



## **INTERNATIONAL TRADE MANAGEMENT**

# **SAMPLE BUSINESS PLAN**

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## **Executive Summary**

TSO3 Inc., a Quebec-based Canadian medical sterilization equipment supplier, is considering entering France's healthcare sector in an export venture. The company has developed and patented a unique and innovative sterilization process using ozone as a sterilant. TSO3's management is very capable and experienced in exporting their product, the 125L, and providing the after-sales service that goes with its sales. 90% of TSO3's revenues have been realized by sales abroad.

The company's product, the 125L ozone sterilizer, is unique in the world. Its main competitive advantages over other companies' sterilizers are ease-of-use, large throughput and significant cost-saving versus other company's products. The 125L is also able to sterilize heat and moisture-sensitive equipment. The 125L will be a successful export in France's healthcare market principally because it creates costs-savings without sacrificing performance or safety. France's healthcare system is considered by many as the best in the world. Innovation is key to maintaining that standard and reputation.

France has also been severely affected by the current economic crisis, which is particularly harmful to France's medical institutions who are cash-strapped because of budgetary constraints. The cost-savings aspect of the 125L is exactly what hospital administrators are looking for to survive and emerge from the crisis in a strong financial position.

It must be noted that TSO3 will not realize immediate results. Sales in medical devices take time and typically require one year of cultivating potential clients. France's medical institutions usually frequent the same suppliers, which will create added resistance to establishment in France's market. The expected repayment time in this venture is 5 years before the venture creates positive cashflow. Sales are expected to pick up in the 3<sup>rd</sup> year and amount to around \$800,000. Sales from that point on will increase to around \$2,500,000 in the fifth year. This is a particularly opportune moment in history for TSO3 to enter France's market because growth in the medical equipment industry is forecasted to grow exponentially until 2013, reaching a compounded growth of 28.8%. France is also particularly receptive to TSO3 at the moment because of the economic crisis in France and the need of companies to innovate and remain competitive.

## **Corporate Profile and Nature of the Business**

TSO3 Inc. is a Canadian, Quebec City-based medical equipment company that specializes in ozone sterilization equipment used to sterilize hand-held surgical tools and diagnostic devices. Their main product, the 125L ozone sterilizer is used in all types of facilities, including hospitals, clinics, educational institutions and research and laboratory centers.

TSO3 is a publicly-traded corporation, which trades on the Toronto Stock Exchange under the symbol "TOS". The abbreviation "TSO3" stands for "Technologies of Sterilization with Ozone".

TSO3's logo is:



TSO3 has developed a sterilization process using ozone as its sterilant, which is unique in the world, and hold the patents to both its product, the 125L, and to the scientific process of ozone sterilization. It is positioned to grab a market share from its large competitors, by virtue of the cost-saving nature of its technology.

TSO3 has received clearance from both the FDA and Health Canada to market and distribute the 125L to medical and educational facilities. In this international business plan, TSO3 is considering entering France's healthcare market.

TSO3 is still a small company, with a (fluctuating) market capitalization of about \$19.1M as of January 23<sup>rd</sup> 2009, and annual revenues of \$1.7M. The company has 47.9M shares outstanding. Incorporated in 1998, it was founded by the lead doctors and scientists who researched and developed the ozone sterilization process, and who now attempt to make it an economically and commercially viable commodity in the healthcare sector.

TSO3 is the manufacturer, marketer and distributor of its unique product: the 125L. TSO3 has always used a direct-to-client approach in its business ventures, both in sales and in marketing. TSO3 employs 23 sales staff, who, as agents, conducts their sales and marketing efforts in both Canada and the United States, with their primary focus on the latter. TSO3's typical approach is to directly contact large hospitals and medical facilities, request interviews with the directors, and present the 125L's features and advantages over the competition to them. Direct negotiations ensue, and sales contracts are negotiated and signed. To date, TSO3 has sold 32 125Ls in both Canada and the United States, and has not sold any overseas.

In October 2008, TSO3 announced that it had been selected by Mid-Atlantic Group Network of Shared Services (MAGNET) as a vendor partner. MAGNET is an East coast-based group purchasing network serving over 11,000 healthcare providers in the United States. This arrangement will give customers in the network a greater awareness of TSO3 and its product, the 125L, and should generate much larger sales volumes for TSO3 in the future.

The 125L is a high-end product, costing roughly US\$150,000, and is destined primarily to larger hospitals. It possesses many advantages over its competitors' products. These advantages include ease-of-use, efficaciousness, reliability, environmental friendliness, large through-put, and its ability to properly sterilize without damaging heat and moisture-sensitive equipment.

The 125L measures 1.9 meters (75 inches) in height, 0.762 meters (30 inches) in width, 1.22 meters in depth (48 inches) and weighs 1400 pounds. **(See Appendix A)**

From a business standpoint, the 125L's greatest competitive advantage and incentive to buy for its clients is the 125L's cost-saving nature. A sterilization cycle by the 125L costs only 1\$. Competitor's products such as ethylene oxide, hydrogen peroxide plasma, and liquid peracetic acid sterilizers cost from between 4 and 18\$ per cycle, depending on the size of the autoclave and sterilization chambers.

A client who purchases a 125L and replaces an existing sterilizer of different make can recoup its US\$150,000 investment within 12-24 months, depending on the frequency of use. From that point on, the client will forever benefit from major cost savings in its employment of ozone sterilization technology versus other sterilization processes.

TSO3's main focus has always been the U.S. markets, because of the size and proximity of this market, the existing similarities between Canadian and American business practices and customs, the FDA and Health Canada clearance that allow the 125L to be an easier product to sell in the U.S., and the provisions under NAFTA simplifying trade between the two countries.

Since its inception TSO3 has not yet succeeded in making ozone sterilization technology commercially viable.

It has struggled in the past, and especially in its first five years. Recently, the company has seen sales pick up. For example, TSO3 sold five 125L ozone sterilizers in the 3<sup>rd</sup> quarter 2008, as opposed to only two sterilizers in the same quarter of the previous year. Despite growing sales and revenues, the company is still unprofitable, as has still never posted a profitable quarter since inception. The company has a burn rate of \$700,000 per month. Management has been taking steps to conserving its liquidity position by cutting expenses where it can.

In the 3<sup>rd</sup> quarter of 2008, the company announced that it had implemented commercial, technological and operational initiatives that allowed it to reduce its expenses. These initiatives included re-alignment of their product to suit the market's need and optimization of their financial resources. The measures resulted in a reduction of \$150,000 to their monthly burn rate.

Since 1999, TSO3 has resorted to dilutive secondary issues of its equity to maintain its liquidity position and cover its operating expenses.

TSO3 has recently had several changes in its top management. The former president and CEO, Jocelyn Vezina, retired in May 2008, and was replaced by an interim CEO, W. Barry McDonald. Most recently, TSO3 recruited Mr. Ric Rumble to the position of President and CEO.

Mr. Ric Rumble has over 25 years of experience in the medical devices industry. Prior to this new appointment, Mr. Rumble held the position of President at Berchtold Corporation.

TSO3 faces intense competition in France's market because its main competitors are large conglomerate companies such as Johnston & Johnston and Steris Corporation. The situation is further complicated by the fact that the clients, medical institutions, have a proclivity to frequent the same suppliers.

Despite these difficult conditions, TSO3 is qualified for this opportunity because of the inherent advantages of ozone sterilization technology over other sterilization processes. TSO3's sales prospects in France could be enormous, as the French healthcare system is widely considered to be the best in the world, and that the growth trend in the French healthcare equipment market is strong.

Initially grabbing even a smaller market share (i.e. 5%-10%) would represent enough of a presence to make the venture viable and would create a sufficient platform to build upon over the coming years.

