

SANGOMA TECHNOLOGIES CORPORATION
MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL
CONDITION AND RESULTS OF OPERATIONS
FIRST QUARTER ENDED SEPTEMBER 30, 2013

November 26, 2013

INTRODUCTION

The Management Discussion and Analysis (“MD&A”) provides a detailed analysis of the financial condition and results of operations of Sangoma Technologies Corporation (hereinafter referred to as “Sangoma” or the “Company”). The MD&A compares the financial results for the fiscal first quarter of 2014 with those of the same quarter in the previous year. This MD&A should be read in conjunction with Sangoma’s audited annual financial statements and related notes for the year ended June 30, 2013 (“Financial Statements”) which are available at www.sedar.com. All amounts are in Canadian Dollars unless otherwise noted.

BASIS OF PRESENTATION

The Company reports in accordance with International Financial Reporting Standards (“IFRS”).

NON-IFRS MEASURES

This MD&A contains references to certain non-IFRS financial measures such as Operating Income and EBITDA. Non-IFRS financial measures are used by management to evaluate the performance of the Company and do not have any meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other reporting issuers. Non-IFRS financial measures used herein have been applied on a consistent basis. “Operating Income (Loss) before undernoted” means gross margin less expenses before financing costs and one-time charges. “EBITDA” means earnings before interest, income taxes, depreciation, impairment, amortization and one-time charges. EBITDA is a measure used by many investors to compare issuers on the basis of their ability to generate cash from operations. We believe that Operating Income and EBITDA are useful supplemental information as they provide an indication of the results generated by the Company's main business activities before taking into consideration how they are financed or taxed. Investors are cautioned that non-IFRS measures, such as those presented herein, should not be construed as an alternative to net income or cash flow determined in accordance with IFRS.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements, including statements regarding the future success of our business, development strategies and future opportunities.

Forward-looking statements include, but are not limited to, statements concerning estimates of expected expenditures, expected future product development, expected future production, anticipated cash flows, and other statements which are not historical facts. When used in this document, the words such as “could”, “plan”, “estimate”, “expect”, “intend”, “may”, “potential”, “should” and similar expressions indicate forward-looking statements.

Although Sangoma believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Forward-looking statements are based on the opinions and estimates of management at the date that the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in forward-looking statements. Except as required by law, Sangoma undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change.

Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other events contemplated by the forward-looking statements will not occur. Although Sangoma believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct as these expectations are inherently subject to business, economic and competitive uncertainties. Some of the risks and other factors which could cause results to differ materially from those expressed in the forward-looking statements contained in the management's discussion and analysis include, but are not limited to changes in exchange rate between the Canadian dollar and other currencies, changes in technology, changes in the business climate, changes in the regulatory environment, the decline in the importance of the PSTN (see glossary below), impairment of goodwill and new competitive pressures. The forward-looking statements contained in the management's discussion and analysis are expressly qualified by this cautionary statement.

DESCRIPTION OF THE BUSINESS

General (please also refer to the Glossary of Terms at the end of this document)

The communications landscape continues to grow in complexity, with more devices, networks, clouds and systems needing to interoperate. Sangoma's portfolio of products enables Service Providers, Carriers, Enterprises, Small Medium Businesses ("SMBs") and Original Equipment Manufacturers ("OEMs") alike to leverage their existing infrastructure for maximum financial return, while still delivering the most advanced applications and services from the latest technologies available.

Sangoma's latest innovations and expanded product portfolio includes technology and appliances such as Session Border Controllers ("SBCs"), a suite of Microsoft Lync compatible products (including the market-leading Lync Express), VoIP Gateways, Call Tapping, Call Center Software, and signaling gateways for enterprise, SMB, carrier and OEM applications. Sangoma continues to invest in and be a market leader in VoIP-to-PSTN interface boards.

Session Border Controllers

Anytime two VoIP networks interconnect, issues of security and interoperability arise and Session Border Controllers manage these issues. This includes managing Provider-to-Provider connections, Provider-to-Enterprise Connections and even Enterprise-to-Enterprise connections. Sangoma's Session Border Controllers are available as hardware appliances, as software only solutions running on a virtual machine or as a hybrid of both. The hybrid solution is unique to Sangoma and provides all the flexibility expected from Virtual Machine capability coupled with the scalability that is found in hardware based solutions.

