

Final decision on the review of
calculation of the cost-of-capital rate
of PT Comunicações, S. A. for 2011

I. Framework

By determination of 10/02/2010¹ (Decision of February 2010), ICP-ANACOM defined the methodology to be used for calculating the cost-of-capital rate of PT Comunicações, S.A. (PTC) for the three-year period 2009-2011.

It was decided in this determination that a cost-of-capital rate of 10.3% should be applied for 2011, and that a three-year transition period (2009-2011) should be established, to allow PTC to adjust its operations to the cost-of-capital rate resulting from this methodological change (12.3% in 2009, 11.3% in 2010 and 10.3% in 2011). This adjustment was made on the basis of a glide path, which established a linear decrement rate by a full percentage point for the value of the cost-of-capital rate in each year, having as its starting point the reference value for 2008 (13.3%).

On the other hand, this determination also provided that the risk-free interest rate, risk premium and tax rate parameters could be subject to a review in the event that, during the period in question, any extraordinary situation occurred with a significant impact on the validity of the assumptions used in the calculation of the Weighted Average Cost of Capital (WACC). This review, provided it was properly justified, could be triggered on the initiative of ICP-ANACOM or PTC.

As referred in Decision of February 2010, the review mechanism should be triggered until the end of the first quarter of the year following the year in question.

By letter 20185530 of 4 March 2011, PTC requested the review of the cost-of-capital rate for 2010, proposing a value of 12.02% for that year, based on the significant change of two parameters related to the cost-of-capital rate: the risk-free interest rate and tax rate, having ICP-ANACOM decided, by Determination of 26/08/2011² (Decision of August 2011), that the cost-of-capital to be applied to PTC for 2010 and 2011 would be respectively 11.6% and 11%.

¹ <http://www.anacom.pt/render.jsp?contentId=1014532>

² http://www.anacom.pt/streaming/Revision_calcutating_rate_capitalPTC2010_2011_UK.pdf?contentId=1096514&field=ATTACHED_FILE

Later, by letter 20261418 of 29 February 2012, PTC requested a new review of the cost-of-capital rate for 2011 (14.78%), claiming in particular that the risk-free interest rate required a review, proposing for this parameter a value of 7.82% instead of the 4.8% previously defined. PTC also stressed: (i) the relevance of a strict compliance with deadlines defined; (ii) the time horizon of the decision; and (iii) the simplicity and transparency of the methodology applied.

ICP-ANACOM adopted a draft decision (DD) which was submitted to public consultation on 14/05/2012. The respective hearing report is part of this decision.

II. General considerations on the methodology by PTC

As far as the time horizon is concerned, PTC refers that the definition of a cost-of-capital rate calculated on an *ex-ante* basis “*aimed at fostering an environment of a lower regulatory uncertainty*”. The company adds that the Decision of February 2010 resulted in an “*exaggerated regulatory determinism, preventing normal market fluctuations from being reflected on PTC’s cost-of-capital rate accurately and on time, in the case of fixed parameters, and leading to the launch of an administrative process which turned out to be time consuming and disproportionate relatively to reviewable parameters. ICP-ANACOM’s approach created the conditions, on the one hand, for abrupt reviews of the cost-of-capital rate, after the period which ICP-ANACOM’s determination concerns and, on the other hand, for the need to make ad hoc updates, whenever extraordinary situations affecting assumptions considered occurred, which was the case in every year in which ICP-ANACOM’s determination was in force (2009 to 2011)*”.

As regards the cost-of-capital rate, PTC refers that “*the regulatory uncertainty concerning this component of costs of regulated products cannot be removed by administrative means and for limited periods of time (3 years), and a methodology that allows that every year parameters are brought in line with the market evolution should be addressed, through a set of rules that are simple to apply, transparent and affordable.*”

This operator also highlights that the determination of the cost-of-capital rate must reflect “*effectively the actual market conditions in each moment, without requiring every year a new*

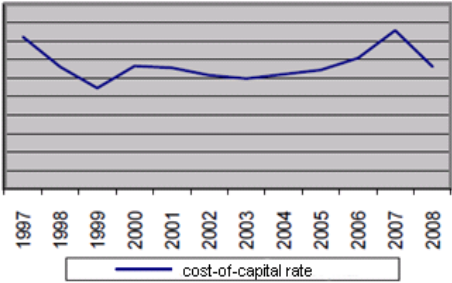
specific decision on the subject, with all the consequences at the level of efforts of analysis, preparation and participation in the respective consultation process”.

