

FINAL DECISION ON THE COST-OF-
CAPITAL RATE OF MEO - SERVIÇOS DE
COMUNICAÇÕES E MULTIMÉDIA, S.A.,
APPLICABLE TO THE 2015 FINANCIAL
PERIOD

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1. Framework

The cost-of-capital rate consists in the appropriate rate of return to compensate the investment opportunity cost. In the context of the regulation of the telecommunications market, this rate is determined in order: (i) to ensure the right incentives to invest; (ii) to guarantee the absence of market distortions, via discriminatory and anti-competitive practises; (iii) to eliminate any barriers to the entry of new competitors; and (iv) to protect consumers from excessive prices. It is fundamental to define a methodology that allows an appropriate calculation, without any accounting and analytical constraints, of the cost-of-capital rate to recompense the investments made by regulated companies.

Law No. 51/2011, of 13 September, provides in its article 74, paragraph 2, that in imposing cost recovery and price control obligations, the National Regulatory Authority (NRA) must take into account the investment made by the operator, allowing him a reasonable rate of return on the capital employed, taking into account any associated risks.

On the other hand, Commission Recommendation 98/322/EC, of 8 April 1998 (point 5.1 of the Annex thereof) requires that “charges for interconnection be cost-oriented, including a reasonable return on investment” and that “the cost of capital of operators should reflect the opportunity cost of funds invested in network components and other related assets”.

Also according to point 5.1 of the referred Annex, the cost of capital “conventionally reflects the following: the (weighted) average cost of debt for the different forms of debt held by each operator; the cost of equity as measured by the returns that shareholders require in order to invest in the network given the associated risks, and the values of debt and equity. This information can then be used to determine the weighted average cost of capital (WACC) using the following formula: $WACC = r_e * E/(D+E) + r_d * D/(D+E)$, where r_e is the cost of equity, r_d is the cost of debt, E is the total value of equity and D is the total value of interest-bearing debt”.

By determination of 10/02/2010¹, ICP - ANACOM defined the methodology for calculating the cost-of-capital rate of Meo Serviços de Comunicações e Multimédia, S.A. (MEO) for the 2009-2011 period.

This determination aimed to reduce the lack of predictability associated to the calculation of MEO's cost-of-capital rate, and at the same time to provide greater regulatory certainty, in a framework of greater transparency for all stakeholders, given that the implementation of the process of allocation of

¹ [Calculation of the cost of capital of PTC](#)

the cost-of-capital, which had been historically used, was undertaken after the financial year concerned had elapsed.

The *ex ante* establishment of transparent rules for the determination of the cost-of-capital rate contributes to a predictable environment to which agents can adapt, anticipating and managing their expectations more effectively.

Moreover, establishing *ex-ante* rules reduces the need for later investigation, which is usually complex, time-consuming and potentially a cause of dispute.

After the end of the 2009-2011 regulatory period, the methodology for calculating the cost-of-capital rate was redefined, to be applied as from the 2012 financial year. According to that determination², dated 05/12/2013, the rate applicable in each financial year should be updated by the end of the 1st half of the year concerned, in the light of elements required for the calculation. In case it is found that a criterion and/or source of information may not be updated, there are grounds for replacement - which may be triggered by either party, by the end of the first third of the concerned year - and subsequent submission to a prior hearing. Otherwise, the calculation is simply be updated, on an annual basis.

In this context, as neither party triggered any methodological review, taking into account the above-mentioned determination, applicable as from the 2012 financial year, and given the need to calculate the cost-of-capital rate applicable to the 2015 financial year, to provide ANACOM with a better basis for its intervention in the scope of the referred powers, the services of Mazars & Associados, SROC, S.A. (hereinafter Mazars) were contracted, to determine the parameters for calculation of the cost-of-capital rate.