Products for Microsoft® Lync

Lync Express

Microsoft® Lync is gaining traction not only as a Unified Communications platform, but as a complete IP-PBX replacement. The initial release of Lync squarely focused on the large enterprise with a staff of Microsoft Certified engineers or partners at their disposal as the complexity of a Lync implementation is beyond most SMBs. This is further complicated when an installation requires that Lync be integrated with the PSTN, either through traditional telephony interfaces or with a SIP trunk. To help the SMBs manage this complexity, Sangoma has created Lync Express, the only all-in-one Lync server appliance with a built-in VoIP gateway and session border controller. The appliance is "right-sized" to support installations of up to 1,000 users with all the required software pre-loaded onto the appliance. Lync Express can also be used for a variety of applications beyond the outright replacement of an IP-PBX such as providing local and failover support of hosted Lync (Office 365) implementations and as part of a migration plan for multi-site company transitions to an end-to-end Lync solution.

Session Border Controllers for Lync

Session Border Controllers are also necessary when connecting any Lync implementation to a standard SIP Trunk and Sangoma is one of only five vendors certified by Microsoft® for interoperability with Lync 2013.

VoIP Gateways for Lync

VoIP Gateways are also necessary to connect any Lync installation to the PSTN and Sangoma's NetBorder Express Gateway is one of only six gateways certified by Microsoft® for Lync 2013.

VoIP Gateways

VoIP Gateways are needed anytime voice traffic moves from a VoIP Network to a traditional PSTN telephone network. As the traffic traverses these networks there are issues that need to be resolved regarding both the media (that is the sound of the caller's voices) and the signaling (that is the method that is used to control the media that is traveling over that connection).

Vega Enterprise Gateways are used by businesses that want to connect their traditional phone systems (PBX or Key System) to a VoIP Provider. These types of connections are referred to as SIP Trunks and Sangoma's gateways enable users to take advantage of the cost savings and flexibility of SIP Trunks, without having to upgrade their entire phone system.

These same gateways can also be used to connect a newer IP-PBX to the PSTN. In addition to providing a back-up to the service provided by their VoIP Provider, this use of VoIP Gateways can also be used as a multi-site company transitions certain offices from older phone systems to new IP-PBX phone systems.

VoIP Gateways are also needed to connect traditional telephones to an IP-PBX. For large companies, the cost of the new IP Phones can be more than replacing the core system, so they keep the older phones and connect them to the new IP-PBX. This allows them to phase in the new phones over time without disrupting normal business operations. There may also be specialized telephones (Elevator phones, Door Entry Phones, Ruggedized phones for use in hard industrial or outdoor conditions for which there are no IP Replacements). These phones can also be connected to the IP-PBX with a Vega gateway.

In a Service Provider or Carrier Network, much larger gateways perform these same tasks. In addition, there are additional signaling protocols that are only used when carrier networks communicate with other carrier networks that are not included in the enterprise product line. The NetBorder SS7 VoIP Gateway is a carrier-specific product that enables a VoIP Carrier to connect their network to the SS7 Network.

PSTN Interface Boards

This product category is the one that is responsible for Sangoma's initial rise as a market leader. Sangoma continues to invest in this category and has maintained a leadership position with the sixteen-span board, the highest density TDM Interface Board on the market. This board can manage up to 480 calls using a single expansion slot in a server. Sangoma also has a complete line of boards that can interface a VoIP system with nearly every kind of telephony network on earth including Digital PRI/PRI, Analog and GSM (cellular networks).

The above boards are primarily used in PC-Based VoIP telecommunications systems that connect to the PSTN and perform a very similar task to VoIP Gateways, but are installed inside the server rather than being a stand-alone device. By providing our customers with option of using a PSTN Interface Board or a VoIP Gateway, we give them the maximum flexibility based on the requirements of their installation particularly when space and power are at a premium. They may also be used in harsh conditions that require ruggedized servers.

Call Center Software

Sangoma currently support two different products used by outbound call centers for Call Progress Analysis (“CPA”). The NetBorder Call Analyser is targeted at very large call centers and is usually delivered under an OEM arrangement with the company that is providing the entire call center solution. Lyra is a “lighter weight” version of the software that has been optimized to work with contact centers that are built on the Asterisk platform.

Sangoma’s CPA is based on a proprietary artificial intelligence model that is currently considered the most accurate system available, having an accuracy of approximately 95%. Customers of CPA include many large companies and Fortune 500 companies. CPA is sold largely through recommendations by partners, the most important at this time being Genesys, a major supplier of call center applications. Work continues on streamlining the implementation of CPA, to simplify the task performed by these partners, and we are actively seeking new partners in the call center business to help market and implement the product.

