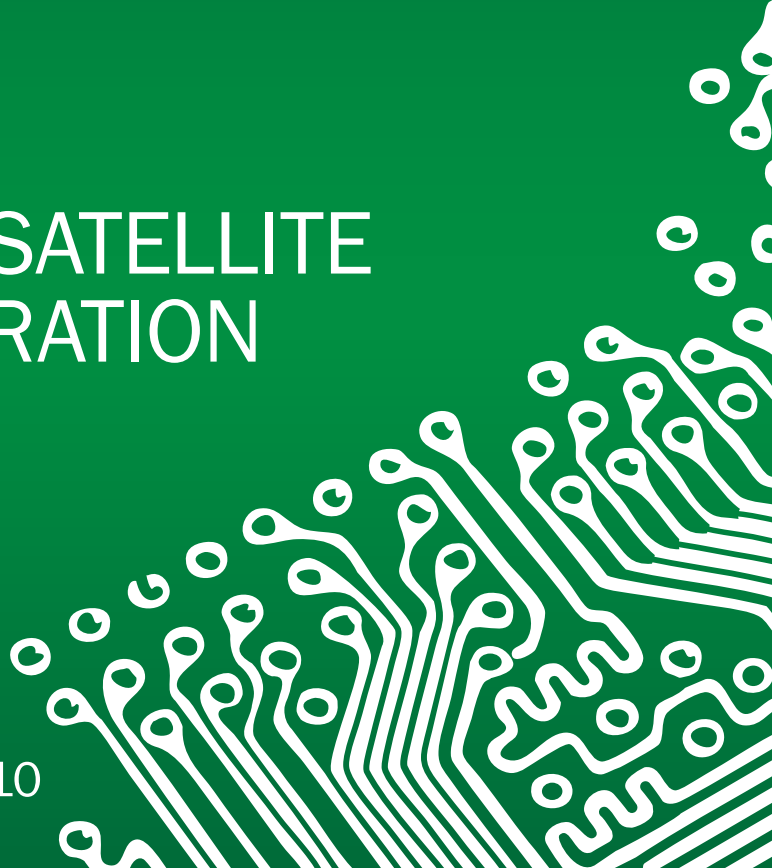




# GENERAL SATELLITE CORPORATION

2010



## DIGITAL TELEVISION FOR EVERYONE

The General Satellite Corporation has been working on the Russian satellite television market for 18 years already. It came to the European market in 2002 and has been actively developing its market share since then.

The Corporation is currently implementing a large-scale investment project "The area of scientific and technological development — Technopolis Gusev" in the town of Gusev, Kaliningrad region, Russia. Two new plants, the largest manufacturers of digital television set-top-boxes in Russia and Europe, were launched in 2009. The Corporation has developed the only Russian service-oriented middleware. Its equipment is widely used in pilot digital broadcasting zones in Russia and it is also officially recommended for customers of the main Russian satellite television broadcasters.

### MISSION STATEMENT:

1. To promote faster digitization of broadcasting in Russia and other countries
2. To provide customers with high-quality set-top-boxes
3. To take an active part in innovation based development of the Russian radio-electronic industry: software and hardware development
4. To build an innovation industrial park — "The area of scientific and technological development — Technopolis Gusev" Project



General Satellite Corporation Headquarters, Saint-Petersburg

Since 1991 — research and development activity in Saint-Petersburg



2003 — The very first receiver under General Satellite brand was produced



Since 2007 — service-oriented middleware development, implementation and testing among millions of digital satellite television subscribers in Russia

Since 2007 — radio-electronic equipment production in the town of Gusev (Kaliningrad region, Russia)



"Technopolis Gusev" project  
Building of 5 new manufactures and objects of social infrastructure by 2012  
Investment: \$156 mln



## DIGITAL FUTURE

Russian television should switch to digital format by 2015, according to the Russian National Program of Digital Broadcasting Switchover. The Government is to create a digital television broadcasting system and also to provide a transmission of a number of state owned channels, which should be free to viewers. Experts estimate that the number of households and institutions which will be provided digital receivers or TV-sets by 2015, makes up to 50 mln.