PTC mentions also that, taking due regard to the macro-economic conditions verified, other parameters of the cost-of-capital rate, such as the risk premium, debt premium, the beta factor and gearing, should also be liable to changes. This change is due to the fact that parameters listed above were calculated on the basis of data from 2008, which are now out of date. However, PTC fails to suggest any alternatives for amending the methodology or to update the values for these parameters.

Lastly, PTC restates the importance of “strict compliance with deadlines defined, so as to minimize the operational impact of its implementation for all involved”, adding that “PTC requested on 4 March 2011 the review of the cost-of-capital rate, thus meeting the established deadline, ICP-ANACOM, after the hearing procedure to interested parties, issued its final determination on this matter only on 26 August 2011 (...)”.

ICP-ANACOM disagrees with PTC’s interpretation according to which the current methodology for determining the cost-of-capital rate favours abrupt reviews of the cost-of-capital rate. In fact, it can be easily noted that the methodology followed earlier by PTC led to significantly volatile rates, notwithstanding the fact that the macro-economic context at the time was significantly more stable and predictable than that in 2009 and 2011, with rates between 1997 and 2008 being in a range between 11% and 17% (*vide* chart I and table I).

Chart I – Evolution of PTC cost-of-capital rate 1997-2008



Source: PTC AAS 1997-2008

Table 1 – Deviations of PTC cost-of-capital rate

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Deviation relatively to the preceding year	-3.21%	-2.30%	2.39%	-0.21%	-0.77%	-0.36%	0.45%	0.45%	1.32%	2.97%	-3.91%

Source: PTC AAS Results 1997-2008

ICP-ANACOM stresses that the Decision of February 2010 had the effect of reducing substantially the uncertainty and volatility of this cost component (see chart and table above) while bringing into line every year the main parameters of the cost-of-capital rate, as the current review process shows. This Authority thus considers that, although it may be assessed in separate how the methodology defined could be improved, namely when defining rules for calculating the cost-of-capital rate for the next regulatory period, the Decision of February 2010 was an effective procedural improvement, when compared to the practise followed to that date.

Lastly, and notwithstanding the fact that ICP-ANACOM agrees with the need to accelerate decision-making procedures, it must be referred that data underlying the calculation of the risk-free rate parameter (10-year Treasury bonds) which PTC wishes to be updated, are available since the beginning of 2012, having PTC requested this review by letter of 29 February 2012.

III. Analysis of the cost-of-capital rate proposed by PTC

PTC considers that the conditions for launching the parameter review mechanism provided for in the Decision of February 2010 have been met. On the grounds of the significant change of the Portuguese macro-economic context, PTC intends to change the risk-free interest rate from 4.8% defined in the Decision of August 2011 to 7.82%. This situation results from the fact that the average of monthly observations for the last two years (2010 and 2011) for 10-year Treasury bonds reaches 7.82%, the cost-of-capital rate then reaching 14.78% (*vide* table 2).

Table 2 – Cost of capital for 2011 proposed by PTC

Parameters	ANACOM Decision 2011 (*)	PTC's Proposal for 2011 (**)
Risk-free interest rate	4.80%	7.82%
Gearing	36.20%	36.20%
Tax rate	29.00%	29.00%
Beta	0.85%	0.85%
Risk premium	5.86%	5.86%
Debt premium	1.23%	1.23%
Cost of equity	9.78	12.80%
Pre-tax CMPC	10.97%	14.78%

(*) Average value for 2009-2010

(**) Average value for 2010-2011

Source: PTC and ICP-ANACOM calculations

Decision of 2010 lays down that the calculation of the cost-of-capital rate must use 10-year treasury bonds, the series being based on monthly observations with reference to the last two years.

