

**Final decision on the Review of the calculation of the  
rate of the cost of capital of PT Comunicações, S.A.  
applicable to 2010 and 2011**

## **I. Framework**

The cost of capital is an important part of the cost of products and services, it being crucial to determine a methodology that makes it possible to determine reasonably, without any accounting or analytical constraints, the rate of cost of capital appropriate for a return on the investments of PT Comunicações, S.A. (PTC).

In this context, considering that (i) the methodology for calculating the cost of capital has not been revised since its implementation, and may therefore be inappropriate to the current situation, and (ii) the determination of certain parameters (e.g. gearing, tax rate, cost of borrowed capital) was not independent of PTC's management decisions, ICP-ANACOM, in a decision of 10/02/2010<sup>1</sup>, defined the methodology to calculate the rate of the cost of capital of PTC, applicable to the 2009-2011 three year period. This Decision also intended to minimize the unpredictability related to the calculation of the cost of capital of PTC, and simultaneously to ensure greater regulatory certainty in the context of improved transparency for all parties involved, insofar as the process of allocating the cost of capital which has been followed historically used to be undertaken after the financial year in question.

As a result of the study conducted by ICP-ANACOM, and after a market consultation, the rate of the cost of capital established for the 2009 – 2011 three year period was 10.3%, while at the same time PTC was given a transition period to allow the company to adjust its operation to the rate of the cost of capital resulting from this change in methodology (12.3% in 2009, 11.3% in 2010, and 10.3% in 2011).

Nonetheless, the decision foresaw that should any extraordinary situation arise that had a significant impact on the premises considered in the parameters external to PTC (risk-free interest rate, interest rate and risk premium), during the period under consideration, these parameters could be subject to review.

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<sup>1</sup> [Calculation of the cost of capital of PTC.](#)

Such review, as long as it was properly justified, could be started up to the end of the first quarter of the financial year following the year in question, by the initiative of ICP-ANACOM or PTC, considering any deviation above 0.5 per cent of the rate of the cost of capital of PTC defined under Decision of 10/02/2010 to be significant.

## **II. Review of the rate of the cost of capital**

PTC, through letter 20185530, of 4 March 2011, requested the review of the rate of the cost of capital to be used in 2010, suggesting a figure of 12.02%<sup>2</sup> for that financial year, based on two significant changes that occurred to two of the eligible parameters in 2010 (risk-free interest rate and interest rate), whose quantification is immediate.

In the same letter PTC also sends the analysis justifying the rate it proposes (12.02%), as well as a number of considerations on the methodology to establish the rate of the cost of capital determined by this Authority, which deserves an attentive and careful review. We now present a detailed analysis that duly clarifies each situation.

## **III. General considerations on the methodology by PTC**

Following the comments on the review of the rate of the cost of capital, PTC considered it was important to state its understanding of two particular aspects of ICP-ANACOM's Determination: the decision's time frame and the methodology's simplicity and transparency.

It should be mentioned that under the draft decision on the review of the calculation of the rate of the cost of capital of PTC applicable to the 2010-2011 period (DD), ICP-ANACOM received comments both from PTC, within the contribution of Grupo PT, and from other respondents, on the methodology itself and on generic issues in addition to these two aspects mentioned in the DD. Since the points raised by those bodies do not affect the current Decision, they can be analyzed in the report of the prior hearing, which is an integral part of the present Decision.

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<sup>2</sup> At the previous hearing, Grupo PT, to which PTC belongs, proposes a different rate to be used in the 2010 financial year, i.e. 12.3%, rather than 12.02%. This issue is analyzed in detail in the report of the prior hearing, which is part of the present Decision.

## Time frame

PTC considers that even though ICP-ANACOM set out to provide a more predictable environment, with less regulatory uncertainty for all parties, ICP-ANACOM's decision did not aim, in fact, to define a methodology but actually merely translated the calculation of the figures and their sources.