Corporation plants are capable of producing up to 5 mln set-top-boxes annually for the Federal Program "Digital Broadcasting Development in Russia in 2009-2015". The Corporation also has a lot of experience in cooperation with the largest satellite operators in Russia.



## PARTNERSHIP

"Tricolor TV" is the largest satellite television operator in Russia with the largest subscriber base — more than 6 mln households at the beginning of 2010. It amounts to 80% of digital television viewers in Russia.

The General Satellite Corporation is the developer of service-oriented middleware which is used to connect and service the "Tricolor TV" customers. Its implementation helped "Tricolor TV" digital television broadcasting service to attract 2.8 mln new subscribers in 2008 alone. "Tricolor TV" became the fastest growing satellite TV operator in the world thanks to the fastest subscribers' base growth rate. The General Satellite Corporation supplies set-top-boxes for this project as well.

"NTV-plus" is the Russian satellite TV operator, with the second largest subscribers' base in the country. Digital TV receivers produced by General Satellite Corporation are officially recommended to "NTV-plus" viewers.

## SERVICE-ORIENTED MIDDLEWARE BY GENERAL SATELLITE

Service-oriented middleware allows control over virtual sub-channel content (channel package), geographical coverage and viewers' registration, as well as communicating with viewers directly, including sending personal messages to a particular subscriber.

It's impossible to utilize all the advantages of digital format without using service-oriented middleware. Use of service-oriented middleware has become a standard part of digitization all over the world.

Service-oriented middleware by General Satellite is a unique product for CIS countries. It's the only Russian system that was implemented in 2007 and tested among millions of viewers of the leading satellite broadcasting operator "Tricolor TV" (more than 6 mln subscribers).



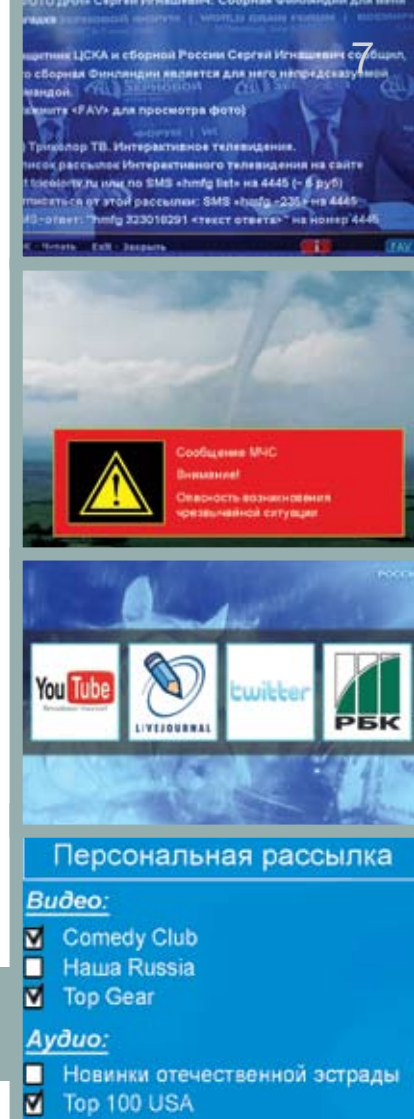
## ADVANTAGES

### For views:

- Wider range of possible ways to spend spare time
- Ability to choose TV content, including orders for specific content according to personal taste
- Wider range of Internet services including e-mail

### For operator and the Government:

- Ability for almost unlimited number of local informational insertions to be integrated into content under centralized control
- Ability to vary virtual sub-channels and their content
- Ability to transmit information either to broad audience or individuals and broadcast emergency announcements, e.g. in case of natural disaster.
- Ability to conduct opinion polls
- Ability to provide Internet access in hard-to-get-to areas
- Ability to provide segmented commercial and social advertising





