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Subject: **State Aid SA.61340 (2021/N) – Portugal**
Pricing model proposed for guarantee schemes under the SNGM (*Sistema Nacional de Garantia Mútua*)

Excellency,

1. PROCEDURE

(1) On 20 November 2020, Portugal pre-notified to the Commission a pricing model for guarantee schemes implemented by Portugal under the national system of mutual guarantees (Sistema Nacional de Garantia Mutua, "SNGM").

(2) The Commission asked for clarifications on 18 January 2021, 23 February 2021, 31 March 2021 and 4 May 2021. Portugal replied on 8 February 2021, 22 March 2021, 15 April 2021 and 12 May 2021.

(3) Following these preliminary exchanges, Portugal formally notified the pricing model on 17 May 2021 for the purposes of legal certainty.

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2. DETAILED DESCRIPTION OF THE METHODOLOGY

(4) Portugal has notified a pricing model proposal for guarantee schemes under the SNGM. The proposed calculation methodology establishes a theoretical market premium for State guarantees, using paragraph 3.4 of the Guarantee Notice[1] as guidance.

(5) The National reinsurance fund ("FCGM") covers a share of the risk held by the SNGM, financed through public funds. The Banco Português de Fomento (the Portuguese National Promotional Bank, hereafter "BPF") is responsible for managing the FCGM, to drive the SNGM, and operates as a shared services centre.

(6) Portugal has established eligibility criteria as follows:

(a) Guarantees are not granted to borrowers in financial difficulty.

(b) The full extent of the guarantee must be properly measured when it is granted, i.e. being linked to specific transactions, be limited in time and have a fixed maximum amount.

(c) The guarantees cover, at most, 80% of each outstanding loan or other financial obligation.

(d) The adequacy of the level of the premiums has to be reviewed at minimum on a yearly basis, assessing the effectively loss rate for an economically reasonable time horizon. A revision process will be conducted annually allowing BPF to adjust the model: on the basis of these data, it will ensure that the premiums paid by the beneficiaries make it, in all probability, self-financing.

(e) The premiums have to cover the normal risks associated with granting the guarantee, the administrative costs of the scheme and a yearly remuneration of capital, in line with market prices.

(f) To ensure transparency, the scheme must ensure the terms on which future guarantees will be granted (i.e. eligibility in terms of sector, size and maximum amount, and duration).

(7) The calculation methodology is only applicable to small and medium-sized enterprises ("SME")[2] and Individual and Micro Companies that also fulfil the criteria of the SME definition. The methodology is not applicable to companies larger than SMEs.

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[1] Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees, OJ C155/10 (20.6.2008).

[2] The term "SME" complies with the term in Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36): these are companies with less than 250 employees and an annual turnover of less than EUR 50 million, or with a total balance sheet of less than EUR 43 million. Within the SME category, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million.

(8) The pricing model encompasses three parts:

(a) Cost of Capital,

(b) Administrative Costs,

(c) Cost of Risk, as a multiplication of Probability of Default ("PD") x Loss Given Default ("LGD").

(9) The model considers 12 rating levels, where 1 is the rating with the lowest risk and 12 the one with the highest risk. For the Cost of Risk calculation, a distinction is made between Individual and Micro Companies, on the one hand, and SMEs, which do not fulfil these criteria, on the other (See below in recital (14) et seqq.).

(10) For the Cost of Capital, the methodology applies a regulatory minimum of 8% and the capital conservation buffer of 2.5% (currently set at 0%)[3]. The combined amount of capital is multiplied by a ratings-based risk premium: 4% for rating categories 1-7, 6% for rating categories 8-9 and 8% for rating categories 10-12.

(11) This results in current recurring annual cost of capital of 0.32% for rating categories 1-7, 0.48% for rating categories 8-9 and 0.64% for rating categories 10-12.

(12) The administrative costs are computed as a rolling average of the costs incurred by BPF in the initial cost of risk assessment, the costs associated with monitoring the risks, and the costs of granting and administrating the guarantee. They include both personnel costs, general administrative expenses and amortisations of systems and software.

