

BY-LAW NO. 1 (Amended and Restated)

Business Corporations Act (Ontario)

A by-law relating generally to the regulation of the business and affairs of

dynaCERT Inc.

(the "Corporation")

TABLE OF CONTENTS

SECTIO	N I DEFINITIONS AND INTERPRETATION		
1.1	Definitions	3	
1.2	Certain Rules of Interpretation		
SECTIO	SECTION II DIRECTORS		
2.1	Quorum		
2.2	Qualification		
2.3	Election and Term.		
2.4	Removal of Directors		
2.5	Vacation of Office	4	
2.6	Vacancies		
2.7	Remuneration and Expenses		
2.8	Appointment of Additional Directors		
	N III MEETINGS OF DIRECTORS		
3.1	Meetings by Telephones Electronic or Other Communication Facility		
3.2	Place of Meetings		
3.3	Calling of Meetings		
3.4	Notice of Meeting		
3.5	Waiver of Notice		
3.6	First Meeting of New Board		
3.7	Adjourned Meeting		
3.8	Regular Meetings		
3.9	Chairperson of Meetings of the Board		
3.10	Votes to Govern		
3.11	One Director Meeting		
3.12	Resolution in Writing		
	N IV COMMITTEES		
4.1	Committee of Directors		
4.2	Audit Committee		
4.3	Transaction of Business		
4.4	Procedure		
	N V OFFICERS		
5.1	Appointment		
5.2	Chairperson of the Board		
5.3	Vice-Chairperson of the Board		
5.4	Chief Executive Officer		
5.5	President		
5.6	Vice-President		
5.7	Chief Financial Officer		
5.8	Treasurer		
5.9	Corporate Secretary		
5.10	Powers and Duties of Other Officers		
5.11	Variation of Powers and Duties		
5.12	Term of Office		
5.13	Agents and Attorneys		
SECTION VI PROTECTION OF DIRECTORS AND OFFICERS			
6.1	Limitation of Liability		
6.2	Indemnity		
6.3	Insurance	10 11	
	IN A DEMOCRATING A COMPARE OF THE VIOLENCE	11	

7.1	Annual Meetings	
7.2	Special Meetings	11
7.3	Place of Meetings	
7.4	Meetings by Telephone, Electronic or Other Communication Facility	11
7.5	Notice of Meetings	11
7.6	List of Shareholders Entitled to Notice	12
7.7	Record Date for Notice	12
7.8	Meetings Without Notice	12
7.9	Chairperson, Secretary and Scrutineers	12
7.10	Persons Entitled to be Present	
7.11	Quorum	
7.12	Entitlement to Vote	
7.13	Proxies	
7.14	Time for Deposit of Proxies	
7.15	Joint Shareholders	
7.16	Votes to Govern	
7.17	Show of Hands	
7.18	Ballots	
7.19	Voting While Participating Electronically	
7.20	Resolution in Writing	
	ON VIII SECURITIES	
8.1	Registration of Transfer	
8.2	Transfer Agents and Registrars	
8.3	Lien on Shares	
8.4	Enforcement of Lien	
8.5	Security Certificates	
8.6	Replacement of Security Certificates	15
8.7	Joint Shareholders	
8.8	Representatives of Security Holders	
	ON IX DIVIDENDS AND RIGHTS	
9.1	Dividends	
9.2	Dividend Cheques.	
9.2	Non-Receipt of Cheques	
9.3 9.4	Record Date for Dividends and Rights	
9.5	Unclaimed Dividends	
	On X GENERAL	
10.1	Execution of Instruments	
10.1		
10.2	Electronic Signatures	
	Voting Rights in other Corporations N XI NOTICES	
3ECTIC 11.1	Method of Sending Notice	
11.2	Notice by Electronic Communications	
11.3	Notice to Joint Shareholders	
11.4	Computation of Time	
11.5	Undelivered Notices	
11.6	Omissions and Errors	
11.7	Persons Entitled by Operation of Law	
11.8	Waiver of Notice	
11.9	Execution of Notices	
11.10		
11.11	Effective Date	20

SECTION I DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this amended and restated by-law and in all other by-laws of the Corporation, unless the context otherwise requires:

"Act" means the *Business Corporations Act* (Ontario) as amended or re-enacted from time to time and includes the regulations made pursuant thereto.

"board" means the board of directors of the Corporation.

"by-laws" means all by-laws of the Corporation.

"director" means a director of the Corporation.

"**non-business day**" means Saturday, Sunday and any other day that is a holiday as defined in the *Interpretation Act* (Ontario).

"number of directors" means the number of directors provided for in the articles or, where a minimum and maximum number of directors is provided for in the articles, the number of directors determined by a special resolution of the shareholders or resolution of the board where it is empowered by special resolution to determine the number of directors.

"**special resolution**" means a resolution that is submitted to a special meeting of the shareholders of the Corporation duly called for the purpose of considering the resolution and passed, with or without amendment, at the meeting by at least two-thirds of the votes cast.

