

NORTEL NETWORKS CORPORATION

BY-LAW NO. 1

February 22, 2001

BY-LAW NO. 1

TABLE OF CONTENTS

**ARTICLE 1
DEFINITIONS**

SECTION 1.1 DEFINITIONS1

**ARTICLE 2
CORPORATE SEAL**

SECTION 2.1 CORPORATE SEAL.....1

**ARTICLE 3
SHAREHOLDERS**

SECTION 3.1 ANNUAL MEETING1
SECTION 3.2 SPECIAL MEETINGS1
SECTION 3.3 NOTICE OF MEETING.....2
SECTION 3.4 ATTENDANCE2
SECTION 3.5 QUORUM2
SECTION 3.6 CHAIRMAN AND SECRETARY OF MEETING2
SECTION 3.7 PROXIES.....3
SECTION 3.8 PROCEDURE AND VOTING AT MEETINGS3
SECTION 3.9 SCRUTINEERS4
SECTION 3.10 ADJOURNMENT OF MEETINGS4

**ARTICLE 4
DIRECTORS**

SECTION 4.1 POWERS4
SECTION 4.2 NUMBER OF DIRECTORS4
SECTION 4.3 ELECTION.....4
SECTION 4.4 RESIGNATION AND VACANCY4
SECTION 4.5 REGULAR MEETINGS OF DIRECTORS5
SECTION 4.6 SPECIAL MEETINGS OF DIRECTORS5
SECTION 4.7 PLACE OF MEETINGS5
SECTION 4.8 NOTICE OF MEETINGS5
SECTION 4.9 QUORUM5
SECTION 4.10 CHAIRMAN OF MEETING.....5
SECTION 4.11 VOTING.....6
SECTION 4.12 PARTICIPATION IN MEETINGS6
SECTION 4.13 RESOLUTION IN LIEU OF MEETING6
SECTION 4.14 REMUNERATION OF DIRECTORS6

**ARTICLE 5
EXECUTIVE COMMITTEE**

SECTION 5.1 FORMATION6
SECTION 5.2 POWERS6
SECTION 5.3 FURTHER PROVISIONS.....6

**ARTICLE 6
AUDIT COMMITTEE**

SECTION 6.1	FORMATION	7
SECTION 6.2	POWERS	7
SECTION 6.3	FURTHER PROVISIONS.....	7

**ARTICLE 7
OTHER COMMITTEE AND ADVISORY BODIES**

SECTION 7.1	FORMATION	7
SECTION 7.2	POWERS	7
SECTION 7.3	FURTHER PROVISIONS.....	7

**ARTICLE 8
OFFICERS**

SECTION 8.1	APPOINTMENT	8
SECTION 8.2	TENURE OF OFFICE.....	8
SECTION 8.3	POWERS	8
SECTION 8.4	CHAIRMAN OF THE BOARD.....	8
SECTION 8.5	MANAGING DIRECTOR	9
SECTION 8.6	CHIEF EXECUTIVE OFFICER.....	9
SECTION 8.7	PRESIDENT.....	9
SECTION 8.8	CORPORATE SECRETARY	9
SECTION 8.9	CONTROLLER.....	9
SECTION 8.10	TREASURER.....	10
SECTION 8.11	OTHER OFFICERS	10

**ARTICLE 9
INDEMNIFICATION OF DIRECTORS AND OFFICERS**

SECTION 9.1	LIMITATION OF LIABILITY	10
SECTION 9.2	INDEMNITY	10
SECTION 9.3	INSURANCE	11

**ARTICLE 10
DISCLOSURE OF INTEREST BY DIRECTORS AND OFFICERS**

SECTION 10.1	DISCLOSURE OF INTEREST AND VOTING.....	11
--------------	----------------------------------------	----

**ARTICLE 11
FINANCIAL YEAR**

SECTION 11.1	FINANCIAL YEAR.....	11
--------------	---------------------	----

**ARTICLE 12
AUDITOR**

SECTION 12.1	AUDITOR	11
--------------	---------------	----

**ARTICLE 13
SECURITIES**

SECTION 13.1	ISSUANCE.....	12
SECTION 13.2	SECURITY CERTIFICATES	12
SECTION 13.3	SECURITIES REGISTERS	12
SECTION 13.4	LOST OR DESTROYED CERTIFICATES.....	12
SECTION 13.5	PAYMENT OF DIVIDENDS AND OTHER AMOUNTS.....	12
SECTION 13.6	JOINT HOLDERS.....	13
SECTION 13.7	UNCLAIMED DIVIDENDS.....	13

**ARTICLE 14
EXECUTION OF DOCUMENTS**

SECTION 14.1	DOCUMENTS	13
SECTION 14.2	BANKING ARRANGEMENTS	13
SECTION 14.3	CUSTODY OF SECURITIES.....	13

**ARTICLE 15
NOTICES**

SECTION 15.1	METHOD OF GIVING NOTICES	14
SECTION 15.2	PROOF OF GIVING OF NOTICE.....	14
SECTION 15.3	ADDRESSES OF SHAREHOLDERS	14
SECTION 15.4	ACCIDENTAL OMISSION.....	14
SECTION 15.5	PERSONS ENTITLED BY DEATH OR OPERATION OF LAW	14
SECTION 15.6	WAIVER OF NOTICE.....	15

**ARTICLE 16
BORROWING**

SECTION 16.1	BORROWING POWER.....	15
SECTION 16.2	DELEGATION.....	15

**ARTICLE 17
ENACTMENT AND REPEAL**

SECTION 17.1	EFFECTIVE DATE.....	15
--------------	---------------------	----

**ARTICLE 18
INTERPRETATION**

SECTION 18.1	INTERPRETATION	16
--------------	----------------------	----

**ARTICLE 1
DEFINITIONS**

SECTION 1.1 DEFINITIONS

In the by-laws of the corporation, unless the context otherwise requires:

“Act” shall mean the Canada Business Corporations Act, R.S.C. 1985, c. C-44, the Regulations enacted pursuant to the Act and any statute and regulations that may be substituted therefor, all as amended from time to time;

“by-laws” shall mean this by-law, as amended from time to time, and all other by-laws of the corporation in force and effect from time to time;

“corporation” shall mean Nortel Networks Corporation;

“meeting of shareholders” shall mean an annual meeting of shareholders or a special meeting of shareholders, and includes a meeting of the holders of one (1) or more of the classes or series of shares of the corporation;

“notice” shall include any communication or document; and

“special meeting of shareholders” shall mean any meeting of shareholders at which special business is to be conducted, and includes an annual and special meeting of shareholders.

**ARTICLE 2
CORPORATE SEAL**

SECTION 2.1 CORPORATE SEAL

The corporation may, but need not have, one (1) or more corporate seals. The corporate seal or seals of the corporation shall be in such form as the board of directors may adopt by resolution. An instrument or agreement executed on behalf of the corporation by a director, officer or agent of the corporation is not invalid merely because the corporate seal is not affixed thereto.

**ARTICLE 3
SHAREHOLDERS**

SECTION 3.1 ANNUAL MEETING

Subject to the Act, the annual meeting of shareholders shall be held at such place and on such date in each year and at such time as may be fixed by the board of directors.

An annual meeting of shareholders may also be constituted as an annual and special meeting of shareholders to consider and transact any special business, which may be considered and transacted at a special meeting of shareholders.

SECTION 3.2 SPECIAL MEETINGS

Subject to the Act, special meetings of shareholders may be called at any time by, or by the order of, the board of directors, the chairman of the board or the chief executive officer and shall be held at such place as may be determined by the person or body calling, or ordering the calling of, the special meeting.

SECTION 3.3 NOTICE OF MEETING

A notice of meeting of shareholders or, to the extent required under the Act, notice of any adjournment or postponement thereof, shall be given as specified by the Act and other applicable law, and may be given in the manner provided in Article 15.

SECTION 3.4 ATTENDANCE

The only persons entitled to attend a meeting of shareholders are those entitled to vote thereat, the directors, the auditor of the corporation and others who, although not entitled to vote, are entitled or required under the Act or other applicable law, the articles or the by-laws of the corporation to be present at such meeting. The chairman of a meeting of shareholders may permit or restrict attendance at such meeting by persons other than those enumerated above.

The chairman of a meeting of shareholders may order the removal from the meeting of any person whose conduct, in the opinion of the chairman, has prejudiced or is likely to prejudice, the orderly conduct of the meeting.

To the extent permitted by the Act, meetings of shareholders may be held by telephonic, electronic or other communication facility. A person participating in a meeting by such means is deemed to be present at the meeting. The board of directors may establish, by resolution, procedures regarding the holding of meetings of shareholders by such means as are permitted by the Act.

SECTION 3.5 QUORUM

Unless otherwise provided in the articles of the corporation, a quorum at a meeting of shareholders shall be three (3) persons present in person and representing in their own right, or by proxy, or as the duly authorized representative of any shareholder that is a body corporate or association, not less than ten percent (10%) in number of the outstanding shares of the corporation carrying voting rights at the meeting of shareholders. At an adjourned meeting of shareholders, a quorum shall be the shareholders present in person or represented by proxy or by a duly authorized representative, holding shares carrying voting rights at the adjourned meeting of shareholders. Notwithstanding the foregoing, if the corporation has fewer than ten (10) shareholders of any class or series of shares, any two (2) persons present in person and representing in their own right, or by proxy, or as the duly authorized representative of any shareholder that is a body corporate or association, not less than ten percent (10%) in number of the outstanding shares of that class or series carrying voting rights at the meeting of that class or series of shareholders constitutes a quorum for such meeting.

If a quorum is present at the opening of a meeting of shareholders, the persons present may proceed with the business of the meeting, notwithstanding that a quorum is not present throughout the meeting.

SECTION 3.6 CHAIRMAN AND SECRETARY OF MEETING

The chairman of the board or, in his or her absence or in case of his or her disability or refusal to act, the chief executive officer or, in his or her absence or in case of his or her disability or refusal to act, the president or, in his or her absence or in case of his or her disability or refusal to act, such other person that may have been designated by the board of directors to exercise such function, shall preside as chairman at meetings of shareholders. In the absence of the chairman of the board, the chief executive officer, the president and all such other persons designated by the board of directors, or in case of their disability or refusal to act, the persons present entitled to vote at a meeting of shareholders shall choose another director as chairman of the meeting and if no director is present or if all the directors present refuse to act, then the persons present entitled to vote shall choose one (1) of their number to be chairman of the meeting.

The corporate secretary shall act as secretary of meetings of shareholders or, in his or her absence or in the case of his or her disability or refusal to act, the chairman of the meeting shall appoint a person, who need not be a shareholder, to act as secretary of the meeting.

SECTION 3.7 PROXIES

A shareholder is entitled to vote in person or by proxy or, if a body corporate or an association, by its duly authorized representative.

Proxyholders must be appointed by a form of proxy or other appropriate instrument in writing signed by the shareholder or his or her attorney duly authorized in writing that conforms with the requirements of the Act; provided, however, that if the Act permits the appointment of a proxyholder or attorney by telephonic or electronic or other means, the board of directors may establish, by resolution, procedures in respect of the delivery, completion, execution, submission and revocation of such instruments by such means.