Other Connectivity and Media Processing Products

Tapping Boards

Recording calls has long been a requirement in many situations that include those calls recorded for training purposes in many call centers and those that are recorded in order to validate over-the-phone transactions such as placing a stock order with a broker. The Sangoma T116 is a specialized high density board that can be used as part of large call recording platforms.

Transcoding Boards and Gateways

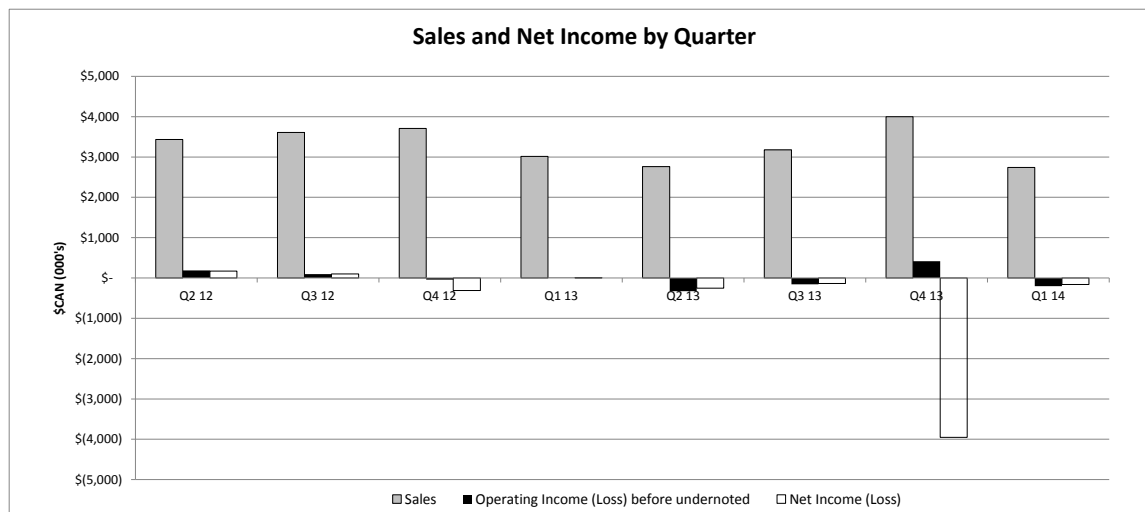
One of the things that makes VoIP telephony different from traditional telephony is the way in which sound (media) is encoded for transmission. In the traditional telephony network, there is a universally agreed upon standard that has been in place for nearly 100 years. This means that the media can easily be moved across any number of networks or devices. However, there are a variety of methods that can be used to encode media for transmission over a VoIP Network. Transcoding Boards and Gateways are specially designed to translate media encoded by one method into another. This allows call to pass between networks, even if they use different methods of encoding the media. Sangoma offers both board and appliance based products to offer network providers the maximum flexibility when deploying a solution.

Multiplexers

A Multiplexer is a device that works at the physical layer of a network. Different standards are used to move information over the physical wires of a network. Multiplexers are used to translate these standards. For example, the Sangoma STM1Fiber Multiplexer can consolidate up to 83 T1s running over copper wire into a single OC-3 Fiber connection. Sangoma provide a variety of Multiplexers for connecting different type of physical networks.

OVERALL PERFORMANCE

Financial



¹ Operating Income (Loss) before undemoted and EBITDA are metrics used by the Company to monitor its performance and the definitions may be found in the accompanying Financial Statements and MD&A posted today at www.sedar.com.

Sales for the first quarter of fiscal 2014 were \$2.74 million, down from \$3.02 million in the first quarter of fiscal 2013. As in previous years, Sangoma's sales in the first quarter were well below those of the fourth quarter in the prior year, owing to seasonally lower demand during summer months, a trend that the company expects will continue.

Gross profit was \$1.83 million for the quarter or 67% of revenue, below the 72% in the same period of 2013, and consistent with the percentages experienced over recent quarters which are more representative of Sangoma's business going forward.

Operating expense for the first quarter was \$2.03 million, in line with that of the immediately prior fourth quarter. Operating expenses were 6% below last year's first quarter reflecting the modest restructuring completed at the end fiscal 2013.

Operating Loss was \$0.20 million for the quarter, \$0.21 million below that of the same quarter last year, driven by lower sales and gross margins.

Net Loss for the quarter ended September 30, 2013 was \$0.16 million (\$0.006 per share fully diluted), compared to net income of \$0.01 million (\$0.000 per share fully diluted) for the quarter ended September 30, 2012.

