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In the published version of this decision, some information has been omitted, pursuant to articles 24 and 25 of Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...].

**PUBLIC VERSION**

**WORKING LANGUAGE**

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**Subject: State Aid SA.35378 (2012/N) – Germany**  
**Financing of Berlin Brandenburg Airport**

Excellency,

## **1. PROCEDURE**

- (1) After pre-notification contacts, on 28 November 2012 Germany notified the Commission for reasons of legal certainty the financial measures in relation to the financing of the construction and the costs for putting into operation Berlin Brandenburg Airport ("BER airport") by the Länder of Berlin and Brandenburg and the Federal Republic of Germany. This notification has been registered under the case number SA.35378 (2012/N).

## **2. DESCRIPTION OF THE MEASURE**

### **2.1. Background to the notification**

- (2) Due to historic reasons, Berlin originally had three airports, two in West-Berlin (Tegel and Tempelhof, the latter closed down in 2008) and one in East-Berlin (Schönefeld). Following the reunification of Germany in 1990, the three Berlin airports and their airport managing companies ("*airport managers*") were pooled and later partially merged within a single holding company, Flughafen Berlin Brandenburg GmbH

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("FBB"),<sup>1</sup> which manages the Berlin airport group. This holding company is owned by the Länder of Berlin (37%) and Brandenburg (37 %) and the Federal Republic of Germany (26 %).

- (3) Since the early 1990s, the unbalanced capacity utilisation of the three Berlin airports has taken on great economic importance. The idea of one airport for the Berlin-Brandenburg area was therefore discussed immediately after the reunification of Germany. The aim was to centralise the three existing airports of Schönefeld, Tempelhof and Tegel in one location. Moreover, based on forecasts of passenger numbers for the Berlin airports, it was assumed that an increase in air traffic to and from Berlin could only be handled by a single airport that was of a suitable size and properly equipped with modern technology.
- (4) Therefore, the public authorities initiated the planning procedure in the 1990ies. By 1999, Schönefeld was chosen as the location for the new centralised BER airport. Schönefeld airport was the only airport in the Berlin area that met all the legal and factual requirements for the development of the new centralised airport. In 2006, the construction works for BER airport started on a green field adjacent to the existing Schönefeld airport.
- (5) At the peak of the financial crisis in 2009, the Commission approved state aid (~27 % aid intensity) in favour of the construction of the new BER airport.<sup>2</sup> The measures approved by the Commission comprised of a debt for equity swap of EUR 224 million; and a capital increase of EUR 430 million of the public shareholders; as well as a 100% state guarantee covering long-term debt financing of up to EUR 2.4 billion. At that time the overall construction costs of the airport were expected to be around EUR [...] billion.<sup>3</sup> With the exception of those measures, the Berlin airport manager FBB (also the owner and manager of the new BER airport) had not received any state aid, as it has always been profitable.
- (6) Originally, the opening of the new BER airport was envisaged for 30 October 2011. However, in June 2010 the owners declared that the opening would be delayed to 3 June 2012. In May 2012, it turned out that the opening would again be delayed until 2013, because of unforeseen planning and construction problems. In particular the fire safety system of the main terminal could not be approved by the responsible local authority. In addition, in June 2012, a German court unexpectedly ordered the airport to significantly ameliorate the noise protection for its neighbours. The new opening date was set for 27 October 2013.
- (7) As a consequence of the latest deferral, and the unexpected court judgment, FBB had to revise its construction and financial planning which showed that the airport will have to bear additional costs amounting to EUR 1.2 billion.

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<sup>1</sup> Before the change of the name in 2012, the entity managing the Berlin airport group was called *Flughafen Berlin Schönefeld GmbH*.

<sup>2</sup> Commission decision of 13 May 2009 in State aid case SA.28141 (NN 25/2009) – Germany – Berlin Brandenburg International airport, OJ C 179, 1 August 2009, p. 5 (hereinafter "2009 decision").