To the extent permitted by the Act, the board of directors may establish, by resolution, procedures regarding the lodging of instruments appointing a proxyholder 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 the means by which such instruments may be communicated prior to the meeting or adjourned meeting to the corporation or any agent of the corporation appointed for the purpose of receiving such particulars and providing that instruments appointing a proxyholder so lodged may be voted as though the instruments themselves were produced at the meeting or adjourned meeting and votes given in accordance with such procedures shall be valid and shall be counted. The chairman of a meeting of shareholders may, subject to any procedures made as aforesaid and applicable law, in his or her discretion accept telephonic, electronic or other communication as to the authority of anyone claiming to vote on behalf of and to represent a shareholder, notwithstanding that no instrument of proxy conferring such authority has been lodged 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.

SECTION 3.8 PROCEDURE AND VOTING AT MEETINGS

The chairman of a meeting of shareholders shall conduct the meeting and shall determine the procedure thereof in all respects. The chairman's decision on all matters or things, including, for greater certainty, any questions regarding the validity or invalidity of a form of proxy or other instrument appointing a proxy, shall be conclusive and binding upon the meeting of shareholders.

Unless otherwise required by the Act or other applicable law, or by the articles or by-laws of the corporation, the vote of the shareholders representing a majority of the votes attaching to all shares represented at a meeting of shareholders and entitled to vote thereat shall be sufficient for all purposes and shall be the decision of the meeting. In the case of an equality of votes, the chairman of the meeting shall have a casting vote in addition to the vote or votes to which the chairman is entitled as a shareholder, a proxyholder or a duly authorized representative of a shareholder.

Unless otherwise required by the Act, every matter submitted to a meeting of shareholders for decision shall be decided by a show of hands, unless a ballot thereon is required or demanded. The chairman of a meeting of shareholders may require, or any person entitled to vote may demand, a ballot on any matter either before or after any vote by a show of hands. A demand for a ballot may be withdrawn at any time prior to the taking of the ballot. A ballot so required or demanded shall be taken in such manner and either at once or after adjournment, as the chairman of the meeting shall direct. The result of the ballot shall be the decision of the meeting of shareholders, whether or not a vote by a show of hands shall have been taken previously on the same matter.

Subject to the Act, every person entitled to vote at a meeting of shareholders shall have one (1) vote on a show of hands. Upon a ballot, every person entitled to vote at a meeting of shareholders shall be entitled to the number of votes attached to the aggregate number of shares that such person holds or represents.

Whenever a vote by a show of hands shall have been taken, unless a ballot thereon is required or demanded, a declaration by the chairman of a meeting of shareholders that a particular resolution has been carried, or carried unanimously, or by any majority, or lost, or not carried by a particular majority, shall be conclusive evidence of that fact, without proof of the number or proportion of the votes recorded in favour of or against any resolution, and the result of the vote so taken shall be the decision of the shareholders on the resolution.

To the extent permitted by the Act, a vote at a meeting may be carried out by means of a telephonic, electronic or other communication facility.

SECTION 3.9 SCRUTINEERS

The chairman of a meeting of shareholders may appoint one (1) or more persons who need not be shareholders to act as scrutineers at a meeting of shareholders or at any adjourned or postponed meeting of shareholders.

The scrutineers shall determine the number of shares held by shareholders present in person or represented by proxy or by a duly authorized representative at the meeting and the existence of a quorum. The scrutineers shall also receive, count and tabulate all ballots, determine the result of a vote by ballot, and do such acts as are necessary to conduct such vote in an equitable manner. The decision of a majority of the scrutineers shall be conclusive and binding upon the meeting and a declaration or certificate of the scrutineers shall be conclusive evidence of the facts declared or stated therein.

SECTION 3.10 ADJOURNMENT OF MEETINGS

The chairman of a meeting of shareholders may adjourn such meeting from time to time and from place to place. Any adjourned meeting shall be duly constituted if held in accordance with the terms of the adjournment and a quorum is present thereat. Any business may be considered and transacted at any adjourned meeting, which might have been considered and transacted at the original meeting of shareholders.

ARTICLE 4 DIRECTORS

SECTION 4.1 POWERS

Subject to the Act, the board of directors shall supervise the management of the business and affairs of the corporation.

The board of directors may exercise all such authority and powers of the corporation and do all such lawful acts and things as are not by law or otherwise directed or required to be exercised or done by the shareholders or in some other manner.

SECTION 4.2 NUMBER OF DIRECTORS

Until otherwise determined in accordance with the Act, the board of directors shall consist of not fewer than the minimum number and not more than the maximum number of directors provided in the articles of the corporation, and within such minimum and maximum numbers, the board of directors shall from time to time determine the actual number of directors.

Unless otherwise permitted by the Act, a majority of the directors shall be resident Canadians and the corporation shall have at least two (2) directors who are neither officers nor employees of the corporation or of its affiliates.

SECTION 4.3 ELECTION

The directors shall be elected at each annual meeting of shareholders, except as otherwise provided by the Act, the articles or the by-laws of the corporation.

Each director shall hold office until the close of the next annual meeting of shareholders or until he or she ceases to be a director as provided by the Act or until his or her resignation becomes effective.

SECTION 4.4 RESIGNATION AND VACANCY

A director may resign by sending to the corporation a resignation in writing. A resignation of a director shall become effective at the time it is sent to the corporation or at the time specified in the resignation, whichever is later. The provisions of Article 15 with respect to the sending of notice by the corporation shall apply *mutatis mutandis*.

In addition to any power the directors may have pursuant to the Act to fill the vacancies among their number, but subject to the maximum number of directors provided for in the articles, the directors may 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 shareholders, provided that the total number of additional directors so appointed shall not exceed one third of the number of directors elected at the previous annual meeting of shareholders.