PTC replicated values of treasury bonds for 2010 and 2011, achieving a value of 7.82%, that is, an alteration of 3.02 percentage points relatively to the average value calculated for 2009 and 2010 (4.80%).

ICP-ANACOM also replicated the calculations for the average of monthly observations of the last two years (2010 and 2011) and, just like PTC, the Authority obtained a value of 7.82%.

That Decision refers that the use of government bonds concerning the domestic market is generally deemed to be a good proxy for risk-free assets, being also a common and consensual measure of financial and regulatory practice.

However, the unfolding of the international financial crisis created a great instability in financial markets, namely at the level of the sovereign debt, and so the implicit interest rate of national treasury bonds showed an atypical behavior. This undermines, in the opinion of this Authority, the reasonableness of using national government bonds as proxy for the risk-free interest rate indicator.

In fact, the risk-free interest rate reflects the remuneration of risk-free assets. However, this is a theoretical rate, as there are no financial assets absolutely risk-free.

It is also important to note that Portugal is part of a wide currency area, thus the indicative value of the risk-free rate should not, and cannot, differ significantly, or be contrary to similar indicators obtained from data of other countries in the same currency area.

In this respect, it should be recalled that Decision of February 2010 refers explicitly that *“in the event that, during the period in question, any extraordinary situation occurs which has a significant impact on the validity of the assumptions used, the parameters defined will be reviewed.”*

Specifically as regards the risk-free interest rate, ICP-ANACOM referred explicitly in the Decision of February 2010 that *“the domestic market should be chosen as the relevant market. However, in the event that local bonds are not issued on a consistent basis or where they lack liquidity, both PwC and the IRG support the choice of another market”*.

In the light of the above, and taking into account the macro-economic context of the country, which had a strong impact on the regularity and liquidity of issues of long-term government bonds³, ICP-ANACOM disagrees with PTC view to maintain the use of treasury bonds as proxy for the risk-free interest rate, as currently it is no longer valid to assume that such bonds can be deemed to be a good proxy for risk-free asset indicators.

As such, and in the alternative, ICP-ANACOM takes the view that a different approach for calculating the risk-free interest rate is required, which gave rise to this determination⁴ (*vide* table 3), based on monthly observations of government bonds between 2010 and 2011, of a selected set of countries (including Portugal), which belong to the same currency area, resulting in a value of 5.36% (*vide* Annex A).

This approach has the advantage of maintain consistency in the way the various assessed parameters are calculated, and, at the same time, it somewhat reflects the worsening in the

³ Available date in the website of the Instituto de Gestão da Tesouraria e do Crédito Público, I.P. (the Treasury and Public Credit Management Institution) indicates that the last auction of long-term Treasury bonds took place in January 2011 (<http://www.igcp.pt/gca/?id=80>).

⁴ *Vide* Table 3 of paragraph.6 of PwC's report - “Assessment of the cost of capital analysis of Portugal Telecom Comunicações”, attached to Decision of February 2010 - available at ICP - ANACOM's website.

Portuguese macro-economic context, with consequences at the level of the risk-free interest rate.

Table 3 – Calculation of risk-free rate

Countries	Averages of 10-year Government Bonds (2010-2011) (*)
Belgium	3.85%
Spain	4.85%
France	3.22%
Ireland	7.67%
Italy	4.73%
Portugal	7.82%
Average	5.36%

(*) Average of monthly observations of government bonds of the referred countries, at nominal value, and Euro as currency of transaction

Source: European Central Bank

In addition, as the regulatory period in which prevailed the current approach for defining the cost of capital to be considered by PTC for regulatory costing purposes, is coming to an end, ICP-ANACOM stresses that a new decision on this subject is under way, for the 2011-2014 period, reflecting in an integrated manner the changes of context occurred since the adoption of decision of February 2010. This Authority expects that new elements on this issue may soon be made available.