1.2 Certain Rules of Interpretation

- (a) All terms used in the by-laws which are defined in the Act shall have the meanings given to such terms in the Act.
- (b) In all by-laws, the singular shall include the plural and the plural shall include the singular and words in one gender include all genders.
- (c) Headings used in the by-laws are for convenience of reference only and shall not affect the construction or interpretation of the by-laws.
- (d) If any of the provisions contained in this by-law are inconsistent with those contained in the articles or a unanimous shareholder agreement, the provisions contained in the articles or unanimous shareholder agreement, as the case may be, shall prevail.

SECTION II DIRECTORS

2.1 Quorum

The quorum for the transaction of business at any meeting of the board shall consist of a majority of the directors. If, however, the Corporation has fewer than three directors, all directors must be present at any meeting of the board to constitute a quorum.

2.2 Qualification

No person shall be qualified for election as a director if that person: (a) is less than 18 years of age; (b) has been found under the *Substitute Decisions Act*, 1992 (Ontario) or under the *Mental Health Act* (Ontario) to be incapable of managing property or who has been found to be incapable by a court in Canada or elsewhere; (c) is not an individual; or (d) has the status of a bankrupt. A director need not be a shareholder.

2.3 Election and Term

The election of directors shall take place at each annual meeting of shareholders. A director not elected for an expressly stated term shall cease to hold office at the close of the first annual meeting following such director's election or appointment. If an election of directors is not held at the proper time, the incumbent directors shall continue in office until their successors are elected.

2.4 Removal of Directors

Subject to the provisions of the Act, the shareholders may by ordinary resolution passed at an annual or special meeting remove any director from office and the vacancy created by such removal may be filled at the same meeting failing which it may be filled by the directors.

2.5 Vacation of Office

A director ceases to hold office when that director: (a) dies; (b) is removed from office by the shareholders; or (c) ceases to be qualified for election as a director. A director who resigns ceases to hold office when that director's written resignation is received by the Corporation or, if a time is specified in such resignation, at the time so specified, whichever is later.

2.6 Vacancies

- (a) Subject to the provisions of the Act, if a quorum of the board remains in office, the board may fill a vacancy in the board, except a vacancy resulting from:
 - (i) an increase in the number of directors otherwise than in accordance with section 2.6(b), or in the maximum number of directors; or
 - (ii) a failure to elect the number of directors required to be elected at any meeting of the shareholders.
- (b) Where the directors are empowered to determine the number of directors, the directors may not, between meetings of shareholders, appoint an additional director if, after such appointment, the total number of directors would be greater than one and one-third times the number of directors required to have been elected at the last annual meeting of shareholders.
- (c) In the absence of a quorum of the board, or if there has been a failure to elect the number of directors required by the articles, the board shall forthwith call a special meeting of shareholders to fill the vacancy. If the board fails to call such meeting or if there are no directors then in office, then any shareholder may call the meeting.

2.7 Remuneration and Expenses

The directors shall be paid such remuneration for their services as the board may from time to time determine and shall also be entitled to be reimbursed for travelling and other expenses properly incurred by them in attending meetings of the board or any committee thereof. Nothing in this by-law shall preclude any director from serving the Corporation in any other capacity and receiving remuneration therefor.

2.8 Appointment of Additional Directors

The directors may, within the maximum number permitted by the articles, appoint one or more additional directors, who shall hold office for a term expiring not later than the close of the next annual meeting of the shareholders, but the total number of directors so appointed at any time may not exceed one third of the number of directors elected at the previous annual meeting of shareholders.

SECTION III MEETINGS OF DIRECTORS

3.1 Meetings by Telephones Electronic or Other Communication Facility

Any or all of the directors may participate in a meeting of the board or of a committee of the board by means of such telephone, electronic or other communication facilities ("electronic means") as to permit all persons participating in the meeting to communicate with each other simultaneously and instantaneously, and any director participating in such a meeting by such means is deemed to be present at the meeting.

3.2 Place of Meetings

Meetings of the board may be held at any place within or outside Ontario. In any financial year of the Corporation, a majority of the meetings of the board need not be held within Canada.

3.3 Calling of Meetings

Meetings of the board may be convened at any time by the chief executive officer, the chairperson of the board or any director upon notice given to all directors in accordance with section 3.4.

3.4 Notice of Meeting

Notice of the time and place of each meeting of the board shall be given in the manner provided in section 11.1 to each director: (a) if the notice is provided by or on behalf of the chief executive officer or the chairperson of the board: (i) not less than 48 hours before the time when the meeting is to be held if the notice is mailed; or (ii) not less than 48 hours before the time 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 or as an electronic document; and (b) if the notice is provided by or on behalf of a director other than the chief executive officer or the chairperson of the board: (i) not less than four (4) business days before the time when the meeting is to be held if the notice is mailed; or (ii) not less than four (4) business days before the time 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 or as an electronic document.

3.5 Waiver of Notice

A director may in any manner and at any time waive notice of or otherwise consent to a meeting of the board, including by sending an electronic document to that effect. Attendance of a director at a meeting of

the board shall constitute a waiver of notice of that meeting, except where a director attends for the express purpose of objecting to the transaction of any business on the grounds that the meeting has not been properly called.

3.6 First Meeting of New Board

Provided a quorum of directors is present, each newly elected board may without notice hold its first meeting immediately following the meeting of shareholders at which such board is elected.