## **Management and Human Resources**

TSO3's existing corporate organization is not a very complex one given the junior and non-international status of the company in relation to its peers.

TSO3 at present employs about 50 people, 23 of them sales staff who are focused on North American markets. Being a publicly-traded entity, TSO3 has a typical organizational structure which includes departments of Sales and Marketing, Human Resources, Logistics, Finance, Customer Service and Technical Support, Corporate Communications and Investor Relations, and Research and Development.

These different departments play their separate roles in the prosperity and success of the business. The following chart roughly demonstrates the actual corporate organization of TSO3.



TSO3's key positions and personnel occupying them:



**R.M. Rumble**  
President and CEO



**Simon Robitaille**  
Secretary-Treasurer  
Vice-President, Operations and Research,  
Chief Scientific Officer and co-founder



**Marc Boisjoli**  
Vice-President Finance and CFO



**Robert F. Mosher**  
Vice-President, Marketing

**Mr. R.M. Rumble** joined TSO3 in October 2008, succeeding W. Barry McDonald who was interim president and CEO. Prior to this appointment, Mr. Rumble was CEO of Berchtold Corporation. He has over 25 years of experience in the North American and global medical devices industry. He has an impressive track record of delivering sustained earnings and revenue growth, and has in the past successfully negotiated large acquisitions. Mr. Rumble holds a Bachelor of Science degree in biology and an Honors Bachelor of Science degree in microbiology from the University of Western Ontario.

Several key notable positions he has held in the past include: Vice-President, Sales and Marketing for Strategic Diagnostics Inc, Vice-President and General Manager for Steris Corporation and President and CEO of Medivators Inc, as well as several positions with 3M Corporation.

**Simon Robitaille** is a founding member and holds several positions with TSO3. He is secretary-treasurer, Vice President, Operations and Research, as well as the Chief Scientific Officer. Mr. Robitaille holds a Masters in Environmental Engineering from the Ecole Polytechnique de Montreal. He has been involved with ozone sterilization technology since 1977.



His expertise is the design and integration of ozone generating systems and its commercial application. Prior to his co-founding of TSO3, he was employed at Tecksol for 17 years in the capacity of construction projects manager.

**Marc Boisjoli** is the Vice-President Finance and CFO of TSO3. Mr. Boisjoli holds two notable degrees: a degree in Actuarial Science and a Masters in Finance from Sherbrooke University. Prior to joining TSO3, Mr. Boisjoli was employed by Innovatech Quebec as a venture capitalist financier. He specializes in project analysis, valuation of high-tech companies and business financing.

**Robert M. Mosher** is the latest addition to TSO3's senior management, having joined the company in January 2009 in the capacity of Vice-President, Sales and Marketing. He holds a Bachelor of Science degree Psychology/Business from St. Louis University. He has over two decade of experience in management roles in the international medical sterilization and healthcare sector. Mr. Mosher's most notable positions include: Director of Global Product Marketing for Johnston & Johnston, Vice-president of Healthcare consumables and Vice-President of Intercontinental Commercial Operations for Steris Corporation, Director of Marketing of Europe, Middle-East and Africa for Bausch & Lomb Surgical Inc., and Director of Marketing for Storz Ophthalmics Inc.

Management's financial interest and commitment to the company:

As mentioned before, TSO3 has 47.9M shares outstanding.

Management (including the board of directors) owns 1.22% of all outstanding shares.

TITLE	NAME	Common shares(direct ownership)	Common shares(indirect ownership)	Options(direct ownership)
Chairman of the Board	Germain Carriere	146,448		64,903
Director	Christian Belisle			7,000
Director	Andre Boulanger	10,225	970,288	35,903
Director	Jacques Marcotte	7,000		45,903
Director	Andre De Villers			35,903
President and CEO	Richard Mark Rumble	58,000		1,500,000
CFO	Marc Boisjoli	49,301	44,559	208,375
CSO, VP, Operations and Research	Simon Robitaille	314,758	533,303	330,755
VP, Sales and Marketing	Robert M. Mosher	Not yet reported	Not yet reported	Not yet reported

**Source:** INK Research Insider report, January 26, 2009

As mentioned previously, TSO3's entire international exporting experience rests with its sales to the United States. TSO3's sales staff is at present well acquainted with conducting its business in the United States and is familiar with the languages, customs, business practices, laws and intricacies of doing business in that country.

All segments of TSO3's organization, with the exception of the Research and Development department, deal at one time or another in the international transactions of the company. Finance deals with receiving and processing payments and arranging financing for its clients. Marketing and sales has an extensive role in the international operations; researching, contacting and negotiating directly with clients. The Communications and Investor relations department deal with its foreign clients and its U.S.-based distribution channels, providing after-sales service, updating foreign investors, and responding to inquiries that can come from any part of the globe. The Human Resources department actively recruits U.S.-born sales staff and agents to further their marketing and sales activities.

For its proposed export venture into France, TSO3 will require sales and marketing staff familiar with the French language, its history, customs, business practices, and good understanding of the regulatory and political conditions of the target market. Since TSO3 is a Quebec City-based corporation, all the sales staffs are comfortable speaking French, as for the majority of them, it is their first language. The most efficient way for TSO3 to establish a sales and marketing force in France is to have the marketing manager in Canada and the sales staff abroad. The salespeople can travel to France and seek out clients, and/or negotiate sales contracts when propitious. This will eliminate the costs of having a permanent office in France. After-sales service and technical support for the French customers can be accommodated through the existing French-language technical support line and communications department based in Quebec City.

Additional professional services will need to be employed in France to facilitate payment, delivery and legal matters. A logistics company will be needed to ship the 125Ls directly to the customers in France. Since the units are sold individually and infrequently, no major problems should arise concerning delivery problems or late shipments. The employment of a local bank of good reputation, such as *BNP Paribas*, will likely be required to facilitate payment or financing. This is important because the clients are familiar and trust their local banks, whereas they may not know the Canadian banks TSO3 uses as their bankers. An arrangement with a local French bank will provide added assurance and peace of mind to potential and existing clients alike. Lawyers familiar with France's legal code, the Code Civil, and French laws are indispensable in negotiating and finalizing sales agreements.

It will be necessary for TSO3 to find and employ local French lawyers specialized in International business and familiar with medical equipment technology pertaining to sterilization equipment imports.

## **Target Market and Environmental Scan**

Many different factors need to be considered in assessing France's market. Specifically, the political, regulatory and economic conditions of this country need to be looked at closely to ascertain the potential risks and rewards of TSO3 doing business there.

France is a politically stable European country, and one of the most important countries of the European Union. France's form of government is a republican democracy and is considered to be the most democratic system of government in the world.

France is very friendly to foreign companies operating within its national borders and encourages foreign investment.

As a member nation of the European Union (EU), it shares a single currency with the 27 other member nations, the Euro. The European Union laws allow people, goods, services and capital to move freely between member nations. France is the largest West European nation.

France's economy is in a transitional phase from an economy that involved extensive government ownership and interventions to an economy that now relies more on market demand. In the past, the government has privatized many different companies such as insurers and banks. The government of France still maintains important stakes in its power, public transportation and defense industries. The government leaders continue to be committed to capitalism and maintain equilibrium by sensible social policies.

France's GDP (Gross Domestic Product) is \$2.097 Trillion. That makes France the world's 8<sup>th</sup> largest economy and Europe's 4<sup>th</sup>. France's GDP growth rate in 2008 was 0.9% and is expected to decrease further in 2009 because of the ongoing global recession.

