Motorola: беспроводная связь для повышения безопасности и эффективности работы предприятий

II Всероссийская конференция менеджеров энергосбытовых компаний, инвестиционного сообщества и регулирующих органов исполнительной власти

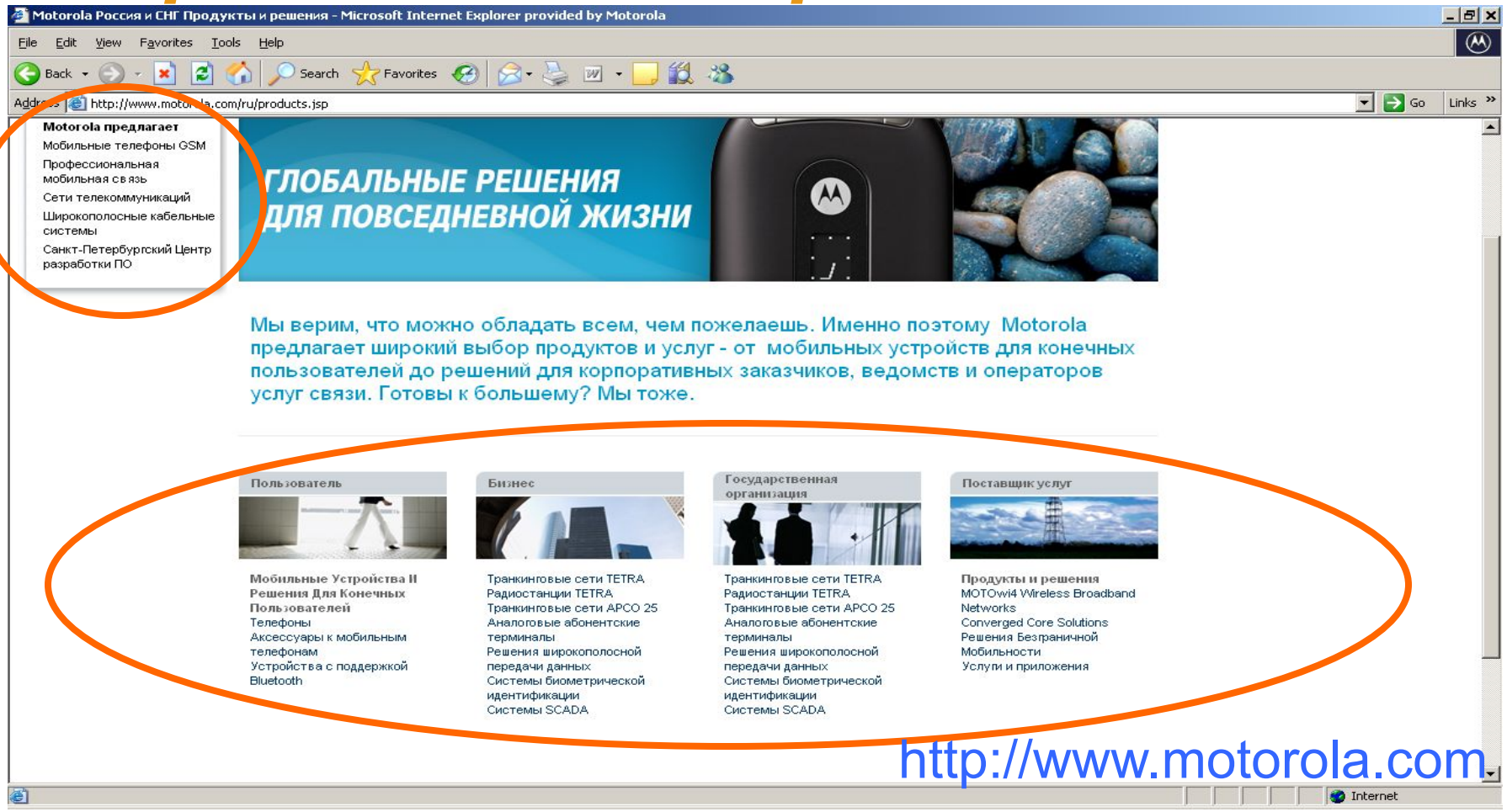
16 – 20 октября 2007 г.