Sangoma continues to maintain a solid cash balance of \$4.33 million, up somewhat from \$4.01 million on June 30, 2013. Working capital was \$10.42 million as compared to \$10.62 million one quarter ago.

Operational

Sangoma is a leading provider of hardware and software components that enable or enhance IP Communications Systems for both telecom and datacom applications. Enterprises, SMBs and Carriers in over 150 countries rely on Sangoma's technology as part of their mission critical infrastructures. Through its worldwide network of Distribution Partners, Sangoma delivers high quality products, some of which carry the industry's first lifetime warranty.

The Company has been a major player in the Open Source Telephony ("OST") business for many years, is a respected contributor to open source telephony solutions and contributes back to the OST community regularly. Sangoma is heavily involved in multiple OST projects (including two of the most common, Asterisk and Freeswitch), giving the Company a significant competitive advantage in this market.

Sangoma recognized the critical need to evolve the Company beyond relying upon PSTN based products in order to protect its future and to have any possibility at reigniting the Company's growth. This started with an operational rebuild in fiscal 2011, the acquisition of VegaStream, an internal build out of the product portfolio during the past 12-24 months, and in fiscal 2013 Sangoma began to compete in new market and customer segments.

Sangoma has now become a stronger competitor in the larger, more typical telecoms equipment market which is not generally OST based. With our PSTN interface boards, Vega gateway products, our Microsoft® Lync certified products, our SBCs, and others, we now sell to carriers/service providers, enterprise/SMBs, and OEM type customers. Several third party applications are also using our products.

Innovation

As noted above, Sangoma invests in Research and Development ("R&D") to develop new products and to improve existing offerings. Since July 1, 2011 Sangoma has accelerated the rate of new product introduction, and released many more new products to the market than in prior years. The list of new products released includes:

- T3 Mux Appliance
- Version 4 of NetBorder SS7 Media Gateway
- Vega 50, 400 and 5000 series Gateways
- NetBorder Express Microsoft Lync Certification
- NetBorder SS7 VoIP Gateway Appliance
- W400 GSM Board
- Vega 100 and 200 Gateways
- NetBorder Transcoding Gateway
- NetBorder Lync Express Appliance
- Vega 400 Session Border Controller
- A116 16-Span Digital Telephony Interface Board
- B500 BRI Board

- STM1 Mux Appliance
- Call Progress Analysis for Asterisk Systems
- NetBorder SS7 Gateway Release 5.0
- Full line of Session Border Controllers
- T116 16-Span Tapping Board
- NetBorder VOIP Gateway
- Lync Express 2.0
- SBC 2.0
- Video Multipoint Control Unit (MCU)

Sangoma has progressed from a company that had historically released few new products each year, to a company capable of delivering multiple new offerings annually.

Further, the Company has consciously investigated some other more ‘tangential’ product categories. We want to develop engineering expertise in these new areas and to identify product opportunities that combine Sangoma’s expertise and intellectual property in what may be faster growing markets. Our plans include products in all the following categories: wireless, optical networks, social, video and cloud. The first of these products was released in 2012 (W400 wireless board), the second, our STM1 mux with optical interface commenced shipping in the first quarter of fiscal 2013 and Sangoma’s third product in these new areas was our video MCU launched in the first quarter of fiscal 2014.

Sales and Marketing

Since the beginning of fiscal 2012 the Company has steadily increased its investment in, and focus on, sales. Sangoma has sales professional teams across all key geographic regions to identify and engage local distributors and to address opportunities with larger customers such as carriers and OEMs. Sangoma continues to use a dual sales path to customers: direct sales to large customers (typically OEMs and Carriers) and distribution to others.

Carriers are typically telcos, ISPs, ITSPs, wireless/mobile operators, service providers who resell services using either their own networks or those of others. All of these organizations are potential customers for Sangoma.

OEM partners are companies that “design in” Sangoma products as a component of the OEM’s solution. OEM customers tend to be committed participants in their given markets and to have longer term focus. It is important to reach these potential customers in the early days of any project to secure ‘design wins’ and to have sales and marketing programs that will ensure close intercompany collaboration during development and sales development cycles that may last as long as three years.