3.7 Adjourned Meeting

Notice of an adjourned meeting of the board is not required if the time and place of the adjourned meeting is announced at the original meeting.

3.8 Regular Meetings

The board may appoint a day or days in any month or months for regular meetings of the board at a place and hour to be named. A copy of any resolution of the board fixing the place and time of such regular meetings shall be sent to each director forthwith after being passed, but no other notice shall be required for any such regular meeting except where the Act requires the purpose thereof or the nature of the business to be transacted to be specified.

3.9 Chairperson of Meetings of the Board

The chairperson of any meeting of the board shall be the director who is the chairperson of the board, and if no such director has been appointed, the directors present shall choose one of their own to be chairperson of such meeting of the board.

3.10 Votes to Govern

At all meetings of the board, every question shall be decided by a majority of the votes cast on the question. In case of an equality of votes, the chairperson of the meeting shall not be entitled to a second or casting vote.

3.11 One Director Meeting

Where the board consists of only one director, that director may constitute a meeting.

3.12 Resolution in Writing

A resolution in writing signed by all of the directors is as valid as if it had been passed at a meeting of the directors, whether or not one or more directors declaring a conflict sign such resolution for the sole purpose of giving effect to such resolution.

SECTION IV COMMITTEES

4.1 Committee of Directors

The board may appoint from their number one or more committees of the board, consisting solely of directors, and delegate to such committee any of the powers of the board except those which, under the Act, a committee of the board has no authority to exercise.

4.2 Audit Committee

If the Corporation is an offering corporation the board shall, and otherwise the board may, constitute an audit committee composed of not fewer than three directors, a majority of whom (or all of whom, if required by a stock exchange upon which the shares of the Corporation are listed for trading or by other applicable regulatory policies) are not officers or employees of the Corporation or any of its affiliates, and who shall hold office until the next annual meeting of shareholders. The audit committee shall have the powers and duties provided in the Act.

4.3 Transaction of Business

The powers of a committee of the board may be exercised by a meeting at which a quorum is present or by resolution in writing signed by all the members of such committee who would have been entitled to vote on that resolution at a meeting of the committee provided that no resolution in writing shall be valid in the event that a member of such committee has declared a conflict of interest. Meetings of such committee may be held at any place within or outside Ontario or by electronic means.

4.4 Procedure

Unless otherwise determined by the board, each committee shall have the power to fix its quorum at not less than a majority of its members, to elect its chairperson and to regulate its procedure. To the extent that the board or the committee does not establish rules to regulate the procedure of the committee, the provisions of this by-law applicable to meetings of the board shall apply *mutatis mutandis*.

SECTION V OFFICERS

5.1 Appointment

The board may designate the offices of the Corporation and from time to time appoint a chairperson of the board, a vice-chairperson, president, chief executive officer, chief financial officer, one or more vice-presidents (to which title may be added words indicating seniority or function), a secretary, a treasurer and such other officers as the board may determine, including one or more assistants to any of the officers so appointed. The board may specify the duties of and, in accordance with this by-law and subject to the provisions of the Act, delegate to such officers powers to manage the business and affairs of the Corporation. One person may hold more than one office and, except for the chairperson of the board, an officer need not be a director.

5.2 Chairperson of the Board

If appointed, the chairperson of the board may be assigned by the board any of the powers and duties that are by any provisions of this by-law assigned to the president and, subject to the provisions of the Act and the policies and mandates of the Corporation, such other powers and duties as the board may specify. The chairperson of the board shall, when present, preside at all meetings of the board and shareholders. Subject to section 3.9 and section 7.9, during the absence or disability of the chairperson of the board, the duties of the chairperson of the board shall be performed, and the powers exercised, by the vice-chairperson (if one has been appointed), failing which, by another director chosen by the directors present at the meeting.

5.3 Vice-Chairperson of the Board

If appointed, the vice-chairperson of the board may fill the role of the chairperson at a meeting of the board in the chairperson of the board is absent. A vice-chairperson may only be appointed if he/she is independent of management and is not an officer of the Corporation.

5.4 Chief Executive Officer

The chief executive officer shall have general supervision of the business and affairs of the Corporation, subject to the direction and authority of the board, and shall have such other powers and duties as the board may specify from time to time.

5.5 President

If appointed, the president shall be the chief executive officer of the Corporation unless such office is otherwise occupied by appointment of the board.

5.6 Vice-President

If appointed, the vice-president, or if more than one, the vice-presidents, in order of seniority as designated by the board, shall be vested with all the powers and perform all the duties of the president in the president's absence, and the chief executive officer, in the chief executive officer's absence or inability or refusal to act, except that a vice-president shall not preside at any meeting of the directors unless appointed to do so by the board or in accordance with Section 5.2 of this by-law. A vice-president shall have such powers and duties as the board or the chief executive officer may specify from time to time.

5.7 Chief Financial Officer

The chief financial officer shall keep or cause to be kept proper accounting records in compliance with the Act and shall be responsible for the deposit of money, the safekeeping of securities and the disbursement of funds of the Corporation. The chief financial officer shall render to the board whenever required an account of all transactions undertaken as chief financial officer and of the financial position of the Corporation and shall have such other powers and duties as the board or the chief executive officer may specify from time to time.

