

"MICRONIKA Co" Ltd.

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Management: L. Boukhalov - Director General,

A. Filaretov - Business Director,

A. Belaiev - Director for production and development

Employees: full time - 8, part time - 17 persons

Previous financing: \$60 000

Current financing: \$23 000

Requested investment: \$750 000

Use of the requested investment: : capital investment, R & D of new products, market development, serial production volume increasing.

Company Description:

Since the date of incorporation in November, 1995, Micronika Co., Ltd. has been specializing in design and manufacturing of antennas.

Today the company is manufacturing antennas for terrestrial TV receiving, different radiocommunication systems, and cellular telephone systems both of it's own design and in cooperation with Russian and Western companies on the basis of technology transfer.

The company's concept is to design and manufacture serially high quality consumer and semiprofessional antennas providing the best price - quality ratio, and to design and manufacture products under special orders.

The company is differentiated from other Russian manufacturing and importing companies by

- Development and production of up-to-date antennas complying with western quality requirements in design, materials and technology;
 - Constant expansion of the output by new product designing and product modification in accordance to customer's order;
 - Experience in antenna's design and manufacturing in accordance to customer's order;
 - Technology flexibility which provides shipment of any volume in the shortest time;
- Some projects were supported by Russian Foundation for Support in Small High-Technology Businesses Development (Governmental Institution).

Micronika Co., Ltd. - participant of TACIS' Work Attachment Program.

Field and Directions of Activity:

Telecommunication: Manufacturing of terrestrial TV and radiocommunication antennas.

Products/Services/Technologies:

Directional antennas for cellular telephone, Antennas for radiocommunication mobile included systems, Receiving antennas for terrestrial TV broadcasting, and customized design and manufacturing under special order.

Using technology has been transferred from CBD Electronic under solar agent agreement. Raw materials and its finishing are meeting requirements accepted in Western Europe: antennas booms and vibrators are made of thin wall rolled aluminum with protective yellow golden electrochemical surface finishing which provides antennas high resistance to corrosion while being light.

Plastic parts are made of plastic stable to both ultra violet and Russian temperature difference.

Technology for radiocommunication and cellular telephone systems antennas manufacturing was developed by the applicant for the same materials.

R & D (methods and results) of new antenna types is applicants know-how.

Management Team:

Director General Leo L. Boukhalov (shareholder), Ph.D. in chemistry, running the company since the date of incorporation, business special training (management) by TACIS program, worked on probation for "Probest service", Italy.

Business Director Alexei H. Filaretov (shareholder) Ph.D in physics, business special training (marketing) - certificate of Marketing Mix received from Finish Institute of Marketing, worked on probation for VG Semicon, UK.

Director for production and development Andrey H. Belaiev, 4 years experience in antennas manufacturing, 15 years in research and development.

Markets/Competition:

Domestic and international markets.

Application of directional antennas for cellular telephone is to improve communication reliability in low signal regions. The need for improvement originated from:

- Cellular Telephone Service market growth beyond operators financial possibility to invest into infrastructure (e.g. Russia, India), leading to linear cells layout spreading over the most populous regions only;
- Uneven density of population (e.g. Finland, Russia);
- Island - type of population over significant territory (e.g. Greece, Russia);
- Advancing application of cellular networks for data transfer including Internet (e.g. USA, Europe, Japan, Russia).
- Advancing subscriber's demand on reliability of cellular telephone communication while inside of buildings.

Estimated Russian market volume in 2000 is \$4 500 000, applicants market share is 2.2%. It is planned to gain market share up to 7.5% in 2001 while market volume is estimated to be \$12 000 000.

Import substitution and export potential. Competitors. Applicants products correspond to western made products (Allgon, Carant Sweden, Procom, Denmark) in raw materials used and technology being from 2 to 2.5 times cheaper while excelling them over in technical characteristics. At the time being contracts with Indian, Grecian and USA companies are being negotiated.

Distribution. Product introduction was in May, 2000. Today the company sells its products in St.Petersburg (40%), Moscow (30%), Nizny Novgorod, Kazan, Ekatherinburg (30% total). The company sells to cellular telephone service providers (MTS - direct shipment), wholesaler companies distributing subscribers equipment (direct shipment), companies - providers of service in communication, chains of cellular telephone communication equipment retail (UltraStar, Fantaon-Telecom - direct shipment). There is a distributor in Moscow pricing products by Micronika's price-list, it provides unified price policy implementation in both cities. Type of products including those planned to develop permits growth of sales through distribution chains of cellular telephone service providers.

Achievements:

- Technology for terrestrial TV receiving antennas production has been transferred and updated so that the same technology was applied to production of radiocommunication antennas. Today Micronika Co., Ltd. is the only Russian company manufacturing (not importing) products corresponded to western made ones;
- Software and test methods have been developed; it become possible to develop new and modify existing products in shortest time;
- Level of technology unification gives the possibility to manufacture products in any, down to smallest, volume by almost equal to serially manufactured product price;
- Growing share of special orders for full R & D and manufacturing shows an achieved high reputation and recognition of high scientific potential of the company.

Outlook:

- Expansion of the sales and development of TV and cellular telephone antennas.
- Product development - development and introduction of electronic components for microcells of cellular telephone systems, 300 MHz antennas for trunk communication systems (ActioNet, Altay and so on), 1800 - 1900 MHz antennas for cellular telephone GSM 1800
- Diversification - development and introduction of 1800 MHz antennas for DECT, 2300-2500 MHz antennas for data transfer and antennas for 2050 MMDS.