<sup>3</sup> Marking of business secrets in the sense of the Commission Communication C(2003) 4582 of 1 December 2003 on professional secrecy in State aid decisions, Official Journal ("OJ") C 297 of 9.12.2003, p.6

## 2.2. *The notified financing measure*

- (8) FBB will not be able to finance the additional costs of EUR 1.2 billion from its own (internal) resources. In particular, because of the delay of the opening of BER airport, the introduction of the new airport charges schedule, which will increase the charges for all users of the new airport and generate additional revenues for FBB, will also be delayed.
- (9) The current percentage of completion of the construction works at the new BER airport stands at 95%. The public owners of FBB have declared their intention to finalise the BER project and are therefore planning to increase the equity of FBB by EUR 1.2 billion.
- (10) The additional financing needs, which enable FBB to finalise the construction and to put into operation the new airport, comprise of the following cost positions:

Measures	Expected costs in EUR million
Noise protection program for neighbours of the airport (in particular through a payment of damages)	[...]
Additional construction works (in particular fire safety system etc.)	[...]
Costs of a delayed opening [...] and provisions for risks	[...]
<b>Total additional financing</b>	<b>1,200</b>

(11) [...]

## 3. ASSESSMENT OF THE AID NATURE OF THE NOTIFIED MEASURE

- (12) By virtue of Article 107(1) of the Treaty of the Functioning of the European Union ("TFEU") "any aid 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 shall, in so far as it affects trade between Member States, be incompatible with the common market."
- (13) The criteria laid down in Article 107(1) TFEU are cumulative. Therefore, in order to determine whether the notified measures constitute State aid within the meaning of Article 107(1) TFEU all of the following conditions need to be fulfilled. Namely, the financial support should
- be granted by the State or through State resources,
  - favour certain undertakings or the production of certain goods (selective economic advantage),
  - distort or threatens to distort competition, and
  - affect trade between Member States.

### 3.1. Severability of the notified measure from previously granted state aid

- (14) In the present case the Commission considers appropriate to start its analysis by checking whether the notified capital injection grants FBB an advantage within the meaning of Article 107(1) TFEU, i.e. an advantage that it would not have received under normal market conditions.
- (15) With regard to the capital injection at stake, Germany argues that FBB's shareholders act as market-economy investors when injecting additional capital of EUR 1.2 billion into FBB. In order to substantiate this argument, Germany has submitted an *ex ante* business plan of the new airport BER.
- (16) In order to establish whether the notified capital injection grants FBB an advantage that it would not have received under normal market conditions, the Commission has to assess, whether in similar circumstances a private market investor would have made the additional capital injection into FBB. If this is the case, it would therefore be void of aid.
- (17) However, in order to carry out this appraisal the Commission first has to assess whether the notified measure can be severed from the state aid previously approved by the Commission (cf. 2009 decision) in the context of the construction of the new airport or must be considered together with that aid.
- (18) In *BP Chemicals v Commission*<sup>4</sup> the Court set out a non-exhaustive list of elements that should be considered in order to determine whether a given measure can be reasonably severed from the previous ones. These elements are (i) the chronology of the measures, (ii) their purpose and (iii) the assessment of the financial and risk situation of the beneficiary undertaking concerned<sup>5</sup>.
- (19) As regards the first element, in *BP Chemicals* the Court of First Instance assessed three capital injections that were made during a relatively short period of time between October 1992 and July 1994. The Court considered the three capital injections as closely related in time.<sup>6</sup>
- (20) In the present case, the measures subject to the 2009 decision were granted in 1996 and between 2005 and 2009. The notified capital injection will be granted at the beginning of 2013 (i.e. four years after the approval of the last measures). Consequently, a substantial period of time has already elapsed between the envisaged capital injection and the measures assessed in the 2009 decision, hence the measures cannot be considered as closely related in time.
- (21) As regards the second element, in *BP Chemicals* the Court of First Instance underlined that three capital injections appeared to serve the common purpose of allowing the restructuring of the company. In the present case, the object of the aid measures granted before 2009 was to finance the construction of the airport. The object of the capital injection at stake is, inter alia, to finance noise protection and to ensure a comprehensive fire safety. All those measures have the same general purpose of making the new BER airport operational.

