

AERCAP HOLDINGS N.V.

NOTICE OF THE ANNUAL GENERAL MEETING OF SHAREHOLDERS

Notice is hereby given of the annual general meeting of shareholders of AerCap Holdings N.V. (the "Company") to be held on Thursday May 2, 2013 at 9:30 a.m. (Amsterdam time) at the offices of the Company at AerCap House, Stationsplein 965, 1117 CE Schiphol, The Netherlands (the "Meeting").

The agenda for the Meeting, including proposals made by the Board of Directors, is as follows:

- 1. Opening.
- 2. Report of the Board of Directors on the 2012 financial year (for discussion).
- 3. Adoption of the annual accounts for the 2012 financial year (voting item).
- 4. Reservation and dividend policy (for discussion).
- 5. Release of liability of the directors with respect to their management during the 2012 financial year (voting item).
- Re-appointment of (a) Mr. James N. Chapman (voting item) and (b) Mr. Marius J.L. Jonkhart (voting item) as non-executive directors for an additional term of four years.
- 7. Amendment to the remuneration policy for the non-executive directors (voting item).
- 8. Designation of Mr. Keith A. Helming as the designated person in article 16, paragraph 8 of the articles of association (voting item).
- 9. Appointment of PricewaterhouseCoopers Accountants N.V. as the registered accountants (voting item).
- 10. (a) Authorization of the Board of Directors to repurchase ordinary shares (voting item).
 - (b) Conditional authorization of the Board of Directors to repurchase additional ordinary shares (voting item).
- 11. Reduction of capital through cancellation of the Company's ordinary shares which may be acquired pursuant to the authorizations to repurchase shares (voting item).
- 12. (a) Amendment to the articles of association (article 6 paragraph 1 subparagraph b) (voting item).
 - (b) Amendment to the articles of association (article 21 paragraph 2)

(voting item).

- (c) Designation of each of the Company's directors and each (candidate) civil law notary and lawyer at NautaDutilh N.V. to implement the amendments to the articles of association (voting item).
- 13. Questions.
- 14. Closing.

Copies of the agenda for the Meeting stating the topics to be considered, including the proposed amendments to the Company's articles of association, and other meeting documents can be obtained free of charge by shareholders, others entitled to attend the Meeting and their respective representatives until the close of the Meeting at the offices of the Company and at Broadridge Corporate Issuer Solutions, Inc., the Company's transfer agent, at 1155 Long Island Avenue, Edgewood, NY, 11717, U.S.A. and are also available free of charge during the Meeting. Copies of these documents are also available on the Company's website (www.aercap.com).

The Board of Directors has determined that only shareholders who are shareholders as of April 4, 2013 at the close of business (the "Registration Date") and who are registered in one of the Company's shareholders' registers on that date, or have a valid proxy from such a shareholder, may attend and vote at the Meeting.

For the convenience of the Company's shareholders, the Company will mail this notice of the Meeting, an explanation of the agenda, the annual report for the 2012 financial year, the annual accounts for the 2012 financial year and the draft deed of amendment including the proposed amendments to the Company's articles of association together with a proxy form (the "Proxy Materials") to shareholders who are registered in the Company's shareholders' registers and to beneficial holders of the Company's ordinary shares who hold their shares indirectly through the Depositary Trust Company (collectively, the "Investors") who owned their registered or beneficial shares (collectively, the "Shares") on March 22, 2013. This mailing will allow Investors more time to read and consider the Proxy Materials. However, such Investors' votes will not count unless they remain Investors on the Registration Date.

The Company will make a second distribution of the Proxy Materials on the Registration Date to Investors who acquired their Shares after March 22, 2013 to ensure that all Investors who own the Shares on the Registration Date have an opportunity to vote.

In both cases, Investors who receive the Proxy Materials should vote promptly after they receive the Proxy Materials in accordance with the voting instructions contained in the Proxy Materials to allow sufficient time for the proxies to be received and tabulated.

Investors wishing to exercise their meeting rights by submitting a proxy must return the proxy contained in the Proxy Materials in accordance with the instructions set forth therein no later than 5:00 p.m. (New York time) on April 25, 2013. Investors wishing to exercise their meeting rights in person must (i) notify the Company by submitting an e-mail stating their name and the number of beneficial shares or the number of registered shares they hold to the Company's e-mail address at shareholdersmeeting@aercap.com no later than 5:00 p.m. (New York time) on April 25, 2013 and (ii) in the case of any shares beneficially owned, provide the Company with appropriate evidence of ownership of and authority to vote such shares no later than April 25, 2013.

Access to the Meeting by an Investor or proxy holder is permitted after verification of personal identification.

For further information please see www.aercap.com.

Requests for information can also be sent to: Shareholdersmeeting@aercap.com

The Board of Directors

March 21, 2013