According to the report drawn up by Mazars, entitled “Determination of the cost-of-capital rate of Meo Serviços de Comunicações e Multimédia, S.A.” (*vide annex*), consultants were of the opinion that, in the light of the methodology established by ANACOM, “*methodological principles on which the calculation of the cost-of-capital rate of MEO Comunicações is based are appropriate*”, having as such agreed “*with its application along the lines described.*”

Notwithstanding, it must be referred that when Mazars’ calculation was undertaken, there were situations where it was not possible to use the full amount of data and respective series required for the calculation of the cost-of-capital rate, although consultants did not believe that such situation required a methodological change or brought any robustness problems. In addition to situations where some

² [Methodology for calculating the cost-of-capital rate of PTC as from the 2012 accounting year - final decision](#)

data were absent, namely as regards the risk-free interest rate and debt premium, a situation was identified where one of the comparable companies, PT SGPS, suffered very significant alterations in its corporate structure, after the first quarter of 2014. The consultant thus proposed, for the purpose of the calculation of parameters which include PT SGPS, the exclusion of observations for the last 9 months of 2014, to consider only 4 years and 3 months of observations of series for the calculation of beta and gearing and 15 months of observations for the calculation of the debt premium.

Acknowledging that there are situations where elements supporting the calculation of the cost-of-capital to be applied to MEO for the 2015 financial year may contain limitations, and in order to promote transparent and accurate action, ANACOM thus believes that for the financial year concerned - 2015 - it would be best to submit the value of the cost-of-capital determined to the prior hearing of stakeholders, as opposed to the summary notification of the calculation result laid down in the determination of December 2013.

For this purpose, and explicitly aiming to maximize regulatory predictability as far as this issue is concerned, it was sought within the framework of the draft decision (DD), whenever possible, to determine the individual value of each of the parameters used in the calculation of the cost-of-capital rate as closely as possible to the methodology in force, established in the 2013 determination, introducing deviations only where required to address, on one hand, the lack or insufficiency of information, and on the other, the structural change undergone by PT SGPS, the comparable company.

Taking into consideration contributions received, and in the light of positions taken in the scope of the prior hearing, a correction was introduced in data concerning the debt premium, having Mazars prepared a new report further to the DD (*vide* annex) and a prior hearing report which is an integral part of this decision. These corrections affected the average debt premium, which increased from 1.98% (average obtained with 2.20% for 2013 and 1.76% for 2014) to 2.12% (average obtained with 2.38% for 2013 and 1.86% for 2014). This on its turn entailed an increase by 0.0587 p.p. in the cost-of-capital rate mentioned in the preceding report, which raised from **9.2660%** (in the preceding version of the DD) to **9.3247%** (in the final corrected version, post DD).

Moreover, and so as to meet MEO's concerns, it is also informed that Mazars' report was reviewed, namely in order to report beta values to three decimal places and the calculation of cost of equity to four decimal places.

Finally, to meet some of the concerns pointed out by MEO, ANACOM took the view that to the methodology defined in the determination of 2013 should be introduced an addition, replacing the paragraph indicated in the DD:

“Notwithstanding, where it is found that databases that enable the calculation of parameters show limitations, and that the application of the defined methodology is not possible, there are grounds for its alteration/replacement - only where it is not possible to guarantee the inclusion in the calculation of at least 80% of observations or of sources of information required for the determination of parameters - which may be triggered by either party, by 31 May of the year concerned and subsequent submission to a prior hearing. Otherwise, the calculation will simply be updated, on an annual basis” with the following paragraph:

*“Notwithstanding, where it is found that databases that enable the calculation of parameters show limitations, and that the application of the defined methodology is not possible, there are grounds for its alteration/replacement - only where it is not possible to guarantee the inclusion in the calculation of at least 80% of observations or of sources of information required for the determination of parameters, **considering that all comparable companies continue to comply with selection criteria** - which may be triggered by either party, by 31 May of the year concerned and subsequent submission to a prior hearing. Otherwise, the calculation will simply be updated”.*

In this respect, the European Commission assessed, on 27.11.2015, the draft final decision notified on 29.10.2015, and did not present any comments.

In the light of the above, a more detailed analysis of relevant parameters for the determination of MEO's cost-of-capital rate is presented below.