- ✔ Motorola для ведомственных и корпоративных заказчиков
- ✔ Motorola сегодня в России и в мире

- ✔ Решения Motorola для электроэнергетики
- ✔ Наш подход к работе с ведомственными и корпоративными заказчиками

Title of Presentation

MOTOROLA на корпоративном и потребительском рынках



Title of Presentation

Motorola в мире

MOTOROLA сегодня*:
Число сотрудников : 66 тыс. человек
Объем продаж: 42,9 млрд. долларов
Инвестиции в НИОКР 4,1 млрд. долларов

*** данные за 2006 г.**

Title of Presentation

Motorola в России

MOTOROLA в России:

1980 – поставка радиостанций для Олимпийских игр в Москве
1993 – открытие российского представительства
1995 – открытие научно-исследовательской лаборатории в Москве
1997 – открытие Санкт-Петербургского центра по разработке ПО

Более 500 сотрудников в Москве и Санкт-Петербурге
Более 100 авторизованных дистрибьюторов и дилеров, более 20 сертифицированных сервисных центров
Опыт реализации масштабных системных проектов силами российских сотрудников не только в России, но и за рубежом

Title of Presentation

Опыт долгосрочного партнерства

’07 Норвегия: 20 лет

Долгосрочный партнер

’06 Португалия: 15 лет

’06 Великобритания: 14 лет

Title of Presentation

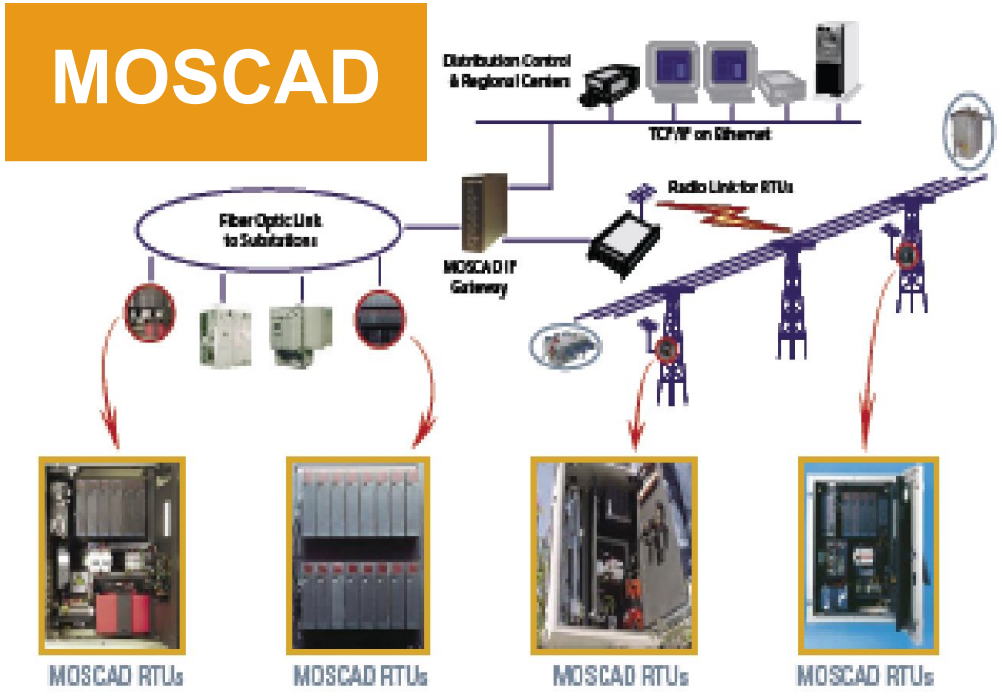
Motorola: беспроводная связь для решения технологических задач

Решения Motorola беспроводной связи для электроэнергетики:

- ✔Системы телеметрии SCADA (торговая марка Moscad)
- ✔Системы радиосвязи открытых стандартов TETRA (торговая марка Dimetra IP) и APCO Project 25 (ASTRO 25)
- ✔Взрывозащищенные терминалы TETRA стандарта ATEX
- ✔Системы широкополосного доступа (MOTOWi4)
- ✔Системы биометрической идентификации и контроля доступа

Система мониторинга, управления и сбора данных MOSCAD (MOtorola SCAda)

Организация сбора данных, оперативного диспетчерского контроля и управления и сложными технологическими процессами для географически распределенных объектов.



Title of Presentation

Наш подход к работе с заказчиками

Ответственный подход к участию в тендерах. Мы всегда выполняем взятые обязательства.

Огромный опыт реализации проектов. Поддержка заказчиков на каждом этапе жизненного цикла проекта

MOTOROLA – надежный выбор

Оценка потребностей.
Совместно с заказчиком выявление особенностей технологии, связи, эксплуатации

Проектирование
Подбор оборудования АСУ ТП, отвечающего требованиям данного объекта. Разработка проектой и исполнительной документации.

Системная интеграция.
Монтажные, пусконаладочные, строительные работы на объекте.

