



## Management Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of the financial condition and results of operations of QSound Labs, Inc. and subsidiaries for the year ended December 31, 2003 compared to the year ended December 31, 2002, and the year ended December 31, 2002 compared with the year ended December 31, 2001 should be read in conjunction with the Consolidated Financial Statements of QSound and related Notes included therein. This Management Discussion and Analysis was prepared using information and knowledge available as of March 19, 2004.

### Business Segment Overview

We operate in three separate operating segments: audio, e-commerce, and IP telephony.

Audio Segment: Our audio segment, which has been the main focus of our business since 1988, operates within the parent company, QSound Labs, Inc. QSound is a world leader in audio enhancement with core competencies in multimedia software solutions and audio enhancement algorithms based on our family of patented and proprietary sound technologies. Revenues from our audio licensing activities and sales of audio enhancement software products comprise the major portion of our company's revenue. During 2003 we expanded our audio products and marketing activities to include the growing mobile devices market in addition to our traditional computer multimedia and consumer electronics focus.

E-commerce Segment: Our e-commerce segment operates within our wholly owned subsidiary, QCommerce Inc. Since 1999 QCommerce has provided electronic commerce services that enable electronic commerce for small businesses, and derives revenues from monthly service subscription fees paid by merchants for on-line storefront hosting and related services.

IP Telephony Segment: Our IP Telephony segment operates within our wholly owned subsidiary, QTelNet Inc. We acquired this business, which develops and distributes Voice Over Internet Protocol (VoIP) hardware and software solutions, in April, 2003. Since the acquisition our aim has been to develop this business segment through product improvement, manufacturing efficiencies and marketing efforts.

Shared Expenses: The company allocates certain shared expenses, including treasury, legal and audit, premises, communication, administration, information systems, management and other human resources to each of the operating segments based upon both actual and estimated usage.

### Critical Accounting Policies

On December 12, 2001, the Securities and Exchange Commission ("SEC") issued Financial Reporting Release ("FRR") No. 60, "Cautionary Advice Regarding Disclosure About Critical Accounting Policies" which, among other things, encourages discussion concerning the most critical accounting policies used in the preparation of the company's financial statements. Critical accounting policies are defined as those that are both very important to the portrayal of the company's financial condition and results, and require management's most difficult, subjective or complex judgments. We are required to make certain estimates, judgments and assumptions that we believe are reasonable based upon available information, historical experience and/or forecasts. These estimates, judgments and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported revenues and expenses during the reporting periods. Actual results could differ from these estimates. The accounting policies which management believes are the most critical to aid in fully understanding and evaluating our reported financial results include those relating to inventory, goodwill, and research and development costs.

#### Inventory

Inventory is comprised of work in progress and finished goods and is stated at the lower of cost, being determined by the first-in,

first-out method, and net realizable value. We regularly review quantities of inventory on hand, and an allowance is made for obsolete items based upon current market demand and selling prices. Adverse changes in technology or new models could result in a decreased demand for our products which may require an additional allowance to be made for obsolete inventory.

### Goodwill

Effective January 1, 2002, we adopted the new Canadian Institute of Chartered Accountants standard which no longer permits the amortization of goodwill and other indefinite life intangibles. The new standard requires that a fair value impairment test be performed annually on goodwill and other indefinite life intangibles. As required by the standard, goodwill and indefinite life intangibles were tested for impairment as of December 31, 2003. As a result of the impairment test, an impairment charge of \$2,184,589 was recorded in 2003. (See "Goodwill" under "Results of Operations" below).

### Research and development costs

Research and development costs are expensed as incurred except if development costs are determined to be recoverable from and directly related to development of new products, processes or systems. In 2003, while \$943,058 was spent on research and development, we capitalized only \$108,725 of such costs. The remaining \$834,333 was expensed as the costs could not be directly related to the development of new products, but instead were related to pure research and updates of existing products. In 2002, \$796,249 was spent on research and development of which \$152,725 was capitalized and \$643,524 was expensed.

### **Change in accounting policy**

Prior to January 1, 2003 no compensation expense was recognized when stock options were issued to employees and directors. Any consideration paid by employees and directors on exercise of stock options or purchase of stock was credited to share capital. Had we determined compensation cost in 2002 based on the fair value at the grant date for stock options, we would have recorded \$8,478.