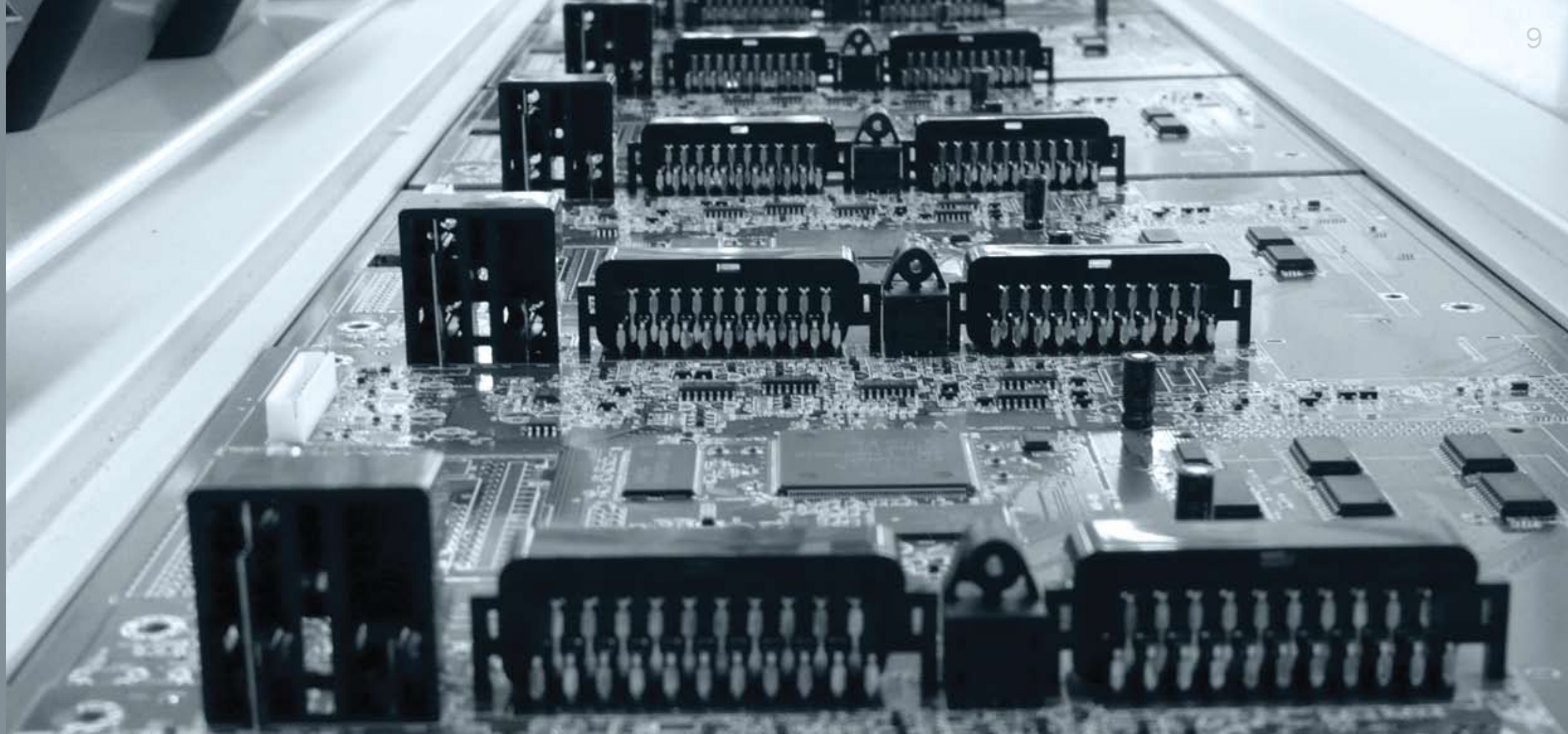
## R&D

The General Satellite Corporation carries out its own R&D projects in the area of system solutions for satellite TV: from software development and system boards production to digital content production and network development.

Prospective Development Department was created in 2002. Its portfolio includes a hardware platform based on STi5518 chip, software for all types of receivers, a receiver for satellite operator "NTV-plus" with integrated Viaccess CAS and also several models of satellite and terrestrial TV set-top-boxes. The Department provides the full cycle of development, there are currently about 100 employees.