Furthermore, PTC states that “*the ex-ante establishment of the rate to be applied for such a long period, calculated based on data from the past referring to years that are some way away from those in which the rate will be applied, should not be mistaken for the transparency of rules.*”

With the Decision of 10 February 2010 ICP-ANACOM defined the rate of the cost of capital applicable for the 2009-2011 three year period, as a result of a thorough methodology review of how each of the parameters is calculated, the remuneration base and the procedure itself, changing from an annual rate to a rate established for three years, with a review mechanism that could safeguard the parties against unanticipated significant effects.

The ex-ante establishment of transparent rules concerning the determination of the cost of capital aimed to promote a predictable environment to which parties may adapt, by anticipating and managing their expectations more effectively.

In fact, the implementation of a methodology defining the rate of the cost of capital *a priori* is a common practice in several countries, such as Ireland<sup>3</sup>, France<sup>4</sup>, Belgium<sup>5</sup> and the United Kingdom<sup>6</sup>.

Additionally, establishing rules *ex-ante* reduces the need for later investigations that are usually complex and time consuming, and possibly subject to dispute, regarding the possible abuse of market power by fixing excessive capital costs.

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<sup>3</sup>[http://www.comreg.ie/publications/comreg\\_sets\\_new\\_eircom\\_cost\\_of\\_capital\\_at\\_10\\_21\\_584.103090.p.html](http://www.comreg.ie/publications/comreg_sets_new_eircom_cost_of_capital_at_10_21_584.103090.p.html)

<sup>4</sup>[http://www.arcep.fr/uploads/tx\\_gsavis/10-0001.pdf](http://www.arcep.fr/uploads/tx_gsavis/10-0001.pdf)

<sup>5</sup>[http://www.ibpt.be/fr/622/ShowDoc/3216/Comptabilisation\\_des\\_coûts/Consultation\\_relative\\_au\\_coût\\_du\\_capital\\_pour\\_les\\_.aspx](http://www.ibpt.be/fr/622/ShowDoc/3216/Comptabilisation_des_coûts/Consultation_relative_au_coût_du_capital_pour_les_.aspx)

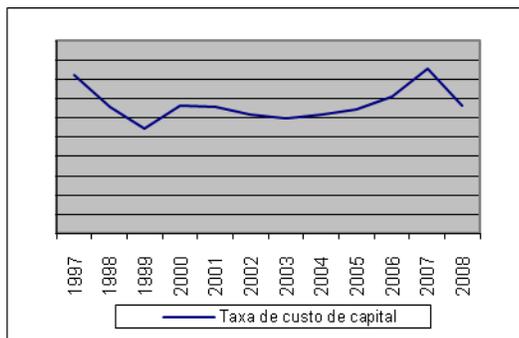
<sup>6</sup><http://stakeholders.ofcom.org.uk/consultations/wba-charge-control/summary>

PTC also states that "what resulted from ICP-ANACOM's determination was an exaggerated regulatory determinism, which is not necessarily a proper and timely reflection of normal market fluctuations, thus favouring the occurrence of hasty reviews of the rate of the cost of capital every three years."

PTC considers that ICP-ANACOM's argument that knowing this rate beforehand would decrease regulatory uncertainty was found to be fallible, given the time lapse and the magnitude of the discrepancies between the data used for calculating the parameters and the figures observed in each financial year.

ICP-ANACOM disagrees with PTC's interpretation that the current methodology for establishing the rate of cost of capital favours the occurrence of hasty reviews of the rate of the cost of capital. In fact, it is easily demonstrated that the methodology previously used by PTC resulted in the considerable volatility of the rates presented, which were in the 11% to 17% range between 1997 and 2008 (vide graph I and table 5).

**Graph I – The rate of cost of capital of PTC 1997-2008**



Source: AAS PTC 1997-2008

**Table 1 – Differences in the rate of cost of capital of PTC**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Difference from previous year</b>	-3,21%	-2,30%	2,39%	-0,21%	-0,77%	-0,36%	0,45%	0,45%	1,32%	2,97%	-3,91%

Source: AAS PTC 1997-2008 results

PTC also notes that the prior establishment of a value relative to a single cost factor, with the justification that it reduces the unpredictability of trend of the cost of the products, is a feeble argument when all other cost factors have a higher weight on the establishment of the final cost.