Effective January 1, 2003, we adopted the new amended Canadian Institute of Chartered Accountants Handbook Section 3870 – Stock-based Compensation and Other Stock-based Payments. The amended section requires entities to account for employee stock options using the fair value based method, beginning January 1, 2004. While the amended section is not required to be implemented until January 1, 2004, the company elected to early adopt the fair value based method for all employee stock options granted on or after January 1, 2003, and accordingly, has recognized compensation expense of \$90,439 related to stock options granted to employees and directors in the current year.

### **A. Results of Operations**

QSound's Consolidated Financial Statements are prepared in accordance with generally accepted accounting principles in Canada. Except as disclosed in Note 15 to the Consolidated Financial Statements and as explained below, there are no material differences as pertains to these statements between accounting principles generally accepted in Canada and in the United States. We measure and report in United States currency.

### Overall Performance

**Consolidated Operations:** While operating expenses remained somewhat constant for the three years ended December 31, 2003, the company experienced a net loss of \$3,705,631 for the year ended December 31, 2003, as compared to net income of \$1,128,952 for 2002. The difference between the loss for the current year and the net income for 2002 was due primarily to a decrease in net revenue from \$3,952,781 for 2002 to \$1,623,251 for 2003, and the impairment of goodwill charge of \$2,184,589 taken in fiscal 2003.

Our net income in 2002 was up from a net loss of \$732,910 for 2001. The increase to profitability in 2002 from the loss shown in 2001 was due primarily to the \$1,018,225 increase in net revenue from \$2,934,556 in 2001 to \$3,952,781 in 2002.

**Audio Segment:** The audio segment had operating losses of \$488,259 in the year ended December 31, 2003 as compared to operating profits of \$1,501,996 in 2002. The decrease in operating profits of \$1,990,255 between 2003 and 2002 is the result of a decrease of \$2,137,926 in revenue between 2003 and 2002.

The operating profit increased by \$849,441 in 2002 from \$652,555 in 2001 as a result of revenue increasing by \$1,194,438.

E-commerce Segment: The e-commerce segment had an operating loss of \$18,624 for the year ended December 31, 2003, as compared to operating profit of \$170,212 for 2002. A decrease in operating expenses of \$39,781 from 2002 to 2003 was offset by a revenue decrease of \$228,617 for the same period. This decrease in revenue resulted in the operating loss referred to above.

In 2001 we had an operating loss of \$615,917. Operating expenses for 2002 decreased by \$782,250 from 2001, and this decrease was primarily responsible for the increase of operating profit of \$786,129 from fiscal 2001 to 2002.

IP Telephony Segment: The IP telephony segment had operating losses of \$764,410 for the year ended December 31, 2003. As this is the first year of operations for the IP telephony segment, there are no comparative figures.

## Revenue

<b>Segmented Revenue</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Audio Segment	\$1,511,312	\$3,649,238	\$2,454,800
E-commerce Segment	346,456	575,073	571,194
IP Telephony Segment	185,320	–	–
<b>Total</b>	<b>\$2,043,088</b>	<b>\$4,224,311</b>	<b>\$3,025,994</b>

Revenue overall decreased in the year ended December 31, 2003 by \$2,181,223 as compared to the year ended December 31, 2002. The addition of telephony revenue of \$185,320 was offset by the decreases in audio revenue of \$2,097,926 and in e-commerce revenue of \$228,617.

Revenue increased in the year ended December 31, 2002 by \$1,198,317 as compared to the year ended December 31, 2001. This increase was made up by increases in audio revenue of \$1,194,438 and of e-commerce revenue of \$3,879.

The decrease in the audio segment revenue between 2003 and 2002 was due primarily to the expiration of the North American portion of royalties received from the hearing aid license. Similarly, the increase in revenue in 2002 over 2001 was due to increased royalties from the hearing aid license.

The decrease in the e-commerce segment revenue in 2003 from 2002 was due to the loss of customers. The e-commerce business model is based on monthly subscription fees.

## Cost of Product Sales

<b>Segmented Cost of Product Sales</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Audio Segment	\$254,688	\$268,844	\$91,438
E-commerce Segment	45	2,686	–
IP Telephony Segment	165,104	–	–
<b>Total</b>	<b>\$419,837</b>	<b>\$271,530</b>	<b>\$91,438</b>

From 2002 to 2003 cost of product sales increased primarily due to the addition of the telephony segment. From 2001 to 2002 cost of product sales increased due to increased sales of QSOUND-enabled analog chips. The volume of analog chip sales remained at approximately the same levels in 2002 and 2003.

