

## **GSI LUMONICS INC.**

### **BY-LAW NUMBER 1**

A by-law relating generally to the regulation of the affairs of GSI LUMONICS INC.

**BE IT ENACTED AND IT IS HEREBY ENACTED** as by-law Number 1 of GSI Lumonics Inc. (hereinafter called the "Corporation") as follows:

#### **DEFINITIONS**

1. In this by-law and all other by-laws of the Corporation, unless the context otherwise specifies or requires:

- (a) "Act" means the Business Corporations Act, Statutes of New Brunswick, 1981, c. B-9.1, as from time to time amended, and every statute that may be substituted therefor and, in the case of such amendment or substitution, any reference in the by- Jaws of the Corporation shall be read as referring to the amended or substituted provisions therefor;
- (b) "articles" means the articles, as from time to time amended, of the Corporation;
- (c) "by-Jaw" means any by-Jaw of the Corporation from time to time in force and effect;
- (d) "director" means an individual occupying the position of director of the Corporation and "directors", "board of directors" and "board" includes a single director;
- (e) "unanimous shareholder agreement" means an agreement as described m subsection 99(2) of the Act  
or a declaration of a shareholder described in subsection 99(3) of the Act;
- (f) words importing the singular number only shall include the plural and vice versa; words importing the masculine gender shall include the feminine and neuter genders and vice versa; words importing persons shall include bodies corporate, corporations, companies, partnerships, syndicates, trusts and any number or aggregate of individuals;
- (g) the headings used in any by-law are inserted for reference purposes only and are not to be considered or taken into account in construing the terms or provisions thereof or to be deemed in any way to clarify, modify or explain the effect of any such terms or provisions; and
- (h) any term contained in any by-Jaw which is defined in the Act shall have the meaning given to such term in the Act.

#### **REGISTERED OFFICE**

2. The Corporation may from time to time by resolution of the board of directors change the location of the address of the registered office of the Corporation to another place within New Bmnswick.

## CORPORATE SEAL

3. The Corporation may have one or more corporate seals which shall be such as the board of directors may adopt by resolution from time to time.

## DIRECTORS

4. *Number and Powers.* There shall be a board of directors consisting of such fixed number, or minimum and maximum number, of directors as may be set out in the articles or as may be determined as prescribed by the articles, or failing that, as specified by by-law. Subject to any unanimous shareholder agreement, the directors shall manage the business and affairs of the Corporation and may exercise all such powers and do all such acts and things as may be exercised or done by the Corporation and are not by the Act, the articles, the by-laws, any special resolution of the Corporation, any unanimous shareholder agreement or by statute expressly directed or required to be done in some other manner.

5. *Vacancies.* If the number of directors is increased, the resulting vacancies shall be filled at a meeting of shareholders duly called for that purpose. Notwithstanding the provisions of paragraph 7 of this by-law and subject to the provisions of the Act, if a vacancy should otherwise occur in the board, the remaining directors, if constituting a quorum, may appoint a qualified person to fill the vacancy for the remainder of the term. In the absence of a quorum the remaining directors shall forthwith call a meeting of shareholders to fill the vacancy pursuant to subsection 69(2) of the Act. Where a vacancy or vacancies exist in the board, the remaining directors may exercise all of the powers of the board so long as a quorum remains in office.

6. *Duties.* Every director and officer of the Corporation in exercising his powers and discharging his duties shall

- (a) act honestly and in good faith; and
- (b) exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances, in the best interests of the Corporation.

7. *Qualification.* Every director shall be an individual nineteen (19) or more years of age and no one who is of unsound mind and has been so found by a court in Canada or elsewhere or who has the status of a bankrupt or who has been convicted of an offence under the Criminal Code, chapter C-34 of the Revised Statutes of Canada, 1970, as amended from time to time, or the criminal law of any jurisdiction outside of Canada, in connection with the promotion, formation or management of a corporation or involving fraud (unless three (3) years have elapsed since the expiration of the period fixed for suspension of the passing of sentence without sentencing or since a fine was imposed, or unless the term of imprisonment and probation imposed, if any, was concluded, whichever is the latest, but the disability imposed hereby ceases upon a pardon being granted) shall be a director.

8. *Term of Office.* A director's term of office shall be from the meeting at which he is elected or appointed until the annual meeting next following or until his successor is elected or appointed, or until, if earlier, he dies or resigns, or is removed or disqualified pursuant to the provisions of the Act.

9. *Vacation of Office.* The office of a director shall ipso facto be vacated if

- (a) he dies;
- (b) by notice in writing to the Corporation he resigns his office and such resignation, if not effective immediately, becomes effective in accordance with its terms;
- (c) he is removed from office in accordance with section 67 of the Act; or
- (d) he ceases to be qualified to be a director.

#### 10. ***Election and Removal.***

(1) Directors shall be elected by the shareholders by ordinary resolution in general meeting on a show of hands unless a poll is demanded and if a poll is demanded such election shall be by ballot. All the directors then in office shall cease to hold office at the close of the meeting of shareholders at which directors are to be elected. A director if qualified, is eligible for re-election.

(2) Subject to sections 65 and 67 of the Act, the shareholders of the Corporation may by ordinary resolution at an annual or a special meeting remove any director before the expiration of his term of office and may, by a majority of the votes cast at the meeting, elect any person in his stead for the remainder of his term.

(3) Each shareholder entitled to vote at an election of directors has the right to cast a number of votes equal to the number of votes attached to the shares held by him multiplied by the number of directors to be elected, and he may cast all such votes in favour of one candidate or distribute them among the candidates in any manner.

(4) A separate vote of shareholders shall be taken with respect to each candidate nominated for director unless a resolution is passed unanimously permitting two (2) or more persons to be elected by a single resolution.

(5) If a shareholder has voted for more than one candidate without specifying the distribution of his votes among the candidates, he shall be deemed to have distributed his votes equally among the candidates for whom he voted.

