EUROPEAN COMMISSION

Brussels, 23.04.2015
C(2015) 2678 final

PUBLIC VERSION

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Subject: **State Aid SA. 39347 (2014/N) – Portugal**
Support scheme for experimental and pre-commercial renewable marine technologies.

Sir, /Madam,

1. PROCEDURE

(1) Pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (hereinafter referred to as TFEU), Portugal notified the scheme for financing ocean energy and/or offshore renewable energy technologies in the experimental and pre-commercial stage of development. Following pre-notification contacts, the application was submitted electronically on 09 December 2014. Additional information was submitted on 30 January 2015 and on 25 March 2015.

2. DESCRIPTION OF THE MEASURE

2.1. Background and objectives of the scheme

(2) In line with the long term European energy policy and innovation strategy, Portugal notified a scheme aimed at developing new renewable energy technologies.

S. Ex.ª o Ministro dos Negócios Estrangeiros
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(3) The scheme is open to any ocean energy or offshore power producer[1] demonstrating renewable energy generation from technologies in the experimental or pre-commercial stage.

(4) The scheme will support demonstration projects for a total cumulative capacity of 50 MW. Of these 50 MW, 25 MW are already allocated to the first project to be funded under the scheme: the floating offshore project Windfloat.

(5) The remaining 25 MW available in the scheme will be available for other projects demonstrating ocean energy or offshore energy technologies.

2.2. The scheme

(6) The notified measure concerns the feed in tariff Portugal intends to offer to ocean energy and offshore power generation projects in the experimental or pre-commercial stage.

(7) Projects funded under the scheme will be remunerated by a tariff as follows:

a) a base feed in tariff of EUR 80/MWh;

b) If a project benefits from a NER 300 grant and is implemented as a follow up of an experimental project, which is already in operation, the tariff granted to the existing project applies. If the new project is larger than the operating experimental project, this tariff will be limited to the installed capacity of the existing project. The remaining installed capacity of the new project shall be remunerated according to a) above[2].

(8) The feed in tariff may be increased or reduced depending on the specific features of the supported project. More in details:

(a) In the case of plants deemed by the Portuguese authorities of particular technical merit, the remuneration described in point (7) b) above may cover a higher capacity, up to a limit of 5.25 times the installed capacity of the existing experimental project.

(b) If the plant benefits from support from the Portuguese Carbon Fund, the tariff defined in point (7) a) above is increased to EUR 100/MWh.

(c) In the case of power plants receiving support from the Portuguese Carbon Fund, if such support ceases before 20 years of operations and is not replaced by a similar or equivalent fund, remuneration may be increased as from the date support from the Carbon Fund stops. Such increase will be defined by the Secretary of State for Energy taking into account the characteristics of the specific project.

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[1] The technologies supported will fall within the categories of wave energy, tidal energy and offshore wind energy.

[2] The present decision concerns only the aid granted under the notified measure and not any support to existing projects.

(d) In the case of power plants that do not receive further public support other than NER 300 and the Carbon Fund, the guaranteed remuneration can be reduced by EUR 2.5/MWh as from January 2020.

(e) In the case of power plants that receive further public support other than NER 300 and from the Portuguese Carbon Fund, the remuneration may be reduced to an amount corresponding to 80 % of the net annual benefit resulting from the granting of the potential aid, in order to avoid any risk of overcompensation

(9) The scheme may support a range of innovative technologies. The Portuguese authorities note that the costs of technologies in the pre-commercial stage will in any case be higher than for established technologies. Table 1 shows ranges for the levelised costs of electricity (LCOE) generated by some typical ocean technologies as submitted by the Portuguese authorities.

	Marine Wave	**Marine Tidal**	**Wind Offshore**
Values range /MWh (approx.)	EUR 240 – EUR 400	EUR 208 - EUR 400	EUR 112 - EUR 256
Central value / MWh (approx.)	EUR 400	EUR 360	EUR 176

Table 1: levelised generation costs for selected ocean generation technologies. Source: Bloomberg New Energy Finance (data for Q2 – 2013) as reported by the National authorities[3].

