



Extract from the report to the  
Public Accounts Committee on  
Metroselskabet I/S

June  
2010

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## I. Introduction and results

1. This report is about the overall preparations made by Metroselskabet I/S (in the following “Metroselskabet”) and the Ministry of Transport prior to a new major construction project.

In the autumn of 2010, Metroselskabet is expecting to sign the contracts relating to the new City Circle Line, in Copenhagen and Frederiksberg, and start construction work. The work will be based on the lessons learned during the construction and subsequent operation of stages 1 - 3 of the Metro. The last stage of the Metro was opened in 2007 and the City Circle Line is expected to be put into operation in 2018. This means that Rigsrevisionen submits the report to the Public Accounts Committee when Metroselskabet has completed its first large construction project and is about to embark on the next.

The report is looking into Metroselskabet’s overall long-term budget and how lessons learned by Metroselskabet during the construction and operation of stages 1-3 of the Metro are included in the company’s overall management of the long-term budget.

The construction of the City Circle Line will be loan financed, and Metroselskabet is currently assuming that the loan will be repaid in 2059. The long payback period and the long construction period will require diligent overall management by Metroselskabet and equally diligent supervision of management by the Ministry of Transport.

2. It appeared from a memorandum to the Public Accounts Committee of 18 May 2001 on report no. 2 from year 2000 on the Ørestads and Metro Project that Rigsrevisionen would conduct another audit of the metro project and submit a report to the Public Accounts Committee when the Metro was finished.

It appeared from a memorandum to the Public Accounts Committee of 30 January 2008 on report no. 3 from 2004 on the Ørestads and Metro Project (no. 2) that Rigsrevisionen’s future examination of the metro project would include the basis for the fare income relating to the future City Circle Line, the framework of the loan financing and the framework for management of Metroselskabet. The examination was also meant to cover the development in an arbitration case between the former Ørestadsselskabet I/S and COMET, the contractor responsible for the construction of stages 1-3 of the Metro, provided that the case had been settled at the time of completion of the report. However, the case has not yet been settled and is therefore not addressed independently in this report.

Rigsrevisionen initiated this examination in June 2009.

3. The overall objective of the examination is to assess Metroselskabet’s overall long-term budget. The report will answer the following two questions:

- Is Metroselskabet handling the overall management of the long-term budget in a satisfactory manner?
- Is the Ministry of Transport’s supervision of Metroselskabet satisfactory?

Rigsrevisionen has previously published two reports on the Metro: report no. 2 from 2000 on the Ørestads- and Metro Project (November 2000) and report no. 3 from 2004 on the Ørestads- and Metro Project (no. 2) (November 2004).

Metroselskabet I/S is jointly owned by the Danish government (41.7 per cent), the City of Copenhagen (50 per cent) and the City of Frederiksberg (8.3 per cent).

The Copenhagen Metro was constructed in three stages: Stage 1 to Vestamager and Lergravsparken was opened in October 2002.

Stage 2 was sub-divided into a phase 2A and 2B. Phase 2A between Nørreport and Frederiksberg was opened in May 2003 and phase 2B between Frederiksberg and Vanløse was opened in October 2003.

The third and last stage between Lergravsparken and the Airport was opened in September 2007.

On 6 June 2007, the Danish parliament adopted bill no. 552 on a City Circle Line, which is expected to be put into operation in 2018.

## MAIN FINDINGS AND CONCLUSIONS

Metroselskabet's overall long-term budget is highly susceptible to even minor changes in fare income generated by the entire metro system, in construction costs for the City Circle Line and in the real interest rate.

Metroselskabet's overall management of the long-term budget is satisfactory and the Ministry of Transport is in all essentials supervising the company in a satisfactory manner.

Handling the risks associated with the overall long-term budget of the company represents a considerable challenge for Metroselskabet.

