

The European Presidency Conference on Innovation and Clusters

ACS - Automotive Cluster of Slovenia

Case Study

**Joint Venture Project as the Base for
»The Polycentric Technological Centre of
Slovenian Automotive Supplier's Industry«**

**Presented by Aleš Nemec,
President of the Management Board
Iskra Avtoelektrika d.d.**

Stockholm, January 22, 2008

What is the Polycentric Technological Centre

The Polycentric Technological Centre - PTC - is an innovative system, which links together governmental and academic institutions, and organizations of the Slovenian automotive industry under the framework of the ACS - Automotive Cluster of Slovenia.



Why the Polycentric Technological Centre

Challenges in the automotive industry:

- ❖ increased global competition and integrations
- ❖ radical cost down pressure by OEM manufacturers
- ❖ importance of long term relationships between OEM manufacturers and suppliers
- ❖ introduction of new materials and alternative fuels

Industry's response:

- ❖ utilisation of new technologies and innovation
- ❖ increased R&D investments
- ❖ cost reduction by productivity improvements
- ❖ alignment of the global supplier's chains
- ❖ establishment of strategic partnerships

The Purpose and the Objectives of the Project

The purpose of the project was to:

- ❖ create the innovative environment,
- ❖ improve international competitiveness,
- ❖ link together the academic sphere and the industry,
- ❖ manage HR resources,
- ❖ promote Slovenian automotive supplier's industry

with the objectives to:

- ❖ produce innovative and competitive automotive parts,
- ❖ stimulate creativity and innovation among the partners,
- ❖ improve the quality and reliability of the products,
- ❖ advance skill, knowledge and capabilities of HR,
- ❖ create partnerships between the suppliers.

Vision of the PTC

The Polycentric Technological Centre wants to be an intensive and reliable development oriented supplier's network for the global automotive manufacturers on the selected markets with higher value added products and complexed structures.

Strategic Objectives

- ❖ **Formation of the PTC as an international innovative system**
- ❖ **Increase of the international competitive advantages of the Slovenian automotive parts manufacturers**
- ❖ **Set up of the innovation capabilities and technological complexity of the products and processes,**
- ❖ **Horizontal and vertical links between academic institutions and industrial organizations,**
- ❖ **Development of the regional development centres across Slovenia**

Operative Objectives

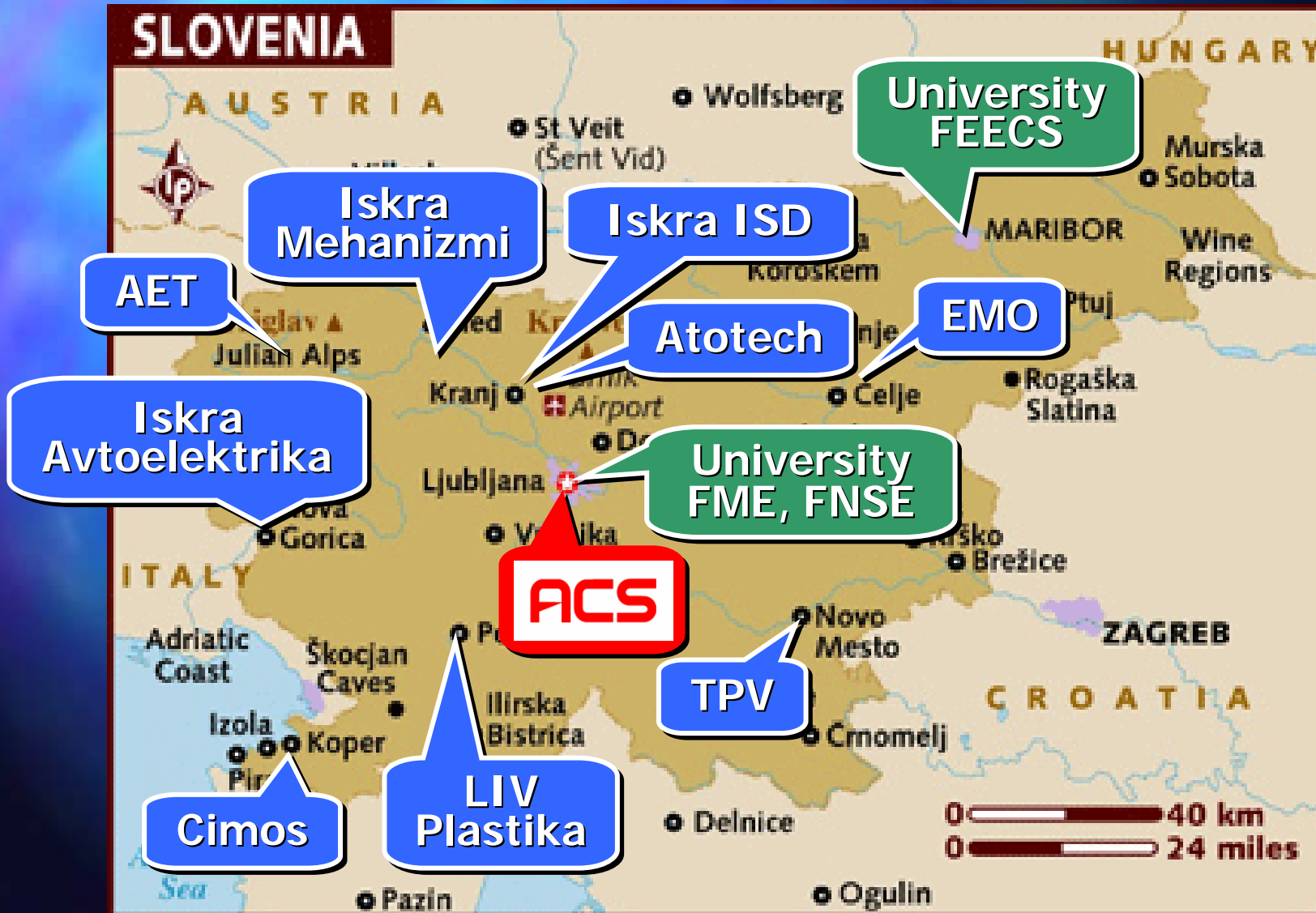
- ❖ **Organic sales growth of the PTC members**
- ❖ **Higher synergical effects between the Slovenian automotive parts manufacturers**
- ❖ **Development of the R&D human resources**
- ❖ **Training and education of the employees in the PTC**
- ❖ **Investments in R&D infrastructure in regional development centres**