(10) The cost ranges in Table 1 are taken from industry estimates. The technologies supported under the scheme fall within the three categories of wave, tidal and offshore wind energy for which these cost estimates are relevant.

(11) The LCOE calculation in Table 1 assumes a 10% equity Internal Rate of Return (IRR) as a hurdle rate for all technologies which reflects the perspective of a "technology agnostic" developer. Portugal considers this hurdle rate appropriate for this type of project.

(12) In order to avoid overcompensation, Portugal will limit the maximum support to a value below the levelised costs of the most deployed conventional ocean technology: offshore wind power.

(13) For this purpose, using the values shown in Table 1, the lower bound for the cost of offshore wind power is determined at approximately EUR 110/MWh. Based on this value, the Portuguese authorities will limit the operating aid available under this scheme at EUR 100/MWh.

(14) Projects qualifying for a level of support higher than EUR 100/MWh under points (7) and (8) above will be individually notified to the Commission or an amendment to the scheme will be notified.

[3] Costs were converted from USD to EUR at a rate of 1.25 EUR/USD. The levelised costs of electricity are calculated according to standard methodology.

(15) Finally, Portugal has confirmed it will not cumulate state aid through the proposed scheme with other state aid where this results in overcompensation and unless the additional funding is specifically approved by the Commission (either through a scheme or individual aid) or covered by the de minimis or block exemption provisions.

2.3. Beneficiaries

(16) The number of ocean energy and offshore power generation projects in the experimental or pre-commercial stage supported is not presently known. However, the scheme will support a maximum of 50 MW of installed capacity including the support already earmarked for the 25 MW Windfloat project.

2.4. Financing: budget, aid intensity and duration

(17) The total budget of the scheme is estimated at EUR 590 million (including support to the Windfloat project).

(18) The scheme was notified until 31 December 2015.

(19) Support will be granted to individual projects for a period of 20 years or until the projects have been fully depreciated according to normal accounting rules.

(20) The scheme will be financed by the tariff for the Global Use of System (UGS), levied on energy consumers proportionally to their energy use. The UGS tariff finances the Global System Management activity which includes:

(i) Costs for the operation of the system.

(ii) Costs arising from energy or environmental policy measures, or measures with a general economic interest.

(iii) Costs from the maintenance of the contractual balance.

(21) The UGS tariff is determined according to the regulation set by the Energy Services Regulatory Authority, ERSE. ERSE is the independent regulatory entity responsible for regulation of the gas and electricity sectors. ERSE is independent in the performance of its duties, without prejudice to the guiding principles of the energy policy established by the Government. ERSE operations are subject to ministerial approval, and its board of directors is appointed by the Council of Ministries.

(22) Producers benefitting from the scheme have the right to sell all electricity generated to the supplier of last resort and be remunerated according to the feed in tariff described in points 7 and 8 above. The supplier of last resort – currently EDP Serviço Universal S.A., a private company subject to a set of public service obligations – is entrusted with the obligation to acquire electricity produced under the scheme.

2.5. Reporting

(23) Portugal will ensure that detailed records regarding all measures involving the granting of aid are maintained. These records will be kept for the duration of the

scheme plus an additional period of ten years, including all information relevant to demonstrating that the terms of the proposed scheme have been complied with.

2.6. National regulatory framework

(24) The measure will be enacted by the Portuguese authorities through the implementing Decree-Law no. 172/2006, of 23 August, as amended by Decree-Law no. 215-B/2012, of 8 August.

3. ASSESSMENT OF THE MEASURE:

3.1. Existence of aid

(25) A measure constitutes State aid in the meaning of Article 107 (1) TFEU if it is "*granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods […] in so far as it affects trade between Member States*."

(26) The scheme is financed through a levy on electricity consumption as described in point (20) above. Portugal acknowledges that the measure is imputable to the Portuguese State. However, Portugal notes that the resources involved cannot be considered under direct control of the State since both the regulatory authority setting the tariff (ERSE) and supplier of last resort (EDP Serviço Universal S.A.) cannot be considered under the control of the State.

(27) The Commission notes that the fact that a measure is not financed directly by the State, but by a public or private body established or appointed by the State to administer the aid does not exclude that that measure is financed through State resources. In particular the State created and imposed the UGS tariff. The State has also defined the purpose and destination of the tariff which serves inter alia to finance the renewable feed in tariff of this scheme.