5.8 Treasurer

If appointed, the treasurer shall, in the inability of the chief financial officer to act, keep or cause to be kept proper accounting records in compliance with the Act and shall be responsible for the deposit of money, the safekeeping of securities and the disbursement of funds of the Corporation. If acting as the chief financial officer, the treasurer shall render to the board whenever required an account of all transactions undertaken as chief financial officer / treasurer and of the financial position of the Corporation and shall have such other powers and duties as the board or the chief executive officer may specify from time to time.

5.9 Corporate Secretary

The corporate secretary shall attend and be the secretary of all meetings of the board, shareholders and committees of the board and shall enter or cause to be entered in records kept for that purpose minutes of all such proceedings. The corporate secretary shall give or cause to be given, as and when instructed, all notices to shareholders, directors, officers and auditors. The corporate secretary shall be the custodian of all books and records of the Corporation, except when some other officer or agent has been appointed for

that purpose. The corporate secretary shall have such other powers and duties as the board or the chief executive officer may specify from time to time.

5.10 Powers and Duties of Other Officers

The powers and duties of all other officers shall be such as the terms of their engagement call for or as the board or the chief executive officer may specify. Any of the powers and duties of an officer to whom an assistant has been appointed may be exercised and performed by such assistant, unless the board or the chief executive officer otherwise directs.

5.11 Variation of Powers and Duties

Subject to the provisions of the Act, the board may from time to time vary, add to or limit the powers and duties of any officer.

5.12 Term of Office

The chief executive officer, or the board, in its discretion, may remove any officer of the Corporation without prejudice to such officer's rights under any employment contract. Otherwise, each officer appointed by the board, shall hold office until a successor is appointed. The term of office of the chairperson of the board shall expire at the earlier of such chairperson of the board ceases to be a director and the annual meeting of shareholders whereafter the board may appoint a new chairperson of the board.

5.13 Agents and Attorneys

The board shall have the power from time to time to appoint agents or attorneys for the Corporation in or out of Ontario with such powers of management or otherwise (including the power to sub-delegate) as the board may determine.

SECTION VI PROTECTION OF DIRECTORS AND OFFICERS

6.1 Limitation of Liability

No director or officer of the Corporation shall be liable for the acts or omissions of any other director, officer, employee or agent of the Corporation, or for any costs, charges or expenses of the Corporation resulting from any deficiency of title to any property acquired for or on behalf of the Corporation, or for the insufficiency of any security in or upon which any of the moneys of the Corporation shall be invested, or for any loss or damage arising from bankruptcy or insolvency, or in respect of any tortious acts of or relating to the Corporation or any other director, officer, employee or agent of the Corporation, or for any loss occasioned by an error of judgment or oversight on the part of any other director, officer, employee or agent of the Corporation, or for any other costs, charges or expenses of the Corporation occurring in connection with the execution of the duties of the director or officer, unless such costs, charges or expenses are incurred as a result of such person's own willful neglect, material default or gross negligence. Nothing in this by-law, however, shall relieve any director or officer from the duty to act in accordance with the Act or from liability for any breach of the Act.

6.2 Indemnity

(a) Indemnification. The Corporation shall, whenever required or permitted by the Act, indemnify and save harmless every director or officer, every former director or officer, and

every individual who acts or acted at the Corporation's request as a director or officer or an individual in a similar capacity of another entity, from and against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by that individual in respect of any civil, criminal, administrative, investigative or other proceeding to which that individual is involved because of their association with the Corporation or other entity.

- (b) Advance of Costs. The Corporation shall, unless prohibited by the Act, advance money to a director, officer or other individual for the costs, charges and expenses of a proceeding referred to in section 6.2(a), but such individual shall be required to repay the money if the individual does not fulfil the conditions set out in section 6.2(c).
- (c) Limitation. The Corporation shall not indemnify an individual under section 6.2(a) unless that individual acted honestly and in good faith with a view to the best interests of the Corporation or, as the case may be, to the best interests of the other entity for which the individual acted as a director or officer or as an individual in a similar capacity at the Corporation's request.
- (d) Further Limitation. In addition to the conditions set out in section 6.2(c), if the matter is a criminal or administrative action or proceeding that is enforced by a monetary penalty, the Corporation shall not indemnify the individual under section 6.2(a) unless that individual had reasonable grounds for believing that the conduct was lawful.
- (e) Derivative Action. The Corporation shall, whenever required or permitted by the Act, with the approval of a court, indemnify and save harmless any individual referred to in section 6.2(a), or advance moneys under section 6.2(b) in respect of any action by or on behalf of the Corporation or other entity to obtain a judgment in its favour, to which the individual is made a party because of the individual's association with the Corporation or other entity against all costs, charges and expenses reasonably incurred by the individual in connection with such action, if that individual acted honestly and in good faith with a view to the best interests of the Corporation or, as the case may be, to the best interests of the other entity for which the individual acted as a director or officer or in a similar capacity at the Corporation's request.
- (f) Right to Indemnity. Despite section 6.2(a), an individual referred to in that section is entitled to indemnity from the Corporation in respect of all costs, charges and expenses reasonably incurred by the individual in connection with the defence of any civil, criminal, administrative, investigative or other proceeding to which the individual is subject because of the individual's association with the Corporation or other entity as described in section 6.2(a) if the individual seeking an indemnity,
 - (i) was not judged by a court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done; and
 - (ii) fulfils the condition set out in section 6.2(c) and section 6.2(d).