2. Application of the methodology defined by determination of 05/12/2013 to the 2015 financial year

2.1. Incomplete information

As referred above, when Mazars' calculation was undertaken, in the report in annex, there were situations where it was not possible to use the full amount of data and respective series required for the calculation of the cost-of-capital rate, given that some data were not available, namely as regards the risk-free interest rate and debt premium (*vide* table 1).

Table 1 – Incomplete information

Parameter	Observation
Risk-free interest rate	<ul style="list-style-type: none"> - Estonia was removed from the calculation of the weighted average due to the lack of information on bond issues. - Due to the absence of information on Luxembourg's annual GDP, for the purposes of the weighing carried out, the published value for the first 9 months of 2014 was used. - Latvia and Lithuania joined the Euro-area in 2014 and 2015, respectively, and were not considered in the calculation as no sufficient history was available.
Debt premium	<p>Only 12 of the 15 comparable companies made debenture loans maturing in 10 years. Companies that did not report issues were: Belgacom, Magyar Telecom and Swisscom, and for this reason they were not considered in the calculation.</p> <p>Of the 12 considered companies that report issues, it must be highlighted that:</p> <ul style="list-style-type: none"> - Elisa OYJ, Telekom Austria, Telenor ASA and TeliaSonera AB present incomplete data in 2013 and no data at all in 2014. - Hellenic Telecommunications presents a complete series in 2013, however fails to present data in 2014. - Telecom Itália presents an incomplete series in 2014, but the full amount of data required in 2013.

Source: Mazars Report

It should be referred that, notwithstanding the above-mentioned limitations, also as regards the risk-free interest rate and the debt premium, consultants did not believe that such situation required a change in the established methodology or brought any robustness problems thereto.

2.2. Comparable companies

In the scope of the analysis carried out by consultants, as regards comparable companies, PT SGPS was identified to have suffered very significant alterations in its corporate structure, after the first quarter of 2014. For the purpose of the calculation of parameters, observations for the last 9 months of 2014 were removed, to consider only 4 years and 3 months of observations of series for the calculation of beta and gearing and 15 months of observations for the calculation of the debt premium (*vide* table 2).

Table 2 – PT SGPS

Debt premium	The calculation of PT SGPS' specific debt premium considered only the series of 1 year and 3 months, excluding the last 9 months of 2014, instead of considering the two-year series.
Beta and Gearing	The calculation of beta and gearing considered only the series of 4 years and 3 months, excluding the last 9 months of 2014, instead of considering a five-year series.

Source: Mazars

In brief, and according to consultants, *“PT SGPS, as far as its performance is concerned for the period after the first quarter of 2014, does not reflect the structure of an operator of the telecommunications sector. The reduction in the total of assets and liabilities of PT SGPS is a sign of the contribution in kind in OI’s capital increase that occurred on 5 May 2014, which explains the decrease of most items of the company’s consolidated financial position. As a result of that operation, the most expressive asset held by PT SGPS corresponds to the fair value of the investment in OI.”*

In this framework, consultants considered that the last 9 months should not be considered in the data sample provided by PT SGPS, concluding that such exclusion *“does not bring any robustness problems to the analysis, given that a considerable time horizon remains - as far as the comparable sample is concerned.”*

3. Methodology – review of the determination of 05/12/2013

The determination of 2013 provided for the definition *a priori* of the methodology for calculating the cost-of-capital rate, to be applied as from 2012, the update of the rate taking place every year, by the end of the 1st half of the year concerned, according to the availability of data required for the calculation, in compliance with the definition of the methodology.

Nevertheless, in case it was found that a criterion and/or source of information could not be updated, there would be grounds for replacement - which could be triggered by either party, by the end of the first third of the concerned year - and subsequent submission to a prior hearing. Otherwise, the calculation would simply be updated, on an annual basis.