(6) If the number of candidates nominated for director exceeds the number of positions to be filled, the candidates who receive the least number of votes shall be eliminated until the number of candidates remaining equals the number of positions to be filled.

(7) A retiring director shall retain office until the adjournment or termination of the meeting at which his successor is elected unless such meeting was called for the purpose of removing him from office as a director in which case the director so removed shall vacate office forthwith upon the passing of the resolution for his removal.

11. ***Validity of Acts.*** An act by a director or officer is valid notwithstanding an irregularity in his election or appointment or a defect in his qualification.

### **MEETINGS OF DIRECTORS**

12. ***Place of Meeting.*** Subject to the articles, meetings of directors may be held at any place within or outside New Brunswick as the directors may from time to time determine or

as the person convening the meeting may give notice. A meeting of the directors may be convened by the chairman of the board (if any), the president or any director at any time. The secretary shall upon direction of any of the foregoing officers or director convene a meeting of the directors.

**13. Notice.**

(1) Notice of the time and place of each meeting of the board shall be given in the manner provided in Section 6.3 to each director:

(a) not less than three (3) days before the time when the meeting is to be held, if the notice is mailed, or

(b) not less than twenty-four (24) hours before the time when the meeting is to be held if the notice is given personally or is delivered or is sent by any means of transmitted or recorded communication, such as facsimile transmission, voice-mail or electronic-mail, provided that meetings of the directors may be held at any time without notice if all the directors have waived notice.

(2) For the first meeting of the board of directors to be held immediately following the election of directors at an annual or special meeting of the shareholders, no notice of such meeting need be given to the newly elected or appointed director or directors in order for the meeting to be duly constituted, provided a quorum of the directors is present.

(3) A notice of a meeting of directors shall specify any matter referred to in subsection 73(2) of the Act that is to be dealt with at the meeting but, unless a by-law otherwise provides, need not otherwise specify the purpose of or the business to be transacted at the meeting.

**14. Waiver of Notice.** Notice of any meeting of the directors or any irregularity in any meeting or in the notice thereof may be waived by any director in writing or by telegram, cable, telex or facsimile transmission addressed to the Corporation or in any other manner, and such waiver may be validly given either before or after the meeting to which such waiver relates. The attendance of a director at a meeting of directors is a waiver of notice of the meeting except where a director attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

**15. Telephone Participation.** A director may participate in a meeting of directors or of a committee of directors by means of such telephone or other communication facilities that permit all persons participating in the meeting to hear each other, and a director participating in such a meeting by such means shall be deemed to be present at that meeting.

**16. Adjournment.** Any meeting of the directors may be adjourned from time to time by the chairman of the meeting, with the consent of the meeting, to a fixed time and place and no notice of the time and place for the continuance of the adjourned meeting need be given to any director if the time and place of the adjourned meeting is announced at the original meeting. Any adjourned meeting shall be duly constituted if held in accordance with the terms of the adjournment and a quorum is present thereat. The directors who formed a quorum at the original meeting are not required to form the quorum at the adjourned meeting. If there is no quorum present at the adjourned meeting, the original meeting shall be deemed to have terminated forthwith after its adjournment.

17. ***Quorum and Voting.*** Subject to the articles, a majority of directors shall constitute a quorum for the transaction of business at any meeting of directors. No business shall be transacted by the directors except at a meeting of directors at which a quorum of the board is present. Questions arising at any meeting of the directors shall be decided by a majority of votes cast. In case of an equality of votes, the chairman of the meeting shall not have a second or casting vote. Where the Corporation has only one director, that director may constitute a meeting.

18. ***Resolution in lieu of meeting.*** A resolution in writing, signed by all the directors or signed counterparts of such resolution by all the directors entitled to vote on that resolution at a meeting of directors or a committee of directors, is as valid as if it had been passed at a meeting of directors or committee of directors duly called, constituted and held. A copy of every such resolution or counterpart thereof shall be kept with the minutes of the proceedings of the directors or such committee of directors.

19. ***Deemed Consent of Director Present at Meeting.*** A director who is present at a meeting of directors or committee of directors is deemed to have consented to any resolution passed or action taken thereat unless he:

- (a) requests that his dissent be or his dissent is entered in the minutes of the meeting;
- (b) sends his written dissent to the secretary of the meeting before the meeting is terminated; or
- (c) sends his dissent by registered mail or delivers to the registered office of the Corporation immediately after the meeting is terminated.

20. ***Deemed Consent of Director Absent from Meeting.*** [Deleted]

## **REMUNERATION OF DIRECTORS**

21. Subject to the articles or any unanimous shareholder agreement, the remuneration to be paid to the directors shall be such as the board of directors shall from time to time determine and such remuneration shall be in addition to the salary paid to any officer of the Corporation who is also a member of the board of directors. The directors may also by resolution award special remuneration to any director undertaking any special services on the Corporation's behalf other than the routine work ordinarily required of a director by the Corporation. The confirmation of any such resolution or resolutions by the shareholders shall not be required. The directors shall also be entitled to be paid their travelling and other expenses properly incurred by them in connection with the affairs of the Corporation.

## **SUBMISSION OF CONTRACTS OR TRANSACTIONS TO SHAREHOLDERS FOR APPROVAL**

22. The directors in their discretion may submit any contract, act or transaction for approval, ratification or confirmation at any annual meeting of the shareholders or at any special meeting of the shareholders called for the purpose of considering the same and any contract, act or transaction that shall be approved, ratified or confirmed by resolution passed by a majority of the votes cast at any such meeting (unless any different or additional

requirement is imposed by the Act or by the articles or any other by-law) shall be as valid and as binding upon the Corporation and upon all the shareholders as though it had been approved, ratified and/or confirmed by every shareholder of the Corporation.