SECTION 4.5 REGULAR MEETINGS OF DIRECTORS

Regular meetings of the board of directors may be held at such time or times as the board of directors or the chairman of the board may determine. Subject to the Act, no notice shall be required for any such regular meeting.

A meeting may be held without notice, except as otherwise provided by the Act, immediately after each annual meeting of shareholders or annual and special meeting of shareholders, by the directors as are then present, provided they shall constitute a quorum, for the appointment of certain officers of the corporation and for the consideration and transaction of such other business as may come before the meeting.

SECTION 4.6 SPECIAL MEETINGS OF DIRECTORS

Special meetings of the board of directors may be called by, or by the order of, the chairman of the board, the chief executive officer, the president or any two (2) directors. Unless otherwise determined by the board of directors, notice of special meetings shall be given.

SECTION 4.7 PLACE OF MEETINGS

Meetings of the board of directors may be held at any place within or outside of Canada. To the extent permitted by the Act, meetings of the board of directors may be held by means of a telephonic, electronic or other communication facility.

SECTION 4.8 NOTICE OF MEETINGS

Unless otherwise determined by the board of directors, a notice of meeting of the board of directors, if required, shall be given at least twenty-four (24) hours before the hour fixed for the meeting and need not specify the purpose of, or the business to be considered and transacted at, the meeting, except as otherwise provided by the Act. Notices of meeting may be given by oral communication.

Directors may in any manner waive notice of any meeting of the board of directors, or any irregularity in any meeting or in the notice thereof, before or after the meeting is held.

SECTION 4.9 QUORUM

The board of directors may determine the quorum for its meetings and, until otherwise so determined, three (3) directors shall constitute a quorum.

Unless otherwise permitted by the Act, no business shall be transacted at a meeting of the board of directors unless a majority of directors present are resident Canadians.

SECTION 4.10 CHAIRMAN OF MEETING

Unless otherwise determined by the board of directors, the chairman of the board or, in his or her absence or in case of his or her disability or refusal to act, the chief executive officer, provided the chief executive officer is a director, or in his or her absence or in case of his or her disability or refusal to act, such other director who has been designated by the board of directors to exercise such function, shall preside as chairman at meetings of the board of directors.

SECTION 4.11 VOTING

Matters considered at a meeting of the board of directors shall be decided by a majority of the votes cast. In the case of an equality of votes, the chairman of the meeting shall have a casting vote in addition to the vote to which the chairman is entitled as a director.

SECTION 4.12 PARTICIPATION IN MEETINGS

To the extent permitted by the Act, a director may, if all the directors of the corporation consent, participate in a meeting of directors by means of a telephonic, electronic or other communication facility. A director participating in such a meeting by such means is deemed to be present at the meeting. Any such consent shall be effective whether given before or after the meeting to which it relates and may be given with respect to all meetings of the board of directors.

SECTION 4.13 RESOLUTION IN LIEU OF MEETING

A resolution in writing, signed by all the directors entitled to vote on that resolution at a meeting of the board of directors, is as valid as if it had been passed at a meeting of the board of directors.

SECTION 4.14 REMUNERATION OF DIRECTORS

Each director shall be entitled to receive such remuneration for all services as a director as the board of directors shall determine.

The board of directors may also award additional remuneration to any director serving as a member of any committee of the board of directors and to any director undertaking special services on the corporation's behalf beyond the services ordinarily required of a director by the corporation.

The directors shall also be entitled to be reimbursed for such traveling and other expenses incurred by them in attending board of directors' meetings or board of directors' committee meetings or otherwise in connection with the business and affairs of the corporation as the board of directors may determine.

ARTICLE 5 EXECUTIVE COMMITTEE

SECTION 5.1 FORMATION

The board of directors may appoint from its members an executive committee consisting of such number of members as the board of directors may determine. The chairman of the board and the chief executive officer, provided he or she is a director, shall be members of the executive committee.

Unless otherwise permitted by the Act, a majority of the members of the executive committee shall be resident Canadians.

The executive committee shall determine its own organization and procedure, including its quorum, except as may be otherwise determined by the board of directors.

SECTION 5.2 POWERS

The executive committee shall possess and may exercise all the authority and powers of the board of directors, subject to any limitations or regulations the board of directors may make and except as otherwise provided by the Act or the by-laws.

SECTION 5.3 FURTHER PROVISIONS

Unless otherwise determined, the provisions of Sections 4.7, 4.11, 4.12 and 4.13 shall apply to the executive committee *mutatis mutandis*.

**ARTICLE 6
AUDIT COMMITTEE**

SECTION 6.1 FORMATION

The board of directors shall appoint annually from its members an audit committee consisting of such number of members as the board of directors may determine, but not less than three (3).

At least a majority of the members of the audit committee shall be neither officers nor employees of the corporation or of any of its affiliates.

Unless otherwise permitted by the Act, a majority of the members of the audit committee shall be resident Canadians.

Subject to the provisions of the Act and as may be otherwise determined by the board of directors, the audit committee shall determine its own organization and procedure, including its quorum.

SECTION 6.2 POWERS

The audit committee shall possess and may exercise the authority and powers provided in the Act, as well as all further authority and powers that may be delegated to it from time to time by the board of directors.

SECTION 6.3 FURTHER PROVISIONS

Unless otherwise determined, the provisions of Sections 4.7, 4.11, 4.12 and 4.13 shall apply to the audit committee *mutatis mutandis*.

**ARTICLE 7
OTHER COMMITTEES AND ADVISORY BODIES**

SECTION 7.1 FORMATION

The board of directors may constitute one (1) or more such other committees of the board of directors as it may determine.

Unless otherwise permitted by the Act, a majority of the members of any such committee shall be resident Canadians.

