# Case No COMP/M.6490 - EADS/ ISRAEL AEROSPACE INDUSTRIES/ JV

Only the English text is available and authentic.

# REGULATION (EC) No 139/2004 MERGER PROCEDURE

Article 6(1)(b) NON-OPPOSITION

Date: 16/07/2012

In electronic form on the EUR-Lex website under document number 32012M6490

#### **EUROPEAN COMMISSION**



Brussels, 16.7.2012 C(2012) 5064 final

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE

ARTICLE 6(1)(b) DECISION

# To the notifying parties

Dear Sir/Madam,

Subject: Case No COMP/M.6490 - EADS/ Israel Aerospace Industries/ JV Commission decision pursuant to Article 6(1)(b) of Council Regulation No 139/2004<sup>1</sup>

1. On 11 June 2012, the European Commission received a notification of a proposed concentration, pursuant to Article 4 of Council Regulation (EC) No 139/2004, by which the undertakings European Advanced Technology S.A. ("EAT", Belgium) controlled by Israel Aerospace Industries Ltd. ("IAI", Israel), and Airbus Invest S.A.S. ("Airbus", France) controlled by the European Aeronautic Defence and Space Company N.V. ("EADS", Netherlands) acquire within the meaning of Article 3 of the Merger Regulation, joint control of a newly created company constituting a joint venture ("JV", Belgium) by way of purchase of shares<sup>2</sup>. IAI and EADS are referred to below as the "Notifying Parties".

# (1) THE PARTIES

2. Airbus Invest S.A.S is a wholly-owned subsidiary of French company Airbus S.A.S, which is active world-wide in civil and military aircraft. EADS, Airbus' ultimate parent company, is active globally in the research, design, development, manufacture,

OJ L 24, 29.1.2004, p. 1 ("the Merger Regulation"). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this decision.

Publication in the Official Journal of the European Union No C 175, 19.6.2012, p. 34.

- modification, sale and servicing of commercial and military aircraft, guided weapons, satellites, drones, space vehicles, electronics and telecommunications equipment.
- 3. IAI is a company wholly-owned by the State of Israel, which is active in the aerospace and defence sectors. Headquartered in Tel Aviv, Israel, IAI is a global supplier of defence and space systems, military and civil aircraft, and airplane maintenance services.

# (2) THE OPERATION

- 4. On 25 April 2012, the Notifying Parties signed a Memorandum of Understanding for the creation of a joint venture that will develop, manufacture and market a new generation of pilot-controlled, semi-robotic pulling tractors, brand-named Taxibot, which will be used to manoeuver commercial airplanes between gate and runway (i.e. to taxi) without using their main engines.<sup>3</sup>
- 5. Airbus will own [...]% of the shares in the JV company, through its wholly-owned subsidiary Airbus Invest S.A.S., whereas IAI group will hold [...]% of the JV's capital through its wholly-owned subsidiary European Advanced Technology S.A.

# (3) CONCENTRATION

- 6. The JV will perform all the functions of an autonomous economic entity on a lasting basis. The JV is set up for an indefinite period of time and it will operate on its own budget, personnel and office space. The JV will have its own management, IP rights and the assets necessary for the development, manufacture and sale of the Taxibot. In line with the practice in high tech industries<sup>4</sup>, the manufacturing and assembly of the components of Taxibot will be outsourced to sub-contractors, including IAI.<sup>5</sup> However, the JV will manage all aspects of the design, coordinate the manufacturing process and provide product specifications to its subcontractors. Likewise, although Airbus may offer general support and advice to the JV's marketing team regarding sales to airlines, the JV will not be dependent on Airbus marketing and commercial department.
- 7. IAI will be entitled to appoint [...] board members whereas Airbus will be entitled to appoint [...] board members.<sup>6</sup> As a general rule, board decisions will be made by simple majority vote. However, key strategic decisions relating to the appointment of senior management, the determination and modification of the JV budget and business plan<sup>7</sup>, will require approval by the board including [...]. As a consequence, [...] will enjoy veto rights on strategic decisions and, thus, the JV will be jointly controlled by the Notifying Parties.
- 8. In light of the above factors, the notified operation constitutes a concentration within the meaning of Article 3(1)(b) and 3(4) of the Merger Regulation.

