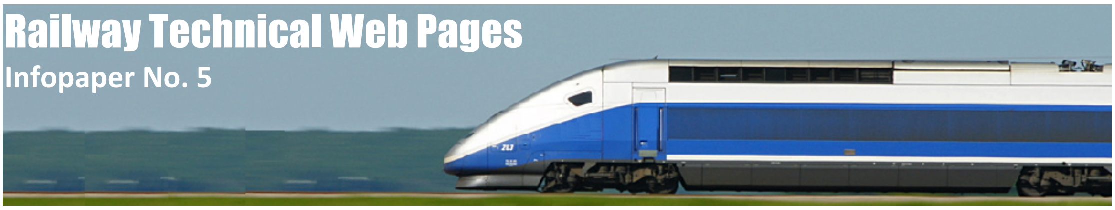

One of a series of papers on railway issues published by RTWP from time to time.

The PPP Collapse of London Underground

by

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A cautionary tale

This is cautionary tale about unreasonable expectations, naivety, gross incompetence, obstinacy, ill thought out political dogma and commercial greed. It put to a serious test the ideas that commercial management is always well managed, that public service is always badly managed and that giving your risks to other people to manage is always a good solution. It is a tale where none of the major participants come out at all well. It also suggests that perhaps there are some experienced people around who, because they are not politicians scattering around soundbites, do know what they are talking about and whose advice is best listened to and even acted upon. The tale begins with a bit of background.

What is PPP?

PPP stands for Public Private Partnership. It was a development of the PFI or Private Finance Initiative, where commercial companies were asked to develop new or replacement public facilities like roads, hospitals and prisons. It originated with the idea that publicly required infrastructure could be better managed if run by commercial management and could be more efficiently financed if money was supplied by the commercial banking system.

There was, and still is, a widely held view that government-run systems and facilities are inherently inefficient and wasteful and that the private sector is always better than government at running things. This may be true in many cases but there are reasons why public services are necessary and why governments have custody of them rather than private commercial organisations. The main reason is financial. Governments run things because the private sector won't and the private sector won't because they are not commercially profitable. Well-known examples are medicine, education and roads. Gradually, as other forms of transport like cars and airlines have increased, railways too have become unaffordable commercially and have had to be supported by governments in one way or another for almost the last 100 years. So why do governments now look to the private sector to start running public services again?

Debt and Project Management

There are two reasons for giving the management of public services to private contractors - debt transfer and management skills. The first of these, debt transfer, is driven by the desire to get financial commitments off "the books". Put simply, if an organisation has a lot of debt, it makes it a risky financial entity. People don't know if the organisation will make enough income to pay the interest on the debts and then enough to repay them within the required time.

[1] PRC Rail Consulting Ltd.

From this point of view then, debt is bad. However, if someone else is looking after the debt for the organisation, it reduces its own risk profile. In the case of the government, getting the private sector to borrow the money to fund public works does the same thing. Instead of the government borrowing huge sums to build new hospitals and upgrade railways, they've persuaded the private sector to do it for them. This keeps the government debt mountain at a lower level and helps to keep the country's finances stable – allegedly.

However, everything has a price and nowhere is this more so than in the financial sector. Governments can borrow money more cheaply than the private sector, largely because it was always assumed that a developed country doesn't renege on its debts and, if it got into trouble, it has huge assets which it can call upon to bail itself out. Well, that was theory at the time but recent events in the Eurozone have shown that even sovereign debt isn't that safe any more.

The private sector can also borrow money but they will be charged more in interest by the banks because they don't have the same guarantees as a country. So, the private sector can run public works but they will be more expensive than the government, partly because the cost of their borrowing is higher and partly because they have to cover their risks. They increase their price for doing the job because they know the government, or a government body like the NHS or DfT, is bad at making decisions and this is likely to change its requirements or delay a project and lead to more money being required to complete it. It's called political risk. There's also currency risk. We shouldn't forget this since many of our railway organisations are owned or part owned by companies in the Eurozone.