(13) For the years 2016-2020, these costs have amounted to respectively 0.42%, 0.41%, 0.44%, 0.43% and 0.15% of the outstanding (live) guaranteed amounts. As a result, the calculation methodology would use a fixed cost of 0.368% in its first year, to be recalculated on an annual basis.

(14) The Cost of Risk is computed as the product of annualized PD and LGD and distinguishes first between company type (Individual and Micro Companies versus other SMEs) and second by rating category.

(15) For Individual and Micro Companies, the following annualized PD is applied for each of the rating categories:

1	2	3	4	5	6	7	8	9	10	11	12
0.250%	0.368%	0.569%	0.846%	0.997%	1.281%	1.581%	2.181%	2.705%	3.368%	4.258%	5.854%

[3] Article 138-D of the Portuguese banking law ("*Regime Geral das Instituições de Crédito e Sociedades Financeiras*") stipulates that credit institutions shall maintain a capital conservation buffer of Common Equity Tier 1 capital equal to 2.5% of their total risk exposure amount. The Banco de Portugal has set the capital conversation buffer to 0% as temporary relief in response to the COVID19-pandemic and is reviewing the buffer requirement on a quarterly basis.

(16) A long-term average LGD of 77.34% is used for these companies. This results in the following table of Expected Losses (EL) as Cost of Risk:

1	2	3	4	5	6	7	8	9	10	11	12
0.193%	0.285%	0.440%	0.654%	0.771%	0.991%	1.223%	1.687%	2.092%	2.605%	3.293%	4.527%

(17) For SMEs, the following annualized PD is applied for each of the rating categories:

1	2	3	4	5	6	7	8	9	10	11	12
0.148%	0.289%	0.505%	0.703%	0.967%	1.063%	1.465%	1.789%	2.143%	2.480%	2.944%	3.298%

(18) A long-term average LGD of 70.16% is used for these companies. This results in the following table of EL as Cost of Risk:

1	2	3	4	5	6	7	8	9	10	11	12
0.104%	0.203%	0.354%	0.493%	0.678%	0.746%	1.028%	1.255%	1.503%	1.740%	2.065%	2.314%

(19) Portugal has arrived at these PD figures using a six- step process: segmentation by client type and rating; outlining the reference period for each segment; counting historical defaults; computing a marginal default rate; estimating a default probability from a best fit curve; annualize the default probability from the weighted average portfolio maturity.

(20) The rating-model with 12 rating levels has been calibrated to each segment in a process of variable selection from financial statements and assignment of weights to the selected variables. Portugal has demonstrated the hierarchical and discriminant properties of the rating model.

(21) Portugal has also performed a rating scale comparison, with respect to the one year annualized PD, where the best rating category 1 corresponds to a Moody's Baa2/Baa3 rating, and the worst rating category 12 corresponds to a Moody's B2/B3 rating respectively for the SME and Individual/Micro company segments. The lower rating categories (13 and 14), corresponding to lower speculative grades on the Moody's scale, are not covered by this methodology.

(22) The estimation of default probabilities follows the Markov methodology (cohort rating methodology) and Portugal has demonstrated that the portfolio's characteristics fit the Markov methodology due to its structure (corporate credits with a significant proportion of revolving facilities and multiple facilities to the same borrower) and composition (balanced and stable cohorts).

(23) The LGDs have also been derived by a multi-step process: a segmentation by historic recovery strategy (cure, liquidation of loan, sale of collateral, inconclusive recovery strategy); the computation of the sum of discounted recoveries to establish the absolute loss and the relative losses of each strategy, the estimation of the probability of each recovery strategy. The LGDs are then calculated, per segment, by a probability-weighted summation of the discounted (absolute and relative) losses of each strategy. The LGDs are re-calibrated on an annual basis using newly available data.

(24) A total guarantee premium is then obtained by summing the components for cost of capital in recital (11), administrative costs listed in recital (13) and the ELs for the appropriate segment in recitals (16) and (18) respectively as follows:

(25) For Individual and Micro Companies:

1	2	3	4	5	6	7	8	9	10	11	12
0.881%	0.973%	1.128%	1.342%	1.459%	1.679%	1.911%	2.535%	2.940%	3.613%	4.301%	5.535%

(26) For other SMEs:

1	2	3	4	5	6	7	8	9	10	11	12
0.792%	0.891%	1.042%	1.181%	1.366%	1.434%	1.716%	2.103%	2.351%	2.748%	3.073%	3.322%

(27) In addition, Portugal implements a governance clause to ensure that no aid is provided to the lenders of the guaranteed loans for the larger sized loans as follows.