Key Common Projects

- ❖ **Research and development of new materials**
- ❖ **Research and development of new technologies**
- ❖ **Establishment of the mechatronics centre**
- ❖ **Development and training of human resources**
- ❖ **Investments in IT infrastructure**
- ❖ **Cluster involvement in the regional HR development and training**

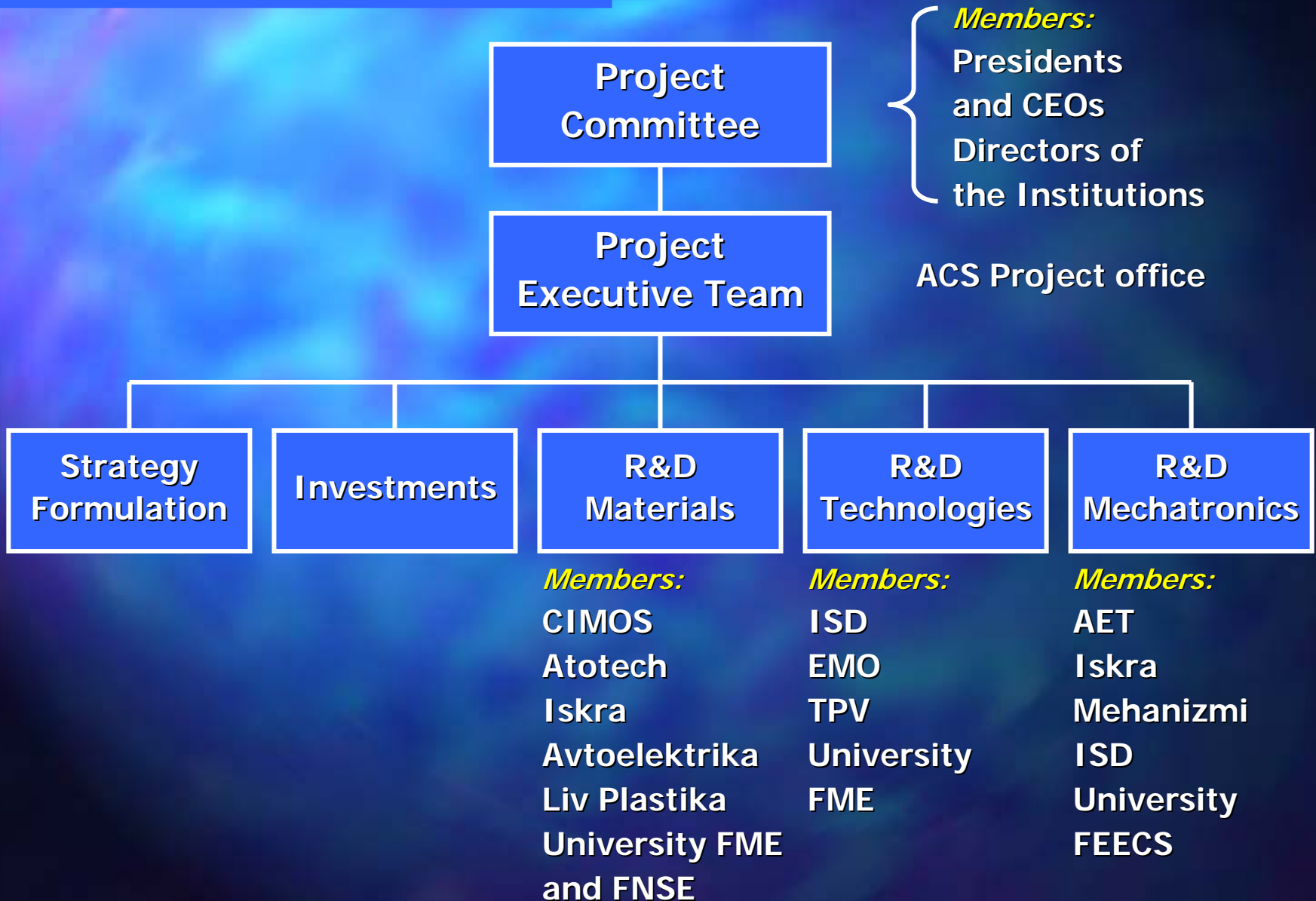
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Partners in the Project



