

AGENDA

for ASM International N.V.'s Annual General Meeting of Shareholders, to be held on Tuesday 15 May 2012, at 2 p.m. CET at the Hilton Hotel, Apollolaan 138, Amsterdam, the Netherlands.

1. Opening / Announcements
2. Report on the financial year 2011
3. Adoption of the Annual Accounts 2011 *
4. Adoption of dividend proposal *
5. Discharge of the members of the Management Board from liability in respect of their management *
6. Discharge of the members of the Supervisory Board from liability in respect of their supervision *
7. Appointment of the Company's auditors for the financial year 2012 *
8. Amendment of the Articles of Association *
9. Composition of the Supervisory Board *
10. Designation of the Management Board as the competent body to issue common shares and rights to acquire common shares and to set aside any pre-emptive rights *
11. Authorization of the Management Board to repurchase shares in the Company *
12. Market valuation of the Company
13. Any other business
14. Closure

* = voting item(s)

EXPLANATORY NOTES TO THE AGENDA

for ASM International N.V.'s Annual General Meeting of Shareholders, to be held on Tuesday 15 May 2012, at 2 p.m. CET at the Hilton Hotel, Apollolaan 138, Amsterdam, the Netherlands.

Agenda Item 2 The Management Board's report on the financial year 2011

This item will be discussed.

The Management Board will report on the business and results of operations for the year ended 31 December 2011.

Agenda Item 3 Adoption of the Annual Accounts 2011

This item will be voted on.

The Statutory Annual Report 2011 (which includes the Annual Report 2011 and the Annual Accounts 2011, as well as the information to be added under section 2:392(1) of the Dutch Civil Code, insofar as applicable to the Company), will be available for inspection by the shareholders from 3 April 2012 at the Company's offices at Versterkerstraat 8 in Almere, the Netherlands and at the ABN AMRO Bank N.V., Gustav Mahlerlaan 10, in Amsterdam, the Netherlands. The Statutory Annual Report 2011 may also be obtained by any shareholder at no charge through the ABN AMRO Bank N.V. (telephone: (+31) (0) 20 344 2000), the Company and at the meeting itself.

The Annual Accounts 2011 have been audited by the Company's accountant, Deloitte Accountants B.V. The Statutory Annual Report 2011 is in English.

Agenda Item 4 Adoption of dividend proposal

This item will be voted on.

A dividend in cash of €0.50 per ordinary share is proposed. Once the dividend has been declared, the dividend will be made available within 14 days after the declaration of the dividend.

Agenda Items 5 and 6 Discharges of liability for the Management and Supervisory Boards

These two items will be voted on.

In accordance with Article 30.4 of the Articles of Association, the General Meeting of Shareholders will be asked to grant the Management Board members a discharge of liability for the policy pursued by them in the financial year 2011 and to grant the Supervisory Board members a discharge of liability for their supervision of that policy.

Agenda Item 7
Appointment of the Company's auditors for the financial year 2012

This item will be voted on.

The external auditor is appointed by the General Meeting of Shareholders each time for one year. On the advice of the Audit Committee and Management Board, the Supervisory Board will propose that the current accountant, Deloitte Accountants B.V., be appointed as the Company's external auditor for the financial year 2012. A representative will be present at the General Meeting of Shareholders on behalf of Deloitte Accountants B.V.

Agenda Item 8
Amendment of the Articles of Association

These items will be voted on.

In accordance with Article 34 of the Articles of Association, the Management Board and the Supervisory Board propose to amend the Articles of Association according to the proposal which, together with the explanatory notes (the "Overview of Proposed Amendments"), has been available for inspection at the Company's offices and at the offices of ABN AMRO Bank N.V., from the day of the notice convening this Annual General Meeting. The Overview of Proposed Amendments has also been posted on the Company's website (www.asm.com).

In accordance with best practice provision IV.3.9 of the Dutch Corporate Governance Code (the "Code"), the proposed amendments to the Articles of Association, as set out in the Overview of Proposed Amendments, will be separately submitted for adoption by the General Meeting of Shareholders as two separate voting items 8(a) and 8(b).

By a vote in favor of any of these proposed amendments the General Meeting of Shareholders shall be deemed to have authorized each member of the Management Board as well as each prospective civil-law notary of Stibbe N.V. in Amsterdam to make any adjustments that are necessary as well as to sign the deed of amendment and to undertake all other activities the authorized person deems necessary or useful.

Agenda Item 8(a) (Proposed) changes with respect to Dutch corporate law.

8(a) Under this agenda item it is proposed to amend the articles reflected in the Overview of Proposed Amendments with the exception of article 22.8 of the Articles of Association.

The proposed amendments relate to the change of bearer shares into registered shares due to certain amendments of the Dutch Securities Giro Transfer Act (*Wet giraal effectenverkeer*) ("SGTA") on 1 January 2011. Pursuant to the SGTA as from 1 January 2013 securities may no longer be issued in the individualized physical bearer form. As a result, it is proposed to replace the bearer shares with registered shares by amending the Articles of Association as reflected in the Overview of Proposed Amendments.