This overall assessment is based on the following audit findings:

**Metroselskabet's overall management of the long-term budget is satisfactory. The company has established a system for risk management of its activities based on the lessons learned during the construction and running of stages 1-3 of the Metro. There is only room for minor changes in the assumptions underlying the long-term budget if the company is to be able to repay the expected debt associated with the construction of the City Circle Line in 2059 at the latest.**

### *Construction and operation of stages 1-3 of the Metro*

- Metroselskabet has continually adjusted the budgets for construction and operation continually to reflect the actual development.
- Rigsrevisionen's financial audit of Metroselskabet included an assessment of the company's reporting on objectives and results achieved and whether it could be considered well documented and covering. The audit opinions issued on the annual reports in 2007, 2008 and 2009 were all unqualified, but included emphasis of matter statements to the extent that COMET, the building contractor on stages 1-3 of the Metro, has started an arbitration case against Metroselskabet with a claim for an additional payment of around DKK 2 billion.
- When Metroselskabet was founded, the owners of the company were aware that a need for additional investment capital and/or loan funding could arise. Should this happen, then the assumptions underlying the long-term budget could change because the company has not made any provisions to cover the possible payment of an additional amount to COMET.

### *Metroselskabet's business strategy and risk management*

- The lessons learned during the construction and operation of stages 1-3 of the Metro is reflected in the business strategy of the company and are forming part of the company's concrete risk management.
- Metroselskabet has established a risk assessment committee whose task it is to discuss and assess risk on an ongoing basis. The risk assessment work conducted by the company is reported to and discussed with the owners of the company.

### *Metroselskabet's overall long-term budget*

- Metroselskabet's overall long-term budget is based on a number of assumptions concerning interest rates, number of passengers, fare income, construction costs, etc. Changes in one or more of these assumptions may affect the payback period for the debt.
- It appears from the comments to the bill on the City Circle Line that no provisions have been made for extraordinarily long delays during the construction period, like the ones that occurred on stages 1 and 2A, or major unforeseen difficulties.
- If Metroselskabet's expected debt is to be repaid by 2059, then there is room for only minor changes in the essential assumptions underlying the long-term budget, i.e. a real interest rate of 4 per cent, construction costs of DKK 18.1 billion and an expected annual fare income of DKK 1.6 billion in 2059.

### *Changes in the real interest rate, construction costs and fare income*

- At a real interest rate of 3 per cent, Metroselskabet will have repaid its debt by 2050 provided that construction costs and fare income do not change. At a real interest rate of 5 per cent, the company will only be able to repay its debt if one or both the assumptions concerning construction costs and fare income, respectively, change. At a real interest rate of 5 per cent, Metroselskabet will still be able to repay its debt in 2059 if construction costs increase by, for instance 5 per cent, provided that the annual fare income increases by at least 10 per cent.
- If the costs of construction increase by 10 per cent at an expected real interest rate of 4 per cent, then the debt of Metroselskabet will be settled in 2084 provided that the annual fare income does not change. If the construction costs increase by 15 per cent, the debt will be settled in 2067 if the annual fare income increases by 5 per cent at the same time.
- A decline of 5 per cent in fare income combined with a real interest rate of 4 per cent will have the consequence that the debt of Metroselskabet will be settled in 2088 provided that the construction costs for the City Circle Line do not change. If the annual fare income drops by 10 per cent and the construction costs at the same time also drops by 10 per cent, then the debt will be settled in 2097.
- The estimated number of passengers for the Cityringen is currently being recalculated at the initiative of Metroselskabet. The updated passenger forecasts are expected to be available before the contract for the construction of the Cityringen is signed in the autumn of 2010.

**The Ministry of Transport's supervision of Metroselskabet is in all essentials satisfactory.**

### *The management framework of Metroselskabet*

- The Ministry of Transport has established a clear framework for the management of Metroselskabet and the loan finance of the Cityringen.

- The Ministry of Transport will ask Metroselskabet to ensure that current expenditure for the Cityringen is settled at the same price level as the budget, as this will enable continuous comparisons between budget and financial statements. The company will discuss the contents of reporting with the ownership.

*The Ministry of Transport's treatment of information provided by the company*

- Metroselskabet's annual report for 2008 did not include a long-term budget, because the ownership had not reached a decision as to which index should be used for the projection of the construction costs of the Cityringen in the capital budget. In August 2009, an index was established and the company worked out a new long-term budget on the basis hereof.
- The Ministry of Transport has now worked out written guidelines for the department's internal division of work and communication in relation to Metroselskabet. The guidelines may contribute to assuring the quality of the department's treatment of information provided by the company.