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<sup>4</sup> Judgment of the Court of First Instance of 15 September 1998 in case T-11/95 – BP Chemicals Limited v Commission of the European Communities (*BP Chemicals*), [1998] ECR II-3235.

<sup>5</sup> Judgment T-11/95 *BP Chemicals v Commission*, point 171.

<sup>6</sup> Judgment T-11/95 *BP Chemicals v Commission*, point 178.

- (22) As regards the third element, the Commission had to assess first the financial and second the risk situation of the beneficiary undertaking. First, as regards the financial situation, the Commission notes that the airport manager FBB was and is in a financially sound situation. Between 2007 and 2011 the compound annual growth rate ("CAGR") of passenger transport at the Berlin airports was 4.7%, whereas the CAGR for all German airports was 2%. Likewise, the cargo turnover at Berlin airports has increased during this period. FBB's operations have been continuously profitable. The average EBITDA margin between 2007 and 2011 is 33%. Except for 2011, FBB has achieved positive earnings after tax. Between 2007 and 2010, the average after-tax profit margin was 5%.
- (23) The reason why the public support measures of 2009 had become necessary was because during the financial crisis and the credit crunch it was not possible to find sufficient funds on the financial market for such a large infrastructure project. Given the continuous profitability of the airport manager FBB and assuming a different environment on the financial market in 2009, the public support measures of 2009 might have been designed and implemented on market terms.
- (24) Second, with regard to the risk situation, Germany states that FBB had included provisions on general and constructions risks in its financial planning, but the circumstances, which caused the additional costs at stake were not known to FBB in 2009 (i.e. at the time the Commission took its 2009 decision).
- (25) The additional noise protection requirements result from a preliminary injunction of the supreme administrative court Berlin-Brandenburg (*Oberverwaltungsgericht*), which was initiated by some citizens only in April 2012. In its previous planning, FBB based its noise protection budget for its neighbours in compliance with the respective applicable rules at that time. The preliminary injunction of June 2012 however required a new level of noise protection, which is unprecedentedly high compared to the standards set at other airports (e.g. Düsseldorf and Munich). The court also requires a higher protection level during the day than during the night. The level of noise protection was set on such a level that for the vast majority of real estates surrounding the airport, the actual noise protection cannot be achieved through construction measures on the houses concerned, but can only be implemented in form of payment of damages to the affected neighbours. Only the smaller remaining part concerns payments to cover direct construction costs at the neighbours' houses.
- (26) Neither when the investment plan for the new airport was set up nor when the Commission took the 2009 decision, FBB could have foreseen the need for an additional budget for noise protection measures going beyond the applicable legal standards, as it did not have a reason to assume that such higher standard will be required, in particular in view of the fact that the applicable legal standards were accepted at other airports. FBB could also not have assumed in 2009 that despite the implementation of noise protection measures of the required standard, it will be faced with legal action of the citizens in the neighbourhood of the airport.
- (27) As regards the additional costs caused by the need for finalising and putting into operation the fire safety system, Germany pointed out that these problems are due to unexpected planning and construction errors. In order to prepare and accompany the construction phase, which began in 2006, FBB had contracted a planning consortium. The construction planning which included the necessary measures for the fire safety system for the main terminal was approved in 2007 by the competent German authorities.

