ISTC Partner Program: Gateway to collaboration with Russia/CIS. Minimizing the risks of failure

Albert GOZAL

LYON-November 27, 2008

ISTC original mission

To support Russian Federation and other CIS countries in nonproliferation (of WMD knowledge) efforts during difficult transformation times:

“Non-Proliferation Through Science Cooperation”

Trust and confidence build up!

BRAIN-STAY – NOT BRAIN-DRAIN!!

In return Russia gave up some of its sovereignty giving ISTC certain access to defense laboratories and tax/custom privileges

ISTC Core Programs and Services

Regular Project Program

Partner Project Program

Sustainability Program

Commercialization Support Program

Patenting Program

Competence Building Program

Workshops and Scientific Seminars

Travel Grants

Communication Support Program

Partner Promotion Program

Core operation of ISTC. Partner Projects, the fast track of ISTC

ISTC approval of Foreign Partner(s)

Max. 30 days

Research Teams and Foreign Partner(s)

Project Application
+ Funding commitment

Host Government Concurrence

Fast

ISTC Secretariat

45 day ISTC Parties negative concurrence

Project Execution

Results

Export Control

ISTC Secretariat
Project Management

Foreign Partners
Exploitation of Results based on AGREED IPR

In most cases Foreign Funding Partner has main share of IPR

Partner projects can be started in principle in 3 months

Regular vs. Partner Program Features

	Regular	Partner
Finance	***ISTC budget Co-funding options***	***100%***
Intellectual Property (IP)	***No ownership. Only access to results and reports***	***100% IP Rights***
Technology Transfer	***Right to get a free exclusive license within EU***	***Full, although efficient mechanism is required***
Concurrence project development	***Slow (~ 1 year; 3 funding session per year)***	***Fast track (possible in 3 months)***

Regular vs. Partner Program Figures

- ***"Regular" (Science) Project Program*** *(530 M$) – funded from the ISTC budget*
  At present, EU is first donor (12 M€/y); Canada funds industry-targeted projects with high return on technology transfer (9 M$); USA in decline (focus on commercialization initiatives); Japan and South Korea virtually not funding
  Standard: $ 350-400 k, 3 years
  ATTENTION: MUST HAVE FOREIGN COLLABORATORS!!

- ***Partner Project Program*** *(250 M$) – direct funding by Partners. ISTC minimizes the risks of failure*
  90% funds from US Govt. agencies (DoE, DARPA-DoS, DoD, DoHS, DoA, EPA); 9% EU (G8 countries; CERN; German, French MNEs, public RTOs); 1% Japan (microprojects, $30k)
  Wide range: $ 30-850 k, 6 months - 5 years

ISTC Accomplishments of 14 Years of Operation

Non PROLIFERATION

Almost 70,000 scientists engaged in RF and other CIS

922 institutes - 2579 projects funded USD 787M$

UNIQUE

37 Nations engaged in cooperative technology development, and growing efforts of working toward nonproliferation and greater world security.