(28) For each loan covered by a guarantee, with a notional amount greater than EUR 1.5 million and a maturity of five years or less; or for each loan with a notional amount greater than EUR 1 million and maturity more than five years, Portugal and BPF will compute the implied Credit Default Swap ("CDS") rate of the client from the charged interest rate according to the formula

CDS(Client) = ((R – F) – G * CDS(Portugal)) / (1-G)

where R is the effective interest rate charged to the client; F is the sum of the lender's funding and administration cost; G is the ratio of loan amount being guaranteed (usually 80%).

(29) Portugal and BPF will then compare the computed implied CDS rate to the guarantee premium it is charging under the methodology. If the implied CDS rate deviates from the guarantee premium by more than 100 basis points (1%), then BPF will either ask the lender to lower the effective interest rate so that the deviation between the implied CDS rate and the guarantee premium is less than 100 basis points; or, if no lender is willing to offer the guaranteed loan at such an interest rate, BPF will adjust (increase) the required guarantee premium so that the deviation between the implied CDS rate and the guarantee premium is less than 100 basis points.

(30) BPF and Portugal will not approve the guarantee on the loan before this governance clause is adhered to.

(31) To avoid abuses either by the lending bank or the loan guarantee applicant, the funding cost of the lender will be computed realistically, and the administration cost will not exceed the administrative costs charged by BPF referred to in recital (12). This governance clause is not applicable to lower loan exposures, provided that applications are not artificially split into amounts that would fall below this threshold.

(32) The methodology will also be used for calculating the gross grant equivalent ("GGE") in guarantee schemes by using it to establish a theoretical market premium (i.e. the premium that should be charged in an equivalent non-aid scheme), as described in the Guarantee Notice. The GGE is determined by subtracting the actual guarantee fee charged to the corresponding theoretical market premium.

3. ASSESSMENT OF THE METHODOLOGY

(33) The notification concerns a methodology to be used by Portugal to establish market conform prices for guarantees for SMEs and Individual/Micro companies.

(34) The fees calculated by the methodology will be used in aid free guarantee schemes and for the determination of the aid element in guarantee schemes under the SNGM.

(35) For guarantee schemes to be State aid free, the Guarantee Notice (section 3.4) requires the following conditions to be fulfilled:

(a) The scheme is closed to borrowers in financial difficulty;

(b) The extent of the guarantees can be properly measured when they are granted, i.e. the guarantees must be linked to specific financial transactions, for a fixed amount and limited in time;

(c) The guarantees do not cover more than 80% of each outstanding loan or other financial obligation;

(d) The terms of the scheme are based on a realistic assessment of the risk so that the premiums paid by the beneficiaries make it, in all probability, self-financing.

(e) In order to have a proper and progressive evaluation of the self-financing aspect of the scheme, the adequacy of the level of the premiums has to be reviewed at least once a year.

(f) The premiums charged have to cover the normal risks associated with granting the guarantee, the administrative costs of the scheme and a yearly remuneration of an adequate capital.

(g) In order to ensure transparency, the scheme must provide for the terms on which future guarantees will be granted, such as eligible companies in

terms of rating and, when applicable, sector and size, maximum amount and duration of the guarantees.

(36) Based on the elements described in recital (6), the Commission considers that the relevant conditions listed under section 3.4 (a)-(c) and (e)-(g) of the Guarantee Notice are fulfilled by the proposed methodology.

(37) As regards the self-financing requirement under section 3.4 (d) of the Guarantee Notice, the Commission takes positive note that Portugal has included an adequate remuneration of capital, differentiated by rating category, as part of the demonstration of self-financing requirement, to avoid cross subsidizing between rating categories.