6.3 Insurance

The Corporation may purchase and maintain such insurance for the benefit of an individual referred to in section 6.2(a) against any liability incurred by the individual in his or her capacity as a director or officer

of the Corporation, or in his or her capacity as a director or officer, or a similar capacity of another entity, if the individual acts or acted in that capacity at the Corporation's request.

SECTION VII MEETINGS OF SHAREHOLDERS

7.1 Annual Meetings

The annual meeting of shareholders shall be held at such time in each year and, subject to section 7.3, at such place as the board, may from time to time determine for the purpose of considering the financial statements and reports required by the Act to be placed before the annual meeting, electing directors, appointing auditors and fixing or authorizing the board to fix their remuneration, and for the transaction of such other business as may properly be brought before the meeting.

7.2 Special Meetings

The board, the chairperson of the board, the president or the holders of not less than five percent (5%) of the issued shares of the Corporation that carry the right to vote at a meeting sought shall have power to call a special meeting of shareholders at any time.

7.3 Place of Meetings

Meetings of shareholders shall be held at the place where the registered office of the Corporation is situated or, if the board shall so determine, at some other place within or outside Ontario or virtually by electronic means in accordance with Section 7.4.

7.4 Meetings by Telephone, Electronic or Other Communication Facility

If the directors determine to hold a meeting via telephone, electronic or other communication facility, any person entitled to attend a meeting of shareholders may participate in the meeting, to the extent and in the manner permitted by law, by means of a telephone, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting if the Corporation makes available such a communication facility. A person participating in a meeting by such means is deemed for the purposes of the Act to be present at the meeting. The directors or the shareholders of the Corporation who call a meeting of shareholders pursuant to the Act may determine that the meeting shall be held, to the extent and in the manner permitted by law, entirely by means of a telephone, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting.

7.5 Notice of Meetings

Notice of the time and place of each meeting of shareholders (and of each meeting of shareholders adjourned for an aggregate of 30 days or more) shall be given in the manner provided in section 11.1 not less than 10 days (or such lesser number of days then required under the Act or any other applicable legislation, regulation or administrative policy), unless the Corporation is an offering corporation in which case not less than 21 days or, in either case, not more than 50 days before the date of the meeting, to each director, to the auditor of the Corporation and to each shareholder entitled to vote at the meeting. Notice of a meeting of shareholders called for any purpose other than consideration of the financial statements and auditor's report, election of directors and re-appointment of the incumbent auditor shall state the nature of such business in sufficient detail to permit a shareholder to form a reasoned judgment thereon and shall state the text of any special resolution or by-law to be submitted to the meeting.

7.6 List of Shareholders Entitled to Notice

For every meeting of shareholders, the Corporation shall prepare (or cause to be prepared) a list of shareholders entitled to receive notice of the meeting, arranged in alphabetical order and showing the number of shares entitled to vote at the meeting held by each shareholder. If a record date for the meeting is fixed pursuant to section 7.7, the shareholders listed shall be those registered at the close of business on the record date and such list shall be prepared not later than 10 days after such record date. If no record date is fixed, the list shall be prepared at the close of business on the day immediately preceding the day on which notice of the meeting is given, or where no such notice is given, the day on which the meeting is held, and shall list all shareholders registered at such time. The list shall be available for examination by any shareholder during usual business hours at the registered office of the Corporation or at the place where the securities register is kept and at the place where the meeting is held.

7.7 Record Date for Notice

The board may fix in advance a record date, preceding the date of any meeting of shareholders by not more than 60 days and not less than 30 days, for the determination of the shareholders entitled to notice of the meeting, and notice of any such record date shall be given not less than 7 days before such record date in the manner provided in the Act. If no record date is so fixed, the record date for the determination of the shareholders entitled to notice of the meeting shall be the close of business on the day immediately preceding the day on which the notice is given.

7.8 Meetings Without Notice

A shareholder and any other person entitled to attend a meeting of shareholders may in any manner and at any time waive notice of or otherwise consent to a meeting of shareholders. Attendance of any such person at a meeting of shareholders shall constitute a waiver of notice of the meeting except where that person attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not properly called.

7.9 Chairperson, Secretary and Scrutineers

The chairperson of any meeting of shareholders shall be the first mentioned of such of the following officers as have been appointed and who is present at the meeting and willing to serve: chairperson of the board, the chief executive officer, the president or a vice-president. If no such officer is present within 15 minutes from the time fixed for holding the meeting, the persons present and entitled to vote shall choose one of their number to be chairperson of the meeting. If the secretary of the Corporation is absent, the chairperson shall appoint some person, who need not be a shareholder, to act as secretary of the meeting. If desired, one or more scrutineers, who need not be shareholders, may be appointed by a resolution or by the chairperson with the consent of the meeting.