### **FOR THE PROTECTION OF DIRECTORS AND OFFICERS**

23. No director or officer for the time being of the Corporation shall be liable for the acts, receipts, neglects or defaults of any other director or officer or employee of the Corporation or for joining in any receipt or act for conformity or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired by order of the board of directors for or on behalf of the Corporation or for the insufficiency or deficiency of any security in or upon which any of the moneys of or belonging to the Corporation shall be placed out or invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person, firm or corporation including any person, firm or corporation with whom or which any moneys, securities or effects of the Corporation shall be lodged or deposited or for any loss, conversion, misapplication or misappropriation of or any damage resulting from any dealings with any moneys, securities or other assets belonging to the Corporation or for any other loss, damage or misfortune whatever which may happen to the Corporation in the execution of the duties of his respective office of trust or in relation thereto, unless the same shall happen by or through his failure to exercise the powers and to discharge the duties of his office honestly, in good faith with a view to the best interests of the Corporation, and in connection therewith to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances, provided that nothing herein contained shall relieve a director or officer from the duty to act in accordance with the Act or regulations made thereunder or relieve him from liability for a breach thereof. The directors for the time being of the Corporation shall not be under any duty or responsibility in respect of any contract, act or transaction whether or not made, done or entered into in the name or on behalf of the Corporation, except such as shall have been submitted to and authorized or approved by the board of directors. If any director or officer of the Corporation shall be employed by or shall perform services for the Corporation, the fact of his being a shareholder, director or officer of the Corporation shall not disentitle such director or officer or such firm or body corporate, as the case may be, from receiving proper remuneration for such services.

### **INDEMNITIES TO DIRECTORS AND OTHERS**

24. Subject to section 81 of the Act, except in respect of an action by or on behalf of the Corporation or Another Body Corporate (as hereinafter defined) to procure a judgement in its favour, the Corporation shall indemnify each director and officer of the Corporation and each former director and officer of the Corporation and each person who acts or acted at the Corporation's request as a director or officer of Another Body Corporate, and his heirs and legal representatives, against all costs, charges and expenses, including any amount paid to settle an action or satisfy a judgment, reasonably incurred by him in respect of any civil, criminal or administrative action or proceeding to which he is made a party by reason of being or having been a director or officer of the Corporation or Another Body Corporate, as the case may be, if

(a) he acted honestly and in good faith with a view to the best interests of the Corporation; and

(b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he had reasonable grounds for believing that his conduct was lawful.

"Another Body Corporate" as used herein means a body corporate of which the Corporation is or was a shareholder or creditor.

25. *Insurance.* Subject to the limitations contained in the Act, the Corporation may purchase and maintain such insurance for the benefit of any person referred to in Section 24 as the board may, from time to time, determine.

## OFFICERS

26. *Appointment of Officers.* Subject to the articles or any unanimous shareholder agreement, the directors may appoint a chairman of the board, a chief executive officer, president and a secretary and, if deemed advisable, may also appoint one or more vice-presidents, a treasurer and one or more assistant secretaries and/or one or more assistant treasurers. None of such officers, except the chairman of the board, need be a director of the Corporation. Any two or more of such offices may be held by the same person. In case and whenever the same person holds the offices of secretary and treasurer he may, but need not, be known as the secretary-treasurer. The directors may from time to time designate such other offices and appoint such other officers, employees and agents as it shall deem necessary who shall have such authority and shall perform such functions and duties as may from time to time be prescribed by resolution of the directors.

27. *Remuneration and Removal of Officers.* Subject to the articles or any unanimous shareholder agreement, the remuneration of all officers, employees and agents appointed by the directors may be determined from time to time by resolution of the directors. The fact that any officer, employee or agent is a director or shareholder of the Corporation shall not disqualify him from receiving such remuneration as may be so determined. The directors may by resolution remove any officer, employee or agent at any time, with or without cause.

28. *Duties of Officers may be Delegated.* In case of the absence or inability or refusal to act of any officer of the Corporation or for any other reason that the directors may deem sufficient, the directors may delegate all or any of the powers of such officer to any other officer or to any director for the time being.

29. *Chairman of the Board.* The chairman of the board (if any) shall, if present, preside at all meetings of the directors. He shall sign such contracts, documents or instruments in writing as require his signature and shall have such other powers and duties as may from time to time be assigned to him by resolution of the directors.

30. *Chief Executive Officer.* The chief executive officer of the Corporation shall exercise general supervision over the business and affairs of the Corporation and such other duties as the board may specify from time to time. During the absence or disability of the president, or if no president has been appointed, the chief executive officer shall also have the powers and duties of that office.

31. **President.** The president of the Corporation shall be the chief operating officer and shall, subject to the authority of the Chief Executive Officer, exercise general supervision over the operations of the Corporation. During the absence or disability of the chief executive officer, or if no chief executive officer has been appointed, the president shall also have the powers and duties of that office.

32. **Vice-President.** The vice-president (if any) or, if more than one, the vice-presidents in order of seniority, shall be vested with all the powers and shall perform all the duties of the president in the absence or inability or refusal to act of the president. The vice-president or, if more than one, the vice-presidents in order of seniority, shall sign such contracts, documents or instruments in writing as require his or their signatures and shall also have such other powers and duties as may from time to time be assigned to him or them by resolution of the directors.

33. **Secretary.** The secretary shall give or cause to be given notices for all meetings of the directors or committees thereof (if any) and of shareholders when directed to do so, and shall have charge, subject to the provisions of paragraphs 34 and 55 hereof, of the records referred to in section 18 of the Act and of the corporate seal or seals (if any). He shall sign such contracts, documents or instruments in writing as require his signature and shall have such other powers and duties as may from time to time be assigned to him by resolution of the directors or as are incident to his office.

