«Financing the construction of Thessaloniki’s Metro»

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Metropolitan Unit of Thessaloniki
Thessaloniki Transport Facts

1,1 mil. (Nat. Census 2011)
287 pop/ km²
400 pass. cars/ 1000 inhabitants
620 busses
70 + 6 bus lines

67% private car, 23% PT, Taxi 4%, Motorbikes 4%, Non-Motor 2%

(Mitsakis et al., 2013)
Thessaloniki Metro

- Expected operation end of 2020
- Expected operation end of 2021
<table>
<thead>
<tr>
<th></th>
<th>Main Line</th>
<th>Kalamaria Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance (km)</td>
<td>9.6 km</td>
<td>4.8 km</td>
</tr>
<tr>
<td>Stations</td>
<td>13 stations</td>
<td>5 stations</td>
</tr>
<tr>
<td>Trains</td>
<td>18 trains</td>
<td></td>
</tr>
<tr>
<td>Length / Capacity (m)</td>
<td>51 m / 450 persons</td>
<td></td>
</tr>
<tr>
<td>Headway (sec)</td>
<td>90 sec (180 sec 1st phase)</td>
<td></td>
</tr>
<tr>
<td>Users/Direction/Day</td>
<td>18,000/hr</td>
<td>320,000/day</td>
</tr>
</tbody>
</table>
Construction Timeline
Main line & Kalamaria Extension

09/2003 Procurement as public work
04/2006 Contract Sign Commence of Works
10/2012 Initial ETC
12/2020 Expected Operation*
12/2021 Expected Operation

01/2005 2nd Stage of Procurement

Kalamaria Extension
07/2013 Contract Sign Commence of Works
07/2018 Initial ETC
Thessaloniki Metro Timeline

- 1917: First Reference to Metro
- 1976: First Registry to the National Budget
- 1987: Revival of Metro by Municipal Initiative
- 1999: First attempt to construct by co-financing
- 2003: Decision to tender as Public Work
- 2006: Commencement of construction works
- 2013: Kalamaria Extension signed
Thessaloniki’s Metro
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Thessaloniki Metro Funding

Main Line
1.615 Million EURO

Kalamaria Extension Line
640 Million Euro

Total EIB credit: 850 Million EURO
Tender Criteria

Main Line

• Technical and Financial Criteria

• Technical criterion accounted for 25%
• Financial criterion accounted for 75%

Offers were based on preliminary study

Kalamaria Extension

• Only Financial Criterion

Offers were based on finalised study
Project Facts

• Main line construction period extended from 6.5 years initially to 14.5 years

• EIB refused to finance the project for at least 10 years due to concerns about its feasibility

• The Main Line was tendered with the method of “Study – Construction” which severely underestimated the expected difficulties during the actual construction

• Main cause of delays – Archeological finds. Archeological works from an initial estimation of 15 million EURO raised up to aprox. 200 million EURO
Lessons Learned

• Delays in construction of the Kalamaria extension were significantly lower (although not entirely understandable)

• Overall level of planning and study elaboration was more meticulous and detailed

• EIB demanded a C-B Analysis using a transport model prior to agreeing funding

• Experience gained at all levels aided decision making and meeting timescales
Thank You!

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