The board of directors may also constitute such other advisory bodies as it may determine, whose members need not be directors of the corporation.

Each such other committee or advisory body shall determine its own organization and procedure, including its quorum, except as may be otherwise determined by the board of directors.

SECTION 7.2 POWERS

Such other committees of the board of directors shall possess and may exercise all the authority and powers that may be delegated to them by the board of directors.

Each advisory body shall have the mandate determined by the board of directors.

SECTION 7.3 FURTHER PROVISIONS

Unless otherwise determined, the provisions of Sections 4.7, 4.11, 4.12 and 4.13 shall apply to such other committees of the board and advisory bodies *mutatis mutandis*.

ARTICLE 8 OFFICERS

SECTION 8.1 APPOINTMENT

The officers of the corporation shall be appointed by the board of directors. The chairman of the board may, but need not be, an officer of the corporation. The board of directors may appoint a chairman of the board, chief executive officer, president, chief operating officer, chief financial officer, chief legal officer, chief marketing officer, chief technology officer, one (1) or more presidents of business units, divisions or other organizations within the corporation, one (1) or more vice-presidents (to which title words may be added to indicate seniority or function), corporate secretary, controller and treasurer. The board of directors may also appoint such other officers, including assistants to any of the officers so appointed, as it may deem appropriate and they shall have such authority and powers and shall perform such duties as may be determined by the board of directors.

The same person may hold more than one (1) office in the corporation.

None of the officers of the corporation, except the chairman of the board, if an officer, is required to be a director of the corporation.

If no person has been appointed to the office of chief financial officer, the officer having senior financial responsibility for the corporation shall be the chief financial officer of the corporation.

SECTION 8.2 TENURE OF OFFICE

The chairman of the board, if an officer, and any other officers who have also been elected as directors of the corporation may be appointed for a period not exceeding the period for which they have been elected as directors. All other officers shall be appointed at the pleasure of the board of directors and may be removed from office with or without cause. Unless removed from office by the board of directors, each officer shall hold office until a successor is appointed or until the officer resigns either orally or in writing.

SECTION 8.3 POWERS

The officers of the corporation shall possess and exercise such authority and powers and shall perform such duties, in addition to those provided in the by-laws, as may be determined by the board of directors. 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 of directors, the chairman of the board or the chief executive officer otherwise determines.

In case of the absence or inability or refusal to act of any officer of the corporation or for any other reason that the board of directors may deem sufficient, the board of directors may delegate all or any of the powers of an officer to any other officer or employee, or to a director.

SECTION 8.4 CHAIRMAN OF THE BOARD

The chairman of the board shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws and the board of directors. If a chief executive officer has not been appointed by the board of directors, unless the board of directors determines otherwise, the chairman of the board shall be the chief executive officer of the corporation and, as such, shall possess and exercise the authority and powers and perform the duties of the chief executive officer.

The board of directors may determine that the chairman of the board shall not be an officer of the corporation and shall act solely in a non-executive capacity. A non-executive chairman of the board shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws and the board of directors.

The board of directors may appoint from their number one (1) or more vice-chairmen of the board who shall possess and exercise such authority and powers and shall perform such duties as may be determined by the board of directors, including, if so determined, possession of any of the authority and powers and performance of any of the duties of the chairman of the board.

SECTION 8.5 MANAGING DIRECTOR

The board of directors may appoint from their number a managing director who, unless otherwise permitted by the Act, shall be a resident Canadian. Subject to the Act, a managing director shall possess and exercise such authority and powers and shall perform such duties as may be determined by the by-laws and the board of directors. A managing director shall not be an officer of the corporation.

SECTION 8.6 CHIEF EXECUTIVE OFFICER

The chief executive officer shall have, under the control of the board of directors, general supervision and direction of the business and affairs of the corporation. The chief executive officer shall possess and exercise such authority and powers and perform such other duties as may be determined by the by-laws, the board of directors and the chairman of the board.

SECTION 8.7 PRESIDENT

Unless the board of directors determines otherwise, the president shall be the chief operating officer of the corporation and shall have, under the control of the board of directors and the chief executive officer, general supervision of the business of the corporation. The president shall possess and exercise such authority and powers and perform such other duties as may be determined by the by-laws, the board of directors, the chairman of the board and the chief executive officer.

SECTION 8.8 CORPORATE SECRETARY

The corporate secretary shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws, the board of directors, the chairman of the board, the chief executive officer and the president.

The corporate secretary shall give or cause to be given, as and when instructed, notices to the board of directors, the shareholders, officers, auditors and members of committees and advisory bodies of the board of directors. Unless otherwise determined by the board of directors, the corporate secretary shall attend and record minutes of all meetings of the board of directors, committees of the board of directors, shareholders and advisory bodies. The corporate secretary shall have charge of the corporate seal or seals and of the corporate records required by law to be kept, except accounting records.

SECTION 8.9 CONTROLLER

The controller shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws, the board of directors, the chairman of the board, the chief executive officer, the president and the chief financial officer.

The controller shall have charge of the accounts and accounting records of the corporation and shall keep or cause to be kept accurate accounts of all transactions affecting the financial position of the corporation. Subject to the control of the chief financial officer of the corporation, the controller shall determine the appropriate accounting procedures for the proper recording of the corporation's assets and liabilities.

The controller shall prepare for submission to the board of directors such financial statements as may be required by the board of directors and shall prepare after the close of each financial year financial statements in accordance with the requirements of any applicable laws.

The controller shall provide financial information and data to the board of directors of the corporation, whenever requested.

SECTION 8.10 TREASURER

The treasurer shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws, the board of directors, the chairman of the board, the chief executive officer, the president and the chief financial officer.

