

XSTREAM SYSTEMS, INC.

COMPENSATION COMMITTEE CHARTER

October 2009

PURPOSE

The purpose of the Compensation Committee (the “Committee”) of the Board of Directors (the “Board”) of XStream Systems, Inc. (the “Company”) is to assist the Board in establishing and implementing the compensation policies of the Company and monitoring compliance with such policies. The Company’s compensation policies are intended to attract, motivate and retain experienced and qualified executives with compensation that is fair in relation to comparable public companies and that recognizes individual merit and overall business results. The policies are also intended to support the attainment of the Company’s strategic objectives by tying the interests of executives with those of stockholders through operational and financial performance goals and equity-based compensation.

MEMBERSHIP

The Committee shall consist of two or more directors. In accordance with The NASDAQ Stock Market (“NASDAQ”) phase-in rules for initial public offerings: (i) at the time of listing on NASDAQ, the Committee shall consist of at least one director who is determined by the Board to be “independent” in accordance with the rules of NASDAQ; (ii) within 90 days of the Company's listing on NASDAQ, a majority of the directors of the Committee shall be determined by the Board to be “independent”; and (iii) within one year of the Company's listing on NASDAQ, each of the directors on the Committee shall be determined by the Board to be “independent.”

A director shall be deemed “independent” if the director is: (i) a “non-employee director” within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934, as amended,¹ (ii) an “outside director” within the meaning of Section 162(m) of the Internal Revenue Code of 1986, as amended,² and (iii) shall otherwise meet the independence requirements of NASDAQ (or other exchange or interdealer electronic quotation service which rules may be applicable to the Company) and applicable law. To the extent the Committee consists of at least three members, one director who is not independent under NASDAQ rules may be appointed to the Committee, subject to the following:

- the director is not a current officer or employee, or a “family member”³ of an officer or employee, of the Company;
- the Board, under exceptional and limited circumstances, determines that such individual’s membership on the Committee is required by the best interests of the Company and its stockholders;
- the Company discloses in the proxy statement for the next annual meeting subsequent to such determination (or in its Form 10-K if the Company does not file a proxy statement) the nature of the relationship and the reasons for that determination; and

¹ SEC Rule 16b-3 defines “non-employee director” as a person who (a) is not currently an officer of the company (or a parent or subsidiary of the company), (b) does not receive significant direct or indirect compensation from the company for any services performed other than services as a director, and (c) has no interest in any significant transactions or business relationships with the company.

² IRC Section 162(m) defines an “outside director” as a director who is not a current or former employee of the corporation and if the director does not receive significant direct or indirect compensation in any capacity other than as a director.

³ Rule 5605(a)(2) of the NASDAQ rules defines “family member” as a person’s spouse, parents, children and siblings, whether by blood, marriage or adoption, or anyone residing in such person’s home.

- such person does not serve under this exception for more than two years.

Notwithstanding the foregoing, under no circumstances shall the Committee consist of more than one non-independent director beyond the phase-in period for initial public offerings described above.

The Committee members shall annually appoint a Chairman of the Committee.

MEETINGS AND ATTENDANCE

The Committee shall meet as frequently as circumstances dictate. Members of the Committee should endeavor to be present, in person or by telephone, at all meetings; however, a majority of Committee members shall constitute a quorum. All non-management directors who are not members of the Committee may attend meetings of the Committee, but may not vote. In addition, the Committee may invite to its meetings any director, member of management of the Company, and such other persons as it deems appropriate in order to carry out its responsibilities. The Committee may also exclude from its meetings any persons it deems appropriate, however no member of management shall be present at the meeting, or portion of the meeting, at which his or her compensation or performance is discussed.

MINUTES OF MEETINGS AND CONSENT TO ACTION

Minutes of each meeting shall be prepared and sent to Committee members and presented to Company directors who are not members of the Committee. Any action required or permitted to be taken at a meeting of the members of the Committee may be taken without a meeting if a consent in writing setting forth the action is signed by all of the members of the Committee. Such consent shall have the same force and effect as a unanimous vote. The Committee will file all written consents with the minutes of the proceedings of the Committee.