34. **Treasurer.** Subject to the provisions of any resolution of the directors, the treasurer (if any) shall have the care and custody of all the funds and securities of the Corporation and shall deposit the same in the name of the Corporation in such bank or banks or with such other depository or depositories as the directors may by resolution direct. He shall prepare, maintain and keep or cause to be kept adequate books of accounts and accounting records. He shall sign such contracts, documents or instruments in writing as require his signature and shall have such other powers and duties as may from time to time be assigned to him by resolution of the directors or as are incident to his office. He may be required to give such bond for the faithful performance of his duties as the directors in their uncontrolled discretion may require, but no director shall be liable for failure to require any such bond or for the insufficiency of any such bond or for any loss by reason of the failure of the Corporation to receive any indemnity thereby provided.

35. **Assistant Secretary and Assistant Treasurer.** The assistant secretary or, if more than one, the assistant secretaries in order of seniority, and the assistant treasurer or, if more than one, the assistant treasurers in order of seniority (if any), shall respectively perform all the duties of the secretary and treasurer, respectively, in the absence or inability to act of the secretary or treasurer as the case may be. The assistant secretary or assistant secretaries, if more than one, and the assistant treasurer or assistant treasurers, if more than one, shall sign such contracts, documents or instruments in writing as require his or their signatures respectively and shall have such other powers and duties as may from time to time be assigned to them by resolution of the directors.

36. **Vacancies.** If the office of chairman of the board, chief executive officer, president, vice-president, secretary, assistant secretary, treasurer, assistant treasurer, or any other office created by the directors pursuant to paragraph 26 hereof, shall be or become vacant by reason of death, resignation, removal or in any other manner whatsoever, the directors may, subject



to paragraph 26 hereof, appoint another person to fill such vacancy.

### **COMMITTEES OF DIRECTORS**

37. The directors may from time to time appoint from their number one or more committees of directors consisting of one or more individuals and delegate to such committee or committees any of the powers of the directors except as provided in subsection 73(2) of the Act. Unless otherwise ordered by the directors, a committee of directors shall have power to fix its quorum, elect its chairman and regulate its proceedings. All such committees shall report to the directors as required by them.

### **SHAREHOLDERS' MEETING**

38. *Annual Meeting.* Subject to compliance with section 85 of the Act, the annual meeting of the shareholders shall be convened on such day in each year and at such time as the directors may by resolution determine.

39. *Special Meetings.*

(1) Special meetings of the shareholders may be convened by order of the chairman of the board, the president or a vice-president or by the directors, to be held at such time and place as may be specified in such order.

(2) In accordance with the articles, shareholders holding between them not less than ten percent (10%) of the issued shares of the Corporation that carry the right to vote at a meeting sought to be held may requisition the directors to call a meeting of shareholders. Such requisition shall state the business to be transacted at the meeting and shall be sent to each director and the registered office of the Corporation.

(3) Except as otherwise provided in subsection 96(3) of the Act, it shall be the duty of the directors on receipt of such requisition, to cause such meeting to be called by the secretary of the Corporation.

(4) If the directors do not, within twenty-one (21) days after receiving such requisition call such meeting, any shareholder who signed the requisition may call the meeting.

40. *Place of Meetings.* Meetings of shareholders of the Corporation shall be held at the registered office of the Corporation or at such other place within New Brunswick as the directors by resolution may determine. Notwithstanding the foregoing, a meeting of shareholders of the Corporation may be held outside New Brunswick if all the shareholders entitled to vote at that meeting so agree, and a shareholder who attends a meeting of shareholders held outside New Brunswick is deemed to have so agreed except when he attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully held. Notwithstanding either of the foregoing sentences, meetings of shareholders may be held outside New Brunswick at one or more places specified in the articles.

41. *Notice.*

(1) Subject to the articles or a unanimous shareholder agreement, a printed, written or

typewritten notice stating the day, hour, place of meeting, the general nature of the business to be transacted and, if special business is to be transacted thereat, stating

(a) the nature of that business in sufficient detail to permit the shareholder to form a reasoned judgment thereon; and

(b) the text of any special resolution to be submitted to the meeting, shall be sent to each person who is entitled to notice of such meeting and who on the record date for notice appears on the records of the Corporation or its transfer agent as a shareholder and to each director of the Corporation and the auditor of the Corporation, if any, personally, by sending such notice by prepaid mail or in such other manner as provided by by-law for the giving of notice, not less than twenty-one (21) days nor more than fifty (50) days before the meeting. If such notice is sent by mail it shall be addressed to the latest address of each such person as shown in the records of the Corporation or its transfer agent, or if no address is shown therein, then to the last address of each such person known to the secretary.

(2) The auditor of the Corporation, if any, is entitled to attend any meeting of shareholders of the Corporation and to receive all notices and other communications relating to any such meeting that a shareholder is entitled to receive.

42. **Waiver of Notice.** A meeting of shareholders may be held for any purpose at any time and, subject to section 84 of the Act, at any place without notice if all the shareholders entitled to notice of such meeting are present in person or represented by proxy at the meeting (except where the shareholder attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called) or if all the shareholders entitled to notice of such meeting and not present in person nor represented by proxy thereat waive notice of the meeting. Notice of any meeting of shareholders or any irregularity in any such meeting or in the notice thereof may be waived by any shareholder, the duly appointed proxy of any shareholder, any directors or the auditor of the Corporation in writing, by telegram, cable, telex or facsimile addressed to the Corporation or by any other manner, and any such waiver may be validly given either before or after the meeting to which such waiver relates.

43. **Omission of Notice.** The accidental omission to give notice of any meeting to or the non-receipt of any notice by any person shall not invalidate any resolution passed or any proceeding taken at any meeting of shareholders.

44. **Record Date.**

(1) The directors may by resolution fix in advance a date as the record date for the determination of shareholders

(a) entitled to receive payment of a dividend;

(b) entitled to participate in a liquidation distribution; or

(c) for any other purpose except the right to receive notice of or to vote at a meeting of shareholders,

but such record date shall not precede by more than fifty (50) days the particular action to be taken.

(2) The directors may by resolution also fix in advance the date as the record date for the

determination of shareholders entitled to receive notice of a meeting of shareholders, but such record date shall not precede by more than fifty (50) days or by less than twenty-one (21) days the date on which the meeting is to be held.

