

NANOSPHERE, INC.

Charter of the Compensation Committee of the Board of Directors

This Compensation Committee Charter (this “**Charter**”) was adopted by the Board of Directors (the “**Board**”) of Nanosphere, Inc. (the “**Company**”) on October 26, 2007.

I. PURPOSE

The purpose of the Compensation Committee (the “**Compensation Committee**”) of the Board is to discharge the Board’s responsibilities relating to compensation of executive officers and senior management, including plans and programs relating to cash compensation, incentive compensation, equity-based awards and other benefits and perquisites; to administer any such plans or programs as required by the terms thereof; to review and discuss with management the Compensation Discussion and Analysis (“**CD&A**”) and, based upon such review and discussion, determine whether to recommend to the Board that the CD&A be included in the Proxy Statement or Annual Report on Form 10-K; and to produce the Compensation Committee Report as required by the Securities and Exchange Commission (“**SEC**”) to be included or incorporated by reference in the Proxy Statement of Annual Report on Form 10-K. The Compensation Committee shall ensure that compensation programs are designed to encourage high performance, promote accountability and assure that employee interest are aligned with the interests of the Company’s stockholders.

In addition to the powers and responsibilities expressly delegated to the Compensation Committee in this Charter, the Compensation Committee may exercise any other powers and carry out any other responsibilities as may be required by applicable law, the Nasdaq Stock Market, the Company’s amended and restated certificate of incorporation or amended and restated bylaws or delegated to it by the Board from time to time consistent with the Company’s amended and restated bylaws. The powers and responsibilities delegated by the Board to the Compensation Committee in this Charter or otherwise shall be exercised and carried out by the Compensation Committee as it deems appropriate without requirement of Board approval, and any decision made by the Compensation Committee (including any decision to exercise or refrain from exercising any of the powers delegated to the Compensation Committee hereunder) shall be at the Compensation Committee’s sole discretion. While acting within the scope of the powers and responsibilities delegated to it, the Compensation Committee shall have and may exercise all the powers and authority of the Board.

II. MEMBERSHIP

The Compensation Committee shall be comprised of two or more directors each of whom shall (i) be a member of the Board, (ii) satisfy the independence requirements of the Nasdaq Stock Market, (iii) be a “non-employee director” within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934 (the “1934 Act”), as amended and (iv) be an “outside director” within the meaning of Section 162(m) of the Internal Revenue Code of 1986 (the “Code”), as amended. Members of the Compensation Committee shall be appointed by the Board and may

be removed by the Board in its discretion. Each member of the Compensation Committee shall be appointed by the Board and shall serve until the earlier to occur of his or her resignation or removal or the appointment of such member's successor. The Board shall designate a chairperson of the Compensation Committee.

III. DUTIES AND RESPONSIBILITIES

The Compensation Committee shall have the following authority, duties and responsibilities:

1. *Overall Compensation Strategy.* The Compensation Committee shall review and, as needed modify, the overall compensation strategy and policies for the Company.

2. *Chief Executive Officer Compensation.* The Compensation Committee shall review and recommend to the Board at least annually the corporate goals and objectives relevant to the compensation of the CEO, evaluate the CEO's performance in light of those goals and objectives, and recommend to the Board the CEO's compensation level, including awards pursuant to incentive compensation plans and equity-based plans, based on this evaluation. In determining the long-term incentive component of the CEO's compensation, the Compensation Committee should consider any factors it believes relevant in determining the appropriate level of such compensation for the applicable performance period, including the Company's strategic objectives; the Company's performance and relative shareholder return; the CEO's individual performance, including progress on strategic objectives; the value of similar incentive awards to CEOs of comparable companies; the awards given to the CEO of the Company in past years; and the economic and business conditions in which the Company has been and will be operating.