In other cases, we utilize an indirect distribution model to reach the full breadth of customers in markets where such partners have established relationships. For Enterprise and SMBs, the Company has built a network of distributors and resellers. Distributors typically sell to resellers. These resellers then sell, install and support the final end users. Utilizing regional distributors and resellers supported by Sangoma’s sales and marketing efforts has proven very successful. The impact of lower margins from a two tier distribution model is offset by the net new growth of sales which distributors bring to Sangoma as well as reducing the cost of handling relatively small orders. Distribution channels require frequent attention to keep Sangoma as the premier

supplier in a crowded product marketplace. Sangoma has implemented several incentive programs with distributors and has developed a comprehensive set of channel promotion programs to incent and reward its distribution partners for performance and behaviours that Sangoma believes will grow its revenue. In the last few months Sangoma has added some Master Resellers from the Microsoft® community to provide a completely new channel to Lync customers

Sangoma is also increasing its focus on, and investment in, Marketing. The marketing team has assembled corporate marketing programs to promote the Company more aggressively and to convey the message that through Sangoma 'Everything Connects'. The Company is now utilizing various marketing techniques typical of technology firms like Sangoma to generate much more awareness of the Company and its new products. That includes participation in tradeshows, speaking at selected industry events, attending specialized seminars run by our distribution channel and other partners, investing in electronic marketing strategies (eg. web presence, social media and blogging, on-line advertising, search engine campaigns etc), conducting lead generation campaigns, and creating thought leadership pieces. The Sangoma partner portal is continuing to develop as a place where approved application partners, distributors and resellers of Sangoma can get access to product information, online pricing/purchasing, co-marketing material, sales tools and other privileged partner information.

RESULTS OF OPERATIONS

SUMMARY OF RESULTS FOR THE FIRST QUARTER OF FISCAL 2014

Sales

Sales for the quarter ended September 30, 2013 were \$2.74 million, 9% below the \$3.02 million for the quarter ended September 30, 2012. As in prior quarters legacy product sales were lower and new product sales were higher than in the same quarter of the prior year.

Cost of Sales and Gross Margin

The cost of sales for the quarter ended September 30, 2013 was \$0.91 million compared to \$0.86 million for the quarter ended September 30, 2012. Gross margin for the first quarter ended September 30, 2013 was 67% of revenue, 5% lower than that recorded in the same period of fiscal 2013 as a result of the product mix. Gross profit for the first fiscal quarter of 2014 was \$1.83 million, 15% lower than the \$2.16 million realized in the first quarter of fiscal 2013, driven by the impact of lower revenue and lower margin percent.

Operational expense

Under IFRS costs are allocated to the respective departments except for the impact of foreign exchange which can result in material swings between time periods.

Selling and Marketing

Selling and marketing expenses were \$0.69 million for the quarter ended September 30, 2013, 25% above the same quarter last year (\$0.55 million) but in line with recent quarters. Investment in sales and marketing is ongoing in order to foster growth in revenue from new and existing customers across the broader range of products introduced in the last few quarters.

Research and Development

Certain development costs are capitalized each period and amortized on a straight-line basis over three years (see the Notes to the 2013 Annual Audited Consolidated Financial Statements available at www.sedar.com). The engineering expense incurred and the development costs amortized during the quarter ended September 30, 2013 were \$0.62 million, 23% lower than in the same quarter last year (\$0.81 million) reflecting the completion of the catch up of product development.

General and Administration

General and Administration expenses were \$0.65 million for the quarter ended September 30, 2013 a decrease of 10% over the same period ended September 30, 2012 (\$0.72 million).

Foreign Exchange

For the quarter ended September 30, 2013, there was a foreign exchange loss of \$0.06 million as the United States dollar continued to strengthen against the Canadian dollar. In the first quarter of fiscal 2013 there was a foreign exchange loss of \$0.07 million.

Total operational expense

Operating expense for the first quarter was \$2.03 million, down \$0.12 million from the \$2.15 million in the same period last year accounted for by the lower spending in development and admin partially offset by the ramp in sales and marketing expense.