So, passing a public infrastructure organisation over to the private sector is more expensive but, it is assumed to be better organised and better managed. The theory is, that if you are using your own money and your contract has a penalty clause which says you will lose money for late completion, you are much more likely to take care over how you spend it and much more likely to try to get the job done on time and within budget. If you pay your staff well and maybe even link their pay to the company's performance, they will tend to perform better too. In general then, people think that the private sector does a better job of managing projects than the public sector and, in general, they do. In government, this view was encapsulated by John McGregor, then Secretary of State for Transport, who was quoted as saying in 1993, "BR is only about running trains. They are not interested in market orientated thrust.[2]" This view was widely regarded in government as a just summary of the status quo and it coloured the political scene for the privatisation of BR and the PPP eventually imposed on London Underground.

Upgrading the Underground

By the early 1990s, it was widely recognised that the Underground was in a deplorable state. Passenger traffic had been rising in almost inverse proportion to the levels of investment being put into it by the government. It took the tragedy of the Kings Cross fire of November 1987 to force the British government into levels of investment which they would never have considered otherwise. The Underground management, to its credit, maximised the opportunity to persuade the government that the fire was largely due the investment famine and that worse would follow if they didn't put in more money. The train and escalator refurbishment programme of the 1990s was a direct result of this threat and was mainly due to the skilful politicking of the then Managing Director, Dennis Tunnicliffe (now Lord Tunnicliffe).

In 1997, after years of pleading, threatening and begging by LU, government finally realised that action on the long term future of the Underground was essential if the

[2] This was blatantly untrue as demonstrated by the successful BR move into business units like InterCity and Network SouthEast.

railway was to survive as a viable transport system. Although there had been widespread criticism of the botched 1994 privatisation of the main line railways, it was still thought that some sort of private financial involvement was the best solution for the Underground, particularly as government was already convinced of the shortcomings of LU's project management skills, exemplified by the descent of the Jubilee Line Extension project into overspend and late delivery culminating in the Blair government's sweat over whether it would be ready in time for the much vaunted opening of the Millenium Dome.

Discussions dragged on into the early 2000s. The Treasury was determined that LU should not be allowed to waste the large sums to be given by government for infrastructure upgrades, so various financing and management solutions were bandied about in an attempt to find a model that was different from the main line railway privatisation. Eventually, even the railway industry was invited to comment about the best model.

In the end, it was decided that London Underground should retain control of train and station operations but its infrastructure and rolling stock would be maintained and replaced by private sector companies. The result was the PPP with its JTCs and ISCs and the division of the LU infrastructure into three unequal parts.

Splitting the Underground

Perhaps the worst aspect of the PPP was the division of the system in 1999 into the three parts which became known as BCV (Bakerloo, Central and Victoria lines), JNP (Jubilee, Northern and Piccadilly lines) and SSL (the sub-surface lines or sub-surface railway – SSR - within LU). They were called "Infracos" – short for Infrastructure Companies. When the proposals for the PPP went out to industry, we (I was in train manufacturing then) were asked what the levels of division of the LU infrastructure should be. I was hauled back from my job in Singapore to help Adtranz with their review. My first reaction was "you can't split it by lines".

My argument was simple. Since there are a number of areas where joint working occurs, splitting by lines would cause serious problems if different companies wanted to supply differing signalling and control systems. Of course, this advice was ignored and the chosen setup was a mish-mash, politically driven decision, the problems it caused being left to the engineers to sort out later. It was a significant and expensive mistake. It destroyed the unified system that had been in place since 1933, when London Transport was first formed.

As was widely feared, some sections of line were to have two signalling systems – Finchley Road to Wembley Park, the Uxbridge branch and Barons Court to Hanger Lane Junction being the most obvious. Getting that to work on the first section to be converted, the Metropolitan/Jubilee lines between Finchley road and Wembley Park proved to be a nightmare, particularly as Westinghouse and Thales (suppliers of Seltrac for the Jubilee line) already had a history of conflict and mistrust. That said, in the end most of the problems were technical, not inter-corporate.