Despite current adverse global economic conditions, France remains a good place to invest and/or export goods to. A note of caution: France is heavily indebted, as a nation. The public debt stands at 64.4% of GDP, a high percentage by global standards. The French government is also experiencing a budgetary deficit of \$86 B annually according to the *CIA World Factbook* 2008 estimate. The inflation rate in France was 3.4% in 2008.

Interest rates in France are determined by the ECB (European Central Bank) and currently stand at a very low 2.0%, and could be cut further. The recent interest cuts are attributable to the bank's efforts to combat global liquidity and credit issues triggered by the current global recession and the recent collapse of several reputable global financial institutions, and severe financial losses suffered by others. France's largest bank, BNP Paribas has especially suffered in the last year by reporting losses of tens of billions of Euros, and by the collapse of several of its largest public funds which were heavily invested in American ABCPs (Asset-Backed Commercial Paper) and CDOs. (Collateralized Debt Obligations)

99% of France's population speaks French, the official language. Additionally, several regional dialects exist such as Provencal, Breton, Alsatian, Corsican, Catalan, Basque and Flemish. The main religion is Roman Catholic. (83%-88%) There is also an important Muslim minority in France. (5%-10%)

France's climate is temperate in the north, with frequent rainfall along the English Channel coast, and warm and sunny along the Mediterranean Sea coast in the South. **(See Appendix B)** France's geographical location and access to the Atlantic Ocean is propitious to imports of goods from North America, South America, and Africa. France also serves as an entry point for goods destined to other European countries.

France's communications system is typical of a first-world nation. That is to say they are highly developed. There are 34.8 M main lines in use and 55.358 M cellular phone users. France also has a domestic satellite system

The Internet is also widely used, with 30.838 M internet users, and 14.256 M internet hosts.

France's transportation system is also highly developed. The railway transportation system in France is the world's 9<sup>th</sup> most developed and Europe's 3<sup>rd</sup>, with a total of 29,370 km of track. The roads and highway systems are also excellent, being the world's 7<sup>th</sup> and Europe's 1<sup>st</sup> most developed, with a total of 951,500 km of paved road including 10,950 km of highways/expressways. The road networks in France encompass all regions of the country and link all other neighbor nations.

France also has an extensive inland waterway system of canals and rivers that stretch over 8,501 km. France's principal ports and terminals are Bordeaux, Calais, Dunkirk, Le Havre, Marseille, Nantes, Paris, Rouen and Strasbourg.

France's tax system is one of the best for foreign companies setting up there. France's tax system offers many incentives to foreign companies, and does not discriminate against them. In France the laws, regulations, tax rates, and accesses to credit are the same for all companies whether they are French or not.

The costs of setting up in France are among the lowest in the world.

According to a KPMG study in 2006, France ranks third in the world after Singapore and Canada in terms of affordability of setting up a business of an export venture in an industrialized nation. TSO3 would have to register itself with the CFE (Center for Business Formalities) and pay a total cost of approximately 300 Euros for registration and administrative costs combined.

TSO3 would be targeting specific clients in France, namely hospitals and clinics which require sterilization equipment.

The healthcare system in France has both public and private facilities. Typically, institutions that require sterilizers and could use a 125L ozone sterilizer to generate costs savings over other processes are larger, meaning 200 beds or more. The majority of large hospitals and clinics are concentrated in the major urban centers of the country like Paris, Bordeaux, Orleans, Dijon, Marseilles, Strasbourg, Calais and Lyons.

Typically, these medical institutions operate on a budget, which means that increases or decreases in their expenses have major impact on their bottom line. These institutions are therefore very receptive to innovative ideas and solutions to reducing their ever-growing operating expenses. TSO3's major competitive advantages are that no other producers of ozone sterilization technology exist and that the sterilization cycle of the 125L costs only \$1, far less than others and without sacrificing safety, ease of use, efficaciousness, cycle time or throughput.

TSO3 will be faced with the fact that the hospitals and clinics' management teams have proclivity to frequent their established and reputable world-class suppliers of sterilization equipment such as *Johnston & Johnston* and *Steris Corporation*.

The tendency to deal with these reputable companies is fostered by the belief that the hospitals' reputations are enhanced and that it ensures that France's standing as the best medical system in the world is maintained.

As with all medical capital expenses, sales of sterilization equipment experience some seasonality, with most sales occurring during the summer months, particularly from May to September. The reason behind it is that most medical budgets are established during that timeframe or directly before it. The hospitals in France are either private not for profit (33%), private for profit (40%) or public (25%). There are 445 public hospitals and approximately 1,300 private hospitals. Based on a sales price of \$150,000US per 125L, and a reasonable initial potential market share of 1% per year for the first 5 years, TSO3 could count on revenues of \$2,625,000 per year. This level of revenue is quite substantive for a company TSO3's size.

## **Market Entry and Marketing Strategy**

In order to access France's medical equipment industry, TSO3 must choose the most effective market entry approach. In this case, selling a high-end, high-cost product as the 125L is, and in low volumes, the best approach is certainly directly to the client. As has always been TSO3's approach, the company should send its sales staff to France and establish direct contact with its potential clients and negotiate sales contracts.

TSO3 should begin with its existing sales staff, which has time on its hands, and being Quebec-based, speak very good French and understand the local culture well. TSO3 could hire more local sales staff in Quebec who meet the criteria and advertise employment opportunities on its website with particular focus on people who have experience doing business in France, and dealing with French medical institutions. This method of entering the market is the most logical because it will keep the venture costs to a minimum, the company only having to pay salaries and travel expenses.

This method of market entry is also used by other major companies that sell medical devices. When a client is paying \$50,000-\$200,000 for a product, he expects to meet his suppliers face-to-face and gain a clear understanding of the product's capabilities and features, as well as be assured that after-sales service and warranties are in place.

### **The 125L Ozone Sterilizer:**

The 125L measures 1.9 meters (75 inches) in height, 0.762 meters (30 inches) in width, 1.22 meters in depth (48 inches) and weighs 1400 pounds. **(See Appendix A)** It is a high-end sterilization autoclave, which uses ozone as its sterilant, a unique technology. The 125L ozone sterilizer has many technological advantages over the competitors' products. **(Refer to Appendix C)**

TSO3 has developed and patented the ozone sterilization process. It is a process that involves subjecting oxygen and water vapor to electrical discharges, thus creating ozone, sterilizing the hand-held surgical tools and diagnostic equipment, then reforming the ozone into oxygen molecules and safely venting them as low-heat water vapor. **(See Appendix D)**

For a very interesting video presentation of this technology, please follow this link, from TSO3's website: <http://tso3.com/en/img/video.swf>

The 125L Ozone Sterilizer requires a 45 ampere dedicated electrical circuit to operate. This means that the hospital or clinic purchasing the 125L will need to perform some modifications from European standards to the electrical outlet where the 125L is to be installed.

### **Pricing Strategy:**

As with most high-tech medical devices, a price skimming strategy is the most obvious and practical. This type of pricing strategy is a good fit for TSO3's efforts to successfully establish its presence in the French sterilization equipment industry because of the complete absence of competition in the ozone sterilization segment of the industry. Charging premium prices to specific segments of the healthcare sector will allow TSO3 to maximize its profits and recover its sunk costs even with relatively low sales volume.

TSO3's competitors sell sterilization systems using ethylene oxide, hydrogen peroxide plasma, steam, or liquid peracetic acid. The capital costs and operating costs of these various technologies differs significantly.

