

# Russia-Taiwan. Opportunities for cooperation in ICT

June 5, 2009, Taipei
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President of RUSSOFT Association

www.russoft.org

#### RUSSOFT (www.russoft.org)

- RUSSOFT is the major Association of 70+ leading software development companies from Russia (also some from Belarus) with more than 23000 software engineers, \$800 M of export turnover
- RUS®SOFT
- Part of the Russian Information and Computer Industry Association (APKIT).
- Close partnership with the Russian Association of Electronics' manufacturers
- Leadership in implementing PM and QA (CMMI/ISO) standards in the Industry
- Organizer of marketing and PR activities in Russia and abroad (RUSSOFT Forum, Mobile Software Forum, SECR, IT-Seasons, National Pavilions at CeBIT, ...)
- Active lobbyist of IT interests in the Russian Government (IT-parks and Free Economic Zones, Export Promotion Agency, Law on better taxation, less administrative barriers, more effective educational system, etc.)

#### International Cooperation Agreements with:

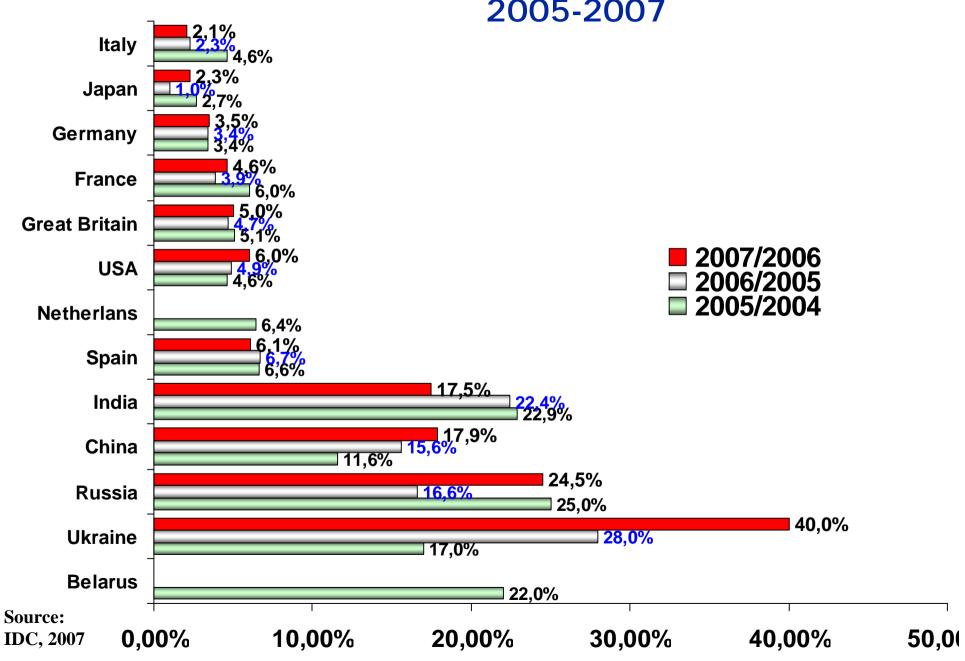
- BITKOM (Germany)
- Massachusetts Software Council (US)
- Connecticut Technology Council (US)
- Software Association of New Hampshire (US)
- Vermont Chamber of Commerce (USA)
- US-Russia Chamber of Commerce of New England (USA)
- Israel Association of Electronics and Information Industries – IAEII
- Kansai Information Systems Association (Japan)



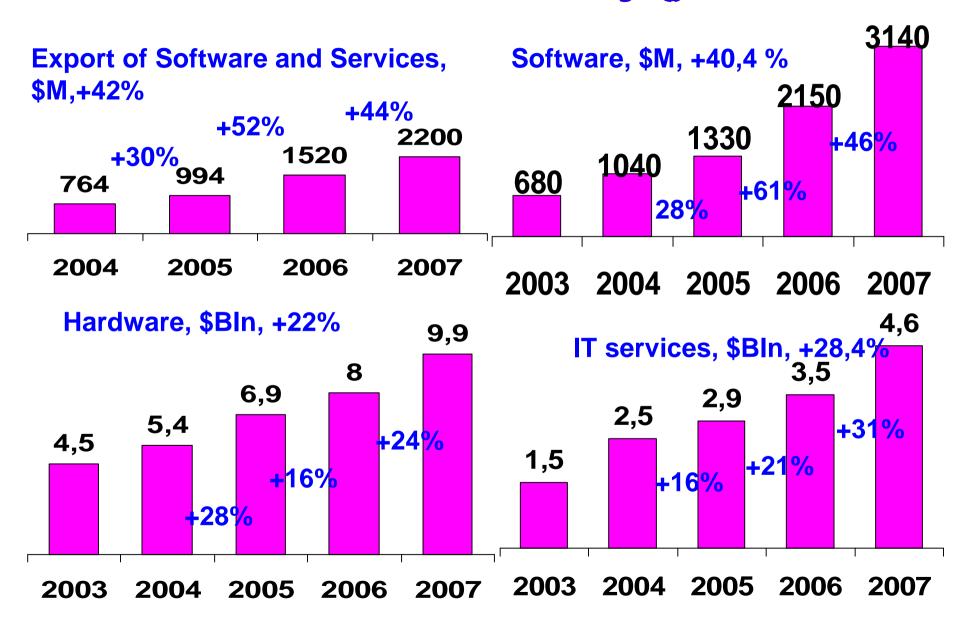
# Russian IT-market. Situation before the crisis



