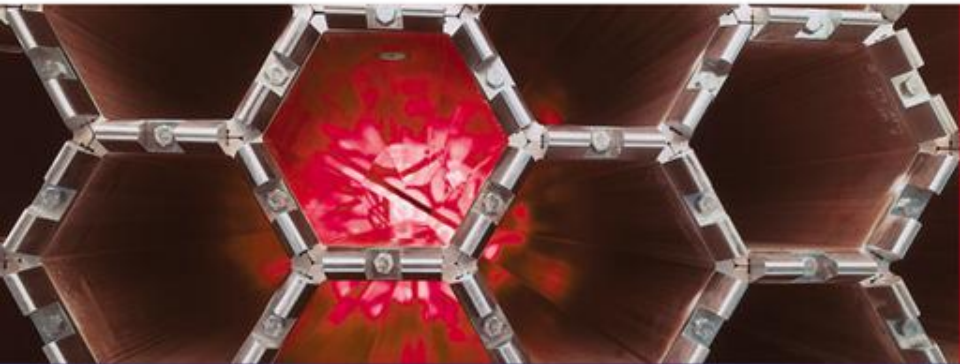




ŠKODA JS a.s.



**ŠKODA JS – Leader of
Czech Nuclear Industry**

**Engineering, Investments Projects and Project
Management Capabilities**

FURTHER DEVELOPMENT

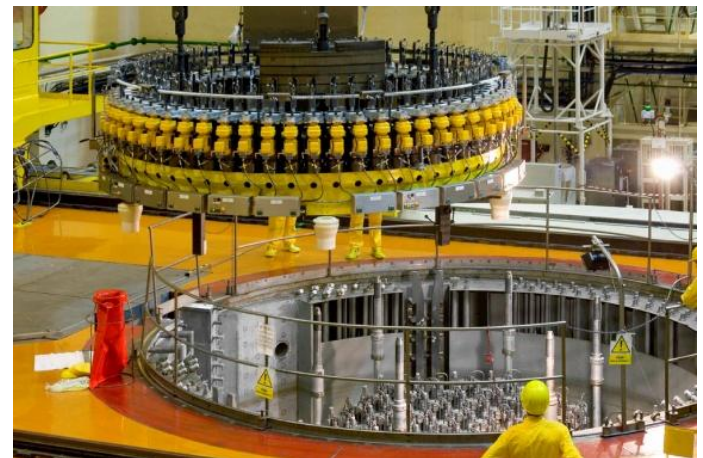
Prague, October 2011

1. **SKODA JS Capabilities and Experience**
2. **Overall feedback from the large project execution**
3. **Further development with respect to SKODA JS role in Czech Nuclear Industry**
4. **Global Supply Chain Definition**
5. **Consortium MIR.1200 Strategy**

- **Decommissioning of NPP – decommissioning programs and manipulators design and manufacturing**
- **Refurbishment of Research Reactor IRT 2000 in Sofia**
- **Refurbishment of Research Reactor in ČVUT Prague**
- **Upgrade of Polar Cranes NPP Kozloduj**
- **Long-Term Contract for Calculation**

Services for CEZ

- **Power Capacity Increasing Study for NPP Dukovany**
- **Design and Manufacturing of Flange Joint Stud Tightener**



- **Gas Treatment Plant Modernization in Sosnogorsk**
- **Fuel Handling Machine Supply for EdF**
- **Dukovany I&C Replacement**
- **Mochovce 3&4 Completion Project**

Projects in amount of tens of billion CZK



ŠKODA JS a.s. has the required resources for EPC Project execution covering the following disciplines:

- **Mechanical, Electro, I&C and Civil Design**
- **3D Model for Design Development and Coordination (PDMS)**
- **Installation Design**
- **Calculations – all key disciplines (thermohydraulic, strength analyses, physics, radiation safety)**
- **Quality Assurance**
- **Quality Surveillance and Expediting**
- **Scheduling**
- **Project Controlling and Reporting**
- **Contract Management**



ŠKODA JS a.s. has the required resources for EPC Project execution covering the following disciplines:

- **Site Management**
 - **Commissioning**
 - **Project Office Concept for effective Project Administration and Management**
 - **Legal Services**
-
- **The core team consists of senior engineers with sizeable, 25 years continuous experience on NPP projects in the Czech and Slovak Republic**
 - **This valuable and seldom knowledge has is being transferred to a large number of young engineers representing the new generation of nuclear experts ready to take on the challenges of nuclear renaissance.**
 - **In all disciplines the know-how is not limited to design and delivery of standard Skoda's products but is able to realize complex project structures**
 - **The Engineering Division is not only substantially enlarged by the number of resources but also by the new functions required for modern and effective management of large projects**

ŠKODA JS implements new, modern engineering and management tools and principles & procedures for its engineering and project management

- **Design development and engineering coordination by using the 3D models**
- **All engineering SW tools implemented and properly connected between each other (CAD systems, IDEA-S, AutoPipe, PDMS, etc.)**
- **Engineering planning and management supported by EPS system**
- **Today EPS tool is already properly connected with planning tool and WBS principle**
- **Compliance management system to assure that all Contract requirements (technical, regulatory, commercial, functional) have been met**
- **Controlling and risk management system again using the SW tool**
- **In accordance with the current Quality management requirements, all processes are structured and managed as a part of one integrated enterprise management system**