After a thorough analysis of this procedure, and taking into account situations identified in the scope of the calculation of the rate for 2015, it is deemed that the lack of some data may not necessarily constrain the calculation of the rate for the respective year. In fact, consultants concluded as much when determining the rate for 2015. In this sense, the calculation methodology defined in the determination

of 2013 is to be maintained. However, it is important to introduce an addition to the paragraph concerning the review of data, as it is deemed relevant to replace/change databases that allow the calculation of parameters, in case it is not possible to perform the referred calculation guaranteeing the availability of 80% of observations (for example, for the risk-free interest rate) or sources of information (for example, for the risk-free interest rate). Moreover, in order to guarantee that data are fully published in the period under analysis, there are grounds also for replacing the 30 April deadline for 31 May, for triggering the data review.

In the light of the above, ANACOM deems that it is relevant to add to the methodology defined in the determination of 2013, replacing the paragraph: *“Nevertheless, in case it is found that a criterion and/or source of information may not be updated, there are grounds for replacement - which may be triggered by either party, by the end of the first third of the concerned year - and subsequent submission to a prior hearing. Otherwise, the calculation will simply be updated, on an annual basis”* with the following paragraph: *“Notwithstanding, where it is found that databases that enable the calculation of parameters show limitations, and that the application of the defined methodology is not possible, there are grounds for its alteration/replacement - only where it is not possible to guarantee the inclusion in the calculation of at least 80% of observations or of sources of information required for the determination of parameters, considering that all comparable companies continue to comply with selection criteria - which may be triggered by either party, by 31 May of the year concerned and subsequent submission to a prior hearing. Otherwise, the calculation will simply be updated”*.

4. Calculation of the cost-of-capital rate for 2015

4.1. Risk-free interest rate

“The risk-free interest rate must be computed based on the GDP weighted average, (source: Eurostat) of the respective country, of implicit rates (yields) of 10-year T-bonds, of all Euro zone countries (historical series, based on monthly observations during the two years preceding the year of decision - source: European Central Bank).”

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **risk-free interest rate of 2.42%** (*vide* table 3) was obtained, the detailed calculation of which may be consulted at Mazars’ report (*vide* annex).

Table 3 – Calculation of risk-free interest rate

	GDP weighted average
Risk-free interest rate for 2013	2.87%
Risk-free interest rate for 2014	1.97%
Average for 2013 and 2014	2.42%

Source: Mazars Report

It is particularly important to refer some situations that were identified by consultants when data were collected for the calculation of the cost-of-capital rate, making it impossible to use some data in the scope of the respective calculation, namely: (i) lack of information on bond issues as far as Estonia is concerned; (ii) absence of information on Luxembourg’s annual GDP, having been used the published value for the first 9 months of 2014 and (iii) insufficiency of historic data for Latvia and Lithuania, that joined the Euro-area in 2014 and 2015, respectively.

Notwithstanding the identified limitations, it is deemed that, on the basis of data presented by Mazars, as well as of the calculation carried out, the determined rate reflects the best possible estimate for the establishment of the risk-free interest rate for the 2015 financial year.

4.2. Risk premium

“The risk premium shall be calculated based on a simple average of ex-ante data - Pablo Fernandez and Damodaran (calculated in the year preceding that of the decision, taking future expectations into consideration), for Portugal.”

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **risk premium of 9%** (*vide* table 4) was obtained, the detailed calculation of which may be consulted at Mazars’ report (*vide* annex).

Table 4 – Calculation of risk premium

Risk premium		
Source Pablo Fernandez	Market Risk Premium and Risk Free Rate used for 88 countries in 2014 Pablo Fernandez, Javier Aguirreamalloa and Pablo Linares IESE Business School June 20, 2014	8.50%
Damodaram	Portuguese market risk premium	9.50%
	Risk premium - Average	9.00%

4.3. Beta

*“The beta must be calculated using the benchmark of comparable companies. Data correspond to adjusted betas of comparable companies, provided by Bloomberg - historical series for the five years preceding the decision year, with monthly observations. Moreover, data from Bloomberg must be unleveraged from the financial structure and later leveraged, using the Harris and Pringle model (equity $\beta = \text{asset } \beta * (1 + D/E)$), using the gearing defined for MEO for the decision year.”*

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **beta of 0.74%** (*vide* table 5) was obtained, the detailed calculation of which may be consulted at Mazars’ report (*vide* annex).