ICP-ANACOM is perfectly well aware that the cost of capital is only one of the cost items of PTC's operation. However, the possibility of setting *a priori* this component of the cost of products and services contributes to greater regulatory predictability, a procedure which is in fact followed by several other sectoral regulators.

### **Simplicity and methodology transparency**

PTC observes that the regulatory uncertainty involving the cost of capital cannot be eliminated by administrative means for limited time periods, stressing that it has to be fought with a methodology that enables an annual alignment of its parameters with the evolution recorded in the market, through a set of rules that are simple, transparent and accessible to all parties.

In this context, PTC also claims that ICP-ANACOM, after starting from consensual methodologies, such as WACC and CAPM, ended up by embracing excessive information sources and criteria, complicating what should be simple, with reserved access for data that should be accessible to all, and therefore PTC suggests that the methodology defined be reviewed.

Regarding PTC's challenge to the methodology for calculating the cost of capital, ICP-ANACOM stresses that with the Decision of February 2010, the uncertainty and volatility of this cost component decreased drastically (see previous graphs), but still considering the annual alignment of the main parameters of the cost of capital, as the present review process bears out. Therefore, it is this Authority's understanding that, even admitting that possible improvements to the defined methodology might be assessed in the appropriate forum, the Decision of February 2010 represented, in comparison to the practice followed up to then, a definite procedural improvement, and that in any case this subject will be revisited for 2012 and the following years.

It should be noted that the guidelines are already defined, and therefore that the degree of complexity inherent to this task does not seem to be a disruptive factor in the calculation process, especially because all data bases and information sources used for establishing the parameters are properly identified, thus guaranteeing the total transparency and independence of the data used.

Additionally, the methodologies considered for calculating the cost of capital are not significantly innovative with respect to the methodologies that are followed by other European regulators, as shown in the benchmark considered in the Decision.

#### **IV. Analysis of the rate of cost of capital proposed by PTC**

##### **Risk-free interest rate**

PTC mentions that ICP-ANACOM's Decision on this matter establishes that the risk-free interest rate should be calculated using the 10 year Treasury Bond rate, and that the series to be used should correspond to the monthly observations of the last two years.

Having analyzed the monthly series of the last two years (2009 and 2010), PTC concludes that this rate changed materially, rising to 4.80%, compared with the 4.47% defined in the Decision on this matter.

**About this figure, note that ICP-ANACOM recreated PTC's calculations, and found the same value – 4.80% for the average 10 year Treasury Bonds rate between January 2009 and December 2010.**

##### **Tax rate**

PTC says that Article 2 of Law 12-A/2010 of 30 June, concerning additional measures relating to the budget consolidation of the State accounts, has now set an additional rate of 2.5% on the taxable profit, corresponding to the state local tax. PTC's nominal tax rate thus became 29%.

**ICP-ANACOM agrees with the update of the nominal interest rate stated by PTC, which is now 29% as opposed to the 26.5% rate defined by the Determination of February 2010.**

Furthermore, PTC mentions that besides the rate of IRC (corporation tax) and the municipal and state taxes, it also pays tax in the form of Independent Taxation, the amounts of which rose under the budget consolidation measures.

Notwithstanding this reference to the worsening of its fiscal obligations, PTC does not consider them in the calculations presented within the review of the rate of the cost of capital. ICP-ANACOM agrees with the approach suggested by PTC.

### **Risk Premium**

Concerning the review of the parameter representing the risk premium, PTC notes that *“the complexity of the calculation introduced by ICP-ANACOM implies the use of data to which PTC has no access under its normal activity; therefore its update should be the Regulator’s responsibility”*.

It should be recalled that under the process leading to the Decision of February 2010 it was stipulated that the review mechanism can be triggered by ICP-ANACOM or by PTC, with the proposer, however, being responsible for collecting the information. In addition, the figures that support its calculation are available to any party, since they are not confidential or subject to restricted access.