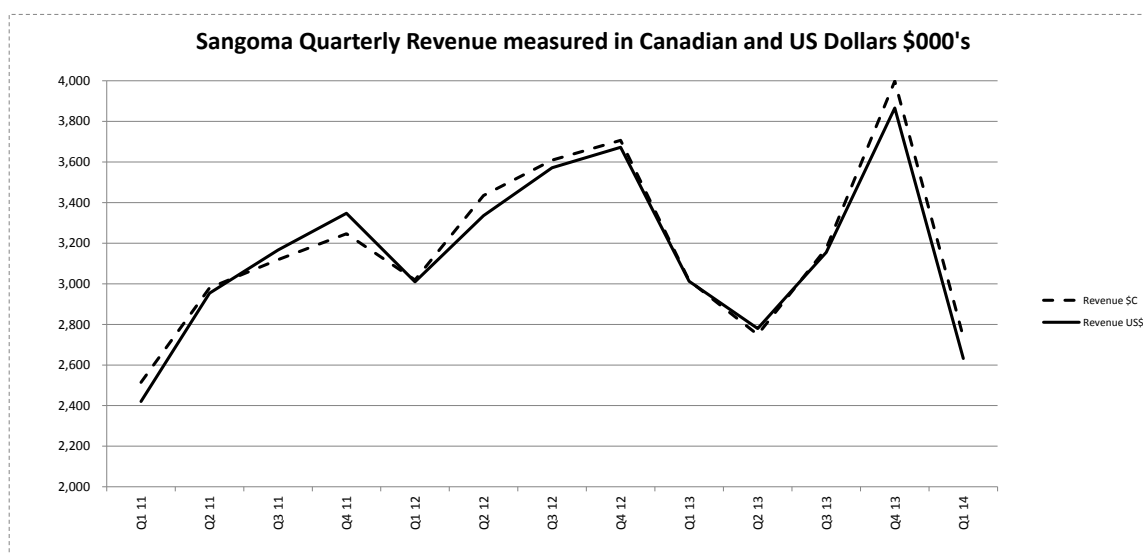
Operating Income (Loss) (before interest, financing and restructuring related expense)

Operating loss for the quarter ended September 30, 2013 was \$0.20 million versus a slight profit of \$0.01 million in the first fiscal quarter of 2013.

Net Income (Loss) and Comprehensive Income (Loss)

Net loss and total comprehensive loss for the quarter ended September 30, 2013 was \$0.16 million (-\$0.006 per share fully diluted) compared to a net profit and total comprehensive profit of \$0.01 million (\$0.000 per share fully diluted) for the same quarter ended September 30, 2012.

QUARTERLY RESULTS TRENDS



When measured in source currency (predominantly US\$), sales in the quarter ended September 30, 2013 were 13% lower than those of the same quarter in the previous year.

Sales and Net Income by Quarter

C\$ thousands	Second quarter 2010-2011	Third quarter 2010-2011	Fourth quarter 2010-2011	First quarter 2012-2013	Second quarter 2012-2013	Third quarter 2012-2013	Fourth quarter 2012-2013	First quarter 2013-2014
Sales	\$ 2,980	\$ 3,119	\$ 3,247	\$ 3,016	\$ 2,760	\$ 3,175	\$ 3,999	\$ 2,740
Gross Margin	\$ 2,304	\$ 2,270	\$ 2,441	\$ 2,160	\$ 1,873	\$ 1,994	\$ 2,458	\$ 1,826
Operating Expense	\$ 1,893	\$ 1,889	\$ 2,085	\$ 2,150	\$ 2,202	\$ 2,152	\$ 2,041	\$ 2,029
Operating Income (Loss) before undermoted	\$ 411	\$ 381	\$ 356	\$ 10	\$ (329)	\$ (158)	\$ 417	\$ (203)
Net Income (Loss)	\$ 309	\$ 278	\$ (4,385)	\$ 9	\$ (254)	\$ (136)	\$ (3,954)	\$ (160)
Net Earnings per Share								
non-diluted basis	\$ 0.010	\$ 0.009	(\$0.146)	\$0.000	(\$0.009)	(\$0.005)	(\$0.136)	(\$0.006)
fully diluted basis	\$ 0.010	\$ 0.009	(\$1.145)	\$0.000	(\$0.009)	(\$0.005)	(\$0.136)	(\$0.006)

¹ Operating Income (Loss) before undermoted is a metric used by the Company to monitor its performance and the definition may be found in the accompanying Financial Statements and MD&A posted today at www.sedar.com.

Earnings before Interest, Taxes, Depreciation, Impairment and Amortization (“EBITDA”)

EBITDA for the quarter ended September 30, 2013 was a loss of \$0.09 million versus earnings of \$0.13 million for the first quarter of fiscal 2013.

\$C Thousands	Three months ended	
	Sept 30, 2013	Sept 30, 2012
Net Income	(160)	9
Tax	(36)	5
Interest	(7)	(5)
Amortization of Property, Plant and Equipment	19	20
Amortization of Intangibles	96	102
Impairment of Intangible Assets	0	0
Impairment of goodwill	0	0
Restructuring Expense	0	0
One time acquisition fees	0	0
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EBITDA	(88)	131

The above table shows the reconciliation of net income (loss) and total comprehensive income (loss) to EBITDA.