Модернизация системы.
Moscad – легко наращиваемый комплект автоматизации. Модернизация по мере роста задач и потребностей.

Поддержка/ сервис.
Гарантийное и послегарант. обслуживание.

Обучение пользователей

Title of Presentation

Опыт работы в стандарте TETRA

Title of Presentation

Опыт поставок систем телеметрии MOSCAD (MOtorola SCAda) для энергетики

География реализованных проектов – весь мир

EPEC	Argentina
EPEC Los Molinos	Argentina
EPEC Yocsina - Malaguenio	Argentina
SECHEEP	Argentina
Siderar Campana	Argentina
AGL	Australia
Etobicoke Hydro	Canada
Hydro Quebec	Canada
Hydro-Sherbrooke	Canada
Kanata Hydro	Canada
Newfoundland Light & Power	Canada
Compañía de Electricidad de Tulua	Colombia
Empresas Públicas de Medellín	Colombia
EPSA	Colombia
EPSA	Colombia
EDF France	France
Israel Electric Co. (IEC)	Israel
Israel Electric Co. (IEC)	Israel
Cerro Prieto	Mexico
Los Azufres	Mexico
Miguel Aleman	Mexico
Horowhenua Energy	New Zealand
Energia del Sur	Peru
Philippine Geothermal	Philippines
Cincinnati Gas& Elec.	USA
Soyland Power	USA
Baltimore Gas & Electric	USA
Belmont Electric, OH	USA
Jones – Onslow EMC	USA
Kanata Hydro	USA
Kansas Power & Light, Topeka, KS	USA
Pierce Pepin Electric Cooperative	USA
Snowy Mountains	USA
Southern Carolina E.	USA
United States Navy - PWC Phase 3	USA

Title of Presentation

Отзывы пользователей наших Moscad (SCADA) систем

Motorola Communications Israel Ltd.

3 Kremenetski Street
Tel Aviv, 67899 Israel

To: Zelig Hering

This is to confirm, that Eletrosul – Centrais Eletricas do Central do Brasil S.A. has installed, since 1998, 7 large Moscad RTUs configured with 800 up to 1000 I/O points. The communication of these RTUs with Control Center is done through DNP 3.0 Protocol in mode slave and dual channel. These RTUs control and monitor the operation of High Voltage substations used for power transportation.

The Moscad based systems supplied by Motorola, including the hardware, basic software, protocol and application programs, are operating according to our specifications and are performing to our satisfaction. The system is in expansion, Eletrosul already bought more 7 large RTUs from 800 up to 1200 I/O points, the project is in development.

We will be glad to answer any questions you may have.

Sincerely yours,

Eduardo Magin Galhardo
Technical Manager

São Paulo, February 14, 2000

To Motorola Espalia, SA
Martinez Villergas, 52
28027 Madrid
Spain

Mr. Jesus Martin,

Subject: Our Motorola MOSCAD RTU system

For more than 10 years we, the power company of Catalunya, are purchasing and installing Motorola MOSCAD RTU for our Distribution Automation system. WE are using the MOSCAD models F6920X series. They are being used with fiber optics, PSTN and radio communication for distances of hundreds of kilometers throughout Catalunya.

The majority of the MOSCAD RTUs were installed in the last 5 years. Total MOSCAD RTUs installed in our system is about 500 units.

We are very satisfied with the performance and reliability of the MOSCSAD RTUs.

Sincerely,

Guillermo Nicolau Gonzalez
Protective Relays & RTU Manager
FECSA – ENHESA
Tel: +34935096649
Fax: +34933001724
Email: gnicolau@fecsa.es

Etobicoke Hydro

March 30, 1992

To whom it may concern:

This is to confirm that Etobicoke Hydro is purchasing The Motorola Moscad RTU in a point to multipoint radio communication configuration. We will be using the RTU for in excess of 100 pole top and padmounted sensing and device operation applications, as well as 77 4 kV and 13.8 kV municipal substation control and monitoring applications. The RTU will also be used at up to 6 Ontario Hydro owned transformer stations to monitor and control the 27.6 kV feeder breakers. In total we expect to ultimately use 250 to 300 of these RTU's.

Etobicoke Hydro has approximately 93,000 customers, serves an urban area of about 55 square miles, and has a system peak load of about 700 MW.