Ethylene oxide is the most common sterilization method. Anderson Medical, for example, sells its sterilizer autoclaves from \$3,999 to \$29,500 from smallest to largest. The cost of operating their ethylene oxide sterilizers ranges from \$6.50 to \$11.00 per cycle. Ethylene oxide sterilizers use a lot of electricity as well, adding an additional \$1.90 to the total cost per cycle. Anderson's most popular sterilizer is the Anprolene AN2000. **(See Appendix E)**

Also frequently used by hospitals around the globe and in France are hydrogen peroxide plasma sterilizers. Johnston & Johnston has the greatest presence and market share in France. Johnston & Johnston's *Sterrad 100S* **(See Appendix F)** is the most popular model. The Sterrad 100S costs \$185,000. It has a low through-put, but a very fast cycle time: 56 minutes. A hydrogen peroxide plasma sterilizer costs on average \$12-\$18 per cycle.

Commonly used also is steam sterilization autoclaves. A steam sterilization autoclave of medium size and throughput, like Steris's *Century Sterilizer* **(See Appendix G)**, costs \$65,000. It is cheap to operate, costing about \$0.85 per cycle in utilities, but it cannot sterilize heat and moisture-sensitive tools and diagnostic devices.

### **Place:**

In order to effectively ship the 125Ls to France, proper shipping methods and terms must be laid out.

The 125Ls are being shipped from Quebec, Canada to customers in France's main urban areas, with Paris and Bordeaux as the main shipping destinations.

Shipping by sea is the best method for this product, because the Atlantic Ocean separates the two markets, and because the weight (1400 lbs) and dimensions of the 125L would make shipping by air extremely costly.

TSO3 has no previous experience shipping its product overseas by ship. It is therefore obvious that the company has no connections. The ideal shipping Incoterm is FOB (Free on Board) or FAS (Free Alongside Ship).

This means the costs of shipping and risks associated with the shipment end for TSO3 once the 125Ls are at the departing dock in storage waiting for loading on the outgoing vessel, or once the goods are loaded on the vessel the client has chosen.

Since Quebec City is one of Canada's major port cities, the 125Ls will depart from there or from Montreal as an alternative. The 125Ls will travel by sea and land in Bordeaux. From Bordeaux, they will be sent directly to the client hospitals' locations throughout France.

Packaging is very important to the preparation of shipment. The packaging must be resistant to inclement sea weather, and to jolting or banging. The labeling must indicate the country of origin, the destination country, the nature of the goods, the quantity, the type of goods within, the shipper and the end client.

Freight forwarders will play an important role in the company's logistics operations. Employing freight forwarders initially is a good way to ship because of the low volumes of goods being shipped, and because of TSO3's inexperience in shipping goods overseas. The low costs associated with employing freight forwarders greatly outweigh the costs in time and money of hiring staff for that purpose, doing research, and attempting to take care of all logistics issues.

Customs brokers will also play an important role. Rather than train and employ in-house customs staff, it will be much more cost and time-effective to outsource this work to specialists and experts.

Shipping individual units of the 125L will create very little warehousing needs. The only real warehousing needs that could arise are warehousing at ports prior and after shipments. As previously mentioned, the 125Ls are sent out to clients right away and individually. Using freight forwarders will also negate the need for warehouses in France.



TSO3's main competitors, such as Johnston & Johnston, Steris and Anderson also use a direct-to-customer shipping approach, both to minimize costs and optimize delivery times. Because Johnston & Johnston has production facilities in France, they eliminate the need to ship sterilizing autoclaves overseas and produce them directly in France. Other companies that also produce medical devices ship them overseas because of the shipping costs associated with the weight and dimensions of the equipment, and because their sales volumes are low.

#### Promotion:

The promotional mechanism that will be used for promoting the 125L to France's leading hospitals and clinics will involve sales staff approaching the hospitals' administrations and making detailed presentations of the 125L, as well as discussing prices and financing arrangements. It is the simplest, most effective way to promoting such a high-end, high-cost product. This promotional method will involve some market research in order to determine which hospitals offer the best opportunities.

Another method of disseminating information to promote the 125L is mention in reputable French medical journals and publications. The cost of publishing articles in these journals is not insignificant, but is well worth the investment, since most hospital and clinic administrators read them.

As most capital expenditures in hospitals occur immediately before or after their annual budgets are written up, typically in the months of May and June, it would make sense to begin promoting the 125L ozone sterilizer in the 3 to 6-month period prior to the summer months.

The best management arrangement for TSO3 would be to set up an international sales force with respect to France, but to have their efforts coordinated by a sales manager headquartered at home, in Quebec City.

Progress reports could be sent back through telephone conversations or by email.

This arrangement would allow TSO3 to conduct its marketing efforts without the need to set up a sales office in France, and have staff permanently posted there until a large enough market share has been secured, at which time this arrangement could be reviewed and potentially altered. The cost-savings of not having a full-time sales staff and office in the target market greatly outweighs the occasional costs of the sales staff's travel expenses from Quebec City to France, generating sales that typically occur only seasonally.

TSO3 has an ongoing testimonials program. This program offers discounts on the price of the 125L in exchange for testimonials from satisfied clients. This promotional approach allows TSO3 to develop a reputation as a producer of excellent sterilization equipment by having reputable hospitals vouch for usefulness of the 125L. This testimonials program effectively allows

TSO3 to gain a larger market share and increase the frequency and volume of sales. This same approach would definitely be an asset when conducting promotional activities in France.

People:

As previously mentioned, hospitals in France are either private not for profit (33%), private for profit (40%) or public (25%). There 445 public hospitals and approximately 1,300 private hospitals.

These medical institutions form the client base for TSO3. The majority of the hospitals are concentrated in the larger urban centers: Paris, Bordeaux, Orleans, Dijon, Marseilles, Strasbourg, Calais and Lyons.

The purchasing criteria used by these potential clients are essentially the same across the board. The hospitals' primary purchasing criteria for sterilization equipment are safety, efficaciousness, capital cost, reliability and cost of operation.

The secondary purchasing criteria are ease-of-use, environmental friendliness, large throughput and cycle time.

TSO3's 125L meets all these criteria, and surpasses its competitors especially in the areas of environmental friendliness, cost of operation and safety.

As mentioned before, hospitals and clinics' capital purchases are typically made during the summer months because that is when their budgets are new and they have the most money to innovate or make large purchases. This period usually extends from period between May and September.

The hospitals usual purchasing methods involve paying in full up-front, paying a few months after taking title to the 125L, or hospitals with greater budgetary constraints, financing the purchase over a 12 or 18-month period. Because TSO3 is just attempting to gain a foothold in the French market, and because it is still unprofitable, the company should attempt to avoid hospitals experiencing major budgetary constraints and focus on larger hospitals that can pay in full within a short amount of time after the sale.

TSO3 will need to be careful to whom they entrust their sales efforts in France. The marketing and sales staff will need to be qualified in several areas, namely: Perfect communication skills in French, understanding of French culture, history, business customs and practices, a basic understanding of French laws, good negotiating and oratory skills, and the ability to work independently and exercise good judgment. The sales staff will also need to understand the medical industry in France.

After-Sales Service:

TSO3's after sales service is extremely important, especially so because it deals with a high-cost medical device that performs an essential function in hospitals. Hospitals will require after-sales service in three main areas: Warranties, Technical Support and ongoing service coverage.

In the past, TSO3 has offered 1-year warranties with every 125L sold. This is wise timeframe for a warranty because it ensures that any manufacturing defects will have become apparent by then, because it gives peace of mind to a client interested in purchasing a 125L, and because it is not so long as to cost TSO3 much money in place of after-sales service it can sell as a package.

The technical support line being currently being offered is a free, 24/7 offered internationally at no charge to past customers. It is intended to provide over-the-phone troubleshooting assistance for minor technical issues that may arise with the operation or installation of the 125L. The service is available in both French and English and is toll-free. This means that French customers can easily be accommodated by the existing technical support line without any language barrier issues to address.