RESPECTED: Reliability and Services

Intergovernmental organization with status of diplomatic mission

CLEAN

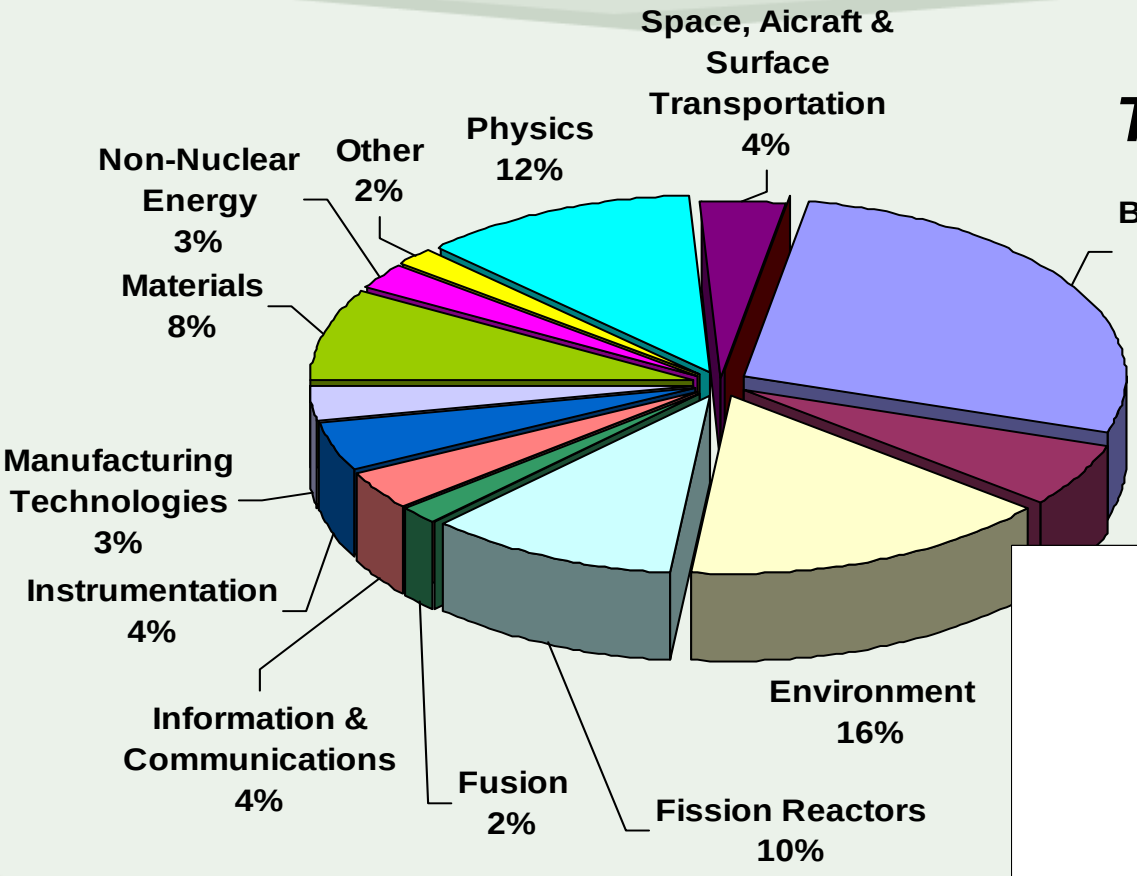
Legal, audited & transparent mechanism

ISTC Achievements

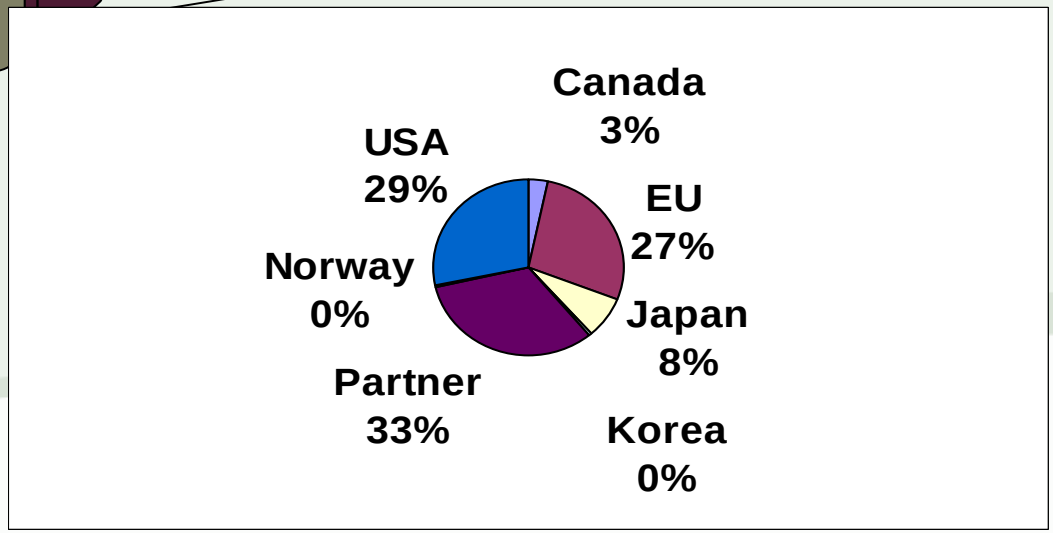
- **A gradual integration of WMD scientists with a community of civil science:**
  - Efficient integration of Russian and CIS WMD community into world scientific community of civil research, **Transparency in ISTC activities contributed significantly to reduction of the threat perception**
  - Creation of links and collaborative projects between weapon laboratories and civil Russian/CIS institutes. Without ISTC funding there would be neither stimulation nor driving forces for this internal openness and more transparency between those two different scientific communities in Russia. **A very important contribution to a sustainable redirection**