(3) If no record date is fixed,

(a) the record date for the determination of shareholders entitled to receive notice of a meeting of shareholders shall be

(i) at the close of business on the day immediately preceding the day on which the notice is given; or

(ii) if no notice is given, the day on which the meeting is held; and

(b) the record date for the determination of shareholders for any purpose, other than that specified in subparagraph (a) above or to vote, shall be at the close of business on the day on which the directors pass the resolution relating thereto.

#### **45. *Voting.***

(1) Votes at meetings of the shareholders may be given either personally or by proxy. At every meeting at which he is entitled to vote, every shareholder present in person and every proxyholder shall have one (1) vote on a show of hands. Upon a poll at which he is entitled to vote, every shareholder present in person or by proxy shall (subject to the provisions, if any, of the articles) have one (1) vote for every share registered in his name.

(2) Voting at a meeting of shareholders shall be by show of hands except where a ballot is demanded by a shareholder or proxyholder entitled to vote at the meeting. A shareholder or proxyholder may demand a ballot either before or after any vote by show of hands. In case of an equality of votes the chairman of the meeting shall not have a second or casting vote in addition to the vote or votes to which he may be entitled as a shareholder or proxyholder.

(3) At any meeting, unless a ballot is demanded, a declaration by the chairman of the meeting that a resolution has been carried or carried unanimously or by a particular majority or lost or not carried by a particular majority shall be conclusive evidence of the fact without proof of the number or proportion of votes recorded in favour of or against the motion.

(4) In the absence of the chairman of the board, the president and every vice-president, the shareholders present entitled to vote shall choose another director as chairman of the meeting and if no director is present or if all the directors present decline to take the chair then the shareholders or proxyholders present shall choose one of their number to be chairman.

(5) If at any meeting a ballot is demanded on the election of a chairman or on the question of adjournment or termination it shall be taken forthwith without adjournment. If a ballot is demanded on any other question or as to the election of directors it shall be taken in such manner and either at once or later at the meeting or at an adjourned meeting as the chairman of the meeting directs. The result of a ballot shall be deemed to be the resolution of the meeting at which the ballot was demanded. A demand for a ballot may be withdrawn.

(6) Where a person holds shares as a personal representative, such person or his proxy is the person entitled to vote at all meetings of shareholders in respect of the shares so held by

him.

(7) Where a person mortgages or hypothecates his shares, such person or his proxy is the person entitled to vote at all meetings of shareholders in respect of such shares unless, in the instrument creating the mortgage or hypothec, he has expressly empowered the person holding the mortgage or hypothec to vote in respect of such shares, in which case, and subject to the articles, such holder or his proxy is the person entitled to vote in respect of the shares.

(8) Where two or more persons hold the same share or shares jointly, any one of such persons present at a meeting of shareholders has the right, in the absence of the other or others, to vote in respect of such share or shares, but if more than one of such persons are present or represented by proxy and vote, they shall vote together as one on the share or shares jointly held by them.

#### 46. *Proxies.*

(1) A shareholder, including a shareholder that is a body corporate, entitled to vote at a meeting of shareholders may by means of a proxy appoint a proxyholder or one or more alternate proxyholders, none of whom are required to be a shareholder of the Corporation, which proxyholders shall have all the rights of the shareholder to attend and act at the meeting in the place and stead of the shareholder except to the extent limited by the *proxy*.

(2) An instrument appointing a proxy shall be in writing and shall be executed by the shareholder or by his attorney authorized in writing or, if the shareholder is a body corporate, either under its seal or by an officer or attorney thereof, duly authorized. A proxy is valid only at the meeting in respect of which it is given or any adjournment thereof.

(3) Unless the Act requires another form, an instrument appointing a proxyholder shall be in the form determined by the directors from time to time.

47. *Time for Deposit of Proxies.* The board may by resolution specify in a notice calling a meeting of shareholders a time, preceding the time of such meeting or an adjournment thereof by not more than 48 hours excluding Saturdays and holidays before which time proxies to be used at such meeting must be deposited. A proxy shall be acted upon only if, prior to the time so specified, it shall have been deposited with the Corporation or an agent thereof specified in such notice or, if no such time is specified in such notice, only if it has been received by the secretary of the Corporation or by the chairman of the meeting or any adjournment thereof prior to the time of voting.

48. The directors may from time to time make regulations regarding the depositing of proxies at some place or places other than the place at which a meeting or adjourned meeting of shareholders is to be held and for particulars of such proxies to be sent by means of wire or wireless or any other form of transmitted or recorded communication or in writing before the meeting or adjourned meeting to the Corporation or any agent of the Corporation for the purpose of receiving such particulars and providing that proxies so deposited may be voted upon as though the proxies themselves were deposited with the Corporation at the meeting or adjourned meeting and votes given in accordance with such regulations shall be valid and shall be counted. The chairman of any meeting of shareholders may, subject to any regulations made as aforesaid, in his discretion accept wire or wireless or any other form of transmitted or recorded or written communication as to the authority of any person claiming

to vote on behalf of and to represent a shareholder notwithstanding that no proxy conferring such authority has been deposited with the Corporation, and any votes given in accordance with such communication accepted by the chairman of the meeting shall be valid and shall be counted.

**49. *Adjournment.***

(1) The chairman of the meeting may with the consent of the meeting adjourn any meeting of shareholders from time to time to a fixed time and place. If a meeting of shareholders is adjourned for less than sixty (60) days, it is not necessary to give notice of the adjourned meeting other than by announcement at the earlier meeting that is adjourned. If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of sixty (60) days or more, notice of the adjourned meeting shall be given as for an original meeting.

(2) Any adjourned meeting shall be duly constituted if held in accordance with the terms of the adjournment and a quorum is present at the opening thereof. The persons who formed a quorum at the original meeting are not required to form the quorum at the adjourned meeting. If there is no quorum present at the opening of the adjourned meeting, the original meeting shall be deemed to have terminated forthwith after its adjournment. Any business may be brought before or dealt with at any adjourned meeting which might have been brought before or dealt with at the original meeting in accordance with the notice calling the same.