TSO3's main after-sales service comes in the form of purchased service packages, ranging from preventive maintenance to full service including travel expenses, material and labor, corrective upgrades, annual performance certificate issuances and unlimited on-line troubleshooting. These packages are sold separately from the 125Ls and are therefore not a value-added.

TSO3 also guarantees that a field service technician can be on-site within 24 hours in case of a problem. These current after-sales options are in-line with clients' expectations of service, and can be offered in France as well.

The main issue TSO3 will face with respect to honoring its service contract obligations will be to have trained personnel available in France to perform repairs, maintenance or inspections in accordance with its terms of service. Because services of these types will not be required frequently, it is not economical to train staff in this capacity and permanently retain them in France on a full-time basis, at least until the time TSO3 establishes itself as a strong player in the French market.

The alternative is that TSO3 will need to find French personnel willing to be trained and work on an as-needed-only part-time basis.

In compliance with TSO3's current policies that service staffs need to be trained not only in physical maintenance of the 125L but also in the theories of ozone sterilization, it will be necessary to incur expenses related to bringing the potential candidates from France to Canada and giving instruction on the maintenance and workings of ozone sterilization equipment.

## **Operations Overview**

TSO3's production of 125Ls is outsourced to a manufacturer in Quebec who takes care of all related processes, flow through, inspection and testing.

Because the number of 125L units being produced annually is so small and infrequent, it was considered uneconomical to have in-house manufacturing facilities operating year-round. This has been proven to have been the correct decision over time as TSO3 currently produces only about 30 units per year. Due the sensitive and classified nature of the 125L, its technological and scientific process and its intellectual property, TSO3 is quite unwilling to make any comment or discuss production or technical information related to the actual manufacturing process of the 125L or even which company is employed in its production. This author went up the corporate ladder and spoke with the CFO of the company without success in an attempt to gain a better understanding of the production process of the 125L.

To facilitate customer inquiries, request testing of products to be sterilized or provide a more in-depth understanding of how the 125L works, TSO3 has set up many tools and documents on its website for its clients or potential clients. The company also has 24h technical support line for such inquiries as an alternative.

When a purchase order is received by TSO3, its Information Management System (IMS) records the order and the details of the client. TSO3 then contacts its supplier/manufacturer to request manufacture of a unit. A number of units are already in TSO3's inventory in Quebec, which allows the company to ship out a 125L immediately.

The newly-produced unit replaces the one shipped. TSO3 uses a "First in First out" inventory control system.

Besides the shipping terms and related costs previously discusses, no additional equipment or costs are incurred by the company in ordering the production of additional 125Ls. The company holds the ISO 9000 certification.

The administrative process of the operations is simple in TSO3's case. A purchase order is recorded by the sales staff abroad, and sent electronically or by telephone to headquarters in Quebec City. The corporate communication department sends a purchase order to its supplier.

FITT would like to thank the author, Carl Cencig, for allowing FITT to use this project as a sample.

A 125L in inventory is prepared for shipment to destination. Customs brokers and freight forwarders are contacted for the shipment overseas and the unit leaves Quebec City. The standard logistics procedures described previously are used and the order arrives at destination. The financial arrangements, including potential financing related to the sale of the 125L have already been discussed in the sales agreement and are put into effect.

## **Financial and Risk Management Strategy**

After reviewing TSO3's financial statements for the past three years, it becomes obvious that the company continues to face serious financial challenges, but that the company's sales and revenues are starting to pick up.

The highlights of TSO3's last three annual reports (**See Appendix H**) demonstrate that although the company has generated positive year-over-year cashflow (from 0 sales and revenue in 2004 to sales of \$1,731,017 in 2007), the

Company remains unprofitable as their expenses have risen correspondingly.

The company recorded a net loss of \$6,434,885 in 2005, \$7,477,443 in 2006 and \$7,912,490 in 2007.

These increases in net losses are attributable to ever-increasing expenses primarily related to administrative expenses and marketing.

Administrative expenses jumped from \$2,327,232 in 2005 to \$3,228,206 in 2007, an increase of 38.71%.

Marketing expenses jumped from \$1,923,980 in 2005 to \$4,189,403 in 2007, a whopping increase of 117.74%.

R&D expenses remained at high levels but actually decreased: from \$1,878,310 in 2005 to \$1,782,253 in 2007, a decrease of 5.11%.

To finance its continuous and ongoing heavy losses, TSO3 has resorted to secondary issues of its equity, greatly destroying shareholder value, as indicated in the company's balance sheets.

The shareholders equity deficit widened from \$30,047,204 in 2005 to \$47,640,464 in 2007. The share price has plunged from around \$3 per share to less than 50 cents per share today (**See Appendix I**).

In order to begin its export venture in France, TSO3 actually requires no capital equipment. The 125Ls will continue to be produced in Quebec, and sent via ship and freight-forwarders to the end clients.

This direct-to-client approach is best because of the high-cost and high-end nature of the 125L ozone sterilizer, and because only small quantities will be infrequently shipped. Expenses related to capital equipment purchases are nil. The lack of capital equipment purchases is a unique advantage to TSO3, eliminating its need to budget or finance such purchases.

The initial 12-month period where TSO3 will attempt to penetrate the French market will be critical and could be very costly without a planned operating budget. The planned 12-month operating budget for the venture is:

<u>EXPENSE</u> <u>(\$)</u> <u>MONTH</u>	Marketing and advertising	Administrative expenses	Travel and Logistics expenses	Storage of a sample 125L	TOTAL EXPENSE
1	60,000	18,000	40,000	-----	118,000
2	60,000	20,000	35,000	1,000	116,000
3	50,000	20,000	22,000	1,000	93,000
4	50,000	16,000	22,000	1,000	89,000
5	50,000	16,000	30,000	1,000	97,000
6	30,000	16,000	30,000	1,000	77,000
7	30,000	25,000	34,000	1,000	90,000
8	30,000	25,000	34,000	1,000	90,000
9	30,000	25,000	34,000	1,000	90,000
10	30,000	30,000	34,000	1,000	95,000
11	40,000	30,000	50,000	1,000	116,000
12	40,000	30,000	50,000	2,000	117,000

Total 12-month budget: \$1,198,000.

As stated in TSO3's Q3 2006 quarterly report by Jocelyn Vezina, TSO3's former CEO, a sale of a 125L takes 12 months from the time interest is first expressed by a potential customer. This means that TSO3 is unlikely to see any sales at all in the first year but could possibly see sales in the 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> month. Expenses will be higher at the beginning and the end of the 12-month period because TSO3 will be establishing a presence at the start, and developing it significantly in month 11 and 12.

Advertising and marketing expenses will initially be higher at the start, as demonstrated, paying for mention in scientific and medical journals, as well as research and contacting many hospitals.

This intensive marketing effort will last until the 5<sup>th</sup> month when serious leads will have been developed and the sales staff will focus on its most promising potential clients. In the last months, marketing expenses will again ramp up as sales occur and more clients are sought.

Administrative expenses comprise salaries and costs related to negotiations, drawing up contracts, and making financial arrangements for actual sales. As demonstrated above, initial costs will be low because no immediate sales are anticipated and only 2 sales staff will be in France at the beginning. As sales become imminent, and the market becomes aware of TSO3, 2 more sales staff will be sent to France.

Travel and logistics expenses are related to accommodations for the sales staff including lodging, food, air and ground travel, and the transportation of the sample 125L that will be in France for demonstrations. The cost of food, lodging and ground travel is \$11,000 per month per staff. The 1<sup>st</sup> month includes airfare and hotels. The increased expense between month 5 and 10 takes into account increased ground travel of sales staff meeting various clients, and the transportation of the sample 125L to interested clients. Months 11 and 12 take into account two more sales staff on the ground. A second 125L sample will be required in month 12 as a precaution, and the costs of proper storage increases to \$2,000 per month.