## Operating Costs

<b>Segmented Operating Costs</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Audio Segment	\$ 1,744,883	\$ 1,878,398	\$ 1,710,807
E-commerce Segment	\$ 365,035	\$ 402,175	\$ 1,187,111
IP Telephony Segment	\$ 784,626	\$ –	\$ –
<b>Total Operating Expenses</b>	<b>\$ 2,894,544</b>	<b>\$ 2,280,573</b>	<b>\$ 2,897,918</b>

From 2002 to 2003 total operating expenses increased by \$613,971. The addition of the IP telephony segment added \$784,626 in operating costs, with the majority of costs incurred in marketing, and product research and development. Audio operating expenses decreased by \$133,515 from the previous year due to decreased marketing activity and cost cutting measures taken in the administration departments. Operating expenses in the e-commerce segment decreased by \$37,140 primarily due to downsizing of customer service staff as subscription revenue decreased.

From 2001 to 2002 total operating expenses decreased by \$617,345. Audio operating expenses increased by \$167,591 primarily due to increased salaries and usage of outside consultants. E-commerce operating expenses decreased by \$784,936 due to savings realised by moving operations to our Calgary offices, downsizing of the engineering staff, and cutting back on marketing programs that were no longer effective in attracting new customers.

### **Impairment of Assets**

During the year ended December 31, 2003 it was determined that the AudioPix product line had suffered an impairment in value, therefore the company took a charge of \$108,154. \$100,000 of this charge consisted of the remaining capitalised book value of the software and \$8,154 being unsold inventory and marketing materials. A previous charge of \$100,000 against this product had been taken in the 2002 fiscal year.

### **Funding of Past Service Pension Costs**

In 2002 QSound resolved an outstanding contingency relating to an employment contract that expired September 30, 2002 by putting in place an individual pension plan for the individual. The past service pension costs of \$55,189 were expensed in the 2002 fiscal year, while the actual payment was made in the first quarter of 2003.

### **Interest and Other Income**

From fiscal 2002 to fiscal 2003 interest and other income increased by \$11,331, and other income increased by \$159,732. Both of these increases are due to cash management. In the first quarter of 2003 the company converted \$2,500,000 of its cash reserve funds from United States currency to Canadian Currency. With the subsequent increase in the value of the Canadian Dollar and the higher interest paid on Canadian funds, the company realised both increased interest income as well as foreign exchange gains. The company used these Canadian funds to pay for Canadian Dollar expenses incurred during the remainder of the year.

### **Accounts Receivable**

Accounts receivable decreased by \$708,325 from December 31, 2002 to December 31, 2003. The majority of the decrease was in the audio segment, due to the expiration of the North American portion of the hearing aid license, and the resulting reduction in royalties receivable. The IP telephony segment added \$13,067 to the accounts receivable balance.

### **Inventory**

Inventory increased by \$90,922 from December 31, 2002 to December 31, 2003. The majority of the increase is due to the addition of the IP telephony inventory.

### **Note Receivable**

During 2002 we advanced \$525,000 to a private company in the IP telephony industry. The advance was secured by the private company's assets, and during the 2003 year we enforced our security and collected on the note by acquiring title to certain of the assets. The assets included inventory and the IP telephony technology of the private company. We incorporated a wholly owned subsidiary, QTelNet Inc., to operate the new IP telephony segment.

### **Goodwill**

In accordance with our accounting policies, amortization is not taken on goodwill, but instead a valuation of carrying value is performed each December. Due to the decrease in the number of subscribers for our e-commerce services, the company felt

there had been an impairment in the value of goodwill, and subsequently a goodwill impairment charge of \$2,184,589 was recognized.

### **Share Capital**

During the 2003 fiscal year, our share capital increased from 7,156,074 common shares with a book value of \$43,886,036 to 7,199,244 common shares with a total book value of \$44,108,140. The increase of 44,170 shares was a result of the exercise of stock options for cash of \$22,940. The remaining increase in the book value of share capital was due to additional paid-in capital from options of \$90,439 and warrants of \$108,725.

Prior to January 1, 2003 we accounted for stock options to employees, directors and officers using the settlement method. Under the settlement method, any consideration paid on the exercise of stock options or purchase of stock is credited to share capital and no compensation expense is recognized.

The CICA Accounting Standard Board amended CICA Handbook, Section 3870, to require companies to account for all stock options using the fair value based method beginning January 1, 2004. We used the fair value based method for stock options granted to non-employees prior to January 1, 2003, and we elected to early adopt the new handbook section. As a result, effective January 1, 2003 all stock options are accounted for using the fair value based method. Under the fair value based method, the fair value of granted options is estimated on the day of the grant using the Black-Scholes option pricing model. Compensation cost is then expensed over the options' vesting period. The additional paid-in capital of \$90,439 was due to the fair value based method of accounting for stock options.