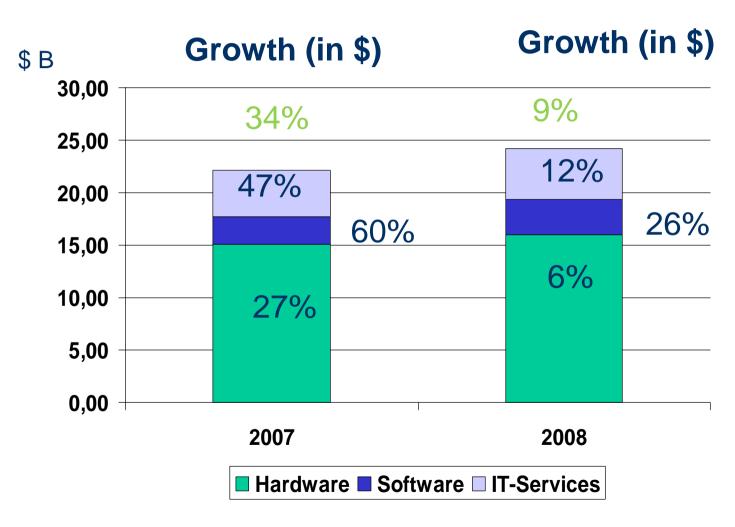
### IDC/ IDC Data on Countries IT-Market Growth 2005-2007



#### Russian IT industry growth

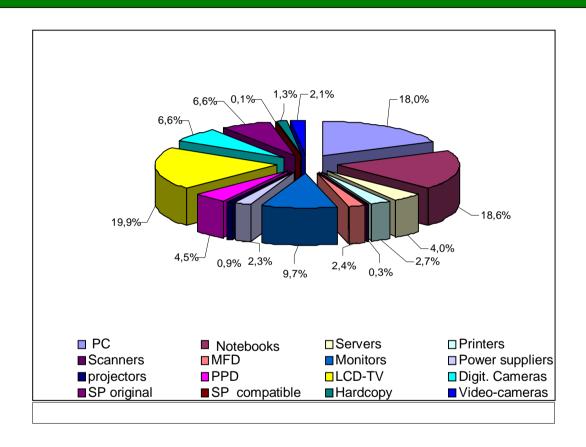


### Russian IT-market growth, 2007/2008 (\$M)



Source: IDC, 2009

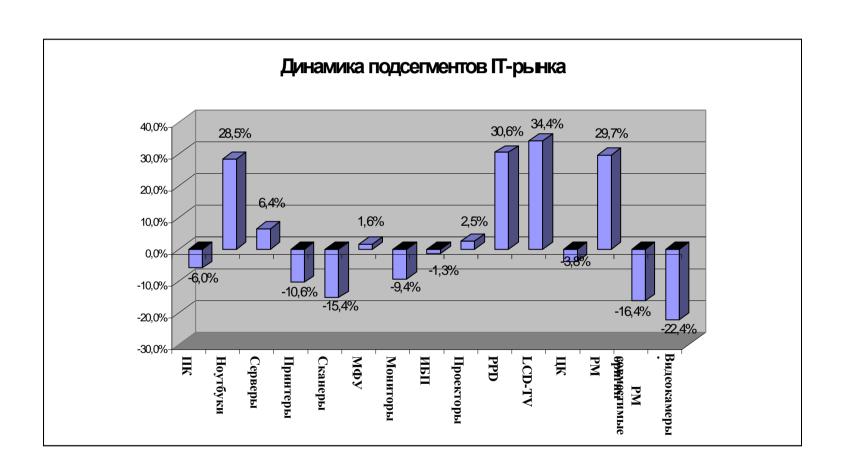
#### Market segmentation. Total market \$20,3 B