TSO3 has planned out 5 years of projected operating budgets in advance:

EXPENSE(\$)  YEAR	Marketing / Advertising	Administrative Expenses	Travel / Logistics	Storage of a sample 125L	TOTAL EXPENSES
1	500,000	271,000	415,000	13,000	1,198,000
2	640,000	300,000	460,000	24,000	1,424,000
3	800,000	400,000	550,000	24,000	1,774,000
4	900,000	420,000	650,000	36,000	2,006,000
5	1,100,000	620,000	800,000	48,000	2,568,000

It is projected that years 1 and 2 will be very difficult, with few sales and little result other than market awareness. During year three, marketing and advertising expense will be increased in anticipation of larger sales from having cultivated potential buyers during years one and two. Years 4 and 5 will see 2 additional staff employed to further sales efforts, and the related administration costs rise. Sample 125s will be added at the rate of one per year during year 4 and 5.

Another crucial part of the financial management strategy include in this business plan is a 5-year cashflow forecast. Although past performance is not indicative of future results, it is TSO3's best comparative measurement of what it can expect in terms of sales volume and frequency.

Cashflow from operations in France will be nil in the first year.

Year two may see two or three sales at most, recording revenues of approximately \$500,000.

Year three will likely see sales of between 3 and 8 units, generating cashflow of \$500,000 to \$1,200,000. Year 4 will create revenues of \$800,000 to \$1,800,000, with around 10-14 units sold.

Year 5 will likely be the venture's first profitable year, with revenues \$1,500,000 to \$3,000,000, and the company selling 12-24 units. This fifth year will be TSO3's crucial year where positive cashflow is finally achieved.

TSO3 will need to be very careful with its financing arrangements. TSO3 must ensure it gets paid but must be mindful that its clients, private and public hospitals and clinics are also on a budget and typically suffer from cashflow problems as well.

TSO3 will not need worry about non-payment risk from the public institutions because payment is guaranteed by the French government. Private institutions will require more vigilance. Because TSO3 is in no position to directly finance its clients, and the clients will usually never be able to pay in advance, on open account terms or documentary collection, TSO3's best option to assure it is paid for its product is through outside financing.

The best payment method for TSO3 to do its financing through EDC (Export Development Canada) and arrange Buyer Credits. This method of financing allows TSO3 to get paid immediately by EDC and have the French buyer instead repay EDC directly. This financing arrangement eliminates TSO3's business risk, regulatory risk, foreign exchange risk and non-payment risk. It also allows TSO3 to immediately receive payment in full, thus improving its cashflow.

The costs associated with buyer credits are diverse. The costs vary with the credit risk of the buyer, the general market conditions, and the length of time of the financing. Current credit market conditions are very difficult due to the ongoing financial crisis but EDC insurance can be purchased, and guarantees obtained by participating banks for added security. A complete financing package can be provided a French buyer. Also notable, EDC will typically only finance 85% of the transaction value, which should pose no problem for a serious buyer.

This proposed venture has some risks that cannot fully mitigated, such as the proclivities of French hospitals to frequent the same suppliers, and the ongoing credit crisis affecting the world's economy and smaller companies' ability to access credit or funding.



Risks and costs related to shipping will already be largely mitigated by the usage of FAS shipping terms, meaning TSO3's risks and costs end when they get the 125L units to the port. Insurance will be used for shipping the goods to this departure location.

Foreign exchange risks can be mitigated by the use of forward contracts taken out with TSO3's or any bank. This allows the company to have payment remitted at a fixed future value without the risks of an adverse move by the Canadian dollar slashing into TSO3's profit margin. Credit and business risks can be mitigated by due diligence, credit check, and inquiries at the Canadian consulate or embassy in France.

Regulatory risks will be mitigated by outsourcing legal work to lawyers familiar with the French legal and regulatory system and retaining and employing their services as needed.

## **Conclusion and Recommendation**

TSO3 has an exceptional product, its 125L ozone sterilizer. The 125L's inherent competitive advantages are significant and superior to its competitors in several respects: It produces large cost-savings compared to its competitors products, it has a large throughput, it is easy to use, is relatively fast, it is user friendly, it is environmentally friendly, it is easy to operate, and it requires no expensive sterilants.

TSO3 has the advantages of having its unique technology protected by patents for several more years to come, certainly a long enough time to secure a large enough market share in France which will allow it to create substantial additional revenues before the patents expire. Another major advantage that TSO3 has is in its ability to enter the French market without massive investments such as warehouses, factories, large supply and distribution chains, or Greenfield investments.

Because of the anticipated low sales volume which is typical of the industry, TSO3's current production capacity will be unaffected and undisrupted by the additional production sent to France. The lower-cost market entry approach outlined in the marketing and market entry strategy of this plan, if implemented correctly, will allow TSO3 to enter the market with no major capital equipment expenses.

TSO3's management team is very knowledgeable about conducting exports. After all, around 90% of the company's revenues have so far been realized by sales outside of Canada. TSO3's sales staff and marketing managers are all used to conducting marketing and sales initiatives abroad, and all of them speak French, an organic quality of the company's staff which is appreciated in France and will be very useful in conducting negotiations and finalizing sales.

FITT would like to thank the author, Carl Cencig, for allowing FITT to use this project as a sample.

Despite current adverse economic conditions in France at the moment, a real opportunity exists for TSO3. France's GDP growth has slowed to about 1% and could contract in the coming months, however many analysts say that the downturn could be short-lived and prosperity could return to France as soon as the last quarter of 2009. This downturn means that hospitals and clinics are suffering from budgetary constraints and are looking to reduce operating expenses. The 125L is a perfect innovation for these new initiatives. TSO3's marketing staff, focusing on the cost-saving nature of the 125L as well as its other features will undoubtedly meet with much success in its attempts to interest potential clients to buy. This innovation is exactly what they need. By replacing their older ethylene oxide and Hydrogen peroxide plasma sterilizers with 125Ls, they could save tens of thousands a year, forever.

The growth trend for medical devices in France is also the largest in Europe. It is anticipated that the medical equipment industry in France will grow by 28.8% by 2013. This demonstrates that this is a most opportune time for TSO3 to enter the market and participate and profit from this expected growth.

Given the immense opportunities in France for a company of TSO3's small size, and its ability to mitigate most risks related to this ambitious venture, TSO3 should not pass on the opportunity presented to it. TSO3 should implement this plan, with its financial, marketing and risk management strategies and begin to attain the market share in France that its corporate mission envisions for it.

