

## QSOUND LABS, INC.

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

The following discussion of the financial condition and results of operations of QSound and subsidiaries for the year ended December 31, 2002 compared to the year ended December 31, 2001, and the year ended December 31, 2001 compared with the year ended December 31, 2000 should be read in conjunction with the Consolidated Financial Statements of QSound and related Notes included therein.

#### **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, research and development costs, and our stock option plan.

#### Inventory

Inventory is comprised of 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

Goodwill is recorded at cost and up to December 31, 2001 was amortized on a straight-line basis over one to seven years, beginning in the year of acquisition. We assess the recoverability of this intangible asset by determining whether the unamortized balance of the goodwill can be recovered through undiscounted future operating cash flows of the acquired operation over its remaining life. The amount of goodwill impairment, if any, is measured based on projected discounted future operating cash flows using a discount rate reflecting our average cost of funds. The assessment of the recoverability of goodwill will be impacted if estimated future operating cash flows are not achieved.

Effective January 1, 2002, we adopted the new Canadian Institute of Chartered Accountants standard No. 3062 - Goodwill and Other Intangibles ("CICA 3062"), 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 CICA 3062, goodwill and indefinite life intangibles were tested for impairment as of January 1, 2002. This transitional impairment test was completed, and it was determined that the fair value of the Corporation's goodwill and indefinite life intangibles exceeded their carrying values. Consequently, no impairment loss was recorded. Further impairment tests will be conducted on December 31 each year. The new standard is applied prospectively. There has been no change in the carrying value of goodwill (\$2,184,589) since December 31, 2001.

### Research and development costs

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

### Stock option plan

No compensation expense is recognized when stock options are issued to employees. Any consideration paid by employees on exercise of stock options or purchase of stock is credited to share capital. Had we determined compensation cost in 2002 based on the fair value at the grant date for its stock options, \$8,478 would have been recorded using the Black Scholes option pricing model with the weighted-average assumptions of a risk free interest rate of 4.5%, volatility of 80%, expected option life of 3 years, and zero dividend yield.

Options issued to non-employees are accounted for at fair value upon their vesting date. During 2002 we granted 35,000 stock options for 35,000 shares of the company as compensation for services performed by third parties. These options are exercisable at \$1.75 per share and expire March 31, 2006. Of these options, 5,000 had vested as of December 31, 2002, and the remaining 30,000 were to vest during 2003 however they have been cancelled subsequent to the December 31, 2002. The fair value of the vested options granted was estimated on the day of grant using the Black Scholes option pricing model with the same assumptions as the employee options above, and \$4,870 was charged to income for these options. During 2001 the Company did not issue any stock options in connection with services performed by third parties.

### **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.

### **Fiscal Year Ended December 31, 2002 compared to Fiscal Year ended December 31, 2001**

#### **Revenues:**

Revenues for 2002 were \$4,224,311 representing an increase from revenues of \$3,025,994 in 2001. Revenue in the audio segment increased by \$1,194,438 due primarily to increased royalties from the hearing aid license. In our e-commerce segment revenue increased marginally by \$3,879 to \$575,073 in 2002 compared to \$571,194 in 2001. The e-commerce business model based on monthly subscription fees has remained relatively stable in 2002 as we had predicted.

#### **Operating Costs:**

Operating costs decreased to \$235,201 in 2002 from \$275,077 in 2001 reflecting the cost savings of consolidating our e-commerce operations into our Calgary office.

**Marketing Costs:**

Marketing costs decreased to \$895,820 in 2002 from \$1,074,139 in 2001. In the audio segment costs increased by \$125,339 due to increased salary costs and greater use of outside consultants. In the e-commerce segment costs decreased by \$303,658 due to reduction in the marketing programs.

**Product Research and Development:**

Research and development costs decreased to \$643,524 in 2002 from \$951,017 in 2001. In the audio segment research and developments costs decreased to \$519,137 in 2002 from \$522,888 in 2001. In the e-commerce segments costs decreased to \$124,387 in 2002 from \$428,129 primarily due to downsizing of United States engineering staff.

**Administration Costs:**

General and administrative expenses decreased to \$506,028 in 2002 from \$597,685 in 2001 due to the closing of the e-commerce segment's United States office and consolidation of their administrative functions in the Calgary office in 2001, as well as a reduction in both audio and e-commerce segments' administrative staff.

**Depreciation and Amortization:**

Depreciation and amortization costs decreased to \$382,662 in 2002 from \$831,193 in 2001 due primarily to no amortization being taken on goodwill as detailed in the discussion of major accounting policies above.

**Impairment of Assets:**

Our company experienced shortfalls in revenue from anticipated revenues on the AudioPix product. As a result, it was concluded that the value of this product was impaired and an impairment charge of \$100,000 was taken.

**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. Subsequent to the year end \$55,189 was contributed to the plan as a past service cost.

**Interest and Other Income:**

Interest and other income decreased to \$29,833 in 2002 from \$73,568 in 2001 due to the decline in interest rates in 2002.