- (28) The technical evaluation of the installed fire safety system was planned for spring 2012, immediately prior to the envisaged opening of the airport. The aim of the planned final evaluation of the fire safety system was to ensure that the testing was done under real life conditions, i.e. with the main terminal ready for use. During these tests, it turned out that due to coordination errors in the planning of this complex system, the construction of the fire safety system was not ready for operation as originally planned. Therefore, the competent German authority could not approve the putting into operation of the fire safety system for an opening in June 2012.
- (29) In its initial financial planning, FBB took provisions for the risk that additional costs related to the fire safety system might occur. The risk that the opening of a large project like the BER airport might be delayed is typically not only monocausal, as numerous subprojects have to be completed successfully to ensure the overall project success. Therefore, according to Germany, it is common practice that construction projects of a size like the BER airport are not covered by an overall project success insurance, since the applicable insurance premiums would increase the construction costs beyond an economically acceptable level.
- (30) FBB has initiated a lawsuit against the planning consortium to claim for damages at an amount of EUR [...] million for the delayed opening of BER airport caused by potential planning errors. However the planning consortium's insurance only covers planning errors for an amount of up to EUR [...] million ("*Planungshaftungsversicherung*"). In view of the envisaged costs relating to the additional construction work in the fire safety system, what FBB might be able to potentially recover from the planning consortium represents only a very small part of that amount. In the event that this claim for damages would lead to an eventual reimbursement to FBB, it would increase FBB's profitability. Germany commits to assess how a market economy investor interested in achieving a return on his investment would proceed, in case FBB receives compensation for damages as a result of the pending lawsuit.
- (31) Neither when the investment plan for the new airport was set up nor when the Commission took the 2009 decision, could FBB have anticipated the need for an potential additional budget for finalising and putting into operation of the fire safety system, as all preceding steps of the planning had been duly implemented and validated by the competent German authorities.
- (32) Finally, the considerable costs for a delay (longer construction period and reduced revenues due to the delayed opening of the new airport) are consequences of the incidents mentioned above and were therefore not known to FBB in 2009.
- (33) In the light of the above, the Commission can conclude that, although the notified measure serves the same purpose of making the new Berlin airport operational as the measures assessed in the 2009 decision, the notified measure can reasonably be severed from the measures approved in its 2009 decision, as it has become necessary only a considerable time after the first measure has elapsed and it relates to the financing of costs that reasonably could not have been foreseen when the investment plan of the airport was set up and when the Commission took its 2009 decision. Consequently, the envisaged measure can be assessed separately from the measures approved by the 2009 decision.

### 3.2. *Application of the market economy investor principle*

- (34) In the present case in order to determine whether the notified measure grants FBB an advantage that it would not have received under normal market conditions, the Commission has to compare the conduct of FBB's shareholders to a market economy investor who can be guided by prospects of profitability in the long-term.<sup>7</sup> In addition, according to the Charleroi Judgement<sup>8</sup> when assessing the measures in question, the Commission has to take into account all the relevant features of the measures and their context.
- (35) The comparison between the conduct of public and private investors must be made by reference to the attitude, which a private investor would have had at the time of the transaction in question, having regard to the available information and foreseeable developments at that time.<sup>9</sup>
- (36) A commonly applied method to evaluate equity investment decisions is considering the equity value of the company. Equity value is the value of a company available to its shareholders. The firm's equity value is calculated by subtracting the value of the firm's debt from the enterprise value. The enterprise value is calculated by summing all future cash flows (free cash flows to the firm) discounted at the appropriate return. The discount rate generally used is the appropriate weighted average cost of capital ("WACC") that reflects the risk of the cash flows. This method is applied as laid out below in 3.2.1.
- (37) The Commission notes that in order to consider whether a market economy investor would have injected the additional capital, a comparison needs to be made between the equity value of the company with the planned investment (the "basic scenario"), where the new BER airport is put into operation and the equity value of the company without the investment (the "counterfactual or alternative scenario"), where the new BER airport would not become operational, but where the existing two Berlin airports Tegel and Schönefeld would remain in business.
- (38) If the equity value in the basic scenario is higher than the equity value in the counterfactual scenario and higher than the invested amount, the capital injection can be considered as market conform.

#### 3.2.1. *Equity Value in the basic scenario: construction and opening of the new BER airport*

- (39) As indicated above, Germany has submitted an *ex ante* business plan to show the expected future prospects of BER airport. The business plan is relevant, because a market economy investor would base his investment decision for the additional capital injection on the current forward-looking expectations of the company. Germany has presented the future cash flows, which can be expected for the years 2012 to 2033, if the business plan is realized, based on conservative assumptions. Although this period is rather long, the Commission considers that it is not unreasonable as a positive return on investments in big infrastructure projects like the present one normally can only be expected over a long time period.