### **Review for 2010**

Considering the previously mentioned changes to the risk-free interest rate, PTC updated the calculation of the rate of the cost of capital and obtained a result of 10.97% (*vide* table 2), compared with the 10.28% that calculated under the Decision, determining an impact of

about +0.7 per cent, thereby producing at the outset the conditions triggering a review of the mechanism.

**Table 2 – Cost of capital 2010**

<b>Parameters</b>	<b>ICP-ANACOM Decision</b>	<b>OTS and IRC tax (PTC)</b>
<b>Risk free interest rate</b>	<b>4,47%</b>	<b>4,80%</b>
Debt premium	1,23%	1,23%
Beta	0,85	0,85
Risk premium	5,86%	5,86%
Gearing	36,20%	36,20%
<b>Tax rate</b>	<b>26,50%</b>	<b>29,00%</b>
Cost of equity	9,47%	9,78%
<b>Pre-tax CMPC</b>	<b>10,28%</b>	<b>10,97%</b>

Source: PTC and ICP-ANACOM Calculations

ICP-ANACOM recalculated the rate of the cost of capital considering the same changes, determining a rate of 10.97%, as PTC did.

**ICP-ANACOM therefore agrees that the necessary factors are in place to activate the mechanism for reviewing the previously defined rate.**

### **Review for 2011 and new glide path**

PTC considers that *“given that we are on a transition period of rate adjustment it seems fundamental to evaluate the impact of these changes on the estimate of the rate for the end of that period (2011), and the consequent need to reassess the pace defined for the downward-path”*.

PTC has therefore devised a scenario for 2011 which considers that the tax rate will remain at 29%, and that the risk-free interest rate will be at least 5.40%, on the assumption that the average value of the 10 year Treasury Bonds in 2011 will not be below the 2010 average.

Considering the abovementioned data, PTC presented the calculation for the 2011 fiscal year, finding a figure of 11.73% for the rate of the cost of capital (*vide* table 3).

**Table 3 – PTC Calculation<sup>7</sup>: Cost of capital 2011**

Parameters	PTC
	Calculation
<b>Risk free interest rate</b>	<b>5,40%</b>
Debt premium	1,23%
Beta	0,85
Risk premium	5,86%
Gearing	36,20%
<b>Tax rate</b>	<b>29,00%</b>
Cost of equity	10,38%
<b>Pre-tax CMPC</b>	<b>11,73%</b>

Source: PTC Calculation

Based on this new assumption, PTC proposes to use the rate calculated for 2011 as an arrival point, and the rate of the 2009 financial year, 12.3%, as the departure point for defining a new glide path (*vide* table 4).

**Table 4 – PTC Glide path<sup>8</sup>**

1st year - 2009		<b>12.30%</b>
2nd year - 2010	$Tx_{09} - ((Tx_{09} - Tx_{09/11}) * 0.5)$	<b>12.02%</b>
3rd year - 2011		<b>11.73%</b>

Source: PTC calculation

So, PTC proposes that the rate of the cost of capital to be used for the 2010 financial year should be 12.02%.

It is important to mention that although ICP-ANACOM expresses its agreement with the need to review the rate of the cost of capital, the same understanding is not possible with respect to the figures presented, notably because PTC's proposal is based on the extrapolation of 2010 data, thus creating a hypothetical scenario for interest rates in the 2011 financial year.

Furthermore, the purpose of the review mechanism of the rate of the cost of capital is to prevent any situations arising that might have a disproportionate influence on the rate of the cost of capital corresponding to the financial year under analysis, and therefore the PTC calculation falls outside spirit of this mechanism by extrapolating data for the future.

<sup>7</sup> At the prior hearing, Grupo PT, to which PTC belongs, proposes that a different rate should be used in the 2010 financial year, i.e. 13.25%, rather than 11.73%. This issue is analyzed in detail in the report of the prior hearing, which is part of the present Decision.