The treasurer shall be responsible for the moneys and securities of the corporation, including the deposit of money, the safekeeping of securities and the disbursement of the funds of the corporation. The treasurer shall render to the board of directors, whenever required, an account of all transactions as treasurer and of the financial position of the corporation.

SECTION 8.11 OTHER OFFICERS

The chief financial officer, chief legal officer, chief marketing officer, chief technology officer, president or presidents of a business unit, division or other organization within the corporation and the vice-president or vice-presidents, if appointed, shall possess and exercise such authority and powers and perform such duties as may be determined by the by-laws, the board of directors, the chairman of the board, the chief executive officer and the president.

ARTICLE 9 INDEMNIFICATION OF DIRECTORS AND OFFICERS

SECTION 9.1 LIMITATION OF LIABILITY

No director or officer shall be liable for the acts, receipts, omissions, failures, neglects or defaults of any other director, officer or employee, or for joining in any receipt or act for conformity or for any loss, damage or misfortune whatever occasioned by any error of judgement or oversight on the part of such director or officer, or for any other loss, damage or misfortune which shall happen in the execution of the duties of office or in relation thereto, including any loss, damage or expense suffered or incurred by or happening to the corporation through the insufficiency or deficiency of title to any property acquired 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 the corporation shall be placed out or invested, or for any loss or damage arising from the bankruptcy, insolvency or tortuous acts of any person with whom any of the moneys, securities or effects of the corporation shall be lodged or deposited. Nothing herein shall relieve any director or officer from the duty to act in accordance with the Act or from liability for any breach thereof. The directors of the corporation shall not be under any duty or responsibility in respect of any contract, act or transaction, made, done or entered into 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 otherwise than as a director or officer or shall be a member of a firm or a shareholder, director or officer of a body corporate which is employed by or performs services for the corporation, the fact of such director or officer 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.

SECTION 9.2 INDEMNITY

Subject to the limitations contained in the Act, the corporation shall indemnify a director or officer, a former director or officer, or a person who acts or acted at the corporation's request as a director or officer of a body corporate of which the corporation is or was a shareholder or creditor, or a person who undertakes or has undertaken any liability on behalf of the corporation or any such body corporate, and his or her heirs and legal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by that person in respect of any civil, criminal or administrative action or proceeding to which such person is made a party by reason of being or having been a director or officer of the corporation or such body corporate, if:

- (a) such person 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, such person had reasonable grounds for believing that his or her conduct was lawful.

The corporation shall indemnify any person referred to above who fulfills the conditions contained in (a) and (b) above and who has been substantially successful on the merits in the defense of any civil, criminal or administrative action or proceeding to which such person is made a party by reason of his or her being or having been a director or officer of the corporation or body corporate, against all costs, charges and expenses reasonably incurred by such person in connection with the defense of such action or proceeding.

The corporation may also indemnify such persons in such other circumstances as the Act or other applicable law permits or requires. Nothing in this by-law shall limit the right of any person entitled to indemnity to claim indemnity apart from the provisions of this by-law. The corporation is hereby authorized to execute agreements evidencing its indemnity in favour of the foregoing persons to the full extent permitted by law.

SECTION 9.3 INSURANCE

To the extent permitted by the Act and other applicable law, the corporation may purchase and maintain insurance for the benefit of any person referred to in Section 9.2 against such liability as the board of directors may determine.

ARTICLE 10 DISCLOSURE OF INTEREST BY DIRECTORS AND OFFICERS

SECTION 10.1 DISCLOSURE OF INTEREST AND VOTING

No director or officer shall be disqualified by virtue of being a director, or by holding any other office of, or having any other relationship with or pecuniary interest with respect to, the corporation or any body corporate, partnership or other person in which the corporation is a shareholder, partner or is otherwise interested, from entering into, or from being concerned or interested in any manner in, any contract, transaction or arrangement made, or proposed to be made, with the corporation or any body corporate, partnership or other person in which the corporation is a shareholder or is otherwise interested and no such contract, transaction or arrangement shall be void or voidable for any such reason. Subject to the Act, no director or officer shall be liable to account to the corporation for any profit arising from any such directorship, office, relationship or pecuniary interest or realized in respect of any such contract, transaction or arrangement. Except as required by the Act, no director or officer need make any declaration or disclosure of interest or, in the case of a director, refrain from voting in respect of any such contract, transaction or arrangement.

ARTICLE 11 FINANCIAL YEAR

SECTION 11.1 FINANCIAL YEAR

Unless otherwise determined by the board of directors, the financial year of the corporation shall be the calendar year.

ARTICLE 12 AUDITOR

SECTION 12.1 AUDITOR

At each annual meeting of shareholders, the shareholders shall appoint an auditor to hold office until the close of the next annual meeting of shareholders.

At least once in each financial year, the accounts of the corporation shall be examined and the auditor shall report on the financial statements of the corporation required by law.

ARTICLE 13 SECURITIES

SECTION 13.1 ISSUANCE

Subject to the Act and to the articles of the corporation, the issuance of shares of the corporation shall be determined by the board of directors which may accept subscriptions for, allot, issue and grant rights and options in respect of the shares of the corporation to such persons, on such terms and conditions, and for such consideration as it may determine.

SECTION 13.2 SECURITY CERTIFICATES

Unless otherwise permitted by the Act, every holder of a security of the corporation is entitled, at such holder's option, to a security certificate or to a non-transferable written acknowledgement of such holder's right to obtain a security certificate. Security certificates shall be in such form as the board of directors may determine. Unless otherwise permitted under the Act, a security certificate shall be signed manually by at least one (1) director or officer of the corporation or by, or on behalf of, the registrar, transfer agent or branch transfer agent of the corporation, or by a trustee who certifies it in accordance with a trust indenture, and any additional signatures required on the security certificate may be printed or otherwise mechanically reproduced thereon.