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<sup>7</sup> Case C-305/89 Italy v Commission ("*Alfa Romeo*") [1991] ECR I-1603, paragraph 20; Case T-296/97 *Alitalia v Commission* [2000] ECR II-3871, paragraph 84.

<sup>8</sup> Case T-196/04 Ryanair v Commission [2008] ECR II-3643, paragraph 59 ("*Charleroi Judgement*").

<sup>9</sup> Case C-482/99 France v Commission [2002] ECR I-04397, paragraph 71 ("*Stardust Marine Judgement*").

(40) The key assumptions of the business plan for the basic scenario can be summarised as follows:

- The passenger traffic forecast is based on a compound annual growth rate of passenger traffic, which amounts to [...] % p.a. (the actual CAGR<sub>2007-2011</sub> of the existing Berlin airports was 4.7% p.a.).
- The aviation revenue is calculated on the basis of the passenger traffic forecast, taking into account a possible decline in traffic due to [...] in [...] and [...] and the impact of a possible economic recession in 2013/14. The [...] tariffs [...] was calculated on the basis of a benchmarking exercise with other major German airports (e. g. Frankfurt/ Main, Munich, Stuttgart, Düsseldorf) in order to be able to establish the optimal profit-maximising airport schedule of tariffs that limits the negative impacts on the passenger traffic forecast and would be acceptable for the airlines using BER airport.
- The operating costs are expected to increase in line with the evolution in passenger traffic and infrastructure extensions.
- In addition to the operating costs, the business plan takes into account the capital expenditures for infrastructure extensions (EUR ~[...] million) which are triggered by the increase in passenger volume. According to the business plan, these extensions will be driven by actual passenger demand and realised starting in [...].

(41) The Commission observes that the above assumptions are realistic and conservative because the traffic growth rate used for the calculation is [...] of the historic growth rate of traffic at the Berlin airports and in line with the average historic growth rate of air traffic at German airports in [...]. The growth rate of [...] %, which is used in the calculation, is also only [...] of the growth rate of 4%, which is predicted by the aviation industry for the European aviation market in its long term prognosis.<sup>10</sup> Furthermore, the business plan considers an [...] % and [...] % decline in passenger figures for the years 2013 and 2014 due to an economic recession and [...] at the new BER airport. In addition, the assumptions on the evolution of the operating costs take into account a considerable increase in energy and personnel costs in line with the growth of air traffic. Finally, investments that are already predictable are entirely included in the business plan.

(42) For discounting the future cash flows, Germany has used a WACC of [...] %. The WACC has been calculated as follows:

$$\begin{aligned} \text{WACC} &= \text{equity ratio} \quad * \quad \text{cost of equity} \quad + \quad \text{debt ratio} \quad * \quad \text{cost of debt} \quad * (1 - \text{tax}) \\ &= \quad [ \dots ] \% \quad * \quad [ \dots ] \% \quad + \quad [ \dots ] \% \quad * \quad [ \dots ] \% \quad * \quad [ \dots ] \% \end{aligned}$$

(43) The assumptions underlying the cost of debt are a risk free rate of [...] % (based on the yield of long-term government bonds) and a risk premium of [...] bps based on the 2008 Reference Rate Communication<sup>11</sup> grid, assuming a [...] credit rating and normal collateral.<sup>12</sup>

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<sup>10</sup> Airbus, Global Market Forecast 2012-2031 and Boeing, Current Market Outlook 2012-2031

<sup>11</sup> Communication from the Commission on the revision of the method for setting the reference and discount rates, OJ C 14, 19.1.2008, p. 6

<sup>12</sup> The rating of FBB is between [...] and [...]. The chosen rating of FBB (i.e. [...]) is [...] than the rating of BBB, which was acknowledged in the 2009 Commission decision. In addition, FBB has secured its