The Corporation carries out development projects in the following areas:

- Satellite receivers
- Cable receivers
- Terrestrial receivers
- IP set-top-boxes
- Specialized software and hardware solutions such as EPG (Electronic Program Guide), CAS, Service-oriented middleware and etc.







## PROSPECTS

The Russian Prime-Minister Vladimir Putin meets Minister of Mass Communications Igor Tchegolev, who is devoted to the digital TV switchover in Russia.

**Igor Tchegolev:**

...I have recently visited Kaliningrad, where the plant for production of receivers is nearing completion... Production is of a high quality, better than many overseas analogues in some respects, and it beats even the Chinese when it comes to pricing. The capacity of the plant is several million units per year...

**Vladimir Putin:**

How many receivers could be produced there annually?

**Igor Tchegolev:**

It depends on the demand, naturally. More than 2 mln, anyway

**Vladimir Putin:**

If their products will cost less than imported analogues then it's a work well done and there is a good market.



Minister of Mass Communications of Russia I.Tchegolev visits the town of Gusev, Kaliningrad region, Russia





## MANUFACTURING: FROM MICROCIRCUITS TO FINAL PRODUCT

The largest television receiver plant in Europe was opened in style on 28th of August 2009 in the town of Gusev, Kaliningrad region, Russia. The Corporation is expected to take up to 1,5% of the world STB market after the plant reaches its design capacity.

Digital receivers for terrestrial and satellite TV under the General Satellite Corporation brand production started by the end of 2007, initially on rented capacity. There was a complete production cycle from the system board assembling to the final product.

**The first Russian HDTV receiver went into mass production on 18 February, 2009 on the plant in the town of Gusev.**

New specialized facilities for the production of radio-electronic equipment were being built at the same time as equipment was being produced using the rented capacities. It took 1.5 years to finish the construction and the whole new plants to be ready to start production.



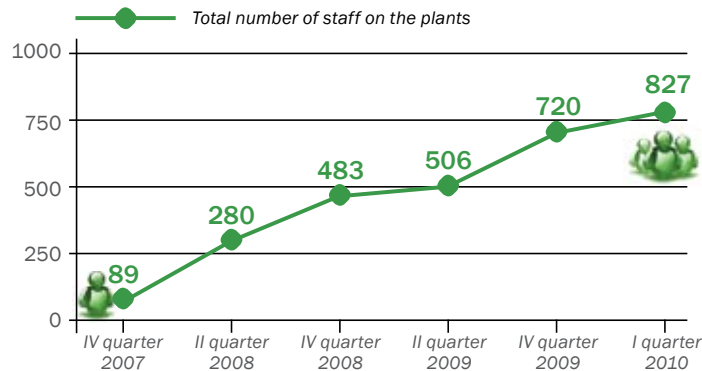
Governor of Kaliningrad region G. Boos, Head of Administration of Gusev municipal region N.Tsukanov and President of General Satellite Corporation A. Tkachenko during the opening ceremony



## SUSTAINABLE DEVELOPMENT IN TIMES OF CRISIS

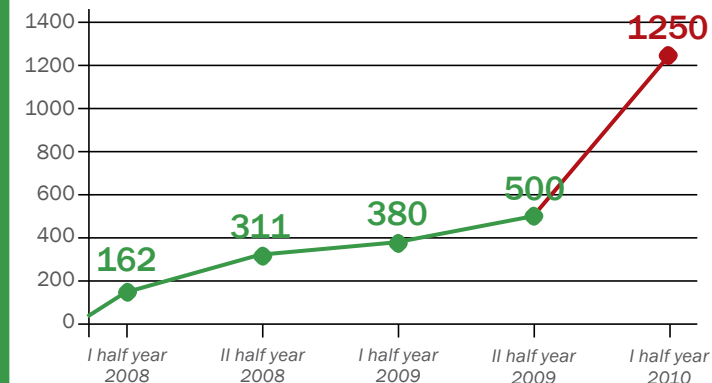
The General Satellite Corporation does not only maintain a stable production rate amidst the current unfavorable economic climate, but is planning to increase production as the number and volumes of new orders grow.