Max segment ~ \$3,8 B. Min segment ~ \$30 M



### Annual dynamics in different segments of Hardware sells (2008/2007)



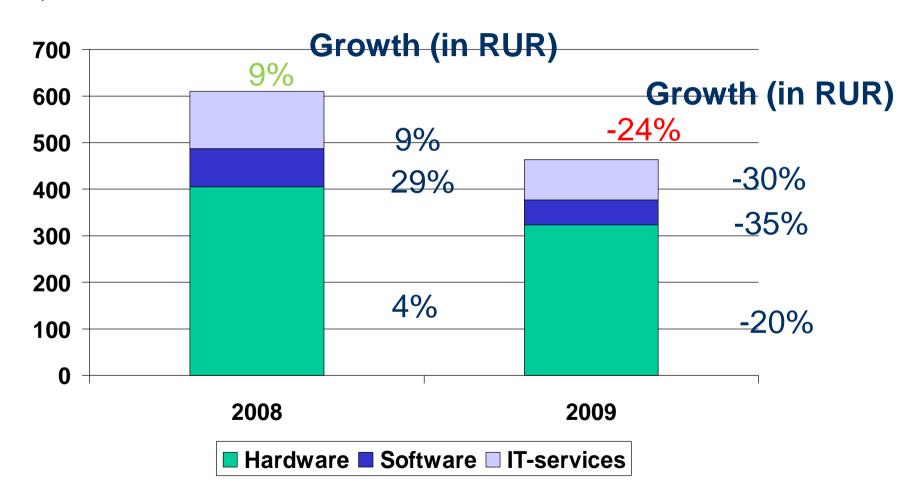


# Situation in the IT-market within the crisis



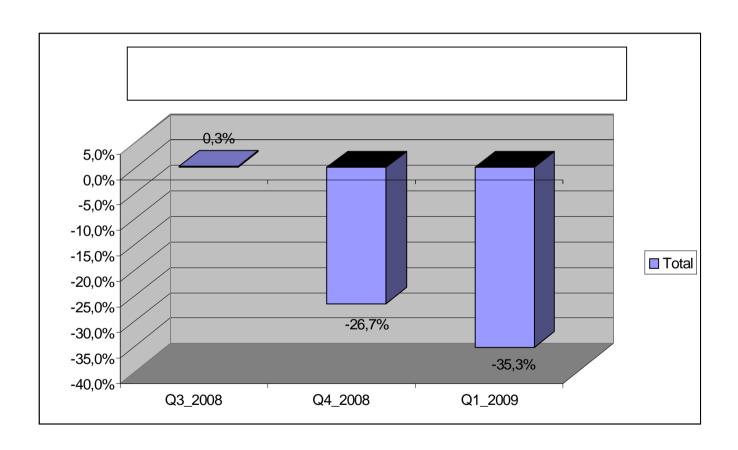
### Russian IT-market growth, 2008/2009 (RUR)

RUR, B



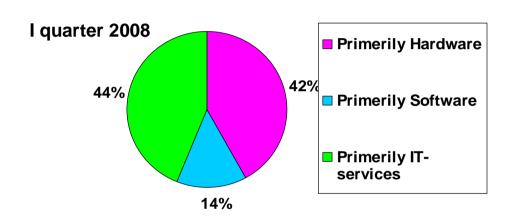
Source: IDC, 2009

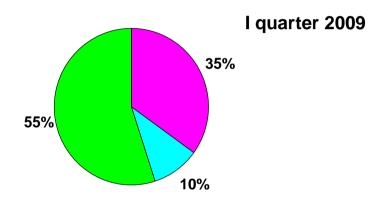
### Dynamics of joint sells of notebooks, monitors and hardcopy





# Significant changes in IT-tenders





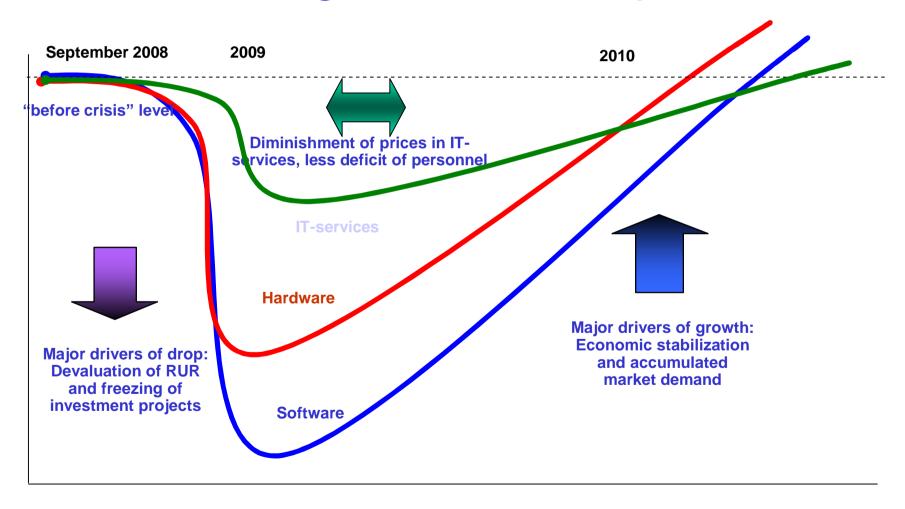
#### **Conclusions:**

- Strong growth of predominantly "servicing" tenders
- I Volume of tenders on standard "software" purchases decreased by 30%