Sincerely,

A. J. Bax, P. Eng.,
Director of Engineering

AJB/df

The Israel Electric Corp. Ltd.
Supply and Stores Division
Divisional Project Management

Fax: 972-4-8687218 Tel: 972-4-8687484

918-1123
15/09/2002

FAX MESSAGE

To whom it may concern

Subject: List of MOSCAD RTUs in Substation Installations

The Israel Electric Corporation Ltd (IEC) installed during the past 10 years over 60 large MOSCAD RTUs supplied by Motorola for controlling the operation of our HV/MV substations in voltage levels of 400 kV, 160kV and 33 KV. These large configuration MOSCAD RTUs have a range of I/O points, up to 1500 points for a single RTU and up to 3000 points per substation installation served by multiple RTUs. These MOSCAD RTUs communicate with the Siemens Energy Management System (EMS) control center over a wide range of media including point to point lines, and fiber optics, and some RTUs are also equipped with radio link for low data rate backup communications when the main link is not available.

Motorola assisted our team to successfully integrate those RTUs with our existing instrumentation and computers. We are satisfied with the reliable operation and performance of MOSCAD RTUs and the ongoing support provided us by Motorola teams.

Best Regards,

Head of Divisional Project Management
Supply & Stores Division.

The Israel Electric Corporation Ltd.
Generation and Transmission Group
Haifa, Israel. P.O.B 31090
Tel: +972-4-825-9244
Fax: +972-4-825-9287

Date: October 14, 1997

To:
Mr. Shlomo Scop
Motorola Communications Israel Ltd.
3 Kremenetski Street,
Tel-Aviv, 67899 Israel

Subject: MOSCAD-Based Systems Supplied by Motorola

This is to confirm, that the Israel Electric Corporation has installed, since 1994, a range of MOSCAD Remote Terminal Unit-based systems. These RTUs control and monitor the operation of HV-MV substations, turbine generator sites, mobile HV-MV transformer substations, hundreds of MV pole-mounted load break switches and other applications.

The MOSCAD RTUs we use, range from small distribution automation RTUs serving up to 100 I/O points to very large substation RTUs serving more than 3000 I/O points. These RTUs report to our Regional Distribution Control Centers and to the National Energy Management System.

The MOSCAD-based systems supplied by Motorola, including the hardware, basic software and application programs, are operating according to our specifications and are performing to our satisfaction.

We will be glad to answer any questions you may have.

Sincerely yours,

Robi Lorber
Manager, Computer Systems
National Dispatch
Israel Electric Corporation Ltd.

FEB-10-00 THU 10:54 AM WHOSE MOTOROLA FAX NO. 84753871S5 P. 2

Jones Onslow
Electric Membership Corporation

259 Western Boulevard
Jacksonville, N.C. 28546
Telephone: (910) 353-1940

October 22, 1999

To: Bob Klawitter
From: Jeff Wilson
Subject: Jones-Onslow EMC Moscad Project

Bob:

Motorola has satisfactorily completed its Moscad project for Jones-Onslow EMC. The following is a brief summary of completed items. Installation of all sites has been completed. DNP communication between the Moscad front-end processor and Valmet Central has been completed. The status, analog, and control points are polling properly and returning correct values.

Jones-Onslow EMC considers Phase 1 of the project complete and is ready for Phase 2 to proceed. Please feel free to contact me at (910) 355-1514 should you have any questions.

Sincerely,

Jeff Wilson

VCE VÝCHODOČESKÁ ENERGETIKA

VCE, VYCHODOCESKA ENERGETIKA A.S
SLADKOVSKEHO 215
501 03 Hradec Kralove
Czech Republic

Project reference contract number: 285/KNTL/DOU
Dated: 2001-2004

CERTIFICATE OF SATISFACTORY OPERATION
PARDUBICE REGION DAS SYSTEM

This is to certify that KONEKTEL LTD Scada Integration Company, satisfactory delivered and commissioned Motorola Moscad FTU (RTU) for our Distribution Automation System (DAS).

The Motorola Moscad FTU provides monitoring and control system for the Pardubice region Electricity network, the Moscad FTU's are installed at the line switches. Some of the Moscad FTU's are used as communication concentrators in the substations.

At the first phase we have installed 200 Motorola Moscad FTU's at year 2002.

We are using the Moscad FTU, which support DNP 3 protocol and MDLC protocol.

The Moscad Model numbers that was installed are F6809 and F6909.

We intend to expand the system to 560 FTU's in the near future.

We are very satisfied with the performance and reliability of the Motorola Moscad FTU.

For on behalf of VYCHODOCESKA ENERGETIKA

Mr. František Kumpan
Head manager of Dispatch center south
Tel: +420 6608 72230
Fax: +420 495842198
Email: frantisek.kumpan@vce.cz

Title of Presentation

СПАСИБО ЗА ВАШЕ ВНИМАНИЕ!

http://www.motorola.com

Татьяна Соловьева

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Tatiana.Soloviova@motorola.com