50. ***Quorum.*** All of the shareholders or holders of at least 20% of the shares entitled to vote at the meeting, whichever number be the lesser, personally present or represented by proxy, shall constitute a quorum of any meeting of shareholders or of any class of shareholders. No business shall be transacted at any meeting unless the requisite quorum be present at the time of the transaction of such business. If a quorum is not present at the time appointed for a meeting of shareholders or within such reasonable time thereafter as the shareholders present may determine, the persons present and entitled to vote may adjourn the meeting to a fixed time and place but may not transact any other business and the provisions of paragraph 38 of this by-law with regard to notice shall apply to such adjournment.

51. ***Resolution in Lieu of meeting.*** A resolution in writing signed by all the shareholders or signed counterparts of such resolution by all the shareholders entitled to vote on that resolution at a meeting of shareholders is as valid as if it had been passed at a meeting of the shareholders duly called, constituted and held. A copy of every such resolution or counterpart thereof shall be kept with the minutes of the meetings of shareholders.

**52. *Telephone Participation.*** [deleted]

## **SHARES AND TRANSFERS**

53. ***Issuance.*** Subject to the articles, any unanimous shareholder agreement and to section 27 of the Act, shares in the Corporation may be issued at such times and to such persons or classes of persons and, subject to sections 23 and 24 of the Act, for such consideration as the directors may determine.

54. ***Certificates.*** Share certificates (and the form of stock transfer power on the reverse side thereof) shall (subject to compliance with section 47 of the Act) be in such form and be signed by such director(s) or officer(s) as the directors may from time to time by resolution

determine. Such certificates shall be signed manually by at least one director or officer of the Corporation or by or on behalf of a registrar, transfer agent or branch transfer agent of the Corporation, and any additional signatures required on a share certificate may be printed or otherwise mechanically reproduced thereon. If a share certificate contains a printed or mechanically reproduced signature of a person, the Corporation may issue the share certificate notwithstanding that the person has ceased to be a director or an officer of the Corporation, and the share certificate is as valid as if he were a director or an officer at the date of its issue.

55. ***Registrar and Transfer Agent.*** The directors may from time to time by resolution appoint or remove one or more registrars and/or branch registrars (which may but need not be the same person) to keep the share register and/or one or more transfer agents and/or branch transfer agents (which may but need not be the same person) to keep the register of transfers, and (subject to section 48 of the Act) may provide for the registration of issues and the registration of transfers of the shares of the Corporation in one or more places and such registrars and/or branch registrars and/or transfer agents and/or branch transfer agents shall keep all necessary books and registers of the Corporation for the registration of the issuance and the registration of transfers of the shares of the Corporation for which they are so appointed. All certificates issued after any such appointment representing shares issued by the Corporation shall be countersigned by or on behalf of one of the said registrars and/or branch registrars and/or transfer agents and/or branch transfer agents, as the case may be.

56. ***Replacement of Share Certificates.*** The board or any officer or agent designated by the board may in its or his discretion direct the issue of a new share certificate in lieu of and upon cancellation of a share certificate that has been mutilated or in substitution for a share certificate claimed to have been lost, destroyed or wrongfully taken on payment of such fee, not exceeding \$3.00, and on such terms as to indemnity, reimbursement of expenses and evidence of loss and of title as the board may from time to time prescribe, whether generally or in any particular case.

## **DIVIDENDS**

57. The directors may from time to time by resolution declare and the Corporation may pay dividends on the issued and outstanding shares in the capital of the Corporation subject to the Act and to the provisions (if any) of the micles of the Corporation.

58. ***Dividend Cheques.*** A dividend payable in cash shall be paid by cheque drawn on the Corporation's bankers or one of them to the order of each registered holder of shares of the class or series in respect of which it has been declared and mailed by prepaid ordinary mail to such registered holder at his recorded address, unless such holder otherwise directs. In the case of joint holders the cheque shall, unless such joint holders otherwise direct, be made payable to the order of all of such joint holders and mailed to them at their recorded address. The mailing of such cheque as aforesaid, unless the same is not paid on due presentation, shall satisfy and discharge the liability for the dividend to the extent of the sum represented thereby plus the amount of any tax which the Corporation is required to and does withhold.

59. ***Non-receipt of Cheques.*** In the event of non-receipt of any dividend cheque by the person to whom it is sent as aforesaid, the Corporation shall issue to such person a replacement cheque for a like amount on such terms as to indemnity, reimbursement or expenses and evidence of non-receipt and of title as the board may from time to time prescribe, whether generally or in any particular case.

60. **Record Date for Dividends and Rights.** The board may fix in advance a date, preceding by not more than 50 days the date for the payment of any dividend or the date for the issue of any warrant or other evidence of the right to subscribe for securities of the Corporation, as a record date for the determination of the persons entitled to receive payment of such dividend or to exercise the right to subscribe for such securities. If no record date is so fixed, the record date for the determination of the persons entitled to receive payment of any dividend or to exercise the right to subscribe for securities of the Corporation shall be at the close of business on the day on which the resolution relating to such dividend or right to subscribe is passed by the board.

61. **Unclaimed Dividends.** Any dividend unclaimed after a period of six years from the date on which the same has been declared to be payable shall be forfeited and shall revert to the Corporation.

### **VOTING SECURITIES IN OTHER BODIES CORPORATE**

62. All securities of any other body corporate carrying voting rights held from time to time by the Corporation may be voted at all meetings of shareholders, bondholders, debenture holders or holders of such securities, as the case may be, of such other body corporate in such manner and by such person or persons as the directors of the Corporation shall from time to time determine and authorize by resolution. The duly authorized signing officers of the Corporation may also from time to time execute and deliver for and on behalf of the Corporation proxies and/or arrange for the issuance of voting certificates and/or other evidence of the right to vote in such names as they may determine without the necessity of a resolution or other action by the directors.

