

Case Study: Bangkok Rail Transit System

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Background

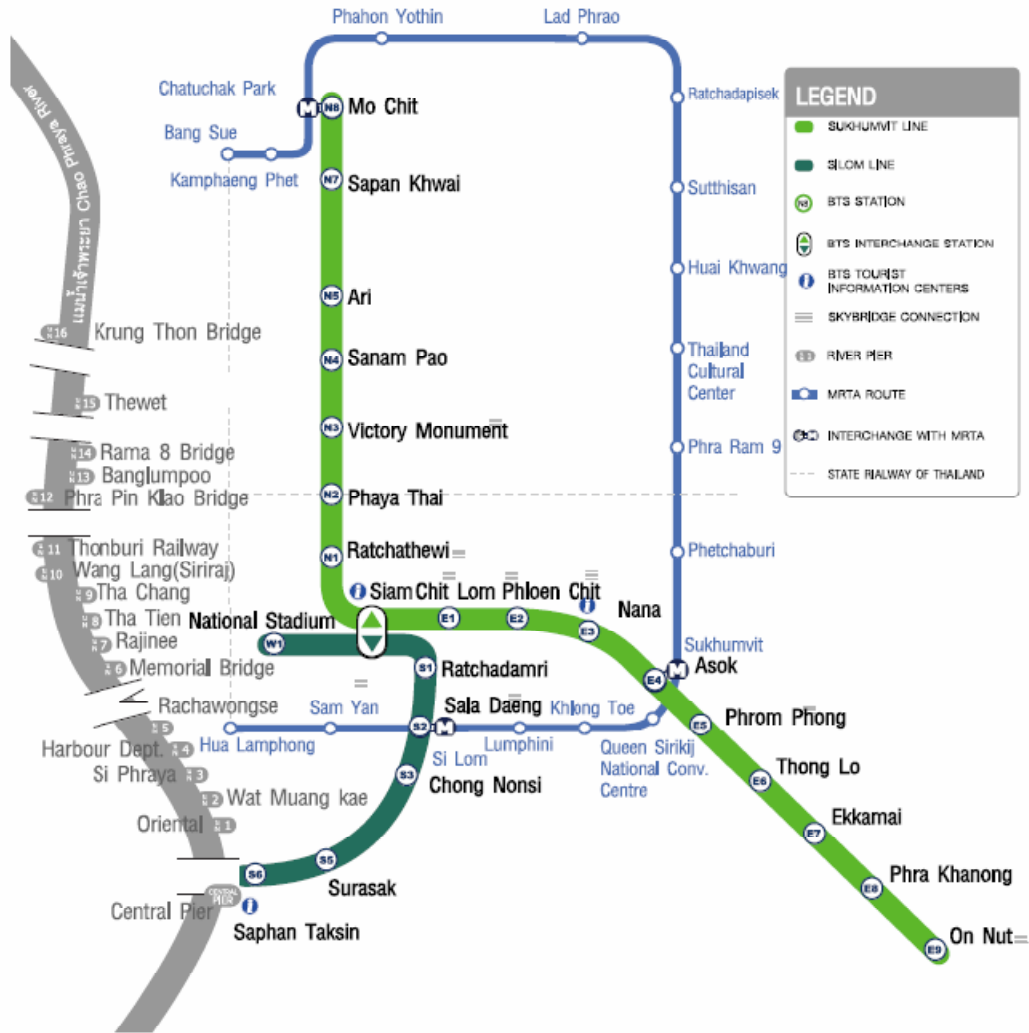
- In the mid to late 1980's, road congestion and atmospheric pollution were an increasing concern in Bangkok.
- City planners recommended a rail transit solution, but the estimated cost of over US\$1 billion was prohibitive.
- The government began to explore a PPP-based approach.



Proposed Rail System

- First Rail Transit System in central Bangkok
- 23.5 km long
- One large depot
- 23 Elevated Stations
- Two routes
- 35 three-car trains
- Revenue stream to be based entirely on fares
- 30-year BOT contract

BTS SkyTrain Route Map





Project Timeline

- Request for Tenders for potential investors issued in 1991
- Concession signed in 1992 between Bangkok Metropolitan Authority (BMA) and Tanayong
- Bangkok Transit System Corporation (BTSC) formed (1992)
- BTSC issues Request for Tenders for ridership consultants (1992)
- Crown Prince lays foundation stone (1994)
- Tendering of electrical and mechanical works, leading to selection, based on fixed price, of Siemens (1994)



Project Timeline

- Large public protests by citizens seeking to change depot site from Lumpini Park (late 1994)
- January 1995 – Change of depot site from Lumpini Park
- Responding to political pressure, civil construction commences on seven work sites in all (February – October, 1995)
- Two significant route changes required by Thai Cabinet (June 1995)



Project Timeline

- August 1996 – Long-term debt signed up, based on Debt Service Coverage Ratio (DSCR) reflecting Tanayong’s ridership forecast.
- Asian crisis hit in 1997, after senior debt closed, causing significant decline in traffic in Bangkok and massive devaluation of Baht
- Operations began in 2000



Initial Operations

- Forecast ridership for opening 650,000 ppd
- Actual ridership opening 180,000 ppd (28% of forecast)
- Current ridership (2007) 380,000 ppd
- Exchange rate (2000) 40 Baht/US\$, but contracted at 25 Baht/\$
- DSCR for senior debt massively inadequate
- Equity extinguished
- Debt under restructuring



Today

- Ridership has increased, but is still just 58% of 2000 projection.
- BTSC is insolvent.
- BMA is under pressure to expand, but is unable/unwilling to finance BTSC expansion.
- Critical Thai development capacity (Tanayong and Ital Thai) has been adversely affected.
- The much-needed expansion of the BTS system will be delayed and – even if accomplished – will suffer from interface issues.



What Went Wrong

- Tanayong persuaded lenders and investors to accept its selected ridership consultant without impartial due diligence as to numbers.
- Stakeholder consultation was inadequate.
- Tanayong bowed to political pressure to commence civil works before the turnkey contracts were negotiated.
- Tanayong permitted the route to change and the cost of the system to be varied, causing delay and added cost for which it was not compensated.
- Tanayong failed to find hedge for exposure to Baht, borrowing long-term floating Baht, and long-term floating dollar.
- Significant risks borne by parties unable to control/mitigate them.



Lessons Learned

- Every effort should be made to develop realistic demand projections, and investors and lenders should always obtain independent due diligence.
- Stakeholder consultation and communication are crucial to project success.
- Concession Granters should not look to sponsors to shoulder unreasonable risks or uncompensated project change.
- Concession Granters should see to give reasonable return for an acceptable risk to sponsors prepared to fund infrastructure.
- Countries seeking to expand PPP must grow a long-term domestic financing market (i.e., giving capacity for long-term fixed local currency debt).