Pigs at the Trough

In 2002, the Metronet contracts were signed. As the ink was drying some 5,000 or so former London Underground employees became Metronet employees. Then the new management kicked in or more realistically, kicked out. As is normal in any takeover, first you have a clearout of anyone senior you think you won't need, mainly those who are regarded as too "old railway" or just too old or too expensive. New people, mostly consultants, are then brought in from the shareholders to assess the assets and manage the work. As a result, several cottage industries were set up within Metronet, not the least of which was one engaged in re-writing all the standards handed down to them from the former London Underground engineering departments. There was an atmosphere of "They can't be any good, they were written by those old guys we got rid of". A huge amount of work was done by separate departments who produced conflicting requirements and, in the process, some quite significant errors. Eventually they were rewritten again to reduce the number and variety and to try to eliminate the conflicts. At the beginning, separate ones were written for BCV and SSL and, to those of us who had to reference them, there was little evidence of any cross referencing. We tried to do our own.

At the same time, London Underground was doing the same thing with their standards. Now they were effectively isolated from the business of looking after their system, they tried to impose some sort of engineering control by writing their own standards. This started in the days of shadow running and was completed in time for them to be imposed on Metronet and Tubelines in the contracts. They had cleverly got it written into the contract that they had to be complied with. Indeed, there was even a clause which suggested that standards not yet written had to be complied with. The scene was already set for conflict.

By now, the five Metronet shareholders had already decided who would do the actual construction work and how much they would charge for it. Metronet got a regular fee, the "Infrastructure Service Charge" from London Underground, less any penalties for delays, while the shareholding companies got on with repainting the stations, replacing track and designing new trains. They were also supposed to keep the existing kit going until it could be replaced. So, there was lots of work to keep everyone going.

Now one of the all-pervasive and long-standing features of the civil construction industry is the use of contract variations to make money. You bid low, probably below the profit level, and then get the job with the certainty that you will get lots of variations which the customer will have to pay for. Your profit margin is in the variations. If you are re-building or refurbishing something, you will always find something you didn't expect. You find that the drains that you were going to clean are actually smashed and need replacing; the roof has bats in it and, since they are legally protected, you can't work on it until some nice person from the RSPCA has come and rehoused the horrible things; the client suddenly tells you he has new faregates being installed by someone else on your freshly tiled floors and it has to be dug up for the cable runs; the paint colour you have repainted the station in doesn't match what the non-standard LU colour chart says. Need I go on? The words "licence" and "print money" come to mind.

Well, unless you have a very tight contract (and if it was that tight no one would offer to do the work), you will have to ask the client for more money. "We didn't allow for that" you will say. "We will have to stop until you agree to pay us more" you say. Anyone who has had a house extension built, or their roof re-tiled will get the drift, I am sure. With the variations for the London Underground work, particularly the station refurbishment contracts, the Metronet contractors did have a licence to print money. In the contract for station refurbishments, for example, which was let as a subcontract through an organisation called Trans4m, there was no recourse to Metronet for poor performance by the contractors and invoices were paid without question. They were racking up huge sums in variations, like pigs at the trough, which Metronet was funding until it eventually ran out of money.

This was not the only reason the money was short. There were constant problems with late surrender, late completion of work, skimped maintenance, bad project management, poor specifications to contractors, poor financial governance and constant rows with London Underground in a hostile political atmosphere. It was bound to end in tears and it did.

How the Mighty Metronet Fell

On 18th July 2007, the administrators were called in to try to salvage what they could from the financial troubles the company got itself into. The road to this ruin was started very early in the company's life and, despite many warnings from both within the company and without, it was a road well travelled by the time the end came. But, how did it all go wrong? And Why? And could it have been different? Well, perhaps it could but, before we go into that, it is worth looking at the reasoning behind the use of private contractors to run public works.