On 20 September 2010, the Notifying Parties entered into a Cooperation Agreement, in which they recorded their common intention to enter into negotiations for the setting up of a joint venture company, [details of negotiations between the Parties].

<sup>4</sup> COMP M.3349 – *Toshiba / Samsung / JV*, paragraph 4.

The company TLD, an independent third party, will manufacture the core tractor platform, [technical details of manufacturing process].

<sup>&</sup>lt;sup>6</sup> SHA, clauses 4.1.1. and 4.1.3.

<sup>&</sup>lt;sup>7</sup> SHA, clause 4.10.2

#### (4) EU DIMENSION

9. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 2 500 million [EADS: EUR 45 752 million, IAI: EUR 2 374 million]. The aggregate EU-wide turnover of each of at least two of the undertakings concerned is more than EUR 100 million [EADS: EUR [...] million, IAI: EUR [...] million]. In each of at least three Member States, the combined aggregate turnover of all the undertakings concerned is more than EUR 100 million [France: EADS: EUR [...] million, IAI: EUR [...] million; Germany: EADS: EUR [...] million, IAI: EUR [...] million; Italy: EADS: EUR [...] million, IAI: EUR [...] million]. In each of those three Member States the aggregate turnover of each of at least two of the undertakings concerned is more than EUR 25 million (see figures above). The aggregate EU-wide turnover of each of at least two of the undertakings concerned is more than EUR 100 million [EADS: EUR [...] million, IAI: EUR [...] million]. However, none of the undertakings concerned achieves more than two-thirds of their aggregate EU-wide turnover within one and the same Member State. The notified operation therefore has an EU dimension within the meaning of Article 1(3) of the Merger Regulation.

# (5) COMPETITIVE ASSESSMENT

#### **Product market**

- 10. Taxibot is a new product intended to optimise the aircraft taxiing procedure, which currently relies on the use of the aircraft main engines. Taxibot is a towbarless tractor that is connected to the aircraft to taxi it from the gate to the runway, and vice versa.
- 11. The main innovation offered by Taxibot in comparison to the conventional push-back tractors is that the Taxibot will be connected to the aircraft in a way that the pilot can steer the plane using the plane's controls but relying on the Taxibot's motor. By using Taxibot, the aircraft will be able to start its engines just before take-off.
- 12. The use of Taxibot is therefore expected to reduce the inefficiencies associated with the use of the main aircraft engines in the taxiing procedure, in particular by reducing jet fuel consumption and the associated costs, and thereby local emissions and the impact on the environment. The target customers will be airports, ground handling service providers, leasing companies and airlines at their main hubs.
- 13. The Notifying Parties submit that the relevant product market should be considered to be the emerging new market for pilot-controlled semi-robotic tugging tractors. The Notifying Parties consider that although Taxibot partially addresses the same demand as conventional push-back tractors (used for push-back operations at the gate), the two tractor types do not fall within the same relevant product market. In fact, pilot-controlled tractors such as Taxibot offer an entirely new service and the intended use and functionalities of Taxibot go significantly beyond those of conventional push-back tractors. The Notifying Parties submit that conventional push-back tractors cannot be used for taxiing procedures for procedural and technical reasons since (i) they do not allow the pilot to control the aircraft and (ii) they cause significant wear and tear on the aircraft's nose landing gear that could end up damaging the aircraft in the long term. In addition, Taxibot tractors differ from conventional push-back tractors in that they can

\_

The existing aviation regulation requires pilots to be in control of the aircraft once passengers are onboard.

reach higher towing speed than conventional tractors<sup>9</sup> and their price is significantly higher. <sup>10</sup> Some respondents to the market investigation considered that Taxibot could be considered similar to conventional push-back tractors although the majority confirmed that Taxibot is a new product for which no substitutable solutions exist at present. <sup>11</sup>