Warrants are similarly accounted for using the fair value based method. During the year 250,000 common share purchase warrants were issued and the fair value of the warrants determined to be \$108,725 was capitalized to software and production tooling. The additional paid-in capital from warrants is due to the issuance of these warrants.

As at December 31, 2003 the company had 1,738,765 options outstanding at exercise prices ranging from \$0.47 to \$1.75 and expiring at various times up to 2012. Further details on stock options outstanding can be found in Note 7 to the financial statements.

Subsequent to the year end and up to March 19, 2004, 26,130 stock options have been exercised for total consideration of \$12,281. This brings the total shares outstanding to 7,225,374 with a book value of \$44,120,421 and reduces the total options outstanding to 1,712,635.

As at December 31, 2003 the company had 500,000 common share purchase warrants outstanding. Each warrant entitles the holder to acquire one common share of the Company for \$1.04 per share and expires March 25, 2007. No warrants have been exercised subsequent to the end of the year and up to the date of this annual report.

### **B. Liquidity and Capital Resources**

As at December 31, 2003 we had cash and cash equivalents of \$2,061,093. This is a decrease of \$560,112 over the balance at December 31, 2002 of \$2,621,205. \$439,693 of cash was used in operations during the 2003 fiscal year. The audio segment generated \$454,812 in cash during the year, while the e-commerce segment used \$23,779 and the IP telephony segment used \$870,726.

Financing activities generated \$22,940 in cash during fiscal 2003 (\$34,815 in 2002) from the exercise of options.

Cash used in investing activities decreased to \$143,359 in 2003 from \$654,192 in 2002. Capital assets were purchased in 2003 for \$98,026 (\$113,880 in 2002) and \$51,394 was spent in 2003 (\$41,052 in 2002) in the acquiring and renewing of patents and trademarks. Excess capital equipment was sold in 2003 for proceeds of \$6,061 (\$740 in 2002).

At December 31, 2003 we had accounts receivable from various customers outstanding of \$221,194 (\$929,519 at December 31, 2002) and inventory of finished goods consisting of QSOUND-enabled analog chips, UltraQ's and IP telephony FreeRide gateways and telephones of \$107,377 (December 31, 2002 \$16,455).

We have contractual obligations under leases for office space and equipment. We are required to make the following minimum lease payments over the next five years:

<b>Lease Obligation</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Office equipment leases	\$ 12,221	\$ 12,221	\$ 4,074	\$ –	\$ –
Office premises lease	87,846	95,832	95,832	95,832	79,860
<b>Total lease obligations</b>	<b>\$100,067</b>	<b>\$108,053</b>	<b>\$99,906</b>	<b>\$95,832</b>	<b>\$79,860</b>

At December 31, 2003 we had working capital resources available of \$2,142,840 (December 31, 2002 - \$3,284,448) and management feels that with our current cash on hand and cash flows from operations we have sufficient capital to carry out our business plan for 2004.

### **C. Research and Development**

**Audio Segment:** QSound carries out sustained research and development activities in the audio business segment, allowing us to maintain our position as a world leader in audio enhancement with cutting edge products and technologies. In 2003 and 2002 we concentrated on development and refinement of our QVE and microQ scalable software engines, as well continuing our previous research and development activities of developing new, and refining and upgrading existing, audio synthesis and enhancement technologies. Our audio research and development costs were \$588,410 in 2003, \$519,137 in 2002 and \$522,888 in 2001. We also work jointly with our licensees and business partners to adapt and optimize our technologies for their products.

**E-commerce Segment:** Research and development expenditures in our e-commerce business segment have steadily decreased, reflecting the satisfactory performance of our products. Research and development activities in 2003 and 2002 consisted mainly of upgrading our products, with expenditures of \$50,757 in 2003 and \$124,387 in 2002. In 2001 e-commerce research and development costs were \$428,129 for activities comprised of upgrading and enhancement of our products, and conversion of our merchant customers whose sites were enabled with technologies of our earlier acquisition targets, to the upgraded Internet Store technology platform.

**Internet Telephony Segment:** In 2003 we had expenditures of \$195,166 for activities consisting of upgrading and adding functionalities to our software, and re-designing the internal layout and external features of our gateways.