### **NOTICE**

63. **Method of giving notice.** Any notice, communication or other document to be given by the Corporation to a shareholder, director, officer, or auditor of the Corporation under any provision of the Act, the Articles or by-laws shall be sufficiently given if delivered personally to the person to whom it is to be given or if delivered to his latest address as shown in the records of the Corporation or if mailed by prepaid ordinary mail or air mail in a sealed envelope addressed to him at his latest address as shown in the records of the Corporation or if sent to such person, at the latest applicable number for such person as shown in the records of the Corporation, by any means of wire or wireless or any other form of transmitted or recorded communication. The secretary may change the address on the records of the Corporation of any shareholder in accordance with any information believed by him to be reliable. A notice, communication or document so delivered shall be deemed to have been given when it is delivered personally or at the address aforesaid. A notice, communication or document so mailed shall be deemed to have been given on the day it is deposited in a post office or public letter box. A notice sent by any means of wire or wireless or any other form of transmitted or recorded communication shall be deemed to have been given on the day on which it is transmitted.

64. **Shares registered in more than one name.** All notices or other documents required to be sent to a shareholder by the Act, the regulations under the Act, the articles or the by-laws of the Corporation shall, with respect to any shares in the capital of the Corporation registered in more than one name, be given to whichever of such persons is named first in the

records of the Corporation and any notice or other document so given shall be sufficient notice or delivery of such document to all the holders of such shares.

65. ***Persons becoming entitled by operation of law.*** Every person who by operation of law, transfer or by any other means whatsoever shall become entitled to any shares in the capital of the Corporation shall be bound by every notice or other document in respect of such shares which prior to his name and address being entered on the records of the Corporation shall have been duly given to the person or persons from whom he derives his title to such shares.

66. ***Deceased Shareholder.*** Any notice or other document delivered or sent by post or left at the address of any shareholder as the same appears in the records of the Corporation shall, notwithstanding that such shareholder be then deceased and whether or not the Corporation has notice of his decease, be deemed to have been duly served in respect of the shares held by such shareholder (whether held solely or with other persons) until some other person be entered in his stead in the records of the Corporation as the holder or one of the holders thereof and such service shall for all purposes be deemed a sufficient service of such notice or other document on his heirs, executors or administrators and all persons (if any) interested with him in such shares.

67. ***Signatures to Notices.*** The signature of any director or officer of the Corporation to any notice may be written, stamped, typewritten or printed or partly written, stamped, typewritten or printed.

68. ***Computation of Time.*** Where a given number of days' notice or notice extending over any period is required to be given under any provisions of the articles or by-laws of the Corporation, the day of service or posting of the notice shall, unless it is otherwise provided, be counted in such number of days or other period and such notice shall be deemed to have been given or sent on the day of service or posting.

69. ***Proof of Service.*** A certificate of any officer of the Corporation in office at the time of the making of the certificate or of a transfer officer of any transfer agent or branch transfer agent of shares of any class of the Corporation as to facts in relation to the mailing or delivery or service of any notice or other documents to any shareholder, director, officer or auditor or publication of any notice or other document shall be conclusive evidence thereof and shall be binding on every shareholder, director, officer or auditor of the Corporation, as the case may be.

#### **CHEQUES, DRAFTS, NOTES, ETC.**

70. All cheques, drafts or orders for the payment of money and all notes, acceptances and bills of exchange shall be signed by such officer or officers or other person or persons, whether or not officers of the Corporation, and in such manner as the directors may from time to time designate by resolution.

#### **CUSTODY OF SECURITIES**

71. (I) All securities (including warrants) owned by the Corporation shall be lodged (in the name of the Corporation) with a chartered bank or a trust company or in a safety deposit



box or, if so authorized by resolution of the directors, with such other depositaries or in such other manner as may be determined from time to time by the directors.

(2) All securities (including warrants) belonging to the Corporation may be issued and held in the name of a nominee or nominees of the Corporation (and if issued or held in the names of more than one nominee shall be held in the names of the nominees jointly with right of survivorship) and shall be endorsed in blank with endorsement guaranteed in order to enable transfer thereof to be completed and registration thereof to be effected.

### **EXECUTION OF CONTRACTS, ETC.**

72. Contracts, documents or instruments in writing requiring the signature of the Corporation may be signed by the chairman of the board, the chief executive officer, the president or a vice-president and the secretary or the treasurer and all contracts, documents and instruments in writing so signed shall be binding upon the Corporation without any further authorization or formality. The board of directors shall have power from time to time by resolution to appoint any officer or officers, or any person or persons, on behalf of the Corporation either to sign contracts, documents and instruments in writing generally or to sign specific contracts, documents or instruments in writing.

The corporate seal of the Corporation, if any, may be affixed to contracts, documents and instruments in writing signed as aforesaid or by any officer or officers, person or persons, appointed as aforesaid by resolution of the board of directors but any such contract, document or instrument is not invalid merely because the corporate seal, if any, is not affixed thereto.

The term "contracts, documents or instruments in writing" as used in this by-law shall include deeds, mortgages, hypothecs, charges, conveyances, transfers and assignments of property real or personal, immovable or movable, agreements, releases, receipts and discharges for the payment of money or other obligations, conveyances, transfers and assignments of shares, share warrants, stocks, bonds, debentures or other securities and all paper writings.

In particular without limiting the generality of the foregoing the chairman of the board, the chief executive officer, the president or a vice-president and the secretary or the treasurer shall have authority to sell, assign, transfer, exchange, convert or convey any and all shares, stocks, bonds, debentures, rights, warrants or other securities owned by or registered in the name of the Corporation and to sign and execute (under the seal of the Corporation or otherwise) all assignments, transfers, conveyances, powers of attorney and other instruments that may be necessary for the purpose of selling, assigning, transferring, exchanging, converting or conveying any such shares, stocks, bonds, debentures, rights, warrants or other securities.