- **ISTC has considerably contributed to minimization of consequences of impoverishment of Russian intellectual class employed in the WMD sector. It played doubtlessly a very important role in moderating social tensions during the difficult transformation period and contributed to peaceful transformation processes in 90's.**

ISTC Core Activity: R&D
Tech fields and funding parties



Total R&D funds 780 M$



Programs of the future ISTC priorities

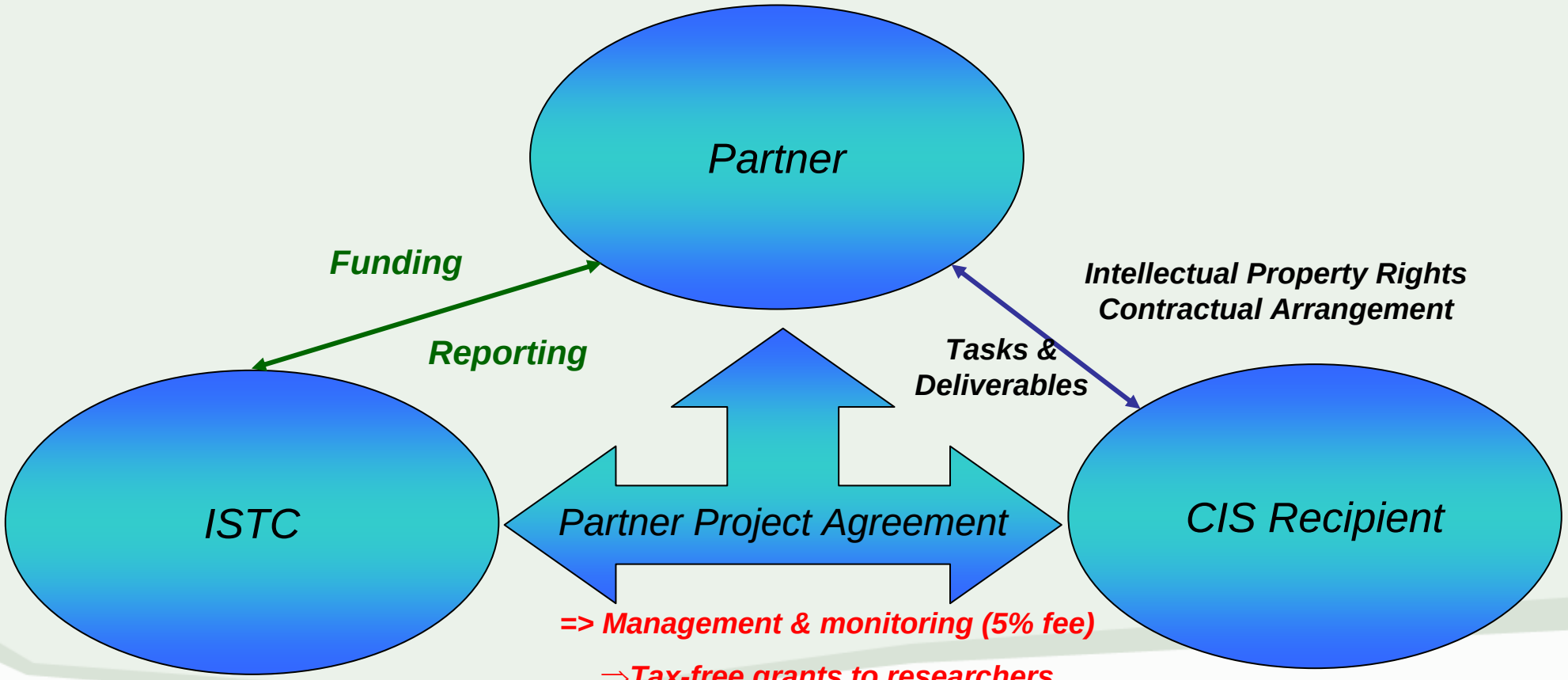
1. ***Science & Technology in Support of Counter Terrorism and Global Security***
2. ***Advanced Nuclear Energy Technology, Nuclear Fuel Cycle and Nuclear Safety***
3. ***Public Health, Agriculture and Biotechnology***
   Medical Physics
4. ***Environmental Restoration and Climate Change Mitigation***
   1. *Clean soil*
   2. *Clean water*
   3. *Clean air*
5. ***Renewable and/or Environmental Friendly Energy***