SECTION 13.3 SECURITIES REGISTERS

To the extent permitted under the Act, a central securities register shall be maintained by the corporation or by an agent at its registered office or at any other place designated by the board of directors for each class or series of securities. Branch securities registers may be maintained by the corporation or by an agent at any place designated by the board of directors for each class or series of securities.

Offices for the transfer of securities of the corporation may be maintained at such places as the board of directors may determine.

SECTION 13.4 LOST OR DESTROYED CERTIFICATES

New certificates for securities of the corporation may be issued upon such terms and conditions as the board of directors or any officer or agent designated by the board of directors may prescribe to replace any certificates theretofore issued by the corporation that have been defaced, mutilated, lost, destroyed or wrongfully taken.

SECTION 13.5 PAYMENT OF DIVIDENDS AND OTHER AMOUNTS

Subject to the Act, the board of directors may declare dividends payable to the shareholders according to their respective rights and interests in the corporation.

Subject to the articles and by-laws of the corporation, any amount payable in cash to shareholders (including dividends payable in cash) may be paid by cheque drawn on a financial institution or by electronic means to or to the order of each registered holder of shares of the class or series in respect of which such amount is to be paid. Cheques may be sent by delivery or first class mail to such registered holder at the holder's address appearing on the register of shareholders, unless that holder otherwise directs in writing. The sending of a cheque, as herein provided, in the amount of the dividend less any tax that the corporation is required to withhold, shall discharge the corporation from its liability to pay the amount of that dividend, unless the cheque is not paid on due presentation.

Cheques payable to joint shareholders shall be made payable to the order of all such joint shareholders. Such cheques may be sent to the joint shareholders at the address appearing on the register of shareholders in respect of that joint holding, to the first address so appearing if there is more than one (1), or to such other address as such joint shareholders direct in writing.

Dividends or other distributions payable in cash may be paid to shareholders in Canadian currency or in equivalent amounts of a currency or currencies other than Canadian currency. The board of directors may declare dividends or

other distributions in any currency or in alternative currencies and make such provisions as it deems advisable for the payment of such dividends or other distributions.

SECTION 13.6 JOINT HOLDERS

In case of several persons registered as the joint holders of any securities of the corporation, any one (1) of such persons may give effectual receipts for all dividends and payments on account of dividends, bonus, return of capital, principal, interest, redemption payments on redemption of securities (if any) subject to redemption, or other money or security payable or issuable in respect of such securities.

SECTION 13.7 UNCLAIMED DIVIDENDS

To the extent permitted under applicable law, any dividend unclaimed after a period of five (5) years from the date on which it has been declared payable shall be forfeited and shall revert to the corporation.

ARTICLE 14 EXECUTION OF DOCUMENTS

SECTION 14.1 DOCUMENTS

Any two (2) of the chairman of the board, the chief executive officer, the president, the chief operating officer, the chief financial officer, the chief legal officer, the chief marketing officer, the chief technology officer, the corporate secretary, the controller, the treasurer, any president of a business unit, division, or other organization within the corporation, or any vice-president, or any one (1) of the aforesaid officers together with any other officer of the corporation, or any one (1) of the aforesaid officers together with a director, or any other person or persons as the board of directors may authorize, are authorized and empowered to execute and deliver, in the name and on behalf of the corporation, any and all agreements, deeds, documents, instruments and writings. In addition, any two (2) officers that may execute agreements, deeds, documents, instruments and writings on behalf of the corporation may direct the manner in which and the person or persons by whom any particular agreement, deed, document, instrument or writing or class of agreements, deeds, documents, instruments and writings may or shall be executed and delivered on behalf of the corporation.

To the extent permitted by the Act or other applicable law, agreements, deeds, documents, instruments and writings on behalf of the Corporation may be executed by the authorized individuals using electronic signatures. The board of directors may establish, by resolution, procedures in respect of the use of electronic signatures.

SECTION 14.2 BANKING ARRANGEMENTS

The banking business of the corporation, including, without limitation, the borrowing of money and the giving of security therefor, shall be transacted in such manner and by such persons as the board of directors, or as an officer or officers designated by the board of directors, may determine, either generally or with respect to a particular instance.

All cheques, drafts or orders for 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 board of directors, or as an officer or officers designated by the board of directors, may determine.

SECTION 14.3 CUSTODY OF SECURITIES

The securities owned by the corporation shall be deposited for safekeeping with a bank or trust company or with such other financial institutions or depositories or in such other manner as may be selected by such officer or officers or other person or persons, whether or not officers of the corporation, and in such manner as the board of directors, or as an officer or officers designated by the board of directors, shall determine. Any securities so deposited may be withdrawn from time to time only upon the written order of the corporation signed by such officer or officers or other person or persons, whether or not officers of the corporation, and in such manner as the board of directors, or an officer or officers designated by the board of directors shall determine. Any such authority may be general or confined to specific instances.

ARTICLE 15 NOTICES

SECTION 15.1 METHOD OF GIVING NOTICES

To the extent permitted by the Act or other applicable law, notice to be given, delivered or sent by the corporation to any director, officer, shareholder, auditor or other person entitled to it shall be sufficiently given, delivered or sent if delivered personally, or left at such person's recorded address, or sent by first class mail, telecopy, facsimile, or is otherwise communicated by electronic means capable of producing a copy that is accessible to the addressee at the recorded address of such person and is capable of being retained so as to be usable for subsequent reference. The board of directors may establish, by resolution, procedures to give, deliver or send a notice to any director, officer, shareholder, auditor or other person by any means of communication permitted by the Act or other applicable law.