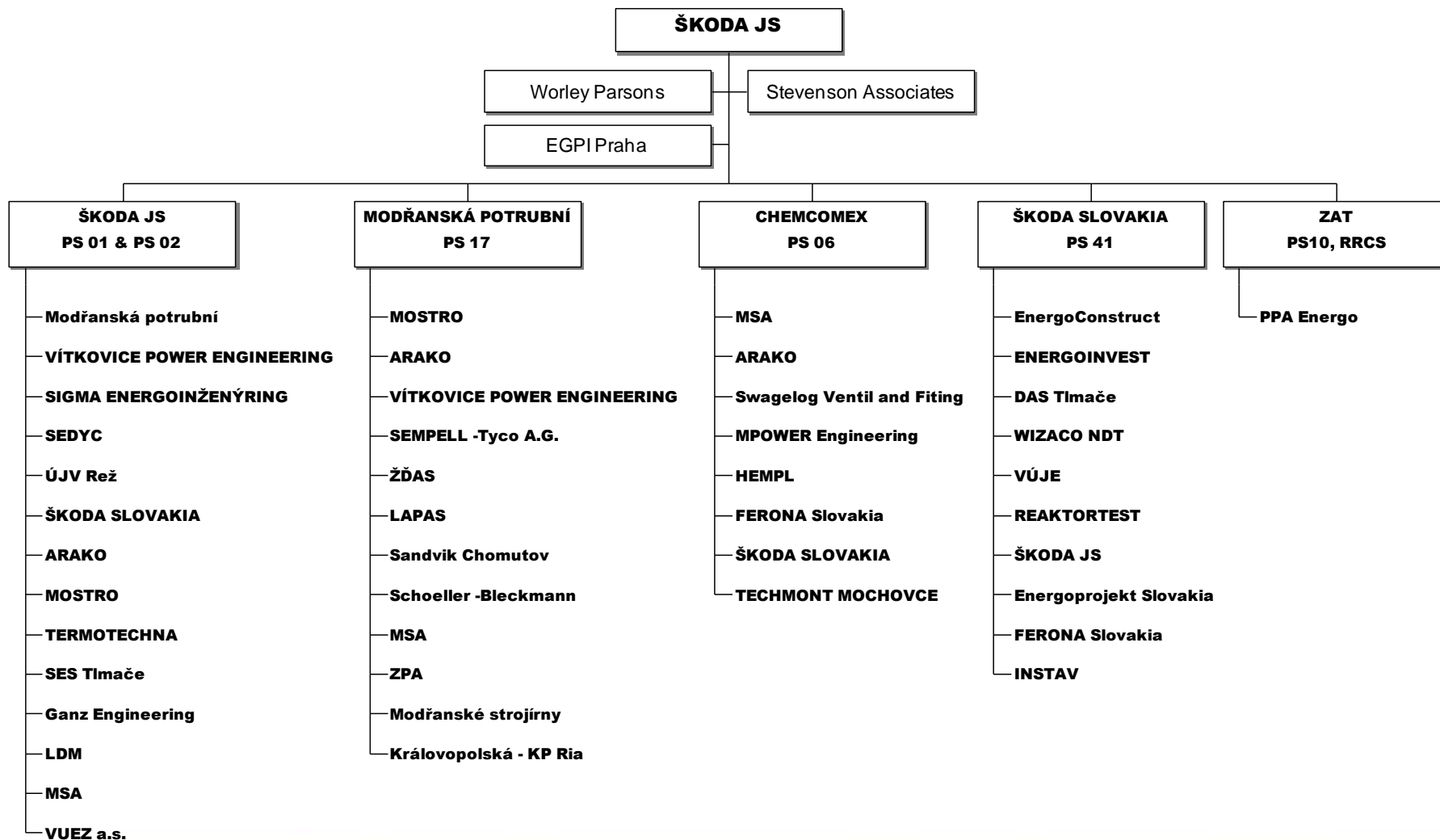
Manufacturing

- **Enough manufacturing capacity and excellent quality of production**
- **Manufacturing companies very well equipped by the modern technologies**
- **Excellent results of expediting and QA audits performed**

Engineering and Project Management

- **Further improvement in engineering and project management system in Czech and Slovak Republic needed**
- **Further improvement of unified IMS concept needed**
- **Further increasing of human resources needed – continuously eliminated**
- **Common approach, procedures and principles definition for effective Engineering and Project Management needed in all individual companies**
- **All involved companies confirmed their preparation for meeting above mentioned goals**
- **Not existing stabil Global Supplier Model**

ŠKODA JS Contracting Model – 42 Suppliers



ŠKODA JS wants to further stabilize its leading role in Czech Nuclear Industry

In order to do that SKODA JS will start as a part of ETE34 Bid Preparation common development project with other nuclear suppliers and with the following goals

- **To unify all key project management and engineering processes and tools across the key nuclear suppliers, across the whole supplier model**
 - processes unification – interface management system, input and output data management system, documentation management system etc.
 - tools unification – tools for EPS management, for proper connection of EPS – WBS and schedule, tools for proper connection 2D with 3D and vice versa and with the design inputs and outputs and calculations, tools for documentation management system etc.
- **To unify the supplier model / system for proper and effective project and engineering management in order to establish and prepare new, modernized and overall project management and engineering system for further investments projects**

TO DEFINE CZECH & SLOVAK GLOBAL SUPPLY CHAIN FOR NPP CONSTRUCTION

Global supply chain which will be able to:

- 1. Execute effectively ETE34 project in case of Bid Success**
 - 2. Repeat the project either in Czech territory or**
 - 3. Offer the deliveries to foreign countries**
 - 4. Offer the following Maintenance Activities**
- 5. Further cooperate on further EPCM Development**

- 1. Request for Quotation to be submitted to individual suppliers will contain strict requirements with respect to EPC Management Principles and Tools**
- 2. The supplier will have to made their acceptation of these requirements binding in their offers**
- 3. In paralell there will be project running which will assure that the concept will not remain „on the paper“ only**

This approach is one of the KEY ISSUES of Consortium MIR.1200 strategy in Bid Preparation and is one of the key issues for being SUCCESSFUL

**If the goal of Global Supply Chain definition is met
then:**

- 1. Consortium MIR.1200 Offer will have a highest chance to win**
- 2. Consortium MIR.1200 Offer is the real chance for further
export**
- 3. Consortium MIR.1200 Offer is the real chance for Czech and
Slovak Suppliers with maximum scope of supplies assigned**
- 4. However the chance which must be actively supported by all
of nominated suppliers**

This approach is today fully supported by agreed Consortium.MIR 1200 strategy

- 1. Strategy which is based on maximization of Czech and Slovak companies participation and is fully supported by all Consortium.MIR 1200 members**
- 2. Strategy which is approved and supported in country of MIR.1200 technology origin**
- 3. Strategy which has been confirmed by signing of individual MoUs**
- 4. Strategy which is supported by the technology owner in other business opportunities**