Second priority
High Energy Physics

Why Russia/CIS in world S&T marketplace?

- **Unique research and science base located in Russia/CIS:**
  - Excellent schools in theoretical sciences – a paradox of non-market oriented research
  - Innovation paradox: Resilience to transform scientific knowledge into innovative products, services and hi-tech jobs
  - Window of opportunities: High economic growth (>7%), critical mass, reliable competence
  - Entry gate to the EXPANDING Russian market

Partner Project Agreement – Minimizing the Risks of Failure



=> Management & monitoring (5% fee)

⇒Tax-free grants to researchers

=> Procurement of equipment & materials exempted customs duties

ISTC Partner Program Advantages

- **Reliable legal basis and institutional framework**
- **Access to unique technological competence**
- **Tax-free direct grant to individual participants , i.e. NO OVERHEADS**
- **Imported equipment and materials: Customs duties exemption if procured through ISTC or handed by Partner**
- **Project agreement defines and establishes background and foreground intellectual property and ownereship of IPR between Partner and CIS beneficary**
- **Export control clearance of deliverables - in accordance with project proposal and work plan**
- **Project management: Technical supervision and financial audit with only 5% fee charged to non-gov entities.**

First Open Innovation Opportunity at ISTC: Partner Program

- **Partnering with ISTC allows organizations interested in expanding their R&D and Innovation pipelines access to >900 ISTC affiliated laboratories in Russia and CIS >200 of which do Biotech research and product/service development, contract research, preclinical trials, sample analysis...**
- **Advantages of becoming an ISTC Partner include:**
  - **No cost match-making services, e.g., call for proposals and expertise/facility identification, in-country logistical support, and other services to help Partners find technology providers in Russia/CIS that meet their innovation needs.**
  - **Very Competitive project labor and overhead costs in Russia and CIS.**
  - **Tax free Russian/CIS project participant salaries that further lower project costs.**
  - **Assistance with and knowledge of Russian/CIS Export Control.**
  - **IPR that is integral to Project Agreement, i.e., negotiated before the project starts.**
  - **Total "turn-key" project management using ISTC proven procedures and personnel.**
  - **Complete control and reporting of project financing.**
  - **>14 years of proven total project management at premier R&D Russian and CIS laboratories.**
  - **Quarterly technical and financial reporting on each project.**
  - **Low project management fee (5%) on commercial Partner projects.**
  - **ISTC staff of >200 with "Profound Knowledge" of Russian and CIS technological, business, political and social environments.**

Options for a long term collaboration (beyond an ISTC frame)

- **A concept of International Science Laboratory (International Centre of Excellence)**
  - Creating an organisational (legal) frame going beyond the ISTC project frame
    - Starting with an ISTC project
    - Ending on legal entities facilitating a long term collaboration
    - Common commercialisation efforts

In Summary

❖ Since 1994 ISTC has developed a network of technology providers at >900 labs in Russia/CIS that have performed >2500 R&D projects worth >$780M all under ISTC management.