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Simon Robitaille: <http://tso3.com/en/investors/members/robitaille.php>

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## Appendices

### Appendix A



TSO3's 125L Ozone sterilizer  
Image source: TSO3.com

### Appendix B



France

Image source: CIA World Factbook

### Appendix C

#### Comparison of sterilization technologies

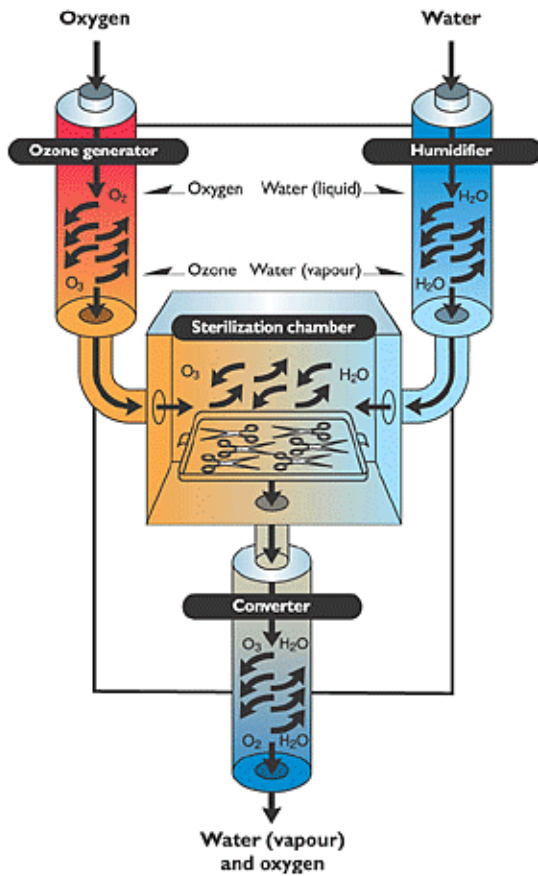
Technology Benefit	125L* Ozone Sterilizer	Hydrogen Peroxide Plasma	Steam	Liquid Peracetic Acid	EtO
Fast	X	X	X	X	
Safe for the environment	X	X	X	X	
Safe for heat and moisture-sensitive instruments	X	X			X
Large throughput	X		X		X
Inexpensive to operate	X		X		
Reliable	X	?	?	?	X
Safe for operator	X	?	?	?	
Easy to operate	X				

Source: TSO3.com

## Appendix D

The 125L's ozone sterilization process

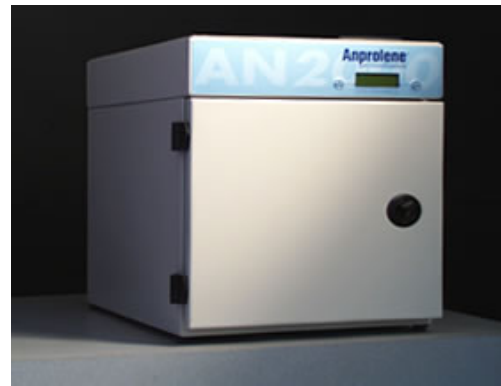
### Flow Diagram



Source: TSO3.com

## Appendix E

The *Anprolene AN2000* ethylene oxide sterilizer, by Anderson Medical



Source: andersonmedical.com

## Appendix F

the *Sterrad 100S*, hydrogen peroxide plasma sterilizer by Johnston & Johnston



Source: jnj.com

## Appendix G

### Steris's Amsco Century Medium Steam Sterilizer



Source: Steris.com

## Appendix H: Financial Statements 2005-2007

Statements of Earnings		Download chart in Excel format.	
		2005	2004
Years ended December 31			
<b>SALES</b>		\$ 171,766	\$ -
<b>EXPENSES</b>			
Operating		993,642	567,263
Research and development		1,878,310	1,573,603
Marketing		1,923,980	1,721,777
Administrative		2,327,232	2,784,407
Financial		13,700	13,243
		<b>7,136,864</b>	<b>6,660,293</b>
<b>OPERATING LOSS</b>		<b>6,965,098</b>	<b>6,660,293</b>
<b>OTHER REVENUES</b> (Note 18)		<b>530,213</b>	<b>726,377</b>
<b>INCOME TAXES</b>		<b>-</b>	<b>12,223</b>
<b>NET LOSS</b>		<b>\$ 6,434,885</b>	<b>\$ 5,946,139</b>
Basic and diluted net loss per share (Note 17)		<b>\$ 0.19</b>	<b>\$ 0.19</b>

FITT would like to thank the author, Carl Cencig, for allowing FITT to use this project as a sample.

# Balance Sheets

As at December 31

[Download chart in Excel format.](#)

	2005	2004
<b>CURRENT ASSETS</b>		
Cash	\$ 294,101	\$ 438,229
Temporary investments (Note 4)	14,300,902	10,240,334
Accounts receivable (Note 5)	344,302	332,331
Inventories (Note 6)	3,303,258	2,845,586
Prepaid expenses	95,894	48,871
	18,338,457	13,905,351
<b>PROPERTY, PLANT AND EQUIPMENT</b> (Note 7)	416,327	497,573
<b>INTANGIBLE ASSETS</b> (Note 8)	3,832,250	3,907,995
	\$22,587,034	\$18,310,919
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 1,015,491	\$ 775,686
Deferred revenue	961,826	36,060
Current portion of long-term debt (Note 10)	-	68,500
	1,977,317	880,246
<b>LONG-TERM DEBT</b> (Note 10)	-	-
	1,977,317	880,246
<b>SHAREHOLDERS' EQUITY</b>		
Share capital (Note 11)	46,036,329	37,651,920
Contributed surplus	4,620,592	2,213,699
Deficit	(30,047,204)	(22,434,946)
	20,609,717	17,430,673
	\$22,587,034	\$18,310,919

On behalf of the Board,



**Jocelyn Vézina**  
Director



**Simon Robitaille**  
Director

## Statements of Cash Flows

Years ended December 31

Download chart in  
Excel format.

	2005	2004
<b>OPERATING ACTIVITIES</b>		
Net loss	\$(6,434,885)	\$(5,946,139)
Adjustments for:		
Depreciation and amortization of property, plant and equipment	157,744	193,914
Amortization of intangible assets	214,350	61,942
Amortization of deferred financing costs	-	84,822
Stock-based compensation	416,672	577,399
Loss on disposal of property, plant and equipment	1,698	-
	(5,644,421)	(5,028,062)
Changes in non-cash operating working capital items (Note 12)	648,905	(443,813)
Cash flows used in operating activities	(4,995,516)	(5,471,875)
<b>INVESTING ACTIVITIES</b>		
Temporary investments	(5,421,424)	7,699,378
Acquisition of property, plant and equipment	(87,496)	(182,578)
Acquisition of intangible assets	(138,605)	-
Increase in value of investments		
Immigrant Investors Program	-	(109,533)
Realization of investment	-	3,475,049
Disposal of property, plant and equipment	9,300	-
Cash flows (used in) from investing activities	(5,638,225)	10,882,316
<b>FINANCING ACTIVITIES</b>		
Reimbursement of long-term debt	(68,500)	(3,620,978)
Share issue	10,024,280	948,241
Share issue expenses	(827,023)	-
Cash flows from (used in) financing activities	9,128,757	(2,672,737)
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	(1,504,984)	2,737,704
CASH AND CASH EQUIVALENTS AT BEGINNING	8,801,619	6,063,915
<b>CASH AND CASH EQUIVALENTS AT END (Note 12)</b>	<b>\$ 7,296,635</b>	<b>\$ 8,801,619</b>

## Statements of Earnings

Years ended December 31

Download Chart In Excel Format

	2006	2005
<b>SALES</b>	\$ 1,069,739	\$ 171,766
<b>EXPENSES</b>		
Operating	1,643,116	993,642
Marketing	3,184,933	1,872,840
Research and development	1,682,413	1,878,310
Administrative	3,090,571	2,378,372
Financial	17,626	13,700
	9,618,659	7,136,864
<b>OPERATING LOSS</b>	8,548,920	6,965,098
<b>OTHER REVENUES (Note 17)</b>	1,071,477	530,213
<b>INCOME TAXES (Note 13)</b>	-	-
<b>NET LOSS</b>	<b>\$ 7,477,443</b>	<b>\$ 6,434,885</b>
Basic and diluted net loss per share (Note 16)	\$ 0.20	\$ 0.19



