
Annual General Meeting

2010 PROXY - Annual General Meeting of Shareholders

ASM International N.V.

ASM International N.V. (the "Issuer")

This proxy card must be received by Citibank, N.A., at the address indicated below, prior to 9:00 A.M. (EST) on May 17, 2010 for action to be taken.

**ASM International N.V., a company organized under the laws of the Netherlands
Common Shares - Proxy**

**Annual General Meeting of Shareholders - May 20, 2010 at 1:00 P.M. (CET) in the Heian room of Hotel Okura,
Ferdinand Bolstraat 333, Amsterdam, the Netherlands.**

**THIS PROXY IS SOLICITED ON BEHALF OF THE MANAGEMENT BOARD OF ASM INTERNATIONAL N.V. FOR
THE 2010 ANNUAL GENERAL
MEETING OF SHAREHOLDERS**

The undersigned, who is the holder of record of the Common Shares of New York Registry of ASM International N.V. identified on the reverse side of this proxy card, hereby acknowledges receipt of the Notice of 2010 Annual General Meeting of Shareholders and Proxy Statement and hereby appoints **Charles D. (Chuck) del Prado** and **Robert A. Ruijter** and each of them, proxies and attorneys-in-fact, with full power to each of substitution, on behalf and in the name of the undersigned to represent the undersigned at the 2010 Annual General Meeting of Shareholders of the Company to be held on Thursday, May 20, 2010, at 1:00 P.M. (CET) in the Heian room of Hotel Okura, Ferdinand Bolstraat 333, Amsterdam, the Netherlands and at any adjournment or adjournments thereof, and to vote all Common Shares of New York Registry Shares which the undersigned would be entitled to vote if then and there present on the matters and in the manner set forth on the reverse of this proxy card hereby revoking any proxy previously given.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS
FOR THE ANNUAL GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON MAY 20, 2010**

The proxy statement and 2009 Annual Report are available at http://www.asm.com/index.php?option=com_wrapper&Itemid=122.

The New York Registrar and Transfer Agent's Notice of Annual General Meeting of Shareholders, the form of proxy card and the Agenda of the 2010 Annual General Meeting of Shareholders are also available at the above internet address.

Please indicate on the reverse side of this proxy card how your shares are to be voted. This proxy card must be marked, signed and returned to Citibank, N.A. prior to 9:00 A.M. (EST) on May 17, 2010, in order to be counted.

If this proxy card is signed and timely returned to Citibank, N.A. but no specific direction as to voting is marked as to an issue, the undersigned shall be deemed to have given a proxy to vote "FOR" all Proposals and as said proxies deem advisable on such other matters as may come before the Meeting.

The following proposals relate to, and are numbered to correspond to, the numbered agenda items in the Notice of 2010 Annual General Meeting of Shareholders and Proxy Statement:

3. Adoption of the financial statements for the fiscal year ended December 31, 2009.
4. Approval to grant discharge of liability to the members of the Management Board for their management.
5. Approval to grant discharge of liability to the members of the Supervisory Board for their supervision of the Management Board.
6. Approval to appoint Deloitte Accountants B.V. as the Company's independent certified public accountants for the fiscal year ended December 31, 2009.
7. Approval of the proposed remuneration policy for members of the Management Board.
- 8(a). Approval of the reappointment of Charles D. (Chuck) del Prado as a member of the Management Board for a four-year period expiring on the date of the Annual General Meeting in 2014.
- 8(b). Approval of the appointment of Peter van Bommel as a member of the Management Board for a four-year period expiring on the date of the Annual General Meeting in 2014.
- 9(a). Approval of the reappointment of H.W. Kreutzer as a member of the Supervisory Board for a four-year period expiring on the date of the Annual General Meeting in 2014.
- 9(b). Approval of the appointment of Martin C.J. van Pernis as a member of the Supervisory Board for a four-year period expiring on the date of the Annual General Meeting in 2014.
- 11(a). Approval of Amendment to Articles of Association relating to the procedure for appointment of members of the Management Board and Supervisory Board.
- 11(b). Approval of Amendment to Articles of Association relating to the procedure for dismissal of members of the Management Board and Supervisory Board.
- 11(c). Approval of Amendment to Articles of Association relating to proposed legislative changes with respect to shareholder rights.
- 11(d). Approval of Amendment to Articles of Association relating to proposed legislative changes with respect to recent and pending changes to Dutch corporate law and certain technical changes.
13. Approval of shareholders' motion.
- 14(a). Approval to authorize the Management Board for a period of 18 months commencing on the date of the 2010 Annual General Meeting to issue common shares and grant rights to subscribe for common shares.
- 14(b). Approval to authorize the Management Board for a period of 18 months commencing on the date of the 2010 Annual General Meeting to issue common shares and grant rights to subscribe for common shares in connection with the Company's existing stock option plan.
- 14(c). Approval to authorize the Management Board for a period of 18 months commencing on the date of the 2010 Annual General Meeting to deviate from pre-emptive rights with respect to the issuance of common shares.
15. Approval to authorize the Management Board for a period of 18 months commencing on the date of the 2010 Annual General Meeting to repurchase the Company's capital shares.

A Issues ASM International N.V.

The Management Board recommends a vote For all Proposals.

| | For | Against | Abstain | | For | Against | Abstain |
|---------------|--------------------------|--------------------------|--------------------------|----------------|--------------------------|--------------------------|--------------------------|
| Proposal 3 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 11(a) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 11(b) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 11(c) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 11(d) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 13 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 8(a) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 14(a) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 8(b) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 14(b) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 9(a) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 14(c) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proposal 9(b) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proposal 15 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

B Authorized Signatures - Sign Here - This section must be completed for your instructions to be executed.

If these Voting Instructions are signed and timely returned to the Depository but no specific direction as to voting is marked above as to an issue, the undersigned shall be deemed to have directed the Depository to give voting instructions "FOR" all Proposals.

Please be sure to sign and date this Voting Instruction Card.

Please sign your name to the Voting Instructions exactly as printed. When signing in a fiduciary or representative capacity, give full title as such. Where more than one owner, each MUST sign. Voting Instructions executed by a corporation or other entity should be in full name by a duly authorized officer with full title as such.

Signature 1 - Please keep signature within the box

Signature 2 - Please keep signature within the box

Date (mm/dd/yyyy)

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