7.10 Persons Entitled to be Present

The only persons entitled to be present at a meeting of the shareholders shall be those entitled to vote, the directors and auditor of the Corporation and others who, although not entitled to vote, are entitled or required under any provision of the Act, the articles or the by-laws to be present at the meeting. Any other person may be admitted only on the invitation of the chairperson of the meeting or with the consent of the meeting.

7.11 Quorum

A quorum for the transaction of business at any meeting of shareholders shall be at least two persons present in person or represented by proxy. No business shall be transacted at any meeting unless the requisite quorum shall be present at the commencement of such meeting, provided that if a quorum is present at the commencement of a meeting, a quorum shall be deemed present during the remainder of the meeting.

7.12 Entitlement to Vote

Subject to the provisions of the Act as to authorized representatives of any other body corporate, at any meeting of shareholders every person who is named in the shareholders list prepared pursuant to section 7.6 shall be entitled to vote the shares shown thereon opposite the name of that person at the meeting to which the shareholder list relates.

7.13 Proxies

Every shareholder entitled to vote at a meeting of shareholders may appoint a proxyholder, or one or more alternate proxyholders, who need not be shareholders, to attend and act at the meeting in the manner and to the extent authorized and with the authority conferred by the proxy. A proxy shall be in writing executed by the shareholder or by the attorney of the shareholder or shall be an electronic document with an electronic signature and shall conform with the requirements of the Act.

7.14 Time for Deposit of Proxies

The board may by resolution and specified in a notice calling a meeting of shareholders fix a time, preceding the time of such meeting by not more than 48 hours exclusive of non-business days, 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, it has been received by the secretary of the Corporation or by the chairperson of the meeting or any adjournment thereof prior to the time of voting.

7.15 Joint Shareholders

If two or more persons hold shares jointly, any one of them present in person or represented by proxy at a meeting of shareholders may, in the absence of the other or others, vote the shares; but if two or more of those persons are present in person or represented by proxy and vote, they shall vote as one the shares jointly held by them.

7.16 Votes to Govern

At any meeting of shareholders every question shall, unless otherwise required by law, be determined by the majority of the votes cast on the question. In the case of an equality of votes either upon a show of hands or upon a ballot, the chairperson of the meeting shall not be entitled to a second or casting vote.

7.17 Show of Hands

Subject to the provisions of the Act, any question at a meeting of shareholders shall be decided by a show of hands unless a ballot thereon is required or demanded by electronic means or otherwise. Upon a show of hands, every person who is present and entitled to vote shall have one vote. Whenever a vote by show of hands shall have been taken upon a question, unless a ballot thereon is so required or demanded by electronic means or otherwise, a declaration by the chairperson of the meeting as to the result of the vote

upon the question and an entry to that effect in the minutes of the meeting shall be *prima facie* evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against any resolution or other proceeding in respect of such question, and the result of the vote so taken shall be the decision of the shareholders upon such question.

7.18 Ballots

On any question proposed for consideration at a meeting of shareholders, and whether or not a show of hands has been taken thereon, any shareholder or proxyholder entitled to vote at the meeting or the chairperson of the meeting may demand a ballot. A ballot so demanded shall be taken in such manner as the chairperson shall direct, which manner shall permit a shareholder or proxyholder participating in the meeting electronically to cast a ballot. A demand for a ballot may be withdrawn at any time prior to the taking of the ballot. The result of the ballot so taken shall be the decision of the shareholders upon the question.

7.19 Voting While Participating Electronically

Any person participating in a meeting of shareholders by electronic means as provided in section 7.4 and entitled to vote at that meeting may vote, to the extent and in the manner permitted by law, partly or entirely by means of the telephone, electronic or other communication facility that the Corporation has made available for that purpose.

7.20 Resolution in Writing

A resolution in writing signed by all of 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 unless a written statement with respect to the subject matter of the resolution is submitted by a director or the auditor in accordance with the Act.

SECTION VIII SECURITIES

8.1 Registration of Transfer

Subject to the provisions of the Act, no transfer of shares shall be registered in a securities register except upon presentation of the certificate (or other acceptable form of evidence thereof) representing such shares with a transfer endorsed thereon or delivered therewith duly executed by the registered holder or by that holder's attorney or successor duly appointed (or such other form of acceptable form of transfer), together with such reasonable assurance or evidence of signature, identification and authority to transfer as the board may from time to time prescribe, upon payment of all applicable taxes and any fees prescribed by the board, upon compliance with such restrictions on transfer as are authorized by the articles and upon satisfaction of any lien referred to in section 8.3.

8.2 Transfer Agents and Registrars

The board may from time to time appoint a registrar to maintain the securities register and a transfer agent to maintain the register of transfers and may also appoint one or more branch registrars to maintain branch securities registers and one or more branch transfer agents to maintain branch registers of transfers, but one person may be appointed both registrar and transfer agent. The board may at any time terminate any such appointment.

8.3 Lien on Shares

The Corporation has a lien on any share or shares registered in the name of a shareholder or the legal representative of that shareholder for any debt of that shareholder to the Corporation.