(28) ERSE actions are subject to ministerial supervision. The Portuguese government appoints ERSE board of directors. EDP Serviço Universal is obliged by the Portuguese Government to purchase power under the conditions laid down by the law. The Portuguese State is therefore in the position of controlling the financial flow of the funds, including the selection of the final beneficiaries. The Commission therefore concluded that the funds involved in the scheme are under control of the State and constitute state resources.

(29) The notified measures favour the generation of electricity from specific ocean and offshore technologies providing selective advantage to the beneficiaries. Electricity is widely traded between Member States and therefore the notified measure is likely to distort the competition on the electricity market and affect trade between the Member States. Therefore the notified measure constitutes State aid in the meaning of Article 107 TFEU.

3.2. Legality

(30) No aid will be granted before a positive Commission decision. Therefore the Portuguese authorities did not put the aid measure into effect before a final Commission decision. Thus, Portugal has complied with the stand-still obligation set out in Article 108(3) TFEU.

3.3. Compatibility under the Guidelines on State aid for environmental protection and energy 2014-2020

(31) The Commission notes that the notified measure aims at providing operating aid to the generation of electricity from renewable sources, ocean and offshore technologies in the experimental and pre-commercial stage of development. As it regards support for electricity from renewable sources, the notified measure falls within the scope of the Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG)[4].

(32) The Commission has therefore assessed the notified measure based on the general compatibility provisions of the EEAG (set out in its section 3.2.) and based on the specific compatibility criteria for operating aid granted for electricity from renewable energy sources (sections 3.3.1 and 3.3.2. of the EEAG).

3.3.1. Objective of common interest

(33) The aim of the notified aid measures is to help Portugal to achieve the long term climate change and energy sustainability targets set by the EU as part of its EU 2030 strategy. The project will help Portugal expand the portfolio of available renewable energy technologies. In line with points 30 and 31 of the EEAG, Portugal defined the objective of the measure and explained the expected contributions toward ensuring a competitive, sustainable and secure energy system.

(34) The Commission considers that the notified aid measures are aimed at an objective of common interest in accordance with Article 107(3)(c) of the Treaty.

3.3.2. Need for state aid, appropriate instrument and incentive effect

(35) In point 107 of the EEAG the Commission acknowledges that *"under certain conditions State aid can be an appropriate instrument to contribute to the achievement of the EU objectives and related national targets"*.

(36) According to point 116 of the EEAG, in order to allow Member States to achieve their targets in line with the EU 2020 and 2030 objectives, the Commission presumes the granting of State aid is an appropriate instrument to promote energy from renewable sources.

(37) In line with point 49 of the EEAG, the incentive effect occurs if the aid induces the beneficiary to change his behaviour towards reaching the objective of common interest which it would not do without the aid.

(38) The Commission notes that without the aid the projects beneficiaries of the scheme would not be financially viable. In particular, the Portuguese authorities demonstrated that the pre-commercial technologies eligible under the scheme would generate electricity at a cost much higher than the expected market price of electricity. In this context, the Portuguese authorities pointed out that the expected levelised cost of electricity would be at least three to four times higher than the estimated wholesale price of electricity. Without aid, power form the pre-commercial projects supported by the scheme cannot compete with electricity

[4] OJ C 200 of 28.06.2014.

generated from other sources and the rate of return for the projects would be negative. The aid therefore allows the beneficiaries to change their behaviour and invest in the demonstration projects.

(39) The Portuguese authorities confirmed that the applicants will be required to submit an application form before being selected for funding under the scheme in a transparent selection process. The Commission notes that the notified measures comply with the obligation to use an application form for aid, as set out in point 51 of the EEAG. The Commission further notes that the application will be submitted before granting aid to the projects and that Portugal confirmed that aid will only be granted to projects that did not start works before the aid application in line with point 50 of the EEAG.

(40) Consequently, the Commission considers that the aid for the notified projects is necessary, granted by means of an appropriate instrument and provides the necessary incentive effect to address the objective of common interest.

