs and maintenance, railway support services, expenses relating to station and other businesses, general and administration expenses and other expenses (less items listed in note 6D – Auditors' remuneration, revaluation deficit, loss on disposal of fixed assets, and operating lease expenses).

- consolidating IT systems, thereby reducing the number of data centres required and the associated equipment, maintenance and support costs
- The estimates of synergies from support functions are based on the current cost of the existing functions that will be streamlined after the rail merger. For example, in the case of the annual report, this would mean saving of one auditor's fee and the cost of designing, printing and posting one annual report in each year.

一九九六年五月一日起生效之車費調整摘要
Summary of Fare Changes Effective from 1st May 1996

		成人 Adult					特惠 Concessionary			
		儲值 Stored Value			單程 Single Journey		儲值 Stored Value		單程 Single Journey	
		現時 Existing (\$)	新 New		現時 Existing (\$)	新 New (\$)	現時 Existing (\$)	新 New (\$)	現時 Existing (\$)	新 New (\$)
平時 Normal (\$)	彈性時間 Staggered Hour (\$)									
車程 Movement 港島及九龍 Intra Island & Kowloon	車費區 Fare Zone									
	1	3.6	3.9	2.7	4.0	4.0	2.5	2.5	3.0	3.0
	2	4.3	4.7	3.3	4.5	5.0	2.5	2.5	3.0	3.0
	3	5.3	5.8	4.1	5.5	6.0	2.8	2.9	3.0	3.0
	4	6.4	7.0	4.9	6.5	7.0	3.2	3.5	3.5	4.0
渡海 Cross Harbour	5	7.6	8.4	5.9	8.0	8.5	3.2	3.8	3.5	4.0
	6	7.5	8.1	5.7	7.5	8.5	3.8	4.1	4.0	4.5
	7	9.5	10.3	7.2	9.5	10.5	4.7	5.2	5.0	5.5
	8	10.9	12.1	8.5	11.0	12.5	4.9	5.8	5.0	6.0