8.4 Enforcement of Lien

The lien referred to in section 8.3 may be enforced by any means permitted by law and:

- (a) where the share or shares are redeemable pursuant to the articles of the Corporation, by redeeming such share or shares and applying the redemption price to the debt;
- (b) subject to the Act, by purchasing the share or shares for cancellation;
- (c) by selling the share or shares to any third party whether or not such party is at arm's length to the Corporation, and including without limitation any officer or director of the Corporation, for the best price which the directors consider to be obtainable for such share or shares; or
- (d) by refusing to register a transfer of such share or shares until the debt is paid.

8.5 Security Certificates

Every holder of securities of the Corporation shall be entitled, at that holder's option, to a security certificate, or to a non-transferable written or electronic acknowledgement of the right to obtain a security certificate, stating the number and designation, class or series of securities held by that holder as shown on the securities register. Security certificates and acknowledgements of a security holder's right to a security certificate, respectively, shall be in such form as the board shall from time to time approve. Any security certificate shall be signed in accordance with section 10.1. A security certificate shall be signed manually (or electronically, as permitted under the Act) by at least one director or officer of the Corporation or by or on behalf of the transfer agent and/or registrar. Any additional signatures required may be printed or otherwise mechanically reproduced. A security certificate executed as aforesaid shall be valid notwithstanding that one of the directors or officers whose signature appears thereon no longer holds office at the date of issue of the certificate.

8.6 Replacement of Security Certificates

The board, any officer or any agent designated by the board has the discretion to direct the issue of a new security certificate in lieu of and upon cancellation of a security certificate that has been mutilated. In the case of a security certificate claimed to have been lost, destroyed or wrongfully taken, the board, any officer or any agent designated by the board shall issue a substitute security certificate if so requested before the Corporation has notice that the security has been acquired by a bona fide purchaser. The issuance of the substitute security certificate shall be on such reasonable terms as to indemnity, reimbursement of expenses and evidence of loss and of title as the board or the officer or the agent designated by the board responsible for such issuance may from time to time prescribe, whether generally or in any particular case.

8.7 Joint Shareholders

(a) If two or more persons are registered as joint holders of any security, the Corporation shall not be bound to issue more than one certificate in respect thereof, and delivery of such certificate to one of such persons shall be sufficient delivery to all of them. Any one of

such persons may give effectual receipts for the certificate issued in respect thereof or for any dividend, bonus, return of capital or other money payable or warrant issuable in respect of such security.

(b) Where a share is registered in the name of two or more persons as joint holders with rights of survivorship, upon satisfactory proof of the death of one joint holder and without the requirement of letters probate or letters of administration, the Corporation shall treat the surviving joint holder(s) as the sole owner(s) of the share effective as of the date of death of such joint holder and the Corporation shall make the appropriate entry in the securities register to reflect such ownership.

8.8 Representatives of Security Holders

Subject to section 8.7(b), the Corporation may treat a person referred to in (a), (b) or (c) below as a registered security holder entitled to exercise all of the rights of the security holder that the person represents, if that person furnishes evidence as required under the Act to the Corporation that the person is:

- (a) the executor, administrator, estate trustee, heir or legal representative of the heirs, of the estate of a deceased security holder;
- (b) a guardian, attorney under a continuing power of attorney with authority, guardian of property, committee, trustee, curator or tutor representing a registered security holder who is a minor, a person who is incapable of managing his or her property or a missing person; or
- (c) a liquidator of, or trustee in bankruptcy for, a registered security holder.

SECTION IX DIVIDENDS AND RIGHTS

9.1 Dividends

Subject to the provisions of the Act, the board may from time to time by resolution declare, and the Corporation may pay, dividends to the shareholders according to their respective rights and interests in the Corporation.

Dividends may be paid in money or property, subject to the restrictions on the declaration and payment thereof under the Act, or by issuing fully paid shares of the Corporation or options or rights to acquire fully paid shares of the Corporation.

9.2 Dividend Cheques

A dividend payable in cash shall be paid by cheque (or other acceptable means of fund transfer as the Corporation may determine) 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 (or, as applicable, electronically delivered) to such registered holder at the recorded address of that holder, unless such holder otherwise directs. In the case of joint holders the cheque (or other form of funds transfer) shall, unless such joint holders otherwise direct, be made payable (or delivered) to the order of all of such joint holders and mailed to them at their recorded address. The mailing of such cheque (or electronic delivery of such funds) 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.

9.3 Non-Receipt of Cheques

In the event of non-receipt of any dividend cheque (or other form of transfer) by the person to whom it is sent as aforesaid, the Corporation shall issue to such person a replacement cheque (or transfer) for a like amount on such terms as to indemnity, reimbursement of 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.

9.4 Record Date for Dividends and Rights

The board may fix in advance a date as a record date for the determination of the persons entitled to receive payment of dividends and to subscribe for securities of the Corporation, provided that such record date shall not precede by more than 50 days the particular action to be taken. Notice of any such record date shall be given not less than 7 days before such record date in the manner provided in the Act, unless notice of the record date is waived by every holder of a share of the class or series affected whose name is set out in the securities register at the close of business on the day the directors fix the record date. If the shares of the Corporation are listed for trading on one or more stock exchanges in Canada, notice of such record date shall also be sent to such stock exchanges. Where no record date is fixed in advance as aforesaid, 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 hoard.