3.3.3. Proportionality

(41) According to point 69 of the EEAG, environmental aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection objective aimed for.

(42) The Commission assessed proportionality of the aid under the provisions of Section 3.3.2 EEAG for the operating aid.

(43) The Commission notes that the scheme is notified until December 31st 2015 while the conditions in point 124 and the aid allocation mechanism in point 126 of the EEAG enter into force as of January 1st 2016 and January 1st 2017 respectively.

(44) However, according point 126 of the EEAG, in a transitional phase covering the years 2015 and 2016 Member States should allocate at least 5 % of the planned new electricity capacity from renewable energy sources with open, competitive bidding processes. Portugal submitted that it has already in place a bidding process open to small renewable energy installations.

(45) The capacity to be allocated in 2015 concerns projects up to 250kW and will represents more than 5 % of the expected new electricity capacity from renewable energy sources granted in the year[5]. Therefore, in 2015, Portugal will grant at least 5 % of the new electricity capacity from renewable energy sources through competitive bidding processes. Portugal committed to notify this scheme to the Commission as soon as it is ready.

(46) As specified in point of the 128 EEAG, in the absence of competitive bidding, the Commission assessed proportionality of the aid under the provisions of point 131 of the EEAG.

[5] For example, in 2014, Portugal allocated 24,25MW of new electricity capacity from renewable energy sources through an auction mechanism. The allocated capacity represents more than 5% of the new electricity capacity from renewable energy sources granted in that year.

(47) Portugal demonstrated that the maximum feed in tariff under the scheme will be lower than the production costs of the supported projects. The maximum tariff can be EUR 100/MWh, as the base tariff of EUR 80/MWh can only be topped up by EUR 20/MWh without requiring the project to be notified to the Commission.

(48) In particular, the Commission notes that the production costs of technologies in the experimental and pre-commercial stage will be higher than for deployed technologies. Therefore, the proposed cap of EUR 100/MWh described in point 16 is appropriate to avoid overcompensation as it is below the minimum cost expected for standard offshore wind energy which is the cheapest ocean and wind offshore technology.

(49) Portugal furthermore confirmed that the aid will not be granted after the depreciation period. The Commission considers the IRR used to calculate the LCOE (see point (11) above) in line with normal rates of return in view of the explanation brought forward by Portugal and in view of previous decision practice[6]. As the scheme only runs until end 2015, there is no need for an annual update of the production costs.

(50) In case applicants will require higher compensation than EUR 100/MWh, the projects will be individually submitted to the Commission (or an amendment to the scheme). As described in point (22) above, Portugal committed to avoid cumulation of aid resulting in possible overcompensation.

(51) Bearing in mind the above, it can be concluded that the state aid granted for the notified scheme is proportional.

3.3.4. Distortion of competition and balancing test

(52) According to point 90 of the EEAG, the Commission considers that aid for environmental purposes will by its very nature tend to favour environmentally friendly products and technologies at the expense of other, more polluting ones. Furthermore, the effect of the aid will in principle not be viewed as an undue distortion of competition since it is inherently linked to its very objective.

(53) The Commission further notes that the scheme will support only 50 MW of installed capacity[7]. The electricity generated by the selected projects will be a small fraction of the Portuguese electricity market and even less of the wider electricity market. Therefore, the Commission considers that the notified projects would not have any significant impact on competition in the Iberian electricity market.

(54) According to point 116 of the EEAG, in order to allow Member States to achieve their targets in line with the EU 2020 and 2030 objectives, the Commission presumes the distortive effects of the aid are limited.

(55) The Commission therefore considers that the overall balance of the proposed scheme is positive and the measure does not have undue distortive effects on competition and trade.

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[6] See for example C(2014) 5074 final OJ C 393 of 7 November 2014, p. 9 – 12.

[7] Approximately 0.3% of the total net electricity capacity in Portugal according to estimates of the Portuguese authorities.

3.3.5. Other aspects – Compliance with Article 30 and 110 TFEU

(56) In accordance with point 29 of the EEAG, as the contribution to the compensation mechanism has the aim of financing the support for green electricity, the Commission has examined its compliance with Articles 30 and 110 of the Treaty.

