

## **WACC Review - 2009**

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### **Statement on revised WACC rates**

**April 2009**

Malta Communications Authority  
Valletta Waterfront, Pinto Wharf, Floriana FRN 1913, Malta  
Tel: (+356) 2133 6840  
Fax: (+356) 2133 6846  
Email: [info@mca.org.mt](mailto:info@mca.org.mt)  
Web: [www.mca.org.mt](http://www.mca.org.mt)

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## 1 INTRODUCTION

In April 2008, the Malta Communications Authority (hereafter “the MCA”) published a decision and further consultation<sup>1</sup> on Estimating the Cost of Capital (hereafter “Decision and Further Consultation”). Subsequently in August 2008, the MCA also issued a Report on Consultation and Decision<sup>2</sup> (hereinafter “Final Decision”). The aim of these documents was to set out the methodology SMP Operators have to follow when compiling their respective WACC rates.

The MCA had also stated that going forward, operators were to be requested to submit revised WACC rates on an annual basis and consequently set the end of February 2009 as the deadline for first submissions.

## 2 RESPONSES RECEIVED

All SMP Operators submitted their WACC calculations to the MCA for review on time. In total the MCA received submissions from two mobile operators and one fixed operator. The MCA reviewed the submissions to confirm they are in line with the methodology outlined in the Decision and Further Consultation published in April 2008, and the subsequent Final Decision issued in August 2008.

In its decisions, the MCA has endeavoured to achieve regulatory consistency with the objective of establishing a fair and appropriate cost of capital. To this effect, a range of parameters for the different variables making up the cost of capital were established. Namely, these were:

- Target gearing structure;
- Risk free rate;
- Equity risk premium;
- Beta values; and
- Debt premium

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<sup>1</sup> Decision and further Consultation on Estimating the Cost of Capital April 2008

<sup>2</sup> Estimating the Cost of Capital: Further consultation on Beta Values – Report on Consultation and Decision August 2008

In its review, the MCA sought to verify that SMP operators applied these set parameters consistently. It effectively resulted that all submissions were in conformity with the MCA's set methodology.

Notwithstanding this, the submissions differed in their approach when establishing the risk free rate. The reasons for these variations were on two fronts:

1. In its Decision and Further Consultation, the MCA had set out that the risk free rate should be established by reference to the current yield to maturity on Malta Government Stocks (MGS) with maturity ranging between five and ten years . From the responses, it transpired that different interpretations arose as to which MGS to consider with one operator opting for reference to bonds maturing in 2013 and 2018 whereas another operator opted for the 2014 and 2019 MGS.
2. It is possible that there is more than one bond maturing in a particular year. This was the case with the years considered by the operators. Whereas one of the operators worked out the average current yield to maturity of all the bonds maturing in the particular years under consideration, the other operator opted to consider only the bonds with the highest current yield to maturity.

### **3 MCA APPROACH AND DECISION**

The MCA has evaluated these differences in the approach towards the risk free rate and sought to take an approach which is most consistent with the principles set forth in its earlier decisions.

To this effect, the MCA is of the opinion that with respect to MGS with maturity of five and ten years, reference to the 2013 and 2018 bonds should be made. Also, where there is more than one bond maturing in a particular year, the average current yield to maturity of the bonds maturing in the particular year should be taken as the risk free rate.

Aware of the global economic downturn emerging in 2008, the MCA kept track of the movements in the current yield to maturity on MGS over recent months to monitor how these new economic realities were impacting the risk free rate. A downward trend which exacerbated in the last quarter of 2008 was noticed. The global economic outlook still remains somewhat uncertain and there is no clear indication when economic stability will be restored. As a result, calculating the WACC at a time when the risk free rate is affected by these exceptional factors would load into the calculation situational uncertainties which do not necessarily reflect the longer perspective which the WACC is intended to take.

In light of this, the MCA opted for an approach which mitigates the effect of these temporal fluctuations by working out the risk free rate as an average of the current yield to maturity at different points in time over 2008. The average of the yields as at the end of each

quarter was taken (i.e. March 08, June 08, September 08 and December 08). This resulted in a risk free rate of 4.41% for the low estimate and 4.69% for the high estimate (Appendix 1). The MCA believes that, given the current economic climate, this approach is more appropriate.

The above approach was applied in the WACC calculations of both the Fixed and Mobile markets (Appendix 2). The resulting WACC rates were virtually equal to the ones currently in force. In light of this the MCA mandates that, until further notice, the current WACC rates which had been established in 2008 are maintained (i.e. Fixed Market – 13.9%, Mobile Market – 15.1%).

#### **4 WAY FORWARD**

The next review of the WACC rates falls due by end of February 2010. Going forward, the MCA intends to keep the methodology under review by keeping under scrutiny any developments on the subject, as well as keeping track of any developments occurring at the international level.