Table 5 – Beta

Comparable companies	5-year equity beta (Harris and Pringle formula)
Belgacom	0.90
BT Group	0.86
Deutsche Telekom	0.77
Elisa O Y J	0.61
Hellenic Telecommunications	1.02
KPN NV	0.35
Magyar Telekom	0.67
Orange	0.77
PT SGPS	0.76
Swisscom	0.60
Telecom Italia	0.80
Telefónica	0.84
Telekom Austria	0.50
Telenor ASA	0.98
TeliaSonera AB	0.73
Average	0.74

Source: Mazars Report

It is particularly important to refer some situations that were identified by consultants when data were collected for the calculation of beta, specifically as regards PT SGPS, having been considered the series with observations corresponding to 4 years and 3 months, removing observations for the last 9 months of 2014, instead of considering a 5-year series, as defined in the methodology.

According to consultants, *“PT SGPS, as far as its performance is concerned for the period after the first quarter of 2014, does not reflect the structure of an operator of the telecommunications sector. The reduction in the total of assets and liabilities of PT SGPS is a sign of the contribution in kind in OI’s*

capital increase that occurred on 5 May 2014, which explains the decrease of most items of the company's consolidated financial position. As a result of that operation, the most expressive asset held by PT SGPS corresponds to the fair value of the investment in OI."

In this framework, consultants considered that the last 9 months should not be considered in the data sample provided by PT SGPS, concluding that such exclusion "does not bring any robustness problems to the analysis, given that a considerable time horizon remains - as far as the comparable sample is concerned."

Notwithstanding the identified limitations, it is deemed that, on the basis of data presented by Mazars, as well as of the calculation carried out, the determined value of beta reflects the best possible estimate for the establishment of the beta for the 2015 financial year.

4.4. Gearing

"The gearing must be calculated using the benchmark of comparable companies. Data correspond to gearings of comparable companies in reports and accounts, as provided for by Bloomberg - historic series for the five years that precede the decision year."

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **gearing of 42.97%** (vide table 6) was obtained, the detailed calculation of which may be consulted at Mazars' report (vide annex).

Table 6 – Gearing

Comparable companies	Average 5-year gearing
Belgacom	26.05%
BT Group	41.98%
Deutsche Telekom	41.33%
Elisa O Y J	44.26%
Hellenic Telecommunications	45.87%
KPN NV	57.01%
Magyar Telekom	35.55%
Orange	41.07%
PT SGPS	56.08%
Swisscom	44.06%
Telecom Italia	50.58%
Telefónica	49.94%
Telekom Austria	49.92%
Telenor ASA	27.47%
TeliaSonera AB	33.41%
Average	42.97%

Source: Mazars Report

It is particularly important to refer some situations that were identified by consultants when data were collected for the calculation of gearing, specifically as regards PT SGPS, having been considered the series with observations corresponding to 4 years and 3 months, removing observations for the last 9 months of 2014, instead of considering a 5-year series, as defined in the methodology.

According to consultants, *“PT SGPS, as far as its performance is concerned for the period after the first quarter of 2014, does not reflect the structure of an operator of the telecommunications sector. The reduction in the total of assets and liabilities of PT SGPS is a sign of the contribution in kind in OI’s capital increase that occurred on 5 May 2014, which explains the decrease of most items of the company’s consolidated financial position. As a result of that operation, the most expressive asset held by PT SGPS corresponds to the fair value of the investment in OI.”*

In this framework, consultants considered that the last 9 months should not be considered in the data sample provided by PT SGPS, concluding that such exclusion *“does not bring any robustness problems to the analysis, given that a considerable time horizon remains - as far as the comparable sample is concerned.”*

Notwithstanding the identified limitations, it is deemed that, on the basis of data presented by Mazars, as well as of the calculation carried out, the determined value of gearing reflects the best possible estimate for the establishment of the gearing for the 2015 financial year.