**Fiscal Year Ended December 31, 2001 compared to Fiscal Year ended December 31, 2000****Revenues:**

Revenues for 2001 were \$3,025,994 representing a decrease from revenues of \$4,469,002 in 2000. Revenue in the audio segment decreased by \$570,302 due to decreased royalty and license fees resulting from general stagnation in the world economy. In our e-commerce segment revenue decreased by \$872,706. Our earlier e-commerce revenue model based on one-time lump sum product license fees became untenable following the dot.com decline and we adopted a more stable model based on monthly service subscription fees.

**Operating Costs:**

Operating costs decreased to \$275,077 in 2001 from \$375,000 in 2000 due to consolidation of our e-commerce operations into our Calgary office during the year.

**Marketing Costs:**

Marketing costs decreased to \$1,074,139 in 2001 from \$1,360,698 in 2000. In the audio segment costs decreased by \$377,386 due to cost cutting measures taken to reflect overall weakness in the PC and consumer electronics industries and decrease in discretionary spending. In the e-commerce segment costs increased by \$90,827 due to continuing marketing programs.

**Product Research and Development:**

Research and development costs decreased to \$951,017 in 2001 from \$1,610,436 in 2000. In the audio segment research and development costs decreased to \$522,888 in 2001 from \$787,800 in 2000 primarily due to less use of outside consultants. In the e-commerce segment costs decreased to \$428,129 in 2001 from \$822,636 in 2000 primarily due to the closing of the United States office and the reduction of United States engineering staff.

**Administration Costs:**

General and administrative expenses decreased to \$597,685 in 2001 from \$802,582 in 2002 due to consolidation of the administrative functions in the Calgary office, the closing of the United States office, and reduction in administrative staff.

**Depreciation and Amortization:**

Depreciation and amortization costs decreased to \$831,193 in 2001 from \$2,535,856 in 2000 due primarily to the decreased amortization of goodwill resulting from the impairment charged taken in 2000. No amortization of goodwill will be taken in 2002 as detailed in the discussion of major accounting policies above.

**Impairment of Assets:**

We did not incur any impairment of assets in 2001 except for the investment described in "Write-down of Investments and Gain on Sale of Investments" below.

**Write-down of Investments and Gain on Sale of Investments:**

During the 2001 year virtually all of one of the marketable securities held for sale were disposed of for total proceeds of \$218,827, resulting in a gain over book value of \$24,327. The remaining securities not sold were felt to have experienced a permanent decline in value, and a charge of \$8,300 was recorded to write down the value of the investment.

**Interest and Other Income:**

Interest and other income decreased in 2001 to \$73,568 from \$154,788 due to interest rates declining in 2001.

**Loss and Gain on Sale of Assets:**

In 2001 we had a gain on sale of assets of \$6,492 resulting from the disposal of sound source and control equipment and furniture and fixtures.

## **Liquidity and Capital Resources**

During 2002 the Company experienced an increase in revenues while decreasing costs. This resulted in an increase in cash from operations of \$1,192,690. While this increase occurred primarily in the audio segment, the e-commerce segment contributed in excess of \$100,000 cash from operations.

Our cash flow from audio business operations in 2003 is expected to come from royalties and licensing fees from current licensees and from new licensing arrangements for QSOUND audio enhancement and synthesis technologies, from revenues related to sales of QSOUND-enabled chips which are manufactured by third parties and sold by those parties and by us, from revenue share and sales receipts related to sales of downloadable software products, and from royalties derived from hearing aid sales outside of North America.

Our cash flow from e-commerce business operations is expected to come from monthly subscription fees paid by merchants for set-up and hosting of on-line storefronts and sales of related services such as domain name registration and credit card processing capabilities.

The company will be expanding into cellular, handheld devices and IP telephony markets in 2003 and each of these areas is also expected to contribute cash flow.

During the year the company advanced \$500,000 to e-tel Corporation. The advance was secured by all of the assets of e-tel. Subsequent to the end of the year the company enforced its security and collected on the note by acquiring, through its wholly owned subsidiary QTelNet Inc., software, inventory, in process research and development, equipment and furniture. QTelNet is now actively marketing the IP telephony technology and inventory acquired and the company expects to fully recover its investment. (See IP Telephony below.)

At the end of the first quarter of 2003 cash and cash equivalents were \$2,861,893 and liabilities for the same period were \$244,286, which consisted of \$130,001 in accounts payable and accrued liabilities and \$114,285 in deferred revenue. We feel that with our current cash on hand and cash flows from operations we have sufficient capital to carry out our business plan for 2003.

Due to the strengthening of the Canadian dollar and the continued weakening of the United States dollar, \$1,748,206 of our cash and cash equivalents as of March 31, 2003 are held in Canadian funds. We feel this amount of Canadian funds should be sufficient to satisfy our Canadian fund cash requirements for the remainder of the year thus protecting us from further foreign exchange fluctuations of the Canadian dollar.

During 2002, we received \$34,815 from the exercise of options and warrants. At December 31, 2002 we had \$2,621,205 in cash and short-term deposits compared to \$2,047,892 in 2001. At year-end December 31, 2002 we had accounts receivable from various customers outstanding of \$929,519 (of which \$926,046 has been collected as of April 24, 2003) and finished goods inventory with a cost of \$16,455 consisting of QSound-enabled analog chips, Audiopix CDs and UltraQ's.