- 14. The Notifying Parties indicate that there a number of competing research initiatives that aim at developing alternative solutions for optimising the taxiing procedure. As opposed to the Taxibot, which will rely on an off-board tractor to tow the aircraft, the other on-going projects mainly focus on on-board solutions, so that the taxiing of the aircraft will rely on additional electric motors placed inside the aircraft and powered by its auxiliary power unit.
- 15. As compared to Taxibot, such on-board solutions will have the advantage that the aircraft may use them at any airport. Conversely, in view of the size of the investments required to operate a Taxibot fleet (fuel, personnel, maintenance and overhaul costs), the Notifying Parties anticipate that Taxibot will be a viable investment only for [certain airports]. In addition, the Notifying Parties indicate that [certain operational modifications of airports may be required]<sup>13</sup>. A concept for the operation of a Taxibot fleet therefore needs to be developed and approved for each airport, requiring approvals from several stakeholders. On the basis of the Notifying Parties' estimates, in 2012 the potential customer base for Taxibot will include about [...]% of all small airports worldwide and [...]% of all large airports worldwide. In 2020, the Notifying Parties expect that the potential demand for Taxibot will come from about [...]% of the small airports and [...]% of large airports worldwide.
- 16. Moreover, in view of the additional weight represented by the additional electric motors, the Notifying Parties envisage that on-board solutions will be unsuitable for wide-body aircraft<sup>14</sup> travelling on long-haul routes.<sup>15</sup> By contrast, the Taxibot will cover both wide and narrow-body aircraft.

<sup>&</sup>lt;sup>9</sup> Form CO, para. 128, second indent.

Taxibot for narrow-body aircraft is expected to cost ca. US\$ [...] and Taxibot for wide-body aircraft ca. US\$ [...]. The price of conventional push-back tractor ranges from US\$ 200,000 to 500,000 for narrow-body aircraft and between US\$ 700,000 and 1.8 million for wide-body aircraft.

Replies to question 4 of the Commission's questionnaire to customers (Q1). Replies to question 4 of the Commission's questionnaire to competitors (Q2). Replies to question 1 of the Commission's questionnaire to trade associations (Q3).

Competing pipeline products to Taxibot are the Wheeltug concept, developed by a large consortium of undertakings, and the Electric Green Taxi System developed by Safran and Honeywell which inter alia cooperate with Airbus on this. While Wheeltug is to be integrated into the nose landing gear, the Electric Green Taxi System favours integration into the rear landing gear.

The Notifying Parties estimate that a Taxibot fleet for their target airports needs to comprise between [...] narrow-body tractors and between [...] wide-body tractors, depending on the number of short haul/long haul flights and on the configuration/ traffic management at each airport.

A narrow-body aircraft is an aircraft with a single aisle and a cabin width typically of 3 to 4 meters. In contrast, a wide-body aircraft is a larger airliner and is usually configured with multiple travel classes with a fuselage diameter of 5 to 7 meters and twin aisles-

<sup>&</sup>lt;sup>15</sup> Form CO, paras. 164-181, p. 43.

17. The market investigation was not conclusive as to whether on-board and off-board taxiing solutions could be considered to constitute a separate market.<sup>16</sup> For the purposes of this Decision, however, the exact product market definition can be left open as the concentration does not raise serious doubts under any alternative market definition.

# Geographic market

- 18. The Notifying Parties submit that though the question could be left open for the purpose of the present case, the market for pilot-controlled semi-robotic tugging tractors should be considered worldwide in scope. In fact, Taxibot will be delivered from [one manufacturing site] to all customers worldwide; demand is expected to come from worldwide customers and transport costs will represent less than 1% of the overall price.
- 19. For the purposes of this Decision, however, the exact geographic market definition can be left open as the concentration does not raise serious doubts under any reasonable alternative definition.

#### Assessment

- 20. The proposed transaction does not result in any horizontally or vertically affected markets in relation to the scope of the JV activities.<sup>17</sup>
- 21. Taxibot is an entirely new and innovative product which is expected to improve airline operational efficiencies and provide environmental benefits. Since it will create an entirely new product, the transaction is *a priori* unlikely to have negative effects on final consumers.
- 22. Airbus is present, in the closely related market for commercial aircraft as a leading manufacturer of both narrow-body<sup>18</sup> and wide-body<sup>19</sup> aircraft, which are complementary products to Taxibot.<sup>20</sup> The market investigation examined whether competition concerns could arise from the transaction as a result of the strong position of Airbus in the supply of aircraft.