3. *Other Executive Officer Compensation.* The Compensation Committee shall review and approve at least annually relevant salaries and bonuses of the Company's executive officers (other than the CEO), including awards pursuant to incentive compensation plans and equity-based plans. The Compensation Committee shall consider the recommendations of the CEO with respect to compensation of executive officers and shall have the authority to determine and approve such compensation. The Compensation Committee shall determine whether program elements are properly coordinated and achieve intended objectives; quantify maximum payments to executives under performance-based incentive plans and total payments under a variety of termination conditions, including upon a change-in control; the impact of the tax and accounting treatment of the various forms of compensation; and review trends in executive compensation and, when necessary, approve the revision of existing plans. The Company shall periodically review the need for a Company policy regarding compensation paid to the Company's executive officers in excess of limits deductible under Section 162(m) of the Code.

4. *Director Compensation.* The Compensation Committee shall review and make recommendations to the Board concerning compensation arrangements for non-employee members of the Board and stock ownership guidelines.

5. *Other Employee Compensation.* The Compensation Committee shall periodically review the compensation systems that are in place for employees of the Company.

6. *Incentive and Equity-Based Compensation Plans.* The Compensation Committee shall review and make recommendations to the Board with respect to incentive compensation plans and equity-based compensation plans or material changes to any such existing plans, including setting minimum, target and maximum award levels with respect to annual and long-term incentive awards and shall discharge and administer any such plans as required by the terms thereof. The Compensation Committee shall approve all amendments to, and terminations of, all compensation plans and any awards under such plans and repurchase securities from terminated employees. All plan reviews should include reviewing the plan's administrative costs, reviewing current plan features relative to any proposed new features, and assessing the performance of the plan's internal and external administrators if any duties have been delegated.

7. *Approval of Equity Grants.* The Compensation Committee shall have the authority (i) to approve grants of stock, stock, options, stock purchase rights and similar awards to individuals eligible to receive such grants under the Company's equity compensation plans, (ii) to approve the forms of agreement evidencing such grants, (iii) to interpret and amend such agreements within the terms of the plans, and (iv) to establish policies and procedures for the making and administration of grants and awards under such plans.

8. *Compliance.* The Compensation Committee shall, in consultation with management, oversee regulatory compliance with respect to compensation matters, including overseeing the Company's policies on structuring compensation programs to preserve tax deductibility, and, as and when required, establishing performance goals and confirming that performance goals have been attained for purposes of Section 162(m) of the Internal Revenue Code.

9. *Severance.* The Compensation Committee shall review and recommend to the Board any severance, change-in-control, employment, or similar termination payments proposed to be made to any current or former executive officer of the Company.

10. *Compensation Discussion & Analysis ("CD&A").* The Compensation Committee shall oversee the drafting and review and discuss with management the CD&A and related disclosures required by the SEC, including specific Compensation Committee review and input regarding the discussion of factors important to understanding the objectives, policies and philosophy underlying the executive compensation programs; the allocation of various types of compensation, including short-term and long-term compensation; the specific items of corporate performance taken into account in setting compensation policies and decisions; the factors considered in decisions to increase or decrease executive compensation; the information presented in the Summary Compensation Table and other supporting tabular disclosures, including narrative descriptions as required; and information and descriptive narrative provided in other disclosures, including post-employment payments, director compensation and Compensation Committee governance. The Compensation Committee will also review and decide whether to recommend the final CD&A to the Board for inclusion in the Company's annual report (Form 10-K) or proxy statement.

11. *Annual Compensation Committee Report.* The Compensation Committee shall prepare and approve the Compensation Committee Report required by the rules of the SEC to be furnished with the Company's Proxy Statement or Annual Report on Form 10-K, including a

statement providing whether the Compensation Committee reviewed and discussed the CD&A with management; a statement providing whether, based on the aforementioned review and discussion, the Compensation Committee recommended to the Board that the CD&A be included in the Company's annual report or proxy statement; and a list of the Compensation Committee members below the Compensation Committee Report disclosure.

12. *Appointment and Monitoring of Named Fiduciaries.* With respect to any funded employee benefit plan covering employees of the Company subject to the fiduciary responsibility provisions of the Employee Retirement Income Security Act of 1974, the Compensation Committee shall have the authority to appoint and terminate the named fiduciary or named fiduciaries of such plan shall monitor their performance, unless such fiduciaries are specified in the constituent plan documents.