Agenda Item 8(b) Maximum term for Supervisory Board members.

8(b) Pursuant to the final sentence of Article 22.8 of the Articles of Association a Supervisory Board member cannot be appointed for more than three 4 year terms. This provision was included in replication of best practice provision III.3.5 of the Code. However, the

inclusion of this principle in the Articles of Association does not allow the Company to apply the "apply or explain" principle as permitted by the Code.

It is proposed to delete the final sentence of Article 22.8 so as to allow the Company to have flexibility and to propose to the General Meeting to appoint a Supervisory Board member in deviation of provision III. 3.5. of the Code if circumstances so require in the best interest of the Company.

Agenda Item 9 Composition of the Supervisory Board

These items will be voted on.

Agenda Item 9(a) Reappointment of Johan Danneels to the Supervisory Board

- 9(a) In accordance with the applicable rotation scheme the term of Dr. J.M.R. Danneels' mandate expires on the date of this Annual General Meeting. The Supervisory Board proposes to reappoint Dr. J.M.R. Danneels (61) to the Supervisory Board for an additional four-year period expiring on the date of the Annual General Meeting in 2016.

In accordance with Article 22.3 of the Articles of Association and section 133, Volume 2 of the Dutch Civil Code, the Supervisory Board has drawn up the following binding nomination list:

- (1) Dr. J.M.R. Danneels
- (2) Mr. J.M. van den Wall Bake

Johan Danneels was elected a member of the Supervisory Board in 2000. Currently Dr. Danneels serves as Chief Executive Officer at Essensium. In January 2005 he founded Essensium N.V., a spin-off from the research institute IMEC of which he was chairman since 2000. Prior to January 2005 Dr. Danneels served as Groups Vice President of STMicroelectronics and as Corporate Executive Vice President of Alcatel N.V. and Chief Executive Officer of Alcatel Microelectronics. He spent 25 years in Alcatel in different management functions of all major product lines. Dr. Danneels holds a Ph.D. degree in engineering from the Catholic University Leuven, Belgium and a MBA degree from Boston University. Dr. Danneels currently owns no shares in the Company.

With reference to Article 22.9 of the Articles of Association the Supervisory Board is pleased to confirm that Dr. Danneels has more than adequately fulfilled his fiduciary duties as a Supervisory Board member over the past years. Dr. Danneels has in particular focussed on the marketing of technology and on the optimisation of operations of the Company.

Dr. Danneels was first appointed to the Supervisory Board at the AGM in 2000 and has served on the Supervisory Board for three consecutive 4 year terms. Pursuant to section III.3.5 of the Code a Supervisory Board member can serve for a maximum period of three 4 year terms. However, the Code includes best practices only and deviations are possible on the basis of the "apply or explain" principle.

The Supervisory Board is of the opinion that in the case of the nomination of Dr. Danneels for a fourth 4 year term a deviation from the Code is justified because such

deviation is under the circumstances in the best interest of the Company. Dr. Danneels is a well known industry expert. Together with Dr. U. Schumacher who is also nominated for reappointment as a Supervisory Board member, Dr. Danneels represents key industry expertise on the Supervisory Board. The Company calls to mind that in 2008 from within the shareholder base of the Company a strong view was expressed that industry expertise on the Supervisory Board should be extended and which was the reason, amongst others, to propose the appointment of Dr. U. Schumacher in 2008 as a second industry expert on the Supervisory Board. Given the highly specialized and technology intensive nature of the Company's businesses, specific industry expertise on the Supervisory Board is very important.

In the framework of the study into the market valuation of the Company's combined businesses as referred to in agenda item 12, the participation and contribution of Dr. Danneels will be very important.

The Supervisory Board strongly feels that the Company would act against its own interests if the Supervisory Board would no longer have the benefit of Dr. Danneel's knowledge and experience. Consequently, the Supervisory Board unanimously supports the proposed appointment of Dr. Danneels for a subsequent 4 year term.

The nomination of Dr. Danneels is made subject to the condition precedent that the proposed amendment to article 22.8 of the Articles of Association as proposed under agenda item 8b is duly adopted by the general meeting of shareholders. The appointment of Dr. Danneels will have effect as of the date of execution of the corresponding notarial deed of amendment of the Articles of Association.

Mr. J.M. van den Wall Bake is a former attorney and currently advisor of Stibbe N.V. He is 62 years old (born on 14 April 1950) and owns no shares in the Company.

Agenda Item 9(b) Reappointment of Ulrich Schumacher to the Supervisory Board

- 9(b) In accordance with the applicable rotation scheme the term of Dr. U. Schumacher's mandate expires on the date of this Annual General Meeting. The Supervisory Board proposes to reappoint Dr. U. Schumacher (54) for an additional four-year period expiring on the date of the Annual General Meeting in 2016.