Average data on predominant structure of tenders, I-st quarters of 2008 and 2009

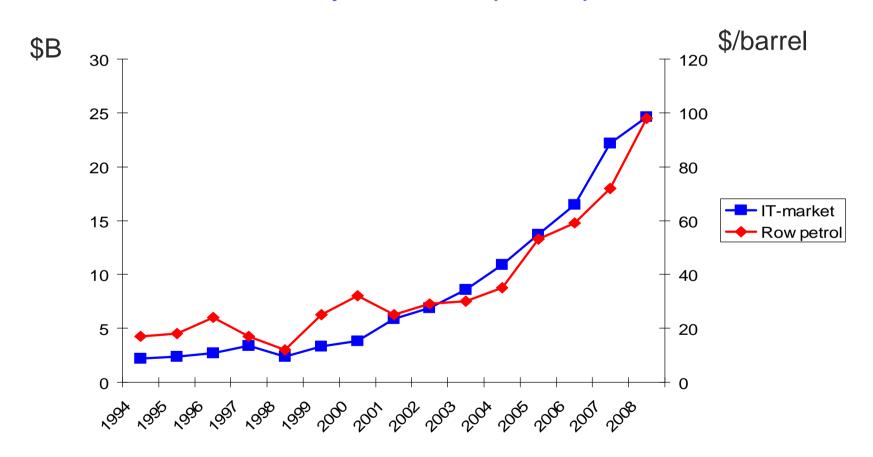
Source: IT Ltd, Marketing Department

#### Crisis: U, L, W? Forecast of major ITmarket segments' development



### Major IT-market growth factor in Russia ...

IT-market and dynamics of petrol prices, 1994-2008



Источник: Energy Information Administration

# Software development and engineering – main driver of the Russian IT-industry on the Global market



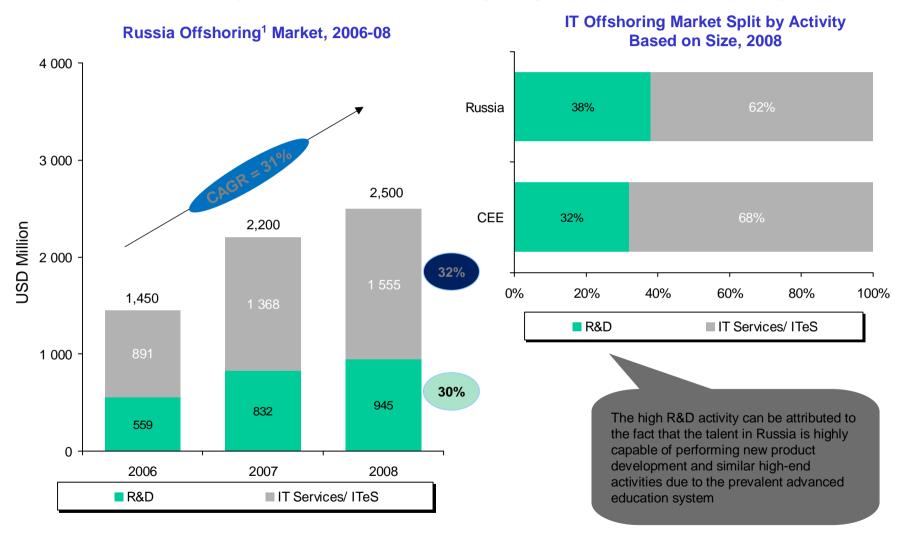
#### NeolT reports on January 07, 2007

- "...Russia would emerge as a strong contender in the IT outsourcing market with an expected growth of 40-45 per cent in 2007. It is currently the third largest IT outsourcing supply market, behind India and China"
- "...Russian IT companies specialize in high-end software and embedded software product development, which acts as a differentiator from lower-priced offerings from Indian companies"

# "Russian expertise in application development is considered the best in the World"

- "Russian software companies are renown for their effective delivery of services and their ability to perform non-standard tasks"
- "They opt for (science) intensive projects and deliver high quality work"
- "Russian software engineers and researchers are highly qualified with excellent programming skills and are competent in developing complex projects"
- Frost&Sullivan, Report 4F84-90

### Russian IT offshoring market has grown rapidly over the last 2 years with growth rates being highest across the globe



### Export of IT-Services in BRIC countries in 2007

Brazil - \$1 B Russia - \$1,3 B India - \$22,9 B (\$14,8 B in SDM) China — \$1,14 B

Data provided by BRIC IT-Associations for the Gartner China Outsourcing Summit, Chengdu, November 18-20, 2008

### The Best 100 Global Service Providers in 2009

#### **Among 100 best IT-service providers**

- EPAM Systems (Belarus-Russia)
- Exigen Services
- IBA (Belarus)
- Luxoft
- Mera NN
- Reksoft
- Intetics (Ukraine)
- Itransition (Belarus)

Global Services&NeoIT, 2009

#### Ten best IT-service providers in CEE

- 1. Luxoft
- 2. EPAM Systems
- 3. Exigen Services
- 4. IBA
- 5. Reksoft
- 6. MERA Networks
- 8. DataArt
- 10. Auriga