Soon the number of staff is to be increased to 1000 employees.



- Owner's investments
- Staff retained
- Construction projects are not interrupted or put on hold
- New projects started

## VOLUME OF PRODUCTION



—●— Thousand units per half year, actual fact

—●— Thousand units per half year, planned

Half year production of TV receivers on the new plant will be 50% more than was produced up until the new plant started.



# PRODUCTS

Engineering solutions, software and service characteristics of radio-electronic equipment by the General Satellite Corporation meet the highest industry standards.

 CRYPT



GS TE 4500

 CRYPT



GS TE 8310

It is an optimal solution for a reasonable price, which can be used for the National Programs of broadcasting digitization in Russia and other countries. STB receives FTA and encrypted TV and radio channels in standard definition. It supports standard definition TV, MPEG-4 format and has the same functionality as more expensive foreign analogues.



HD 9300

The first digital satellite HDTV receiver developed in Russia. Put into production on 18 February 2009.



GS 8300

Receiver, designed for viewing channels provided by Russian digital satellite operator "Tricolor TV" (more than 6 mln subscribers).

## OUR AWARDS



VA 7200 — the first award for "The best solution" on CSTB AWARD 2007



TE 7010 was named the best STB among low price terrestrial receivers, according to the test conducted by the German magazine "DIGITAL FERNSEHEN"

viaccess



VA 7200

The only Russian STB model certified by VIACCESS (subsidiary of France Telecom) and officially recommended for subscribers of "NTV-Plus", Russian Satellite TV operator, which has the second largest subscriber base.



# INVESTMENT PROJECT OF THE GENERAL SATELLITE CORPORATION — "TECHNOPOLIS GUSEV"

"The area of scientific and technological development — Technopolis Gusev", in which General Satellite Corporation acts as a general investor of the project, is being implemented since 2008.

**Project goal:** development of innovation industrial park, improvement of community and consumer facilities, and turning the town of Gusev into a technopolis by 2012.

5 high-tech enterprises, the cottage village and community and consumer facilities will be constructed on the area of approximately 700 ha.

**Investments:** \$156 mln planned, \$25 mln has already been invested.



Town of Gusev 30 of May, "The area of scientific and technological development — Technopolis Gusev" was approved by the Governor of Kaliningrad region G. Boos



## STAGES OF PROJECT DEVELOPMENT

### 2007:

The first Russian full cycle production plant is founded in the town of Gusev. Digital TV receivers, which support also MPEG-4 format, are to be produced there.



### 2008:

- Construction of domestic radio-electronic equipment plant
- Construction of metal goods and goods from stamped plastics plant



### 2009:

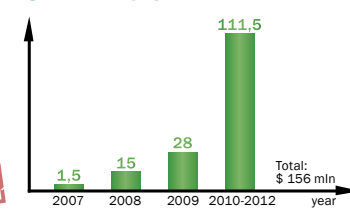
- Construction of plants, which started in 2008, is complete
- Construction of packaging materials plant
- Integrated house-building factory establishment



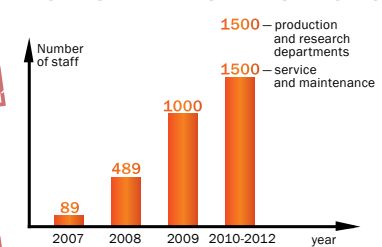
### 2010-2011:

- Packaging materials plant and Integrated house-building factory start to operate
- Construction of the first lot of houses of the cottage village
- Construction of customs terminal
- Integrated development of the Technopolis territory
- Construction of community, consumer and business facilities

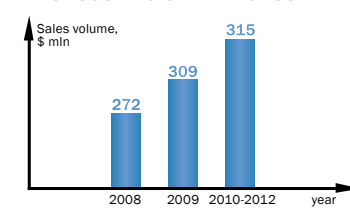
#### CAPEX VOLUME



#### INCREASE IN THE NUMBER OF VACANCIES



#### NET INCREASE IN GROSS REGIONAL PRODUCT





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