IV. Decision of ICP-ANACOM on the cost-of-capital rate to be applied in 2011

Under the above analysis and taking into account contributions received in the scope of the prior hearing and general consultation procedures, and also bearing in mind the letter of the European Commission on the Draft Decision (Decision on the file PT/2012/1353) notified pursuant to paragraph 3 of article 7 of Directive 2002/21/EC of the European Parliament and of the Council, of 7 March 2002, as amended by Directive 2009/140/EC, informing that the Commission “has no comments to make”, ICP-ANACOM considers that given the change of the risk-free interest rate, the value of this parameter for 2011 should be 5.36%, values for other parameters remaining unchanged.

In this sense, ICP-ANACOM determines a value of 11.7% for the cost-of-capital rate for 2011, having weighted all above-mentioned conditions (*vide* table 4).

Table 4 – Cost of capital for 2011

Parameters	ANACOM Decision 2011	Treasury Bonds
Risk-free interest rate	4.80%	5.36%
Gearing	36.20%	36.20%
Tax rate	29.00%	29.00%
Beta	0.85%	0.85%
Risk premium	5.86%	5.86%
Debt premium	1.23%	1.23%
Cost of equity	9.78	10.34%
Pre-tax CMPC	10.97%	11.68%

Source: PTC and ICP-ANACOM calculations

Lisbon, 30 August 2012.

Annex A

Average of government bonds (Euro area) of countries with Regulatory Precedents considered in Decision of February 2010

Collection:	Average of observations through period (A)						
Period\Unit:	[Percent]						
	Belgium	Spain	France	Ireland	Italy	Portugal	
2010Jan	3.75	3.99	3.52	4.83	4.08	4.17	
2010Feb	3.73	3.98	3.50	4.73	4.05	4.56	
2010Mar	3.63	3.83	3.44	4.53	3.95	4.31	
2010Apr	3.54	3.90	3.40	4.76	4.00	4.78	
2010May	3.31	4.08	3.08	4.86	3.99	5.02	
2010Jun	3.47	4.56	3.07	5.31	4.10	5.54	
2010Jul	3.29	4.43	2.99	5.32	4.03	5.49	
2010Aug	3.03	4.04	2.68	5.30	3.80	5.31	
2010Sep	3.12	4.09	2.68	6.14	3.86	6.08	
2010Oct	3.21	4.04	2.72	6.42	3.80	6.05	
2010Nov	3.48	4.69	3.00	8.22	4.18	6.91	
2010Dec	3.99	5.38	3.34	8.45	4.60	6.53	
2011Jan	4.14	5.38	3.44	8.75	4.73	6.95	
2011Feb	4.21	5.26	3.60	9.10	4.74	7.34	
2011Mar	4.21	5.25	3.61	9.67	4.88	7.80	
2011Apr	4.29	5.33	3.69	9.79	4.84	9.19	
2011May	4.21	5.32	3.49	10.64	4.76	9.63	
2011Jun	4.14	5.48	3.43	11.43	4.82	10.87	
2011Jul	4.22	5.83	3.40	12.45	5.46	12.15	
2011Aug	4.11	5.25	2.98	9.57	5.27	10.93	
2011Sep	3.88	5.20	2.64	8.51	5.75	11.34	
2011Oct	4.20	5.26	2.99	8.10	5.97	11.72	
2011Nov	4.84	6.20	3.41	8.51	7.06	11.89	
2011Dec	4.35	5.53	3.16	8.70	6.81	13.08	
Average	3.85	4.85	3.22	7.67	4.73	7.82	5.36

Source: European Central Bank and ICP-ANACOM calculation

Dataset name: Interest rate statistics (2004 EU Member States & ACCBs);

BS counterpart sector: Unspecified counterpart sector

Interest rate type: Long-term interest rate for convergence purposes

Currency of transaction: Euro

Frequency: Monthly;

Transaction type: Debt security issued;

Maturity category: 10 years