❖ ISTC affiliated Russian and CIS technology providers have Partnered with many governmental and commercial organizations to provide them with cost effective expertise/facilities to service their specific open innovation needs for mutual benefit to the Partners and Russian/CIS labs.

❖ Partnering with ISTC will allow companies and organizations access to ISTC services and network of affiliated Russian and CIS laboratories, institutes and companies with no “up-front” obligations or costs.

In Summary

❖ Open Innovation Opportunities at ISTC include:

✓ ISTC managed Partner driven/funded R&D/innovation projects at Russian/CIS labs that service the Partner's technology needs.

✓ Licensing, purchase or further development of results already generated from previous ISTC projects.

✓ More than 2650 Project Proposals approved but not funded that may have innovative approaches, technical expertise, and other yet un-utilized assets of interest to Partners.

✓ Already existing products and services created by ISTC affiliated institutes and companies that have not yet been expanded to other markets.

✓ And possibly other business opportunities yet to be realized…?

Technology Matchmaking: A service to ISTC partners

- **Customized service**
- **Confidentiality**
- **Assistance (access, visa application) and consultancy (IP and technology transfer)**
- **Free of charge for partners**
- **Advanced Matchmaking**

http://partners.istc.ru/eng/

Partners? Why not...

- **Companies wanted to enter Russia/CIS and minimize initial risks**
  - ISTC minimizes those risks, can contribute with seeding money..
  - **Entry gate to the Russian market**
- **Public research organizations – exploiting potential of Russian and CIS scientific communities. Building bridges of collaboration**
- **Scientific facilities, universities:**
  - Addressing global scientific issues, attracting young people to scientific collaboration
- **Space: Exploiting advantages of Russian space technology**
- **Materials for Aeronautics: Exploiting advantages of Russian space technology, joint space programs**

Partners? Why not...

- **Science-based SMEs, research institutes:**
  - Unexploited potential in Biotechnology, nanotech, Renewable energy, laser technology, environmental prtection technology
- **Advanced Matchmaking and customer service to co-funding business collaborators located in CIS – minimizing the risks**
- **ISTC facilitates subcontracting R&D**
- **G8 Global Partnership: Use of ISTC as platform for their non-proliferation programs in Russia and CIS**

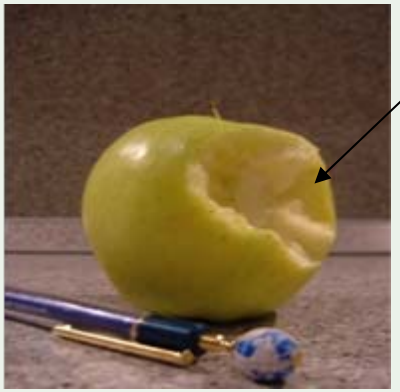
Partners? If not – begin with foreign collaborators

Foreign Collaborators:

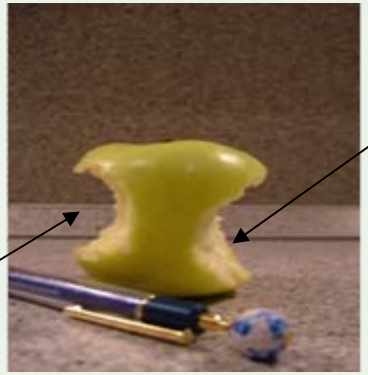
- **Benefitting from ”regular projects” with scientific excellence in focus**
- **Seeding for further collaboration**
- **Further integration with international research programs like FP7**
- **Exploiting commercialization potential**