### **D. Trends**

**Audio Segment:** The Company's and its competitors' entertainment audio algorithm business has been stagnant for several years now. The Company's revenues prior to 2003 were not affected by this trend due to the development and marketing license it had completed with Starkey Laboratories for digital hearing aids. Revenues in 2003 versus 2002 decreased due to the expiration of the hearing aid license for North America in February 2003. To counteract the slowdown in audio algorithm business, in 2001 the Company began developing audio software solutions rather than algorithms. There is a higher technological barrier to entry in these development efforts, which helps limit competition to those who are funded and possess a wider technological knowledge base. With the development efforts complete the Company now expects to grow revenue by exploiting two specific markets, namely PC and mobile devices. Both of these markets are primed for feature driven "soft-audio" solutions.

The PC market has been shipping basic soft-audio solutions as the standard audio playback device in PCs for several years. There has been little effort to improve on this baseline, since audio is not a feature that sells units. For those that want more, OEMs typically offer extra audio features by way of an upsell to the consumer. To date, these upsells have been in the form of hardware-based soundcards. There is no technological reason why these products could not be offered as software. From a marketing perspective, there has been a reluctance to adopt software-based soundcards since there is a value perception issue. OEMs make good margins on the upsell business and believe that consumers will pay more for hardware-based products than the equivalent in software, which would require additional expense to educate the consumer. This may change in 2004. The industry is now focused on "Entertainment PCs". These are targeted for the consumers' living room, will have a wireless "10 ft interface", and will attempt to replace traditional consumer electronic devices. Consumers are used to a better standard of audio from consumer electronic devices than from their PCs. With this in mind, Intel recently announced new audio standards

for PCs being delivered in late 2004. The PC is inherently at a disadvantage architecturally when compared to consumer electronic devices but the Company's management believes there is a growing trend to improve the platform and add more features to the base solution.

Mobile devices have become the "killer app" of the early 21<sup>st</sup> century. Audio is an important component of these devices. The audio systems shipped in mobile devices today are basic, reminiscent of solutions shipped in PCs ten years ago. The growing trend is towards "smart" devices running on operating systems provided by either Microsoft or Symbian (60% owned by Nokia). In 2003, there were less than 10 million of these units shipped. This is expected to at least double in 2004. Fully featured software audio solutions are expected to be a key component of these devices.

The Company still licenses audio algorithms to the consumer electronics industry. This is a very competitive market. In the past few years, several larger corporations with consumer brand awareness have entered this arena. The popularity of digital devices, such as the DVD player, has attracted these companies. Countering this increased competition is the shift in manufacturing from Japan and Korea to China and the growing demand in emerging nations for these products. Typically, the Chinese manufacturers do not want to pay the royalties that companies with brand awareness demand, especially in markets where the brand is not as entrenched as in traditional markets. Consequently, there is opportunity for the smaller companies to supply audio algorithms but competition is all price based.

Internet Telephony Segment: Over the past year, the media has presented Voice over IP to consumers and businesses as a more mature technology whose time has come. This trend bodes well for this industry as a whole as it implies an increase in user acceptance of the technology. Since we are focused on solutions for small businesses only, further analysis is restricted to that segment.

In the small business market, the industry is still marketing first generation devices. These typically are adjuncts to existing installed equipment, offering toll bypass and PBX extension. The smaller suppliers service this segment and a typical installation would have 30 or less telephone lines per office. As with all first generation products in a new category, there is a diversity of approach and a lack of standardization that restricts continued growth for these products. In fact, of all the market segments, this is currently the least serviced, as the larger suppliers have focused on solutions for the enterprise and the growing number of service providers.

It is expected that second generation products will offer much more. Features found in more expensive systems targeted for medium and large enterprises will be incorporated into so called "low-density" solutions. This will be possible since suppliers will have the ability to leverage existing customer networks and exploit the flexibility of complete digital environment. Solutions will be more flexible, modular and scalable. Additionally, suppliers will be able to offer these feature driven solutions at affordable prices for the small business market segment.

E-commerce Segment: Many e-commerce service providers have disappeared in the past three years. A lot have been acquired, as consolidation has become the principal method for acquiring new customers. Organic growth has proved difficult for most service providers as the fallout from the "dot com" implosion lingers on. Many Internet merchants have become disillusioned and given up on their dreams of riches. Those that remain are looking for consistent and stable service; technology is irrelevant. The merchants tend to gravitate towards the larger providers. The net effect for small providers is therefore a net loss of merchants annually.