**APPENDIX 1 – Illustrative results for risk free rate calculation**

<b>Listed Malta Government Securities - YTM</b>				
	<b>Mar-08</b>	<b>Jun-08</b>	<b>Sep-08</b>	<b>Dec-08</b>

7.80% 2013 I	4.32	5.18	4.69	3.50
6.35% 2013 II	4.27	5.18	4.64	3.43
7.00% 2013 III	4.34	5.17	4.70	3.53
<b>Average</b>	<b>4.31</b>	<b>5.18</b>	<b>4.68</b>	<b>3.49</b>
<b>Low Estimate</b>				<b><u>4.41</u></b>

7.80% 2018 I	4.58	5.19	4.88	4.10
7.00% 2018 II		5.19	4.88	4.14
7.00% 2018 III		5.19	4.88	4.14
<b>Average</b>	<b>4.58</b>	<b>5.19</b>	<b>4.88</b>	<b>4.13</b>
<b>High Estimate</b>				<b><u>4.69</u></b>

## APPENDIX 2 – Illustrative results of WACC estimation

The tables hereunder illustrate the resulting calculations of the WACC rates for the fixed and mobile markets.

	Low Gearing		Medium Gearing		High Gearing	
	Low	High	Low	High	Low	High
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Risk free Rate	4.41	4.69	4.41	4.69	4.41	4.69
Equity Risk Premium	5.00	6.00	5.00	6.00	5.00	6.00
Equity Beta	0.93	1.16	1.02	1.28	1.15	1.43
<b>Cost of Equity (post-tax)</b>	<b>9.06</b>	<b>11.67</b>	<b>9.52</b>	<b>12.36</b>	<b>10.14</b>	<b>13.29</b>
<b>Cost of Equity (pre-tax)</b>	<b>13.94</b>	<b>17.95</b>	<b>14.65</b>	<b>19.02</b>	<b>15.61</b>	<b>20.45</b>
Debt Premium	1.00	1.00	2.25	2.25	3.50	3.50
<b>Cost of debt (post-tax)</b>	<b>3.52</b>	<b>3.69</b>	<b>4.34</b>	<b>4.50</b>	<b>5.15</b>	<b>5.31</b>
<b>Cost of debt (pre-tax)</b>	<b>5.41</b>	<b>5.69</b>	<b>6.66</b>	<b>6.94</b>	<b>7.91</b>	<b>8.19</b>
Optimal Gearing	20%	20%	30%	30%	40%	40%
Tax Rate	35%	35%	35%	35%	35%	35%
<b>WACC (pre tax nominal)</b>	<b>12.23</b>	<b>15.49</b>	<b>12.25</b>	<b>15.39</b>	<b>12.53</b>	<b>15.54</b>

**Table I – WACC calculation for the Fixed market**

Based on the above, the WACC estimate ranges between 12.23% and 15.54% with an average pre-tax WACC rate of 13.91%.

	Low Gearing		Medium Gearing		High Gearing	
	Low	High	Low	High	Low	High
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Risk free Rate	4.41	4.69	4.41	4.69	4.41	4.69
Equity Risk Premium	5.00	6.00	5.00	6.00	5.00	6.00
Equity Beta	1.07	1.13	1.16	1.22	1.28	1.34
<b>Cost of Equity (post-tax)</b>	<b>9.77</b>	<b>11.45</b>	<b>10.22</b>	<b>12.01</b>	<b>10.80</b>	<b>12.75</b>
<b>Cost of Equity (pre-tax)</b>	<b>15.03</b>	<b>17.61</b>	<b>15.73</b>	<b>18.48</b>	<b>16.62</b>	<b>19.61</b>
Debt Premium	1.00	1.00	2.25	2.25	3.50	3.50
<b>Cost of debt (post-tax)</b>	<b>3.52</b>	<b>3.69</b>	<b>4.34</b>	<b>4.50</b>	<b>5.15</b>	<b>5.31</b>
<b>Cost of debt (pre-tax)</b>	<b>5.41</b>	<b>5.69</b>	<b>6.66</b>	<b>6.94</b>	<b>7.91</b>	<b>8.19</b>
Optimal Gearing	10%	10%	20%	20%	30%	30%
Tax Rate	35%	35%	35%	35%	35%	35%
<b>WACC (pre tax nominal)</b>	<b>14.07</b>	<b>16.42</b>	<b>13.91</b>	<b>16.17</b>	<b>14.01</b>	<b>16.18</b>

**Table II – WACC calculation for the Mobile market**

Based on the above, the WACC estimate ranges between 13.91% and 16.42% with an average pre-tax WACC rate of 15.13%.