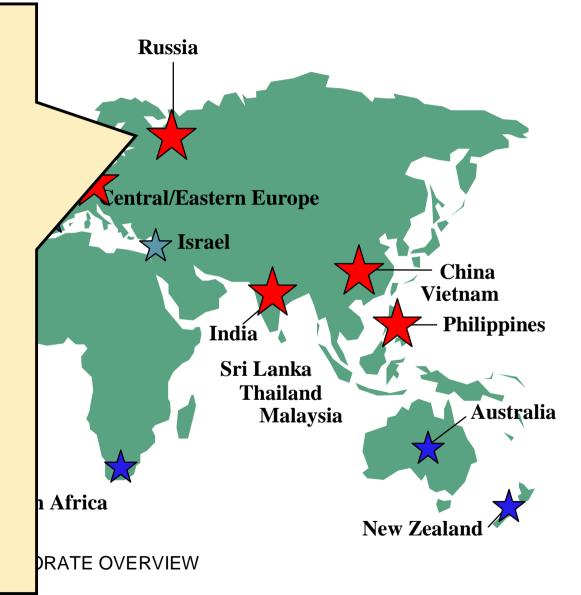


#### Ten best Global Product development services' providers

Exigen Services, EPAM Systems, Luxoft, Auriga, MERA Networks Slide 4 - Country Location Vendor Summary -

Local export software development service providers

- **g**EPAM Systems
- **g**Luxoft
- gIBA (Belarus)
- gExigen Services
- **G**MERA
- **g**Reksoft
- **g**AT Software
- DataArt, Rhonda, Aplana, Auriga, UpScale Software, etc.
- \$1,3 Bln of SWD services and 43000 employees, plus \$0,4 Bln of captive centers production and 9000 employees

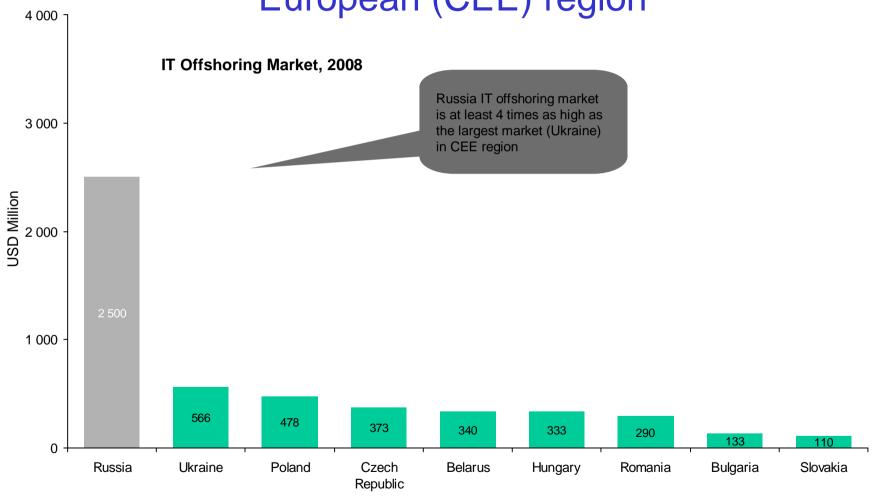


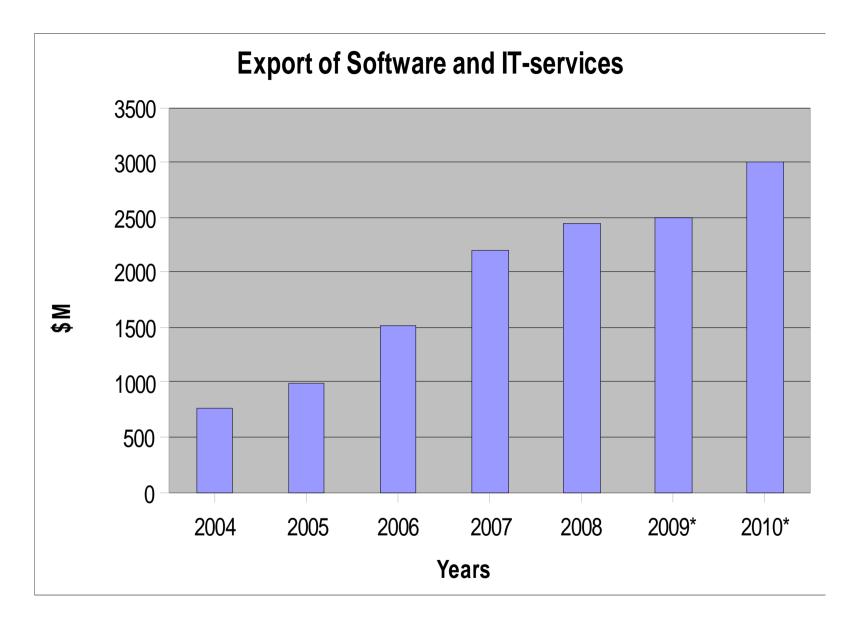
#### Russian Outsourcing Industry Profile Details