13. *Other Duties.* The Compensation Committee shall perform any other duties or responsibilities expressly delegated to the Compensation Committee by the Board from time to time relating to the Company's compensation programs.

IV. DELEGATION TO SUBCOMMITTEE

The Compensation Committee may, in its discretion, delegate all or a portion of its duties and responsibilities to a subcommittee of the Compensation Committee, to the extent consistent with the Company's amended and restated certificate of incorporation, amended and restated bylaws and applicable law and rules of markets in which the Company's securities then trade, provided, however, that the Compensation Committee shall not delegate its responsibilities for any matters that involve executive compensation or any matters where it has determined such compensation is intended to comply with Section 162(m) of the Code by virtue of being approved by a Compensation Committee of "outside directors" or is intended to be exempt from Section 16(b) under the 1934 Act pursuant to Rule 16b-3 by virtue of being approved by a Compensation Committee of "non-employee directors."

V. MEETINGS AND PROCEDURES

The Chair (or in his or her absence, a member designated by the Chair) shall preside at each meeting of the Compensation Committee and set the agendas for Compensation Committee meetings. The Compensation Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any applicable provisions of the Company's amended and restated bylaws.

The Compensation Committee shall meet at least twice annually and as often as the Compensation Committee deems desirable. The Compensation Committee shall meet in person or by conference telephone or other communications equipment by means of which all persons participating in the meeting can hear all such participants. A majority of the members of the Compensation Committee shall constitute a quorum for purposes of holding a meeting and the Compensation Committee may act by a vote of a majority of members present at such meeting. When necessary or desirable, the Compensation Committee may take action by unanimous written consent. Any action of the Compensation Committee (other than actions for which the Compensation Committee has sole authority as set forth herein) shall be subject to review and

modification by the Board. Written minutes will be kept of each meeting of the Compensation Committee, which minutes will be filed with the minutes of meetings of the Board and will be available to each member of the Board. The Compensation Committee shall report its recommendations and actions to the Board after each Compensation Committee meeting.

All non-management directors that are not members of the Compensation Committee may attend and observe meetings of the Compensation Committee, but shall not participate in any discussion or deliberation unless invited to do so by the Compensation Committee, and in any event shall not be entitled to vote. The Compensation Committee may, at its discretion, invite to and include in its meetings members of the Company's management, representatives of the independent auditor, the internal auditor, legal counsel, other advisers, any other financial personnel employed or retained by the Company or any other persons whose presence the Compensation Committee believes to be necessary or advisable, provided, however, that no officer or employee of the Company, including the CEO, may be present when his or her compensation is determined. Notwithstanding the foregoing, the Compensation Committee may also exclude from its meetings any persons it deems appropriate, including, but not limited to, any non-management director that is not a member of the Compensation Committee.

The Compensation Committee may retain any independent counsel, experts or advisors (accounting, legal, financial or otherwise) that the Compensation Committee believes to be necessary or advisable. The Compensation Committee may also utilize the services of the Company's regular legal counsel or other advisors to the Company. The Company shall provide for funding, as determined by the Compensation Committee, for payment of compensation to any advisors employed by the Compensation Committee and for ordinary administrative expenses of the Compensation Committee that are necessary or appropriate in carrying out its duties.

The Compensation Committee may conduct or authorize investigations into any matters within the scope of the powers and responsibilities delegated to the Compensation Committee by the Board.

VI. PERFORMANCE EVALUATION

The Compensation Committee shall prepare and provide to the Board an annual performance evaluation of the Compensation Committee, including compliance with this Charter and such other matters as the Compensation Committee may determine. The evaluation to the Board may take the form of an oral or written report by the Compensation Committee chairman or any other member of the Compensation Committee designated by the Compensation Committee to make the report. The Compensation Committee shall review and assess the adequacy of the Compensation Committee Charter annually and propose any necessary changes to the Board.