LIQUIDITY

Sangoma remains comfortably liquid and as of September 30, 2013 the Company had current assets of \$11.90 million and current liabilities of \$1.48 million, resulting in working capital of \$10.42 million, as compared to \$10.62 million on June 30, 2013. Cash and equivalents as at September 30, 2013 were \$4.33 million as compared to \$4.01 million as at June 30, 2013. The cash inflow of \$0.32 million for the quarter resulted primarily from the net reduction in receivables/payables more than offsetting the net loss.

Accounts Receivable of \$3.98 million on September 30, 2013 were \$0.98 million lower than for June 30, 2013. The absolute balance of accounts receivable remains a continued focus with one substantial receivable outside expected payment terms, caused by a government project in India having stalled thereby slowing down payments. The end customers are large, financially stable and had paid for their earlier shipments, so it is Sangoma’s opinion that these payments will be made during fiscal 2014. The balance over 90 days increased by \$0.28 million but this has already been brought down by \$0.34 million of payments received in the early part of the fiscal second quarter.

Inventory was \$3.06 million on September 30, 2013, almost the same as that on June 30, 2013.

There are no existing or anticipated defaults or arrears on lease payments, or interest. Management of the Company believes that the current working capital and expected funds generated from operations will be sufficient to meet the operating and planned capital expenditures of the Company for the foreseeable future.

CAPITAL RESOURCES

There are no commitments for capital expenditures at this time.

OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of Sangoma.

RELATED PARTY TRANSACTIONS

Except as disclosed, the Company is not party to any material transactions with related parties. The Chairman of the Board of Directors, who is also a significant shareholder of the Company, has a contract through Entropy Control Ltd. to provide certain services to Sangoma including input to the preparation of the Company's Scientific Research and Experimental Development tax claim.

PROPOSED TRANSACTIONS

There are no proposed asset or business acquisitions as at the date of this MD&A.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

Sangoma has determined the estimated fair value of its financial assets and liabilities based on generally accepted valuation methods.

Short-term financial instruments

Cash and equivalents, trade receivables, sales tax receivables, investment tax credits receivable, accounts payable and accrued liabilities and term loan are short-term financial instruments whose fair value approximates their carrying amount on the balance sheet due to their near-term maturities. The Company does not otherwise rely on financial instruments to satisfy its capital requirements.

OUTSTANDING SHARE DATA

On February 25, 2013 the Company initiated a Normal Course Issuer Bid enabling the Company to purchase up to 5% (1,476,940) of the issued and outstanding common shares. During the subsequent period the Company has purchased 709,000 shares on the open market under the bid and these shares were retired. As of both September 30, 2013 and today's date there were 28,829,809 issued and outstanding common shares of Sangoma. Also as of November 26, Sangoma has outstanding option grants to acquire 4,039,160 common shares.

SIGNIFICANT EVENTS

None.

POST REPORTING EVENTS

The Company completed the restructuring announced on July 22, 2013 in early October within the amount of the provision established in the fourth quarter of 2013.

ADDITIONAL INFORMATION

Additional information relating to the Company is filed electronically on SEDAR at www.sedar.com.

GLOSSARY OF TERMS

Analog

Analog telephony is the telephone system that dates back to the original experiments by Alexander Graham Bell. The voice signal is picked up by a microphone and transmitted to the central office. Voice signals from the central office consist of voltages that drive a headset to produce sound. Analog means that the voice pressure signals are represented by voltages levels on the line.

API

Application Program Interface: An API is a purpose-built interface that allows fourth party software to interact with a particular application. A typical API is the user interface for Windows that allow programmers to write programs for Windows that use all its built-in utilities. APIs do not depend on revealing source code, in general. They are usually well documented and include sample programs that make development easy.

Codec

In the telephony context a codec is a mechanism of digitally encoding voice. On the PSTN a voice channel takes up 64kbps in a codec standard called G.711. Cell phones use a codec called GSM that compress the voice further so that a GSM call consumes about 24kbps. Other compressed codecs are used in VoIP to conserve bandwidth. These include standards such as G.729, G.723. Most audio codecs are lossy, in that some of the voice quality is degraded by the compression. On the other hand, as bandwidth becomes cheaper, VoIP allows one to use other codecs that in fact use more bandwidth than the PSTN, the so-called broadband codecs that have DVD-like voice quality.

Digital telephony

In the modern PSTN only the “last mile” line to the customer is still analog, all other internal parts of the network are digital. Digital in this case means that at the central office the analog signal from the subscriber’s telephone is sampled digitally, converting the line voltages to a series of numbers that can be easily transmitted error free over long distances. See T1, E1 below.