(57) According to the case-law, a charge which is imposed on domestic and imported products according to the same criteria may nevertheless be prohibited by the Treaty if the revenue from such a charge is intended to support activities which specifically benefit the taxed domestic products. If the advantages which those products enjoy wholly offset the burden imposed on them, the effects of that charge are apparent only with regard to imported products and that charge constitutes a charge having equivalent effect, contrary to Article 30 of the Treaty. If, on the other hand, those advantages only partly offset the burden borne by domestic products, the charge in question constitutes discriminatory taxation for the purposes of Article 110 of the Treaty and will be contrary to this provision as regards the proportion used to offset the burden borne by the domestic products[8].

(58) If domestic electricity production is supported by aid that is financed through a charge on all electricity consumption (including consumption of imported electricity), then the method of financing, which imposes a burden on imported electricity not benefitting from this financing, risks having a discriminatory effect on imported electricity from renewable energy sources and thereby violate Articles 30 and 110 of the Treaty[9].

(59) The Portuguese authorities explained that the scheme will be financed by the tariff for the Global Use of System, levied on energy consumption. In this respect, Portugal notes that the UGS tariff covers the costs of a wide range of activities, including costs for maintenance and the operation of the system. Hence, the revenues from the UGS tariff are not necessarily allocated for the financing of the aid schemes for renewable energy. The Commission notes, however:

- that the notified aid scheme is financed through a charge imposed on electricity consumed in Portugal, domestic and imported production alike;
- that the charge is calculated on the amount of electricity consumed (and thereby imposed on the product itself).

(60) Where a Member State finances aid for domestic producers through a charge that is levied on imported and domestic products alike, the charge may have the effect of further exacerbating the distortion on the product market caused by the aid as such. For that matter, it is not necessary that the charge exclusively finances the aid, since the additional distortive effect can already be present if a sizable share of the revenues from the charge is used to finance the aid.

(61) In order to alleviate any concern regarding compliance with Articles 30 and 110 TFEU, Portugal will ensure that producers located in other European Member

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[8] Joined Cases C-128/03 and C-129/03 AEM, EU:C:2005:224, paragraphs 44 to 47; Case C-206/06 Essent, EU:C:2008:413, paragraph 42.

[9] Case 47/69 France v Commission, EU:C:1970:60, paragraph 20. See also Case SA.38632 (2014/N) Germany – EEG 2014 – Reform of the Renewable Energy Law (not yet published in the OJ).

States are eligible from the outset to apply for the support scheme up to a share of 4.4 % of the total capacity (that is 2.2 MW). The percentage figure has been established as a function of Portugal's total imports of green electricity from the neighbouring countries divided by the total electricity consumption in Portugal.

(62) The participation of RES-E producers from other Member States in the support scheme can be available upon the signing of a cooperation agreement between Portugal and the other Member State. The Commission considers that this is in line with point 122 of the EEAG which provides that Member States can set up cooperation mechanisms.

(63) The Commission considers that the opening of the scheme in this manner reduces the risk of possible discrimination against producers of green electricity in other Member States.

(64) In the light of the above, the Commission considers that the financing mechanism of the notified aid measure does not infringe Article 30 or Article 110 TFEU.

3.3.6. Conclusion with regard to the compatibility of the measure

(65) In light of the above, the Commission considers that the notified scheme pursues an objective of common interest in a necessary and proportionate way and that therefore the aid is compatible with the internal market on the basis of the EEAG.

4. CONCLUSION

The Commission has accordingly decided:

not to raise objections to the aid on the grounds that it is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union

If any parts of this letter are covered by the obligation of professional secrecy according to the Commission communication on professional secrecy and should not be published, please inform the Commission within fifteen working days of notification of this letter. If the Commission does not receive a reasoned request by that deadline Portugal will be deemed to agree to the publication of the full text of this letter. Portugal wishes certain information to be covered by the obligation of professional secrecy please indicate the parts and provide a justification in respect of each part for which non-disclosure is requested.

Your request should be sent electronically in accordance with Article 3(4) of Commission Regulation (EC) No 794/2004,

Yours faithfully
For the Commission

Margrethe VESTAGER
Member of the Commission