Conclusion: Advantages of ISTC

Your Request



- 18 % VAT

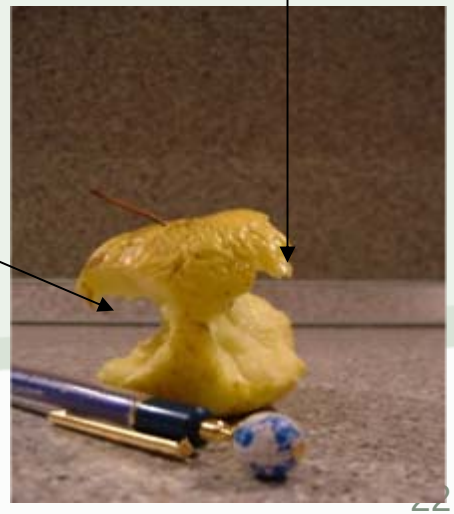


- 24 % Social taxes

- 13 % Income
revenue taxe

- 20 % Customs duties

- 20 % Profit tax



ISTC provides a reliable privileged framework for subcontracting R&D

Practical Examples

Bio & Lifesciences Activities Programs

Drug Design and Development

Capacity building
TB initiative
GXP training

ISTC BioCom

Central Asia Disease Surveillance

Country and Regional Workshops

Biosafety & Security

Upgrading Laboratory to International Safety Standards
Improving physical security of facilities
Training of scientific staff

Radiation Therapy Treatments

Boron Neutron Capture Therapy

Drug Design and Development

Example Capacity Building

Laboratory of Biological Trials, Pushchino, Russia

Enhancing capacity
Ensuring compliance with international GLP standards

THROUGH

Procedures & Documentations
GLP audits
Monitoring and training
Laboratory & Animal care facilities upgrade

BioSafety & Security

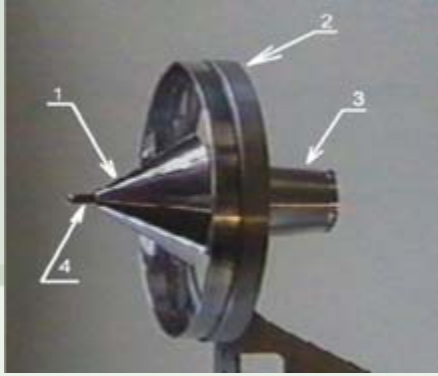
BioSecurity:

- *Vulnerability assessments and design of security systems*
- *Upgrade of electronic communication systems, fire warning systems*
- *Installation of perimeter fencing, security gates, CCTV systems, controlled access systems, motion sensors etc*

BioSafety:

- *Renovation of vivariums, laboratory buildings, installing incinerators, boilers, treatment areas etc.*
- *Design and establishing facilities for central storage of highly dangerous pathogens*

Nuclear medicine



Cancer diagnostics –

Express diagnostic system was developed on the basis of nuclear methods (designed initially for the nuclear fuel analysis) and computer visualization methods (MIFI, NIIIT, Cancer center)

Cancer treatment –

Methods of radiation cancer treatment (via reactor neutron and gamma, or electron or charged particles of accelerator) were developed together with relevant modeling and software (MIFI, ITEP, VNIIEF, IPPE, Budker, and others)

Results: **MIFI started training specialists for "nuclear medicine" on the base of experimental reactor and other installations;**

the cancer treatment center is operating in ITEP (Moscow).

Radioisotope methods for treatment (particularly – production of specific radio-nuclides and preparations) – IPPE, MAYAK, NIIAR

Meeting ISTC Partners' R&D/Innovation Needs

ISTC Partners have funded >650 projects worth >$240M, with >240 projects in Biotech. ISTC Partners (>400) include governmental, commercial and NGOs interested in out-sourcing R&D projects at ISTC affiliated Russian/CIS labs.

Contacts

EU Partner Promotion Program

Prof. Waclaw Gudowski
Deputy Executive Director
Krasnoproletarskaya ulitsa, 32-34
P.O. Box 20 / 127473, Moscow, Russia
tel: 7-(495)-982-3210 / fax: 7-(495)-978-4637
e-mail: gudowski@istc.ru

Dr. Albert Gozal
Project and Promotion Manager
tel: 7-(495)-982-3281 / fax: 7-(495)-978-4637
e-mail: gozal@istc.ru

Ms. Teah Toidze
Customer Care Manager
tel: +7 495 9823228 / fax: +7 499 9784926
E-mail: toidze@istc.ru