In accordance with Article 22.3 of the Articles of Association and section 133, Volume 2 of the Dutch Civil Code, the Supervisory Board has drawn up the following binding nomination list:

- (1) Dr. U. Schumacher
- (2) Mr. H.B.H. Kraak

Ulrich Schumacher was elected as Supervisory Board member in 2008. Currently, Dr. Schumacher is managing partner of CGS and member of the board of directors of Siano, an Israel based semiconductor design company. His previous appointments include serving as CEO and President of Grace Semiconductor Manufacturing Corporation in Shanghai, Operating Partner of Francisco Partners in Menlo Park/USA and President and Chief Executive of Infineon Technologies AG, a worldwide leading semiconductor company. Prior to that, Dr. Schumacher held various management positions at the Semiconductor Group of Siemens AG (1988 - 1999). In 1996, he was appointed President and CEO of Siemens Semiconductor Group, and in 1998, he became a member

of the board of Siemens AG. Dr. Schumacher was born in 1958 in Bergisch Gladbach, Germany. He studied Electrical Engineering and Business Administration at the University of Aachen, Germany, and was awarded a Doctorate of Engineering. Dr. Schumacher currently holds no shares in the Company.

With reference to Article 22.9 of the Articles of Association the Supervisory Board is pleased to confirm that Dr. U. Schumacher has more than adequately fulfilled his fiduciary duties as a Supervisory Board member over the past years. Dr. U. Schumacher has in particular focussed on the audit committee and sales and marketing strategy of the Company.

Mr. H.B.H. Kraak is a former civil-law notary and currently advisor of Simmons & Simmons LLP. He is 62 years old (born on 25 March 1950) and owns no shares in the Company.

Agenda Item 10

Designation of the Management Board as the competent body to issue common shares and rights to acquire common shares and to set aside any pre-emptive rights

These items will be voted on.

- 10(a) In accordance with Articles 5.1 and 5.6 of the Articles of Association, it is proposed that the General Meeting of Shareholders appoints the Management Board, for an 18-month period, to be calculated from the date of the General Meeting, as the body of the Company which, subject to the Supervisory Board's approval, is authorized to issue common shares - including granting the right to subscribe for common shares - at such a price, and on such conditions as determined for each issue by the Management Board, subject to the Supervisory Board's approval as may be required.

The number of common shares which the Management Board shall be authorized to issue shall be no more than 10% of the entire currently issued capital of the Company for common shares in normal cases, and no more than 20% of the entire currently issued capital of the Company for common shares in the case of an issuance related to a merger or acquisition, or to financing instruments regarding which issuing shares or granting rights to subscribe for shares is desirable. Any issuance of shares in connection with stock options granted to employees and the Management Board in accordance with the Company's stock option plan for employees and the stock option plan for the Management Board, will not be taken into account for purposes of applying these limitations.

- 10(b) In accordance with Articles 5.1 and 5.6 of the Articles of Association, it is proposed that the General Meeting of Shareholders appoints the Management Board, for an 18-month period, to be calculated from the date of the General Meeting, as the body of the Company which, subject to the Supervisory Board's approval, is authorized to issue common shares - including granting the right to subscribe for common shares - at such a price, and on such conditions as determined for each issue by the Management Board, subject to the Supervisory Board's approval as may be required, for the purpose of the granting of stock options to employees or the Management Board in accordance with the Company's stock option plan for employees and the stock option plan for the Management Board.

- 10(c) In accordance with Article 7.5 of the Articles of Association, it is proposed that the General Meeting of Shareholders appoints the Management Board, for an 18-month period, to be calculated from the date of the General Meeting, as the body of the Company which, subject to the Supervisory Board's approval, is authorized to limit or exclude any pre-emptive rights of existing shareholders' when common shares or rights to subscribe for common shares are issued.

Agenda Item 11

Authorization of the Management Board to repurchase common shares in the Company

This item will be voted on.

In accordance with Article 8.1 of the Articles of Association, it is proposed that the General Meeting of Shareholders authorizes the Management Board, subject to the Supervisory Board's approval, for an 18-month period, to be calculated from the date of the Annual General Meeting to cause the Company to repurchase common shares in the Company up to a maximum of 10% of the issued capital at a price at least equal to the shares' nominal value and at most a price equal to 110% of the share's average closing price according to the listing on the NYSE Euronext Amsterdam stock exchange during the five trading days preceding the purchase date.

Agenda Item 12

Market valuation of the Company

This item will not be voted on

Shareholders and industry analysts have recently expressed their appreciation on the performance of the Company, in particular on the successful turn around of its front-end business and which has created significant value. However, they also expressed concerns that the financial markets do not adequately recognize the value of the combined businesses (front-end and back-end) of the Company.

The Management Board and the Supervisory Board therefore have decided that the Company will carry out a study into the causes of the present non-recognition by the markets of the value of the combined businesses of the Company. The Company intends to engage a reputable financial adviser for the purpose of assisting the Company in carrying out this study.

Comments by shareholders on the proposed study are welcome.

After completion of the study the Management Board and the Supervisory Board will report to the shareholders on the outcome of the study.

Agenda Item 13

Any other business