- (44) The current long-term loans of FBB have an interest margin of around [...] bps. With regard to the cost of debt secured by the 100 % state guarantee, the risk margin of this part was lowered, due to the guarantee [...] (i.e. the conditions similar to those of large cities or Germany). In order to determine the cost of debt secured by the 100 % state guarantee, the guarantee fee of [...] bps needs to be taken also into account. Consequently, the costs of the secured part of debts amount to EURIBOR plus [...] bps.<sup>13</sup>
- (45) In view of above, the Commission concludes that the costs of debt are based on conservative assumptions.
- (46) The cost of equity is calculated based on the Capital Asset Pricing Model ("CAPM"), which can be considered market practice. The CAPM model provides that the cost of equity of a company would be equal to the risk free rate plus a beta coefficient (representing the sensitivity to market risk for the company) multiplied by the general market risk premium.<sup>14</sup> The beta coefficient was established based on the historical beta coefficients of a peer group of European airports, which are listed on the stock exchange.
- (47) The peer group consists of the following [...] airports: [...]. The historical beta coefficients for these [...] airports were taken from Reuters and were calculated based on [...] observations over the past [...] years. The German authorities performed robustness checks to see whether the coefficients would be different in case of a different observation period or frequency.<sup>15</sup>
- (48) The Commission is of the opinion that, in principle, the estimate of the beta coefficient is to be based on a forward looking basis.<sup>16</sup> In the case at hand, Germany has based itself on historical beta coefficients, but the Commission tested that even for extreme values of the beta coefficients [...], the market economy investor test ("MEIT") would still hold. In other words, the Equity Value would be larger than the

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costs of debt in long run through an interest swap in order to limit the risk of interest rate increases in the future. In addition, the current costs of debt are based on a normal level of collateralisation (i.e. [...] bps) despite a high level of collateralisation (Loss Given Default of <20 %, which would lead to a risk margin of [...] bps according to the 2008 Reference Rate Communication).

<sup>13</sup> See paragraph 60 of the 2009 decision.

<sup>14</sup> CAPM:  $k_{EK} = r_f + \beta_{FBB} \times (r_M - r_f) = [...]$

<sup>15</sup> In simple terms, a beta coefficient shows how risky a stock is relative to the market. Other things being equal, stocks of companies that have (more) debt are more risky than stocks of companies without debt (or that have less debt). This is because even a small amount of debt increases the risk of bankruptcy, and also because any obligation to pay interest represents funds that cannot be used for running and growing the business. In other words, debt reduces the flexibility of management which makes owning equity in the company more risky.

The airports in the peer group have both public and private shareholders and their shares are traded on the exchange. The observed betas are calculated based on the share price (as observed on the exchange). The beta is therefore based on market information. The beta coefficient is calculated on the basis the following formula:

Beta = Covariance ( $r_s, r_b$ ) / Variance ( $r_b$ ) where  $r_s$  is the return on the stock and  $r_b$  is the return on a benchmark index.

Any difference in the debt-to-equity ratio of the airports in the peer group (which could differ for publicly controlled airports) is corrected for. The observed betas are "levered" betas. However, before calculating the appropriate beta for BER airport, the beta coefficients of each of the airports in the peer group was first "unlevered".

After unlevering the betas of the airports in the peer group, the appropriate "industry" beta (e.g. the mean or median of the comparable unlevered betas) was re-levered to take into account the capital structure of FBB. This levered beta is used in the CAPM formula to calculate cost of equity.

<sup>16</sup> See Commission decision of 8 May 2012 in State aid case SA.22668 Ciudad de la Luz studios, recital 73 and annex to the decision, not yet published in the OJ

injected amount and larger than the Equity Value under the counterfactual scenario presented below. Consequently, even if the beta coefficient would be based on forward looking betas, the MEIT would very likely still be satisfied in this case.

- (49) For the general market risk premium, Germany uses [...]%, which is consistent with current capital market studies<sup>17</sup>.
- (50) In view of the above, the Commission notes that the discounting factor (determined as WACC) is based on conservative assumptions taking adequately into account the risk profile of the undertaking concerned and the expected return on investment.
- (51) Discounting the expected cash flows based on the *ex ante* business plan of BER airport by the relevant WACC ([...])% gives the enterprise market value of EUR [...] billion. The equity value of FBB is then calculated by subtracting the debt value of EUR [...] billion from the equity value of EUR [...] billion which amounts to EUR [2-7] billion.
- (52) The Commission takes note that the equity value in the basic scenario is positive. Standing at EUR [2-7] billion, it is clearly larger than the EUR 1.2 billion of capital to be injected.