During 2001, we received \$218,827 from the sale of investments and \$6,654 from the sale of excess capital assets. At December 31, 2001 we had \$2,047,892 in cash and short-term deposits compared to \$2,264,639 in 2000. At year-end December 31, 2001 we had accounts receivable from various customers outstanding of \$439,245 (of which \$431,067 had been collected at June 11, 2002) and finished goods inventory with a cost of \$28,587 consisting of QSOUND-enabled analog chips, AudioPix CDs and UltraQ's.

## **Cash Flows**

Cash generated by operations in fiscal 2002 was \$1,192,690 as compared to \$789,281 in 2001. The increase was due primarily to increased royalties received on our hearing aid license and reduction in operating expenses.

Cash generated by operations in fiscal 2001 was \$789,281 as compared to cash used in operations of \$482,950 in 2000. The increase was due primarily to non-cash working capital decreasing to \$240,189 in 2001 from \$962,006 in 2000 and reduction in operating expenses.

Cash generated in financing in fiscal 2002 was \$34,815 as compared to cash used in financing of \$980,800 in fiscal 2001. The cash generated in fiscal 2002 came from the exercise of options..

Cash used in financing in fiscal 2001 was \$980,800 as compared to cash generated by financing in fiscal 2000 of \$1,854,244. The cash was used to retire a debt to LookSmart and to repurchase 241,615 common shares, resulting in an increase of \$1,108,668 in contributed surplus.

Cash used in investments increased to \$654,192 in 2002 from \$25,228 in 2001. Capital assets were purchased for \$113,880 and \$41,052 was spent in the acquiring and renewing patents and trademarks. The \$500,000 advanced to e-tel was recorded as an investment expenditure as the company enforced its security and collected on the note by acquiring, through its wholly owned subsidiary QTelNet Inc., title to all of the assets of e-tel.

Cash used in investments decreased to \$25,228 in 2001 from \$631,018 in 2000. Capital assets were purchased for \$216,291 and the eMerchant Pro hosting property was purchased for \$34,418. Investments were sold for total proceeds of \$218,827 and capital assets were sold for proceeds of \$6,654.

## **Research and Development**

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 2001 and 2002 we concentrated on development and refinement of our new 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 \$519,137 in 2002, \$522,888 in 2001 and \$787,800 in 2000. We also work jointly with our licensees and business partners to adapt and optimize our technologies for their products. We worked with, among others, Philips, Intel, Zoran and Microsoft in 2002, Philips, Motorola, Zoran and RealNetworks in 2001 and Philips, Intervideo, Sanyo, Sharp and Toshiba in 2000.

In our e-commerce business segment, we carried out fewer research and development activities in 2002, reflecting the satisfactory performance of our e-commerce products, with expenditures of \$124,387 for the year. 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. In 2000 research and expenditure costs were \$822,636 for upgrading and enhancement of our e-commerce products.

## **Trends**

### Audio Segment

In 2002, hearing aid revenues from the North American portion of our hearing aid license constituted a substantial portion of our revenues. The North American portion of the license expired in February, 2003. Hearing aid royalties for the non-North American portion of the license, which are significantly lesser than the North American portion, are expected to remain strong and to increase throughout the remainder of 2003. Due to general stagnation of the world economy, we do not expect other audio royalties to increase in 2003 but, at best, to continue flat at the 2002 level. Sales of integrated circuits are increasing and we expect the volume of sales to not only continue but to increase throughout the remainder of the year. Management expects our revenue from Real

Networks to remain constant throughout 2003 at levels similar to the last quarter of 2002, which constituted approximately 10% of our audio revenue for that quarter. We are continuing to develop additional revenue streams through new licensing arrangements for our products and technologies, including audio engine licenses for cell phones and other mobile applications.

### E-commerce Segment

Our e-commerce segment derives substantially all of its revenue from a recurring service subscription base. We expect this revenue to remain relatively constant throughout the year. We have now fully consolidated operations in Calgary, Canada, and as we realise the cost savings we expect the segment to remain operationally profitable at its current level for the year.

### IP Telephony Segment

We are in the process of establishing a North American dealer network which we anticipate will be the main distribution channel for our IP telephony products.

### **IP Telephony**

IP (internet) telephony provides an alternative to using the conventional telephone system, or Public Switched Telephone Network ("PSTN") for voice transmissions. Using Voice over Internet Protocol ("VoIP") technology to transmit voice data over the Internet bypasses the PSTN network and therefore eliminates long distance telephone charges. QTelNet's products consist of FreeRide™ gateways and telephones that are targeted to small businesses customers who can use their existing Internet connections to accomplish inter-office long distance communications with toll quality voice performance. FreeRide products comply with H.323 protocol standards for Internet telephony and work with any analog telephone line. Currently, FreeRide products are certified by or for use with the following switches: Lucent (IP Imerge Centrex), Sprint PBX, Tadiran PBX and Telrad PBX.

QTelNet sells FreeRide products, primarily within North America, through a network of dealers that the company is in the process of establishing.