Some of the respondents to the market investigation considered that Taxibot was not a brand-new product and compared it to either existing tractors or other on-board taxiing solutions that are currently being developed. See: replies to question 4 of the Commission's questionnaire to customers (Q1); replies to question 4 of the Commission's questionnaire to competitors (Q2).

The Notifying Parties own certain minority participations in companies which could potentially be considered to be downstream to the JV activities, such as ground-handling services, leasing companies, and airport operators. However, the proposed transaction will not create any significant vertical links between the activity of the JV and the Notifying Parties' existing activities. In addition, among the several vectronics components (i.e. components which relate to the communication between the aircraft pilot and the tractor) used in Taxibot, IAI is active in two such components (the obstacle detection radar and computer) through its wholly-owned subsidiary Elta Systems Ltd. However, the Notifying Parties indicate that these are adapted standard components and that the JV will outsource the Taxibot production.

The Notifying Parties estimate that in 2011 Airbus had [50-60]% of the total market for narrow-body commercial aircraft, whereas Boeing had [40-50]% of the market. The Notifying Parties were not able to estimate what percentage of the supply of such aircraft could be attributed to Embraer.

The Notifying Parties estimate that in 2011 Airbus had [40-50]% of the total market for wide-body commercial aircraft, whereas Boeing had [50-60]% of the market.

The Notifying Parties estimate that in 2011 Airbus had [50-60]% of the total market for large commercial aircraft, whereas Boeing had [40-50]% of the market.

- 23. The majority of third parties who responded to the Commission's investigation were unconcerned about the proposed transaction. Some raised concerns which related to Airbus' ability to foreclose rivals by (i) refusing to certify use of taxibot with aircraft other than Airbus manufactured aircraft; (ii) bundling or tying sales of taxibot with sales of aircraft; and (iii) refusing to certify alternative taxiing technologies for use with Airbus aircraft.
- 24. However such foreclosure is unlikely to arise for a number of reasons.
- 25. Taxibot is equipped with a design which works with both primary aircraft types.<sup>21</sup> In relation to another current supplier of commercial aircraft, Embraer, the Notifying Parties submitted that Embraer's E190 and E195 aircraft are currently on the Taxibot target market.
- 26. Taxibot will primarily be sold to operators of ground handling services (primarily airports), directly or through leasing companies and to a lesser extent, airlines. In particular, airlines would only be likely to consider purchasing Taxibots at their main hub airports<sup>22</sup> where they achieve a high volume of flight operations.<sup>23</sup>
- 27. The Notifying Parties have submitted that the certification process or approval procedure of the compatibility of towbarless tractors with aircraft involves (i) a qualification process consisting of the validation of the technical compatibility of new towbarless tractors with aircraft by the aircraft manufacturer; <sup>24</sup> and (ii) a certification procedure with the competent aviation authorities (primarily the European Aviation Safety Agency ("EASA") and the Federal Aviation Authority ("FAA")). An assessment method has not yet been established for on-board taxiing solutions but according to the Notifying Parties would be based on existing criteria for airborne equipment established by the European Organisation for Civil Aviation Equipment. According to the Notifying Parties, these are multilateral processes involving the EASA and airlines. Airlines in particular are development partners for any taxiing solutions since they have a strong strategic interest in their development. The Commission's market investigation confirmed this view.<sup>25</sup>
- 28. Furthermore, the principle of aircraft interoperability has, according to the Notifying Parties, always been core to the Taxibot strategy and it has been implemented in all its technology development and engineering/design decisions. <sup>26</sup> If Taxibot were only compatible with Airbus aircraft, the joint venture would eliminate around half the

Commercial Assessment of the Taxibot by *Simat, Helliesen & Eichner* on behalf of the Notifying Parties (Annex 5.4.a.), p. 33, 48; cf. on the involvement of leasing companies and calculation of Taxibot demand "Taxibot Project – Gate 1" (Annex 5.4.b.), p. 13.