Gateway

In the telephony context this is typically a separate unit with its own case and power supply that provides VoIP-to-PSTN services for a VoIP network. Almost all gateway devices use SIP interfaces to the VoIP system over Ethernet and have analog or digital telephony interfaces that connect to the PSTN. VoIP gateways are available from many manufacturers including Audiocodes, Cisco, Grandstream, Patton Electronics and many others.

ISDN

Integrated Services Digital Network (“ISDN”) is a set of communications standards for simultaneous digital transmission of voice, video, data, and other network services over the traditional circuits of the public switched telephone network. Of the many variations of ISDN, Sangoma supports BRI (Basic Rate Interface) which is essentially an all-digital replacement for ordinary analog lines and PRI (Primary Rate Interface) which is used over T1 and E1 lines. BRI is very popular outside of North America. PRI is used worldwide.

IP

The Internet Protocol (“IP”) is the primary protocol in the internet layer of the Internet protocol suite, and delivers data packets from the source host to the destination host solely based on the IP address.

ISP

Internet Service Provider

ITSP

Internet Telephony Service Provider who offer telecommunications service including voice over internet type connections.

IVR

Interactive Voice Response: IVR systems use the phone to navigate a menu, for example those used by banks to allow access to customer’s account information. IVR systems have typically been driven by dial tones as the buttons on your phone are pressed, but increasingly they are using voice recognition for navigation.

Open Source

Open Source software is distributed free subject to certain conditions. Open Source licenses usually stipulate that source code must always be distributed or made available, and any improvements in the code have to be donated back to the community. It is possible to have dual licensing: Open Source to the community and also a closed, commercial license of the same or similar software.

NetBorder

This is the trade name of a Sangoma SIP to PSTN gateway product. It includes several other functions in addition to the PSTN gateway function. The mass marketed version is known as NetBorder Express or NBE.

PSTN

Public Switched Telephone Network: This is the standard telephone network that has been in operation for many decades. A telephone or FAX or PBX or other telephony device is generally connected to an analog line at a wall plug, which is connected by “last mile” cabling to the central office. The analog signal from the device is converted to a digital signal at the Telco central office and is multiplexed, 24 simultaneous voice channels per line (in North America) onto a T1 for onward transmission. At the other end of the line the digital channel is reconverted to analog for transmission over the “last mile” to the receiving phone or other device.

SBC

A Session Border Controller (“SBC”) is a device deployed in Voice over Internet Protocol (“VoIP”) networks to exert control over the signaling and usually also the media streams involved in setting up, conducting, and tearing down telephone calls or other interactive media communications. SBCs are deployed as demarcation points between enterprises and service providers and between service provider networks.

Signalling

Call setup and tear down is remarkably complicated, involving such things as responding to the different tones as well as generating them, caller identification and handling the different features like hook-flash and voicemail properly. There are different signalling mechanisms for different types of circuits. Analog circuits use tones such as out-of-order, busy, ringing as well as the dialling tones. T1 lines often use a data protocol called ISDN PRI, where packets of control data are exchanged on a separate data channel. ISDN PRI is a simplification of the general signalling protocol used internally by the telecommunications networks known as SS7. In all cases signalling has to be exactly compatible with what the Telco expects, so interoperability and standards are important.

SIP

Session Initiation Protocol: SIP is the emerging standard signalling protocol for VoIP, though it has much broader applications. SIP is responsible for setting up and teardown of two party and multiparty calls, as well as a host of management features. To a great and increasing extent, VoIP calls are SIP based.

T1, E1

A T1 line is a circuit that carries 24 digital telephone calls simultaneously. At higher densities, 28 T1s are aggregated into a T3 line carrying 672 calls. Larger offices can also connect to the central office via T1 directly, so as to have only one circuit for up to 24 calls. T1 is standard in North America and Japan while E1 is the standard in the rest of the world. E1 carries 30 channels of digitized voice per line.

TDM

Time Division Multiplexing (“TDM”) is used in circuit switched networks to increase the number of calls carried simultaneously on any one circuit and formed the basis for the first digital telephony networks.

Unified Communications

Unified communications is a concept in which voice, email, messaging, video and any other type of communication are all considered forms of data that can be combined, manipulated and used in intelligent applications in a seamless way.

VoIP

Voice over IP: The transfer of voice traffic over the Internet Protocol. IP is used universally for all networking including local area networks and private networks, not just the Internet. So VoIP is not necessarily voice over the Internet, but voice over general data networks.