9.5 Unclaimed Dividends

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

SECTION X GENERAL

10.1 Execution of Instruments

Contracts, documents and other instruments in writing may be signed on behalf of the Corporation by such person or persons as the board may from time to time by resolution designate. In the absence of an express designation as to the persons authorized to sign either contracts, documents or instruments in writing generally or to sign specific contracts, documents or instruments in writing, any one of the directors or officers of the Corporation may sign contracts, documents or instruments in writing on behalf of the Corporation. The corporate seal, if any, of the Corporation may be affixed to any contract, document or instrument in writing requiring the corporate seal of the Corporation by any person authorized to sign the same on behalf of the Corporation.

The phrase "contracts, documents and other instruments in writing" as used in this provision 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 securities, all paper writings, all cheques, drafts or orders for the payment of money and all notes, acceptances and bills of exchange.

10.2 Electronic Signatures

Any requirement under the Act or this by-law for a signature, or for a document to be executed, is satisfied by a signature or execution in electronic form if such is permitted by law and all requirements prescribed by law are met.

10.3 Voting Rights in other Corporations

All securities carrying voting rights of any other corporation held from time to time by the Corporation may be voted at any and all meetings of shareholders, bond holders, debenture holders or holders of other securities (as the case may be) of such other corporation and in such manner as the board may from time to time determine. Any person or persons authorized to sign on behalf 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.

SECTION XI NOTICES

11.1 Method of Sending Notice

Any notice (which term includes any communication or document) to be sent pursuant to the Act, the articles, the by-laws or otherwise to a shareholder, director, officer or to the auditor shall be sufficiently sent if: (a) delivered personally to the person to whom it is to be sent; (b) delivered to the recorded address of that person or, if mailed to that person, delivered to the recorded address by prepaid mail; (c) sent to that person at the recorded address by any means of prepaid transmitted or recorded communication; or (d) provided as an electronic document to that person's information system. A notice so delivered shall be deemed to have been sent when it is delivered personally or to the recorded address. A notice so mailed shall be deemed to have been sent when deposited in a post office or public letter box and shall be deemed to have been received on the fifth day after so depositing. A notice so sent by any means of transmitted or recorded communication or provided as an electronic document shall be deemed to have been sent when dispatched by the Corporation if it uses its own facilities or information system and otherwise when delivered to the appropriate communication company or agency or its representative for dispatch. Notices sent by any means of transmitted or recorded communication or provided as an electronic document shall be deemed to have been received on the business day on which such notices were sent, or on the next business day following if sent on a day other than a business day. The secretary may change or cause to be changed the recorded address, including any address to which electronic communications of any kind may be sent, of any shareholder, director, officer or auditor in accordance with any information believed by the secretary to be reliable. The recorded address of a director shall be the latest address as shown in the records of the Corporation or in the most recent notice filed under the Corporations Information Act (Ontario), whichever is the more current.

11.2 Notice by Electronic Communications

A notice or document required or permitted by the Act, the articles, the by-laws or otherwise may be sent by electronic means in accordance with the *Electronic Commerce Act*, 2000 (Ontario).

11.3 Notice to Joint Shareholders

If two or more persons are registered as joint holders of any share, any notice shall be addressed to all of such joint holders, but notice sent to one of such persons shall be sufficient notice to all of them.

11.4 Computation of Time

In computing the date when notice must be sent under any provision requiring a specified number of days notice of any meeting or other event, both the date of sending the notice and the date of the meeting or other event shall be excluded.

11.5 Undelivered Notices

If any notice sent to a shareholder pursuant to section 11.1 is returned on three consecutive occasions because the shareholder cannot be found, the Corporation shall not be required to give any further notices to such shareholder until the shareholder informs the Corporation in writing of a new address.

11.6 Omissions and Errors

The accidental omission to send any notice to any shareholder, director, officer or to the auditor, or the non-receipt of any notice by any such person or any error in any notice not affecting the substance thereof shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded thereon.

11.7 Persons Entitled by Operation of Law

Every person who, by operation of law, transfer or by any other means whatsoever shall become entitled to any share shall be bound by every notice in respect of such share which shall have been duly sent to the shareholder from whom that person derives title to such share prior to the name and address of that person being entered on the securities register (whether such notice was given before or after the happening of the event upon which that person became so entitled).

11.8 Waiver of Notice

Any shareholder (or a duly appointed proxyholder), director, officer or auditor may at any time waive any notice, or waive or abridge the time for any notice, required to be given to that person under any provisions of the Act, the regulations thereunder, the articles, the by-laws or otherwise and such waiver or abridgement shall cure any default in the giving or in the time of such notice, as the case may be. Any such waiver or abridgement shall be in writing or by electronic means in accordance with the *Electronic Commerce Act*, 2000 (Ontario), except a waiver of notice of a meeting of shareholders or of the board, which may be given in any manner.

11.9 Execution of 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.

11.10 Proof of Service

A certificate of any director or officer of the Corporation in office at the time of making of the certificate or of an agent of the Corporation as to facts in relation to the sending of any notice to any shareholder, director, officer or auditor or publication of any notice shall be conclusive evidence thereof and shall be binding on every shareholder, director, officer or auditor of the Corporation, as the case may be.

11.11 Effective Date

Corporate Secretary