(38) The Guarantee Notice mentions that the capital to be remunerated has to correspond to 8% of the outstanding guarantees[4]. This amount corresponds to the capital requirements laid down in Article 75 of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (OJ L 177, 30.6.2006, p. 1) read in conjunction with Annex VI (paragraph 41 onwards) thereto. As from 1 January 2019, with entry into force and full implementation of the Capital Requirements Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 and the Directive No. 2013/36 (EU) of the European Parliament and of the Council of 26 June 2013, the minimum capital requirements have increased to 10.5%, if a capital conservation buffer applies.

(39) The capital conservation buffer has been decreased by the Banco de Portugal from 2.5% to 0% on a temporary basis as of 1 October 2020. Banco de Portugal reviews the level of the capital conservation buffer on a quarterly basis. The amount of capital to be remunerated is thus currently equal to 8% of outstanding guarantees and will increase to 10.5% once the capital conservation buffer has been reset to 2.5%.

(40) According to the Guarantee Notice, a normal risk premium for equity amounts to at least 400 basis points. As mentioned in recital (10), Portugal will apply risk premiums of 400 to 800 basis points, as a function of the rating category, thus adhering to the requirement of the Guarantee Notice.

(41) The Commission considers that this approach reflects the fact that the cost of capital, and hence the applicable risk premium, is often a function of the risk associated with the exposure of a guarantor.

(42) The Commission thus concludes that the remuneration for the cost of capital is in line with the Guarantee Notice.

(43) The Commission further notes that the administration costs are based on realistic historical estimates and considers using a rolling five year average a realistic way of calculating cost remuneration.

[4] Section 3.4 (f) of the Guarantee Notice.

(44) As regards the cost of risk estimation and the overall appropriateness of the remuneration in line with section 3.4(d) of the Guarantee Notice, the Commission asked Portugal to provide a historical analysis of losses per rating category over smaller time intervals to demonstrate that the pricing methodology would not lead to a cross-subsidizing between rating categories and would be sufficiently robust to avoid losses even over those smaller time intervals, while – on average – generating a sufficient remuneration of capital.

(45) The Commission notes positively that Portugal has verified that the proposed guarantee premiums would have provided for an adequate remuneration of capital for each rating category over each three-year interval in the historical dataset, thus ensuring statistical robustness of the pricing methodology.

(46) Moreover, by using in-depth statistical analysis on the dataset, Portugal has demonstrated the hierarchical and discriminant properties of the rating model, by calibration of the minimum and maximum default probabilities per rating category and by mapping cumulative default probabilities both for the SME and for the Microenterprise category, thus also ensuring consistency in the pricing methodology.

(47) The Commission also notes that the statistical analysis undertaken by Portugal to determine the cost of risk for each rating category, allowing for compensation for excess loss risk over shorter time periods in addition to administration costs, demonstrates that the methodology provides for a sufficient remuneration of capital on the specific SNGM portfolio of smaller companies.

(48) In addition, the Commission notes that Portugal will review the adequacy of the premiums on a yearly basis, by comparing the actual losses after recovery with the received premiums net of the administration and required capital remuneration. An increase of the premium by 0.10%-0.20% is also expected, as soon as the Bank of Portugal re-establishes the 2.5% capital conservation buffer requirement[5].

(49) The self-financing capacity of the scheme will be further supported by the full risk analysis of each new guarantee. On the basis of the risk analysis, the guarantee will be classified in one risk class and the corresponding guarantee premium will be charged. The SNGM is responsible for determining the rating category of the underlying borrower, and the approval mechanism foresees a double check, as both the bank and the BPF will perform an independent credit risk analysis.

(50) Furthermore, the governance structure described in recitals (27) to (31), which links the coupon of the partially guaranteed loan to the guarantee premium, will lead to an increase in guarantee premiums if no bank is willing to take the residual risk at a rate implied by the guarantee premium of the scheme.

[5] An increase of 2.5% in the capital requirement (from 8% to 10.5%), multiplied by an 800 basis points risk premium for the lower rating categories would result in a 0.20% premium increase.