All actions of the Committee will be reported to the Board at the next meeting following such action. In addition, the Committee will provide an annual report to the Board regarding the status and disposition of its duties for the year.

KEY RESPONSIBILITIES

Executive Compensation. The primary components of executive compensation are industry competitive salaries, bonuses of cash and/or stock options based on annual operational and financial objectives and on individual merit, and restricted stock, restricted stock units and stock option grants to executives when they are hired and periodic retention grants of such incentives. In setting compensation, the Committee shall consider individual contributions, teamwork and performance level as well as the executive's total compensation package, including insurance and other benefits. The Committee's responsibilities with respect to compensation of the executive officers and other key employees of the Company include the following:

1. Meet at least annually to review the total compensation package of the Chief Executive Officer and other members of senior management, and recommend for approval by the independent directors of the Board the compensation for the Chief Executive Officer and other members of senior management and key employees for the upcoming year.
2. Meet at least annually to discuss the performance evaluation of the Chief Executive Officer based on achievement of performance objectives established in the prior year and individual merit. Based on this evaluation, recommend for approval by the independent directors of the Board the annual cash and/or stock option bonus compensation for the Chief Executive Officer.
3. Meet at least annually with the Chief Executive Officer and other senior management to discuss the performance evaluation of senior management and other key employees based on achievement of performance objectives established in the prior year and individual merit. Based on these evaluations, determine the annual cash and/or stock option bonus compensation for senior management and other key employees, other than the Chief Executive Officer.
4. Meet at least annually to develop appropriate performance goals for the Chief Executive Officer and other members of senior management for the next year for purposes of determining bonus compensation. The Chief Executive Officer may participate in meetings of the Committee held to discuss performance goals for the

other members of senior management. The chair of the Compensation Committee will present the performance goals to the independent directors for approval.

5. Review at least annually market data to assess the Company's competitive position for all components of compensation for the Chief Executive Officer and senior management to ensure the Company is competitive with comparable public companies.

6. Prepare the "Report of the Compensation Committee" to be included in the Company's proxy statement, as required by the rules of the Securities and Exchange Commission.

Equity Plans. With respect to the administration of any stock option and restricted stock plan, employee stock purchase plan, profit-sharing plan or other, similar plan of the Company (a "Plan"), the Committee shall:

1. Have and is hereby delegated the full power and authority (a) to administer any Plan, including, without limitation, the power to select persons to whom grants thereunder are made, the power to determine the terms and type of any such grant under any discretionary-grant plan (including the number of shares subject to such grant), the power to establish vesting schedules and the type and amounts of consideration, if any, paid to the Company for any stock issuable under any Plan and the power to otherwise administer any Plan.

2. Recommend to the Board the adoption of amendments to any Plans or modifying or canceling any existing grants under such Plans.

3. Review annually the sufficiency of the shares available for grant under the Plans based on the Company's goals for hiring, bonus and retention grants, and assess the Company's competitive position with respect to levels of equity compensation, vesting schedules and other terms with comparable public companies.

Director Compensation. The Committee shall annually review and recommend director compensation, including cash payments, equity awards and other benefits. The Committee shall make recommendations to the Board. In considering director compensation and other benefits, the Committee may take into consideration the relative responsibilities of directors in serving the Board and its various committees and the status of the Board's compensation in relation to similarly situated companies. Directors who are Company employees shall not be compensated for their services as directors.

Consultants. The Committee has the power and authority to retain consultants of its selection to advise it with respect to the Company's salary and incentive compensation and benefits programs. It shall have the sole authority to approve the consultants' fees and other retention terms.

The Committee shall review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for approval.

In addition, the Committee shall perform such other functions as necessary and appropriate under law, the rules of NASDAQ (or other exchange or interdealer electronic quotation service which rules may be applicable to the Company), the Company's amended and restated certificate of incorporation or amended and restated by-laws and the resolutions and other directives of the Board.