The breakdown eventually occurred when the money ran out. Metronet had spent more than it should in the belief that LU would have to pay for all the extra work and variations. There was a widely held view that, even if LU played hardball with the contractors, the government would not let the PPP system collapse because of the political embarrassment and because the Tube was in such a poor state of repair the work had to be done regardless.

However, LU fought tooth and nail all along and had refused to pay on the grounds that "it is all part of Metronet's responsibility" to deliver what LU wants. This was unreasonable, of course, but there was a view in LU that the PPP was "the enemy" and that there was political support on the left for its collapse. No one would blame LU if it happened, would they?

There were serious faults on both sides but with huge sums of money involved, capitulation by either side could not be contemplated. When Metronet went to its bankers to ask for more money while they sorted out the dispute, the banks said no, enough is enough. "We are already lending you money on a high risk basis, the money market is in trouble because of over lending and we don't like what we are hearing". There was even a story going round that suggested that the banks had been spooked already by Ken Livingstone warning them that Metronet was out of control and ungovernable and that the only solution was administration. Not hard to believe, bearing in mind the anti-PPP stance taken by Ken all along.

So, why did this happen to Metronet and not Tubelines? Well, the Metronet company setup was flawed and it was never going to work unless a carefully structured and durable project structure was in place to ensure contractors behaved in a disciplined manner. What was also essential was that the relationship with the Underground was managed so that work was limited to what was agreed on both sides at a responsible level. Neither ever happened. Tubelines, although by no means perfect, did this a lot better.

Lost Money – You Must be Joking!

Then of course, there's all the money invested in Metronet by the five shareholders, which has now been lost, they say. Figures of between £40 and £80million have been quoted. The original investment by each company was recorded as £70million. But have they really lost all that? I doubt it. If a company, which is normally a contractor or supplier, is asked to invest in a project, particularly one which is regarded as high risk (and the PPP was always regarded as high risk since no one, least of all London Underground, really knew how bad the state of the assets was), the company will try to find a way of minimising that risk. Any board of directors which authorises an investment of that size will be expected to think very carefully about it. If they can, they will eliminate the risk.

The best way to eliminate the risk is to include the cost of the investment in your price for doing the work. If it's a long contract – and the PPP is long at 30 years – you can spread your investment over that time. I suspect, in reality, it was all covered in the first 7½ year period at the end of which a contract review was due to take place. Now, if something goes wrong, or you are forced to reduce your price at the review point, you will have your investment covered by your payments for the work done or goods supplied. Ah but, you might ask, what if the project gets into trouble before you get paid enough to cover all your investment, like it has with Metronet? Simple, you agree to carry on working. "Business as usual" the administrator said. As the work is being done for the Underground, no one is going to tell you to stop, it would be political suicide. Remember there's the election for Mayor in May. Ken isn't going to rock this boat. So, you carry on. It will take longer for you to get your investment back but you will. You won't make quite as much as you thought you would but the investment was just a bonus anyway. Trans4m walked off the job anyway, so they had probably made their money already. The upshot is that none of Metronet's shareholders will be overly worried about their investment losses. They will just carry on and they will make enough money to secure a reasonable profit in the end.

Bibliography

"The Luso Pages" http://www.luso.u-net.com/listrams.htm, accessed 10th September 2011.

"Traffic & Congestion in the Roman Empire", Cornelis van Tilburg, Routledge, 2007.

"Simplon Postcards", http://www.simplonpc.co.uk/T_Lisbon.html, accessed 11th September 2011.

"Urban Transit Operation Planning & Economics", Vuchic R, John Wiley & Sons Inc., 2005.

The Junction.org at http://www.thejunction.org.uk/index.htm accessed 12th September 2011.

Railway Technical Web Pages: http://www.railway-technical.com.