## Balance Sheets

As at December 31

	2006	2005
<a href="#">Download Chart in Excel Format</a>		
<b>CURRENT ASSETS</b>		
Cash	\$ 753,885	\$ 294,101
Temporary investments ( <a href="#">Note 4</a> )	6,554,897	14,300,902
Accounts receivable ( <a href="#">Note 5</a> )	811,119	344,302
Inventories ( <a href="#">Note 6</a> )	3,387,837	3,303,258
Prepaid expenses	133,651	95,894
	11,641,389	18,338,457
<b>PROPERTY, PLANT AND EQUIPMENT (<a href="#">Note 7</a>)</b>	390,608	416,327
<b>INTANGIBLE ASSETS (<a href="#">Note 8</a>)</b>	3,711,742	3,832,250
	\$ 15,743,739	\$ 22,587,034
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 1,043,700	\$ 1,015,491
Deferred revenue	75,709	961,826
	1,119,409	1,977,317
<b>SHAREHOLDERS' EQUITY</b>		
Share capital ( <a href="#">Note 10</a> )	47,149,127	46,036,329
Contributed surplus	4,999,850	4,620,592
Deficit	(37,524,647)	(30,047,204)
	14,624,330	20,609,717
	\$ 15,743,739	\$ 22,587,034

On behalf of the Board,

  
Jocelyn Vézina  
Director

  
Simon Robitaille  
Director

## Statements of Cash Flows

Years ended December 31

	2006	2005
<a href="#">Download Chart in Excel Format</a>		
<b>OPERATING ACTIVITIES</b>		
Net loss	\$ (7,477,443)	\$ (6,434,885)
Adjustments for:		
Amortization of property, plant and equipment	139,758	157,744
Amortization of intangible assets	220,370	214,350
Amortization of premiums and discounts on investments	(131,637)	(66,510)
Stock-based compensation	651,630	416,672
Loss on disposal of property, plant and equipment	882	1,698
Loss on disposal of investment	6,298	-
	(6,590,142)	(5,710,931)
Changes in non-cash operating working capital items ( <a href="#">Note 11</a> )	(1,447,061)	648,905
Cash flows used in operating activities	(8,037,203)	(5,062,026)
<b>INVESTING ACTIVITIES</b>		
Acquisition of temporary investments	(4,433,793)	(7,256,449)
Disposal of temporary investments	11,857,500	1,901,535
Acquisition of property, plant and equipment	(116,723)	(87,496)
Acquisition of intangible assets	(99,862)	(138,605)
Disposal of property, plant and equipment	1,802	9,300
Cash flows from (used in) investing activities	7,208,924	(5,571,715)
<b>FINANCING ACTIVITIES</b>		
Options exercised	65,632	-
Warrants exercised	774,794	-
Share issue	-	10,024,280
Share issue expenses	-	(827,023)
Reimbursement of long-term debt	-	(68,500)
Cash flows from (used in) financing activities	840,426	9,128,757
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	12,147	(1,504,984)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	7,296,635	8,801,619
CASH AND CASH EQUIVALENTS, END OF YEAR ( <a href="#">Note 11</a> )	\$ 7,308,782	\$ 7,296,635

**Statements of Earnings and Comprehensive Income**  
**Years ended December 31**

	2 0 0 7	2 0 0 6
<b>SALES</b>	<b>\$ 1,731,017</b>	<b>\$ 1,069,739</b>
<b>EXPENSES</b>		
Operating	1,891,668	1,643,116
Marketing	4,189,403	3,184,933
Research and development	1,782,253	1,682,413
Administrative	3,228,206	3,090,571
Financial	17,130	17,626
	<b>11,108,660</b>	<b>9,618,659</b>
<b>OPERATING LOSS</b>	<b>9,377,643</b>	<b>8,548,920</b>
<b>OTHER REVENUES (Note 18)</b>	<b>1,465,153</b>	<b>1,071,477</b>
<b>NET LOSS AND COMPREHENSIVE INCOME</b>	<b>\$ 7,912,490</b>	<b>\$ 7,477,443</b>
Basic and diluted net loss per share (Note 16)	\$ 0.17	\$ 0.20

**Statements of Cash Flows**  
**Years ended December 31**

	2 0 0 7	2 0 0 6
<b>OPERATING ACTIVITIES</b>		
Net loss	\$ (7,912,490)	\$ (7,477,443)
Adjustments for:		
Amortization of property, plant and equipment (Note 7)	144,052	139,758
Amortization of intangible assets (Note 8)	228,596	220,370
Amortization of premiums and discounts on investments	-	(131,637)
Change in the value of temporary investments (Note 18)	(122,594)	-
Stock-based compensation (Note 10)	678,424	651,630
Loss (gain) on disposal of property, plant and equipment (Note 18)	(10,718)	882
Loss on disposal of investment	-	6,298
	<b>(6,994,730)</b>	<b>(6,590,142)</b>
Changes in non-cash operating working capital items (Note 11)	549,123	(1,447,061)
Impact of new standards (Note 3)	20,216	-
Cash flows used in operating activities	<b>(6,425,391)</b>	<b>(8,037,203)</b>
<b>INVESTING ACTIVITIES</b>		
Acquisition of temporary investments	(13,543,326)	(4,433,793)
Disposal of temporary investments	9,542,473	11,857,500
Acquisition of property, plant and equipment	(262,019)	(116,723)
Acquisition of intangible assets	(180,683)	(99,862)
Disposal of property, plant and equipment	11,175	1,802
Cash flows from (used in) investing activities	<b>(4,432,380)</b>	<b>7,208,924</b>
<b>FINANCING ACTIVITIES</b>		
Options exercised (Note 10)	50,764	65,632
Warrants exercised (Note 10)	4,521,975	774,794
Share issue expenses	(1,942,023)	-
Share issue (Note 10)	23,000,000	-
Cash flows from (used in) financing activities	<b>25,630,716</b>	<b>840,426</b>
<b>INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>14,772,945</b>	<b>12,147</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING</b>	<b>7,308,782</b>	<b>7,296,635</b>
<b>CASH AND CASH EQUIVALENTS AT END</b>	<b>\$ 22,081,727</b>	<b>\$ 7,308,782</b>

**Balance Sheets**  
**As at December 31**

2007

2006

**CURRENT ASSETS**

Cash and cash equivalents (Note 4)	\$ 22,081,727	\$ 7,308,782
Temporary investments (Note 4)	4,123,447	-
Accounts receivable (Note 5)	975,011	811,119
Inventories (Note 6)	2,996,409	3,387,837
Prepaid expenses	139,410	133,651
	<b>30,316,004</b>	<b>11,641,389</b>
<b>PROPERTY, PLANT AND EQUIPMENT (Note 7)</b>	<b>508,118</b>	<b>390,608</b>
<b>INTANGIBLE ASSETS (Note 8)</b>	<b>3,663,829</b>	<b>3,711,742</b>
	<b>\$ 34,487,951</b>	<b>\$ 15,743,739</b>

**CURRENT LIABILITIES**

Accounts payable and accrued liabilities	\$ 1,300,877	\$ 1,043,700
Deferred revenues	145,878	75,709
	<b>1,446,755</b>	<b>1,119,409</b>

**SHAREHOLDERS' EQUITY**

Share capital (Note 10)	73,210,291	47,149,127
Contributed surplus	7,471,369	4,999,850
Deficit	(47,640,464)	(37,524,647)
	<b>33,041,196</b>	<b>14,624,330</b>
	<b>\$ 34,487,951</b>	<b>\$ 15,743,739</b>

The accompanying notes are an integral part of the financial statements.

**Approved by the Board**


Director



Director

Source: TSO3.com

# Appendix I

## TSO3's 3-year stock performance

**TOS1/7/2008**Open:2.91High:2.91Low:2.41Close:2.48



Source: TD Waterhouse