The Taxibot is equipped: [with connections for Airbus and Boeing airplanes]. Embraer was unable to indicate whether Taxibot is compatible with its aircraft since it has not yet carried out any compatibility studies

Minutes of the call with British Airways Plc, 2 July 2012.

Following test results carried out between these tractors and airlines, Airbus assesses whether certain benchmark criteria (assessment method) are met. According to the Notifying Parties, this assessment method is freely accessible to any interested tractor manufacturer and consists of clear, objective and non-discriminatory criteria.

Taxibot is supported by Lufthansa LEOS, Wheeltug is supported by El Al Airlines as its first customer and The Electric Green Taxi System is supported by Easyjet.

The Notifying Parties indicate that [ administrative steps for certification were undertaken].

potential demand and, as a consequence, significantly reduce its sales potential. In addition, the Taxibot concept would be rendered much less attractive for potential customers, who would be unlikely to make the significant investments required to operate a Taxibot fleet, since Taxibot would not offer a global solution for their entire towing needs.<sup>27</sup>

- 29. The Notifying Parties also indicated that since 2007 Airbus has been exploring the development of efficient on-board and off-board solutions for aircraft taxiing procedures that could meet the demands of airlines for increased jet fuel efficiency and reduced emissions. Further to the signing of a cooperation agreement with IAI in 2010, in 2011 [Airbus actions concerning on-board taxiing solutions]. Boeing has been in discussions with at least one of these potential alternative taxiing solutions providers to consider them for their aircraft.<sup>28</sup>
- 30. In addition, Airbus' incentives will, post-transaction, remain aligned to those of its primary customers (airlines). The Notifying Parties submitted that the turnover from Taxibot sales is forecast to be around EUR [...] per year, whereas Airbus' commercial aircraft division achieved a turnover of EUR 31.2 billion in 2011. Airbus confirmed it will continue to support on-board solutions for taxiing with the highest potential to improve the efficiency of its aircraft, because this will increase the value of its aircraft products to these customers<sup>29</sup>, and hence potential sales.
- 31. Therefore the Commission considers that the proposed transaction does not give rise to serious doubts in relation to the supply of taxiing solutions-controlled semi-robotic tugging tractors or alternative taxiing technology.
- 32. Finally, although EADS group and IAI are both active in the military aircraft, space and missile sectors, the likely size and turnover of the JV (estimated to be around EUR [...] per year) are minimal compared to the overall turnover of each of EADS group and IAI in general, and in the defence sector in particular (around EUR [...] for EADS group and around EUR [...] for IAI). Furthermore, the JV does not have any links with the defence sector (Taxibot is intended only for use with commercial aircraft), and will accordingly not affect the Parties' incentives to compete. Therefore, the Commission concludes that the proposed transaction will not create or reinforce any incentive for the parent companies to coordinate their competitive behaviour on any markets outside the scope of the joint venture. It is therefore concluded that the creation of the proposed JV is not likely to have as an object or as effect the coordination of the competitive behaviour of the parties to the JV.

The Notifying Parties submit that [...] of airports worldwide have potential demand for Taxibot ([...] of worldwide airports with operations of narrow-body aircraft (which is equal to [...] of worldwide airports as all of them have narrow-body operations) as well as [...] of worldwide airports with operations of wide-body aircraft (which is equal to [...] of all world-wide airports) would not have potential demand - see Commercial Assessment of the Taxibot by Simat, Helliesen & Eichner on behalf of the Notifying Parties (Annex 5.4.a., p. 94, 96). See also: Minutes of call with Heathrow Airport, July 2012.

Embraer has not been actively involved in the development process to date but is closely watching the market.

In addition the Commission's market investigation confirmed that airlines can influence purchases by airports (which affect airlines), through Airline Operators' Committees (AOCs) in which airlines are consulted.

# (6) CONCLUSION

33. For the above reasons, the European Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation.

For the Commission (Signed) Joaquín ALMUNIA Vice-President