#### **Total Amount of Exports of IT Services - \$1,3 B**

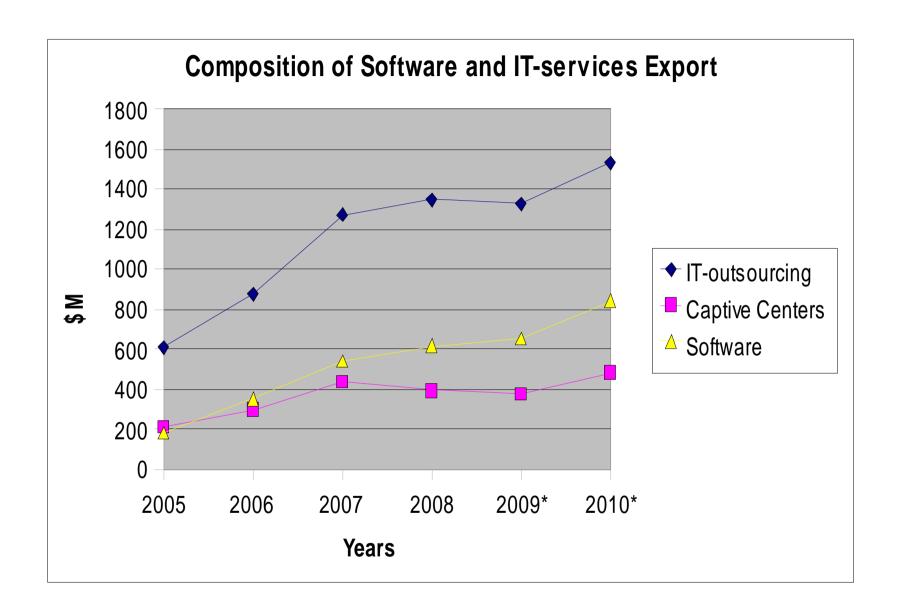
- **SApplications Development** appr. \$520-\$650 M or 40%-50% of total Exports
- **GApplications Outsourcing** (Maintenance & Management) appr. \$260M-\$300 M or 20%-25% of total Exports
- **GEnterprise Apps (ERP)** --- appr. \$130 M or 10% of total Exports
- **gR&D** services (embedded development or engineering services) appr. \$130 M or 10% of total Exports
- **BPO** (Business Process Outsourcing) less than 1 % of Total Personnel Employed for Exports of IT Services
- **G Call Centers** less than 1 % Total Personnel Employed for Exports of IT Services
- **Infrastructure Outsourcing** (Data Center, desktop, help desk, storage etc.) less than 1% of Total Personnel Employed for Exports of IT services
- **Telecommunications** (embedded development or engineering services) appr. \$130 M or 10% of Total Exports

Russia has evolved as the largest market for IT offshoring market as compared to Central and Eastern European (CEE) region





RUSSOFT annual market study, 2009, preliminary data



#### Annual ACM International Collegiate Programming Contests

• 2001

World Champions: St. Petersburg State University
Silver Medal: St. Petersburg Institute of Fine Mechanics and Optics
Among winners: Moscow State University. Novosibirsk State University

2002

World Champions: St. Petersburg State University

**Gold Medal: St. Petersburg Institute of Fine Mechanics and Optics** 

Among winners: Moscow State University, Ural State University, Southern Ural State

University

· 2003

World Champions: Shanghai Jiao Tong University, China

Silver medals: Saratov State University (European Champions),

Among 10 winners: Moscow State University, St. Petersburg Institute of Fine

**Mechanics and Optics** 

2004

**World Champions: Warsaw State University** 

**Gold medals: Moscow State University, St Petersburg State University of Fine** 

**Mechanics and Optics** 

**Silver medals: Saratov State University** 

2005

**World Champions: St Petersburg State University of Fine Mechanics and Optics** 

Gold medals: Byelorussian State University, Penza State University

**Silver medals: Izhevsk State University** 

2006

**World Champions: Shanghai University of Robotics** 

**Gold medals:** Moscow State University, St Petersburg State University of Fine Mechanics and Optics

• 2007

**World Champions: Saratov State University** 

Gold Medal (3<sup>rd</sup>) - Altai State University

Silver Medal (6<sup>th</sup>) – St Petersburg State University

Among 12 winners - 5 Russian Universities, among 20 Europeans - 10 Russians



### Final score of the ACM Finals 2007/2008/2009

#### **2008:** St Petersburg University of IT, Mechanics and Optics – absolute World and European Champion, Gold Medal!

- Massachusetts Institute of Technology 2nd place and Gold Medal
- Izhevsk State Technical University 3<sup>rd</sup> place and Gold Medal
- Ljvov National University 4<sup>th</sup> place and Gold Medal
- Moscow State University 5th place and Silver Medal
- Tsinghua University 6th place and Silver Medal
- Stanford Uuniversity 7th place and Silver Medal
- University of Zagreb 8<sup>th</sup> place and Silver Medal
- University of Waterloo 9th place and Bronze Medal
- Petrozavodsk State University 10<sup>th</sup> place and Bronze Medal
- St Petersburg State University 11<sup>th</sup> place and Bronze Medal
- Belarus State University 12 place and Bronze Medal



**2009:** St Petersburg University of IT, Mechanics and Optics – absolute World and European Champion, Gold Medal!

- St Petersburg State University 3rd place and Gold Medal
- Saratov State University 4th place and Gold Medal
- ALTOGER 3 Gold Medals out of 4 are won by Russian Teams!