The signature or signatures of the chairman of the board, the chief executive officer, the president, a vice-president, the secretary, the treasurer an assistant secretary or an assistant treasurer or any director of the Corporation and/or of any other officer or officers, person or persons, appointed as aforesaid by resolution of the board of directors may, if specifically authorized by resolution of the directors, be printed, engraved, lithographed or otherwise mechanically reproduced upon any contracts, documents or instruments in writing or bonds, debentures or other securities of the Corporation executed or issued by or on behalf of the

Corporation and all contracts, documents or instruments in writing or bonds, debentures or other securities of the Corporation on which the signature or signatures of any of the foregoing officers or persons authorized as aforesaid shall be so reproduced pursuant to special authorization by resolution of the directors shall be deemed to have been manually signed by such officers or persons whose signature or signatures is or are so reproduced and shall be as valid to all intents and purposes as if they had been signed manually and notwithstanding that the officers or persons whose signature or signatures is or are so reproduced may have ceased to hold office at the date of the delivery or issue of such contracts, documents or instruments in writing or bonds, debentures or other securities of the Corporation.

### **AUDITOR**

73. At each annual meeting of the shareholders of the Corporation an auditor may be appointed for the purpose of auditing and verifying the accounts of the Corporation for the then current year and his report shall be submitted at the next annual meeting of the shareholders. The auditor shall not be a director or an officer of the Corporation. Unless fixed by the meeting of shareholders at which he is appointed, the remuneration of the auditor shall be determined from time to time by the directors.

### **FISCAL YEAR**

74. The fiscal period of the Corporation shall terminate on such day in each year as the directors may from time to time by resolution determine.

### **BORROWING**

75. **General Borrowing.** The directors may from time to time:

- (a) borrow money upon the credit of the Corporation;
- (b) issue, reissue, sell or pledge debt obligations of the Corporation;
- (c) give a guarantee on behalf of the Corporation to secure performance of an obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation, owned or subsequently acquired, to secure any obligation of the Corporation.

The directors may from time to time authorize any director or directors, or officer or officers, of the Corporation, to make arrangements with reference to the money borrowed or to be borrowed as aforesaid, and as to the terms and conditions of the loan thereof, and as to the securities to be given therefor, with power to vary or modify such arrangements, terms and conditions and to give such additional securities for any moneys borrowed or remaining due by the Corporation as the directors of the Corporation may authorize, and generally to manage, transact and settle the borrowing of money by the Corporation.

76. **Repeal of By-Laws.** Upon this by-law coming into force, all prior by-laws presently in force other than by-laws relating to the borrowing powers of the Corporation are repealed provided that such repeal shall not affect the previous operation of such by-laws so repealed

or affect the validity of any act done or right, privilege, obligation or liability acquired or incurred or the validity of any contract or agreement made pursuant to any such by-laws prior to their repeal. All officers and persons acting under such by-laws so repealed shall continue to act as if appointed under the provisions of this by-law and all resolutions of the shareholders or board passed under such repealed by-laws shall continue to be good and valid except to the extent that they are inconsistent with this by-law or until amended or repealed.

WITNESS the corporate seal of the  
Corporation this    day of    , 199

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*CHIEF EXECUTIVE OFFICER*

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*PRESIDENT*

**GSI GROUP INC.  
(the "Company")**

**AMENDMENT NUMBER 1 TO BY-LAW NO. 1**

1. Section 50 of By-Law Number I of the Company is hereby amended such that the first sentence of Section 50 is hereby amended to read as follows:

"The holders of at least 33-1/3% of the shares entitled to vote at the meeting, present personally or represented by proxy, shall constitute a quorum of any meeting of shareholders or of any class of shareholders."

The foregoing amendment to By-Law Number 1 was made by the directors of the Company on April 22, 2005 and was confirmed without variation by the shareholders of the Company on May 26, 2005.

/s/ Tamblyn Ghanem

Tamblyn Ghanem  
Assistant Secretary

**GSI GROUP INC.**  
**(the "Company")**

**AMENDMENT NUMBER 2 TO BY-LAW NO.1**

1. Section 54 of By-Law Number 1 of the Company is hereby amended such that the following sentence shall be added to the end of Section 54:

"The Corporation may allow its listed securities to be eligible to be recorded and maintained on the books of its transfer agent without the issuance of a physical stock certificate."

2. Section 63 of By-Law Number I of the Company is hereby deleted in its entirety and replaced with the following:

"Any notice, (which term includes, without limitation, any notice of meeting, communication or document) financial statements, or other information or material required or permitted to be given (Which term includes, without limitation, sent, delivered or served) pursuant to the Act, the regulations, the Articles, the by-laws, any unanimous shareholder agreement or otherwise to a shareholder, director; officer, auditor or member of a committee of the board of directors shall be sufficiently given if delivered personally to the person to whom it is to be given or if mailed to such person at such person's recorded address by prepaid, ordinary or air mail, or if sent to such person at such person's recorded address by means of any telephonic, electronic or other communication facility. A notice so delivered shall be deemed to have been given when it is delivered personally and a notice so mailed shall be deemed to have been given when deposited in a post office or public mailbox. A notice sent by any means of electronic or recorded telephonic communication shall be deemed to have been given when such information, in electronic form, enters an information system outside the control of the Corporation. The secretary may change or cause to be changed the recorded address of any shareholder, director, officer, auditor or member of a committee of the board of directors in accordance with any information believed by such person to be reliable."

The foregoing amendment to Section 54 of By-Law Number I was made by the directors of the Company on October 23, 2007 and the foregoing amendment to Section 63 of By-Law Number I was made by the directors of the Company on February 26, 2008. The amendments to Sections 54 and 63 of By-Law Number 1 were confirmed without variation by the shareholders of the Company on May 15,2008.

*Is/ Daniel J. Lyne*

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Daniel J. Lyne

Secretary