4.5. Debt premium

“The debt premium must be calculated using the benchmark of comparable companies. Data correspond to Credit Default Swaps spreads (10-year maturity) of bond-issuing comparable companies, provided by Bloomberg - historic series for the two years preceding the decision year, monthly observations.”

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **debt premium of 2.12%** (*vide* table 7) was obtained, the detailed calculation of which may be consulted at Mazars’ report (*vide* annex).

Table 7 – Debt premium

	CDS
CDS - 2013 average	2.38%
CDS - 2014 average	1.86%
Average for 2013 and 2014	2.12%

Source: Mazars Report

It is particularly important to refer some situations that were identified by consultants when data were collected for the calculation of the debt premium, namely only 12 of the 15 comparable companies made debenture loans maturing in 10 years. Companies that did not report issues were: Belgacom, Magyar Telecom and Swisscom, and for this reason no data for these companies were used. As regards the 12 companies considered in the calculation, that made debenture loans, it must be highlighted that some of them presented incomplete data series, namely: (i) Elisa OYJ, Telekom Austria, Telenor ASA and TeliaSonera AB presented incomplete data in 2013 and no data at all in 2014; (ii) Hellenic Telecommunications presented a complete series in 2013, however failed to present data in 2014; and Telecom Itália presented an incomplete series in 2014, but the full amount of data required in 2013.

Specifically as regards PT SGPS, only the series with observations corresponding to 2013 and the first quarter of 2014 was considered, excluding the last 9 months of 2014, instead of considering a two-year series, as defined in the methodology.

According to consultants, “PT SGPS, as far as its performance is concerned for the period after the first quarter of 2014, does not reflect the structure of an operator of the telecommunications sector. The reduction in the total of assets and liabilities of PT SGPS is a sign of the contribution in kind in OI’s capital increase that occurred on 5 May 2014, which explains the decrease of most items of the company’s consolidated financial position. As a result of that operation, the most expressive asset held by PT SGPS corresponds to the fair value of the investment in OI.”

In this framework, consultants considered that the last 9 months should not be considered in the data sample provided by PT SGPS, concluding that such exclusion “*does not bring any robustness problems to the analysis, given that a considerable time horizon remains - as far as the comparable sample is concerned.*” Notwithstanding the identified limitations, it is deemed that, on the basis of data presented by Mazars, as well as of the calculation carried out, the determined value of debt premium reflects the best possible estimate for the establishment of the debt premium for the 2015 financial year.

4.6. Tax rate

“The tax rate to be considered, for the purpose of the calculation of the cost of capital rate, corresponds to the nominal tax rate.”

Taking into consideration the calculation carried out by Mazars, applicable to the 2015 financial year, a **tax rate of 29.50%** (*vide* table 8) was obtained, the detailed calculation of which may be consulted at Mazars’ report (*vide* annex).

Table 8 – Tax rate

Tax rate		
IRC Code (Corporate Income Tax Code)	Article 87 IRC rate	21.00%
	Article 87 State surtax rate	7.00%
	Municipal surtax	1.50%
	Tax rate	29.50%

Source: Mazars Report

5. Calculation of the cost-of-capital rate

Taking into account parameters obtained in the preceding points, the cost-of-capital rate for the 2015 financial year was calculated, by applying the pre-tax weighted average cost of capital³, having been obtained the rate of 9.3247% (*vide* table 9).

Table 9 – Cost-of-capital rate for 2015

Parameters	2015
Risk-Free Interest Rate	2.42%
Risk Premium	2.12%
Beta	0.744
Gearing	9.00%
Debt Premium	42.97%
Tax Rate	29.50%
Cost of equity	9.12%
Pre-tax WACC	9.3247%

Source: ANACOM calculation and Mazars Report

6. Final Decision

On the basis of analyses carried out in the preceding chapters, the value of 9.3247% was obtained for the cost-of-capital rate of MEO Serviços de Comunicações e Multimédia, S.A., for the 2015 financial year.

³ Pre-tax weighted average cost of capital (pre-tax WACC): $CMPC_{pre-tax} = [Ke \times (1 - G) + Kd \times G \times (1 - ti)] \times \frac{1}{(1-ti)}$