(51) Indeed, the Commission considers that, if the guarantee premium is matched to the implied CDS rate for the client computed from the formula

CDS(Client) = ((R – F) – G * CDS(Portugal)) / (1-G)

where R is the effective interest rate charged to the client; F is the sum of the lender's funding and administration cost; G is the ratio of loan amount being guaranteed (usually 80%), and if F is the result of a realistic estimate for the funding and administration costs charged by a competitive commercial bank, then a high coupon R required by the bank will imply a higher CDS rate for its Client.

(52) The proposed governance structure would thus lead to a higher guarantee premium payable to the SNGM for those clients that are perceived as riskier by the lending banks, which provides for an additional pricing benchmark[6], that will eliminate occurrences of risky companies within the scheme paying an off-market risk premium In consequence, the average guarantee premium of each rating category will also increase.

(53) The lending bank will, as a commercial operator retaining 20% of the amount at risk, take into consideration all relevant factors in terms of credit risk to ensure sufficient remuneration for the risk it undertakes. Specifically, if the lending bank considers that lending to a specific client is more risky, it will demand a higher interest rate. The SNGM will verify in parallel that its proposed guarantee premium corresponds to the implied CDS rate of the client, which is derived from the effective interest rate charged by the lender bank based on the formula in recital (28). Specifically, the SNGM will require a higher guarantee premium for the lenders that pay a higher interest rate (because they are riskier). Therefore, as part of its governance mechanism, the SNGM will increase the required guarantee premium if necessary after concluding that, on the basis of all relevant credit factors, the client can obtain credit for the guaranteed loan only at a higher interest rate.

(54) The mechanism thus ensures that, following the conditions described in recital (28) for loans with a notional amount of more than EUR 1.5 million, both the SNGM and the bank will perform an assessment of the risk of each new guarantee on the basis of all the relevant factors (quality of the borrower, securities, duration of the guarantee, etc.), in line with the second paragraph of section 3.4(d) of the Guarantee Notice.

(55) The Commission therefore concludes therefore that, for loans with a notional amount of more than EUR 1.5 million, the methodology adheres to the conditions of section 3.4(d) of the Guarantee Notice and will lead to a scheme that is, in all probabilities, self-financing.

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[6] The Commission considers the deviation of up to 100 basis points between the implied CDS rate and the effective guarantee premium reasonable, because of the large multiplier effect in the formula linking the loan coupon to the implied CDS rate. In the normal case of an 80% guaranteed loan, a deviation of up to 100 basis points in the implied CDS rate would correspond to a deviation in the loan coupon of up to 20 basis points. Vice-versa, changes in the coupon rate would reflect in a change in the implied CDS rate that is almost 5 times as high.

(56) For loans with a notional amount of less than EUR 1.5 million and a maturity less than 5 years, or loans with a notional amount of less than EUR 1 million, section 3.5 of the Guarantee Notice allows for a simplified approach, by virtue of the scheme being limited to SMEs, in derogation of section 3.4(d) of the Guarantee Notice. In these cases, Portugal will apply a fixed guarantee premium per rating category, but irrespective of the duration, securities or other credit risk considerations, as listed in tables of recitals (25) and (26).

(57) As demonstrated by the statistical analysis described in (47), the scheme will also be self-financing for those loans.

(58) Finally, the Commission notes positively that the governance structure will also ensure that the measure does not provide any selective advantage to the lender, by limiting the size of the coupon as a function of the CDS rate of Portugal and the guarantee premium payable by the company applying for the loan.

(59) The Commission considers the limitation of the governance structure to the larger loan amounts proportionate, as they contain the biggest potential for a measurable advantage to the lender.

4. CONCLUSION

(60) The Commission concludes that the methodology allows an appropriate risk appraisal of the transactions supported by the State for the determination of the guarantee fees and an appropriate calculation of the aid element in guarantees with State aid. The Commission takes the view that the calculation method is in line with the Guarantee Notice.

The Commission has accordingly decided:

The aid comprised in guarantees and calculated according to the approved methodology will therefore be considered as transparent in the meaning of Article 5(2)(c)(ii) of the Commission Regulation (EU) N° 651/2014 ("GBER") and of Article 4(6)(d) under Commission Regulation (EU) N° 1407/2013 (de minimis Regulation).

The methodology is approved for four years from the moment of the adoption of this decision.

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Your request should be sent electronically to the following address:

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Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President