<sup>8</sup> At the prior hearing, Grupo PT, to which PTC belongs, proposes a glide path based on the rate of cost of capital there approved (13.25%). This issue is analyzed in detail in the report of the prior hearing, which is part of the present Decision.

**Given the above, it is ICP-ANACOM’s position that the rate of the cost of capital at the end of the considered period (2011) should not be calculated based on hypothetical scenarios, and therefore we now present the updated rate, according to the calculations of ICP-ANACOM.**

In order to incorporate the changes in the risk-free interest rate and the tax rate, ICP-ANACOM determines a new glide path by establishing the rate of the cost of capital applied in 2009 as the starting point (12.3%), also suggested by PTC, and the rate obtained with the most recent changes as the arrival point, and still considering the figures from the two last financial years (now 2009 and 2010), 10.97% (*vide* table 2), resulting in a rate of 11.6% for 2010 and of 11% for 2011 (*vide* table 5).

**Table 5 – Glide path**

	<b>Determination glide path</b>	<b>Updated glide path</b>
<b>1st year - 2009</b>	12,3%	12,3%
<b>2nd year - 2010</b>	11,3%	11,6%*
<b>3rd year - 2011</b>	10,3%	11,0%

Source: ICP-ANACOM calculation

\*Tx 09 – ((Tx 09 – Tx 09/11)\*0.5)

Given the above, we determine that the rates of the cost of capital should be 11.6% and 11% for the 2010 and 2011 financial years respectively, noticing that if any extraordinary situation occurs in the 2011 financial year that has a significant impact on the premises considered, the parameters that are now defined can be reviewed under the terms defined by the Decision of February 2010. As long as it is properly justified, this review can be triggered on the initiative of ICP-ANACOM or PTC until the first quarter of 2012, the proposers being responsible for collecting information.

## **Other Parameters**

It is PTC's belief that the parameters related to the company itself, notably Beta, gearing and debt premium, should be reviewed, since, given the significant changes that occurred within the macroeconomic framework, it cannot be expected that those parameters have not changed, but this responsibility is left to the Regulator.

However, as defined in the Decision, these parameters cannot be reviewed during the 2009-2011 three year period, since the benchmark used for finding them is broad enough to consider any variations and to accommodate some volatility, although they will surely be reviewed when the rate for the next three year period is defined.

In any case, during the next review of the rate of the cost of capital for PTC for the period subsequent to 2011, the adequacy of the considered parameters will have to be appraised.

## **V. Decision of ICP-ANACOM on the rate of the cost of capital to use in 2010 and 2011**

From the analysis undertaken and considering the comments received during the prior hearing<sup>9</sup> and the general consultation process, and also considering the letter from the European Commission concerning the draft of the final Decision (decision regarding process PT/2011/1240) notified pursuant to Article 7(3) of Directive 2002/21/EC as amended by Directive 2009/140/EC, where it states that it "has no comments to submit", ICP-ANACOM considers that the rate of the cost of capital resulting from the Decision of 10 February 2010 rises from 10.3% to 11%, and the glide path must be updated per the following table, according to which the rate considered for 2010 is 11.6%.

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<sup>9</sup> Vide Report on preceding hearing of the calculation of the rate of the cost of capital of PTC, applicable to 2010 and 2011, which is part of the present Decision.

**Table 6 – Glide path**

	<b>Determination glide path</b>	<b>Updated glide path</b>
<b>1st year - 2009</b>	12.3%	12.3%
<b>2nd year - 2010</b>	11.3%	11,6%*
<b>3rd year - 2011</b>	10.3%	11.0%

Source: ICP-ANACOM calculation

\*Tx 09 – ((Tx 09 – Tx 09/11)\*0.5)

The parameters now updated may be subject to review. This review, provided it is properly justified, may be triggered on the initiative of ICP-ANACOM or PTC, the collection of information being of the responsibility of the proposers.

It should be stressed that the review mechanism may be started up to the end of the first quarter of 2012, and that the effects of any adjustment established should be reflected in the corresponding financial year, before the presentation of the annual results of the AAS.