St Petersburg University of IT, Mechanics and Optics is rated #1 among World Universities in ACM International Programming Collegiate Contest

# Country Differentiators – Russia exposed for the Gartner Outsourcing Summit - China, Chengdu, Nov 2008

- World best educational background (consecutive winners of every software development competition: organised by ACM, Google, Microsoft, Intel, ...)
- Science intensive and hard business goals' best solution providers with huge R&D experience. Specialize in high-end software and product development, which acts as a differentiator from lower-priced offerings
- Highly integrated with resources in Ukraine and Belarus, Russian software services industry represents a unique East-European Outsourcing Pole, culturally and linguistically close to USA and to EU
- Russia is among the most attractive and fast growing IT-markets, attracting vendors from all over the World

### Russia-Taiwan Cooperation modes



#### Anticipated cooperation mode (1)

- Russian side:
- Rosnano Corp
- Russian hardware manufacturer
- Russian software developer

- Taiwanese side
- Taiwanese hardware producer (smart-phones, notebooks, etc.).
- ITRI

Joint Venture for manufacturing hardware with embedded software in Russia

#### Anticipated cooperation mode (2)

- Russian side
- Software development service provider
- Taiwanese side
- HardwaremanufacturerOr system integrator

Software development outsourcing, Global Product development & deployment outsourcing

# Anticipated cooperation mode (3) Implementation of Russian technologies in Global solutions

- Russian side: Critical solution providing for integration into Taiwanese products
- Voice integration (current speech recognition and synthesis (Russian, English, Chinese) Speech Technology Center (www.speechpro.com), SPEEREO (www.speereo.com)
- Automatic translation PROMT (<u>www.promt.com</u>), ABBYY (<u>www.abbbyy.com</u>)
- VoIP for voice, video and data delivery SPIRIT, www.spiritdsp.com
- Solutions for Mobile Communications Paragon (www.paragon.com), SPb Software House (www.spbsoftwarehouse.com)
- Intelligent Internet data mining Institute for Neuro-Linguistic Programming, <a href="www.institutnlp.ru">www.institutnlp.ru</a>
- GLONAS/GPS ASIC design (SoC) Digital Solutions (www.dsol.ru), SPIRIT (www.spiritdsp.com)

#### Conclusions

- Russian High Education brings new generations of best engineers to the Global market every Year
- They do not leave the country. Insted they produce new software and services, create new businesses
- Within 10 years Russia became World #2 in terms of HighTech off-shore IT-services and among World leaders in Mobile WiMax, (Russian, English, Chinese) Voice Integration, Voice&Video Engines, Image Recognition, Virtualisation, etc.
- Russian software engineering skills and Taiwanese mass production performance may forge a worth and sound synergetic market force



# Russian Software producers. Success stories



#### **ABBYY**

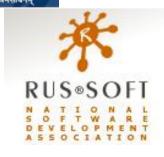
#### (www.abbyy.com)

#### Successful Projects in India

- District Institute of Educational Training (DIETCET) (Andhra Pradesh)
- State Board of Technical Education and Training (SBTET) (Andhra Pradesh)
- Chennai Anna University
- Deemed University, Padmashree Dr. D. Y. Patil Vidyapeeth
- National Institute for Information Technology (NIIT), Delhi
- Cochin University of Science and Technology
- Pondicherry Engineering College
- Bangalore Common Entrance Test Cell
- All India Institute of Medical Sciences (AIIMS)
- Reserve Bank of India









#### Kaspersky Labs

- Among 10 World leaders in anti-virus software vendors (IDC)
- Over 1000 people in the stuff
- #1 retail anti-virus software in Germany
- 140% growth rate and over \$200 Mio of turnover in 2007





#### Corporate Overview December 2008





www.spbsoftwarehouse.com partners@softspb.com

#### SpbSoftware House - Corporate Fact Sheet

- Founded in 1999, focus on mobile software since 2001
- 80 full time employees, R&D and design sites in Russia and Thailand, presence in Hong Kong, Taiwan, USA
- OEM and Carrier partners include: ASUS, E-TEN, Fujitsu Siemens Computers, Gigabyte, HTC, O2, Optimus, Palm, Pharos, Samsung, SingTel, Sky Link, Sony Ericsson, Swisscom, Toshiba, T-Mobile, and VimpelCom.
- Awards and Recognition: 33 "Best Software" awards from Smartphone & Pocket PC magazine, dozens more awards from Handster.com, Handango, Shareware Industry Awards, Microsoft, 5 out of 10 world's best-selling WM Professional software titles are Spb products (First Half 2008 Handango Yardstick)
- Offer to OEMs\ODMs and carriers: Device customization, online services and in-ROM applications
- 5,000,000 licenses shipped, worldwide
- #1 in number of sold WM applications since 2005
- 40 handsets bundle Spb's products