Subject to the Act, a notice shall be deemed to have been given, delivered or sent when it is delivered personally or to the recorded address as aforesaid; when it has been deposited in a post office or post office letter box; or when it has been dispatched or delivered for dispatch by telecopy, facsimile, or is otherwise communicated by electronic means.

Notwithstanding the foregoing, if there are reasonable grounds for believing that a notice to be given, delivered or sent to shareholders, if sent by unregistered mail, will not be received in the ordinary course of mail, alternate methods may be authorized by the board of directors, such as depositing the notice at the offices at which the securities registers of the corporation are maintained or other places and publishing a notice of its availability at such places in appropriate publications, subject to applicable law.

For purposes of this Article 15, the recorded address of a shareholder is the address as recorded in the securities register, and the recorded address of a director, officer, auditor or other person entitled to receive a notice is the latest address as recorded in the records of the corporation.

Any such notice to be given, delivered or sent to shareholders by the corporation may, if two (2) or more persons are registered as joint holders of shares, be given, delivered or sent to whichever person is first named in the securities register of the corporation.

SECTION 15.2 PROOF OF GIVING OF NOTICE

A certificate of the corporate secretary or any other officer of the corporation or of any agent appointed by the corporation, with respect to the giving, delivery or sending of any notice shall be conclusive evidence of the facts stated therein and shall be binding on every director, officer, shareholder, auditor or other persons, as the case may be.

SECTION 15.3 ADDRESSES OF SHAREHOLDERS

Every shareholder shall furnish in writing to the corporation or to any agent appointed by the corporation an address where all notices intended for such shareholder may be given. In the absence of any such address being furnished, the address of the shareholder shall be deemed to be that of the office at which the central securities register of the corporation is maintained.

SECTION 15.4 ACCIDENTAL OMISSION

The accidental omission to give, deliver or send any notice to any director, officer, shareholder, auditor or other person entitled thereto or the non-receipt of any notice by any such person or any irregularity or error in any notice or in the giving, delivery or sending thereof shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded thereon.

SECTION 15.5 PERSONS ENTITLED BY DEATH OR OPERATION OF LAW

Every person who, by operation of law, transfer, death of a security holder or any other means whatsoever, shall become entitled to any security, shall be bound by every notice in respect of such security which shall have been

duly given, delivered or sent to the security holder from whom such person derives title to such security prior to the name and address of such person being entered on the securities register (whether such notice was given before or after the happening of the event upon which such person became so entitled) and prior to such person furnishing to the corporation the proof of authority or evidence of entitlement prescribed by the Act.

SECTION 15.6 WAIVER OF NOTICE

Any shareholder, proxyholder or other person entitled to attend a meeting of shareholders, and any director, officer, auditor or other person entitled to receive notice may at any time waive any notice, or waive or abridge time for any notice required to be given, delivered or sent to such person and such waiver or abridgement, whether given before or after the meeting or event, or other occurrence of which or in respect of which notice is required to be given, delivered or sent, shall cure any default in the giving, delivery or sending of such notice or in the length of such notice, as the case may be. Unless required by the Act or other applicable law, or by the articles or by-laws of the corporation, a waiver of notice of meeting of shareholders or of the board of directors or committee of directors may be given in any manner.

ARTICLE 16 BORROWING

SECTION 16.1 BORROWING POWER

Without in any way limiting the borrowing powers of the corporation and of the board of directors of the corporation as set forth in the Act, but subject to the articles of the corporation, the board of directors may, on behalf of the corporation, without authorization of the shareholders:

- (a) borrow money upon the credit of the corporation;
- (b) issue, reissue, sell or pledge bonds, debentures, notes or other evidences of indebtedness or guarantee of the corporation, whether secured or unsecured;
- (c) to the extent permitted by the Act, give directly or indirectly financial assistance to any person by means of a loan, guarantee or otherwise on behalf of the corporation to secure performance of any present or future indebtedness, liability or obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in all or any currently owned or subsequently acquired real or personal, movable or immovable, property of the corporation including book debts, rights, powers, franchises and undertakings, to secure any such bonds, debentures, notes or other evidences of indebtedness or guarantee or any other present or future indebtedness, liability or obligation of the corporation.

Nothing in this Section 16.1 limits or restricts the borrowing of money by the corporation on bills of exchange or promissory notes made, drawn, accepted or endorsed by or on behalf of the corporation.

SECTION 16.2 DELEGATION

Unless the Act or the articles or by-laws of the corporation otherwise provide, the board of directors may delegate to a director or directors, a committee of the board of directors, or an officer or officers of the corporation any or all of the powers conferred on the board of directors by the Act and Section 16.1 to such extent and in such manner as the board of directors may determine at the time of such delegation.

ARTICLE 17 ENACTMENT AND REPEAL

SECTION 17.1 EFFECTIVE DATE

This by-law shall come into force and effect when made by the board of directors in accordance with the Act.

**ARTICLE 18
INTERPRETATION**

SECTION 18.1 INTERPRETATION

This by-law shall be in both the English and French languages and both versions shall be equally authoritative. If there be a difference between the English and French texts of this by-law, that version shall prevail which is most consistent with the intention of the by-law and the ordinary rules of interpretation shall apply in determining such intention.

This by-law and all other by-laws are made pursuant to and are subordinate to the Act and should be read in conjunction with the Act. In case of conflict between a provision of any by-law and a provision of the Act, the applicable provision of the Act shall govern.

Words and expressions not defined in this by-law shall have the same meaning as ascribed by the Act, unless required otherwise by the context.

Words importing the singular number shall include the plural and vice versa and words importing gender shall include the masculine, feminine and neuter genders.