### ***3.2.2. Equity value in the counterfactual / alternative scenario: BER airport project would be discontinued***

- (53) The Commission observes that in the counterfactual scenario FBB's shareholders would not provide the additional capital and FBB would discontinue the construction of the new BER airport and continue operating the existing Tegel and Schönefeld airports as they stand today; however without the possibility to further extend their capacity (the capacity of Tegel is ~[...] million passengers p.a. and of Schönefeld ~ [...] million passengers p.a.).
- (54) Germany has submitted the expected future cash flows for the hypothetical situation that FBB's shareholders would not provide the additional capital.
- (55) In the same way as for the basic scenario, the ex-ante business plan of the counterfactual scenario is based on the following conservative assumptions:
- the traffic forecast predicts a growth rate of around [...]% p.a.
  - due to limited growth potential and retail/parking facilities the expected revenue is substantially lower as in the basic scenario and
  - the costs for an existing backlog in maintenance investments of around EUR [...] million are also taken into account.
- (56) The Commission observes that based on the expected cash flows under this scenario and the assumed discount factor of [...]%, the Equity Value in the counterfactual scenario is negative and amounts to minus EUR [0.5-2] billion.
- (57) In this context it needs to be considered that mothballing the newly constructed airport would not relieve FBB of the outstanding debts related to the BER airport project

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<sup>17</sup> Recommendation of Institut der Wirtschaftsprüfer IdW or see for example Stehle, Richard: Die Festlegung der Risikoprämie von Aktien im Rahmen der Schätzung des Wertes von börsennotierten Kapitalgesellschaften, Die Wirtschaftsprüfung, Heft 17/2004, S. 906-927.

(despite of the fact that they are secured by a 100% state guarantee). Actually, FBB, in order not to risk a downgrading of its credit worthiness, would have to pay back this debt without being able to generate any revenue with the new airport infrastructure. Due to capacity constraints of the two existing airports, FBB would also face significant opportunity costs.

- (58) Moreover, the implementation of this scenario would immediately create a significant amount of sunk costs for FBB. Consequently, the [...] would [...], which would [...]. As a consequence, this would require an immediate response from the shareholders, as it would otherwise lead to the bankruptcy of FBB.
- (59) The Commission notes that the analysis of Germany shows that the equity value in the basic scenario is higher than the equity value in the counterfactual scenario and, as noted above, the equity value in the basic scenario is also higher than the amount to be invested (EUR 1.2 billion). Consequently, the decision of FBB's shareholders to inject EUR 1.2 billion into FBB is in line with the behaviour of a market economy investor.

### 3.2.3. Sensitivity analyses of the results of the market economy investor test

- (60) However, even though BER airport's *ex ante* business plan is based on conservative assumptions, the Commission is of the opinion that a market economy investor would undertake sensitivity analyses of the basic scenario, i.e. assess the impact of possible developments, negative, as well as positive, on the business plan and consequently the expected return on investment.
- (61) In order to test the sensitivity of the results to the assumptions made by FBB's shareholders, the Commission has requested Germany to stress test the calculated results by considering a more optimistic (best case) and two more pessimistic scenarios (worst cases) than the basic scenario:
- Best Case: a lower WACC ([...]%), a growth rate of [...]%, and an opening of BER airport in October 2013 (i.e. no further delay)
  - Worst case (i): a higher WACC ([...]%), a very low growth rate ([...]%) and an additional delay in opening [...]
  - Worst case (ii): a low growth rate ([...]%) and [...]
- (62) The Commission observes that under the optimistic scenario (best case), the equity value of FBB would be positive amounting to EUR [4-10] billion (compared to EUR [2-7] billion in the basic scenario / base case). With regard to the two pessimistic assumptions (worst cases (i) and ((ii)), the equity value in the basic scenario, i.e. when implementing the envisaged capital measure, is nevertheless still positive and higher than the invested amount of EUR 1.2 billion - as summarised in the following table:

	Equity Value of FBB
<b>Worst case (i):</b> higher WACC ([...]%), very low growth rate ([...]%) and [...] delay in opening	EUR [1.2-5] billion
<b>Worst case (ii):</b> low growth rate ([...]%) and [...]	EUR [1.2-5] billion

- (63) The Commission has also assessed more negative scenarios than those contemplated by the German authorities, cumulating some of the negative developments considered

by them. Even in a scenario with [...], low passenger traffic forecasts for the future and [...] delay in the opening of the new airport; the equity value would be EUR [1.2-5] billion. The following table summarises the results of two variations of worst case scenarios assessed by the Commission:

	Equity Value of FBB
<b>Variation a of the worst case:</b> higher WACC ([...]%), low growth rate ([...] %) and [...]	EUR [1.2-5] billion
<b>Variation b of the worst case:</b> low growth rate ([...]%), [...] and [...] delay in opening	EUR [1.2-5] billion

- (64) In view of the above sensitivity analyses of the business plan and the higher discount factor used, the Commission observes that even under these pessimistic assumptions the equity value is still higher than the equity value in the counterfactual scenario and also higher than the invested amount of EUR 1.2 billion.<sup>18</sup> Applying these pessimistic assumptions to the counterfactual / alternative scenario leads in both worst cases to negative equity values.
- (65) Consequently, the Commission concludes that even when based on pessimistic scenarios, a market economy investor would still undertake the envisaged capital injection.

#### 3.2.4. Comparison of the basic and counterfactual / alternative scenario results

- (66) As previously stated, the basic scenario is not a mutually exclusive option for FBB's shareholders, therefore it is not sufficient that the basic scenario results in a positive equity value, but the shareholders have to choose the option having the highest equity value. In other words, the public shareholders act in line with the market economy investor principle only, if they select the option, which maximises their shareholder (equity) value. In other words, the Commission has to compare whether the equity value in the basic scenario is larger than the injected amount and larger than the equity value under the counterfactual scenario (alternative scenario).
- (67) This assessment is done by comparing the equity values in three different scenarios: (a) a base case scenario, as described in (40) (basic scenario), (b) the worst case scenario (i) as described in (61) and (c) a best case scenario as described in (61). The assumptions of the alternative scenario are described in (55).
- (68) As summarised in the table below, the equity value in the base case scenario is positive, higher than in the alternative scenario and higher than EUR 1.2 billion to be injected into FBB. Moreover, the equity value of the basic scenario is also in the worst and best case scenario higher than EUR 1.2 billion and substantially higher than in the alternative scenario.

[...]

- (69) In view of the results as summarised above, the Commission is of the opinion that the choice of the public shareholder to inject EUR 1.2 billion to finance the finalisation of the construction and the costs associated with putting BER airport in operation is

<sup>18</sup> Because the key value driver of the analyses at stake is the discount rate, the Commission has also calculated the critical WACC, i.e. the WACC as of which the positive equity value would turn into a negative one. Here, the critical WACC would be [...] %. However, on the basis of currently available market data, this calculated critical WACC of [...] % seems to be exaggerated and inappropriate for the investment at hand.

indeed in line with the market economy investor principle and would therefore not constitute an economic advantage to FBB within the meaning of article 107(1) TFEU.

- (70) As one of the cumulative criteria pursuant to Article 107(1) of the TFEU are not fulfilled, the Commission considers that the envisaged capital injection of FBB's shareholders amounting to EUR 1.2 billion does not constitute State aid within the meaning of Article 107(1) of the TFEU.

#### **4. CONCLUSION**

- (71) In the light of the above, the Commission has accordingly decided:

- that the measure does not constitute aid.

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Yours faithfully,  
For the Commission  
Joaquín ALMUNIA  
Vice-President