#### SPIRIT is Voice and Video Engine Expert

#### SPIRIT is voice and video experience

- Voice, video, audio, telecom software products
- 16 successful years in international software biz
- 100M+ embedded voice channels powered
- 200+ first-class customers, largest OEMs
- Local representatives in 12 countries, including Taiwan <a href="http://www.esoft.com.tw">http://www.esoft.com.tw</a>

#### SPIRIT semiconductor partners:

- ARM preferred audio and voice software partner
- Strategic partnership and joint product with TI
- RMI partner for voice&video on MIPS-based RMI processors
- Tensilica strategic partner for audio, voice and video software

#### Selected customer testimonials:



It was a challenging solution enabling experience to us, and we made it!

Lotus Chen, Vice President, HTC Corp.



SPIRIT - the voice&video engine provider with the best offering and reputation.

Larry Sun, General Manager, Importek



SPIRIT again has demonstrated its ability to deliver the highest quality voice and video over IP experience.

Shyi-Ching Lin, Education Platform Project Leader, NCHC





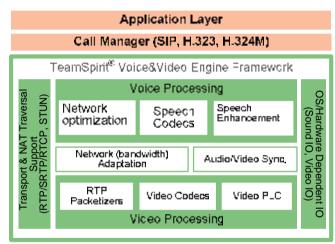




#### SPIRIT + Taiwan: Cooperation Areas

Embedded voice&video software for chipmakers to create application-ready chip

- Platform optimization
- Low resource consumption
- Support for a wide range of DSP and RISC platforms



Complete HD-enabled Voice&Video Engine for desktop VVoIP phone, VoIP gateway and IP-TV STB OEMs

- Hardware acceleration for better video
- Proprietary engine framework to secure voice and video quality
- Network optimization for reliable performance

Voice&Video Software Engine and automatic AEC for mobile OEMs

- High quality voice and video thanks to design adaptation
- BOM at minimum with single low MIPS processor
- Automated high-quality AEC configuration within 24 hours

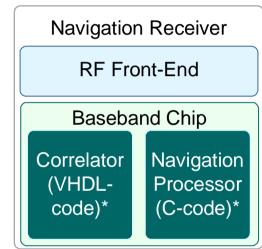
Voice&Video Conferencing Engine for online games

- In-browser voice chat to give the online game an additional edge
- Various conferencing scenarios
- Best server and bandwidth use efficiency with the highest voice quality

#### SPIRIT + Taiwan: Cooperation Areas

High-performance GPS+GLONASS baseband software DuoStar for chipmakers to create baseband chip or hardware receiver design

- Accuracy: 5 m autonomous, 1 m differential
- Start time: reacquisition 1 s, hot start 4 s, cold start 30 s
- Sensitivity: -140 dBm (autonomous acquisition mode), -150dBm (tracking mode)



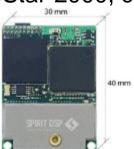
\* SPIRIT GPS+GLONASS Baseband Software

DuoStar is already deployed in several hardware receiver designs:

DuoStar-1000

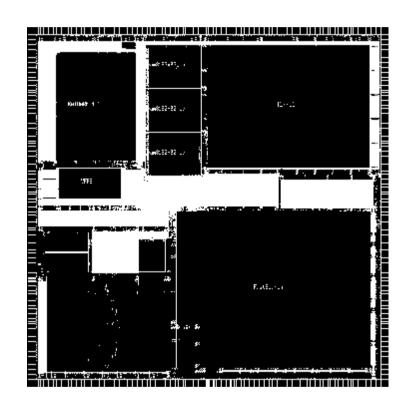


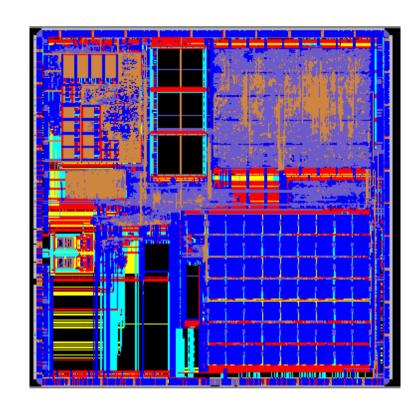
DuoStar-2000, compact





### Navigation ASIC design





GLONASS/GPS SoC 64 channel, ARM 9, BGA 484 CMOS 0,18 мкм

**Digital Solutions Ltd** 

www.dsol.ru

# WinWap OEM Browser and WinWap MMS Client

Mobile Internet Browsing and Multimedia Messaging

> SoftAge Novosibirsk, Russia

www.winwap.com

# Voice Translation and Voice Organisation

#### SPEEREO St Petersburg, Russia

www.speereo.com

www.speereovt.com (Speereo Voice Translator)

http://www.personal-secretary.com/index.html (Speereo Voice Organizer)

First commercial Chinese Voice Integration

# Mobile WiMAX National provider (4G)

YOTA
St Petersburg, Russia

www.yota.com