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Organizational Chart

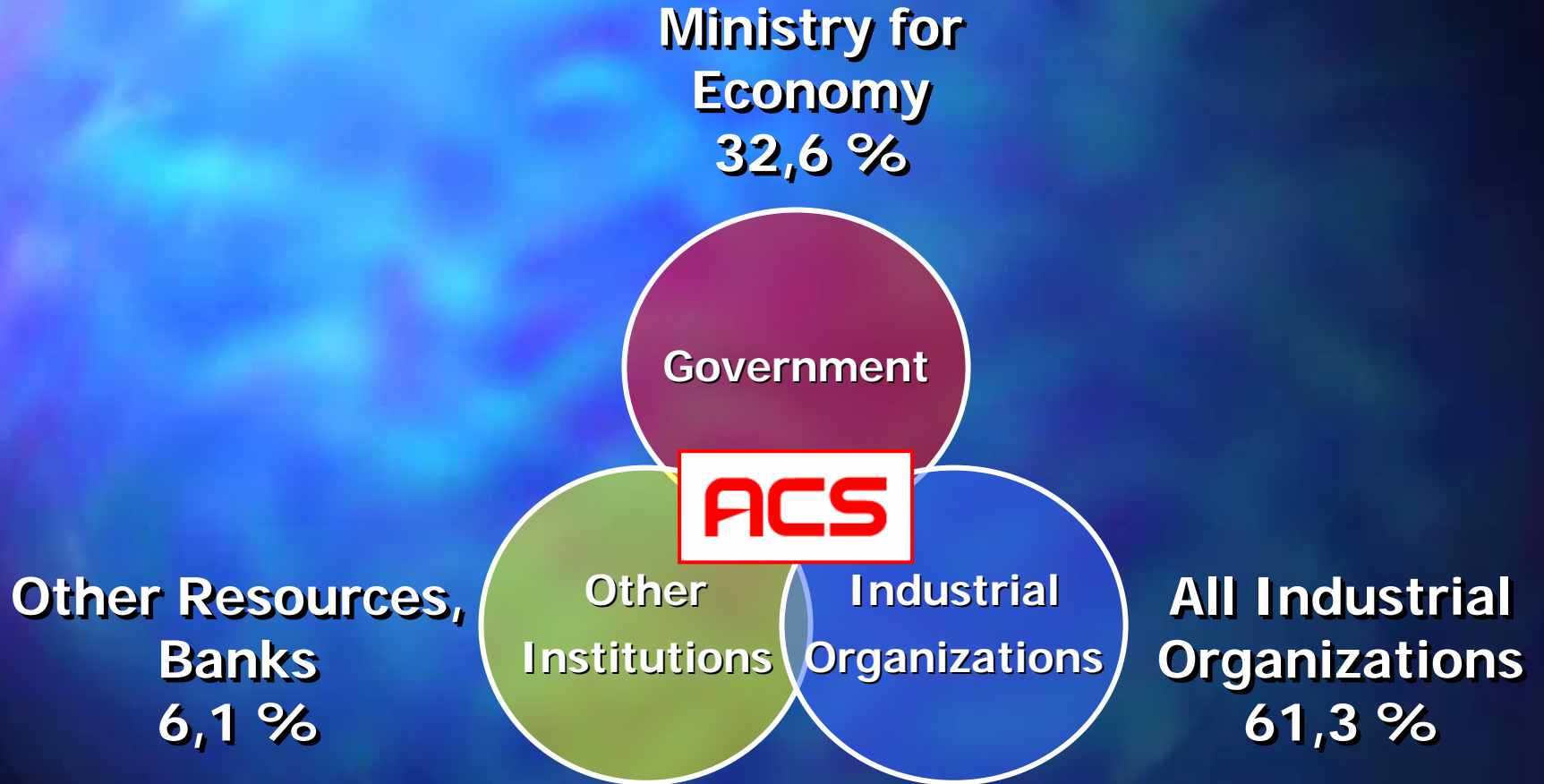


Project Management

- ❖ **ACS - Project office, coordination & administration**
- ❖ **Supervisory Board – Presidents and CEOs**
- ❖ **Project teams – PTC member's representatives**
- ❖ **Project plans, execution, control and reports**
- ❖ **Regular communication and information**
- ❖ **Project capabilities pre-assessment:**
 - ❖ **R&D and technological capabilities**
 - ❖ **HR resources and capabilities**
 - ❖ **Organizational and communication capabilities**
 - ❖ **Financial resources and material capabilities**

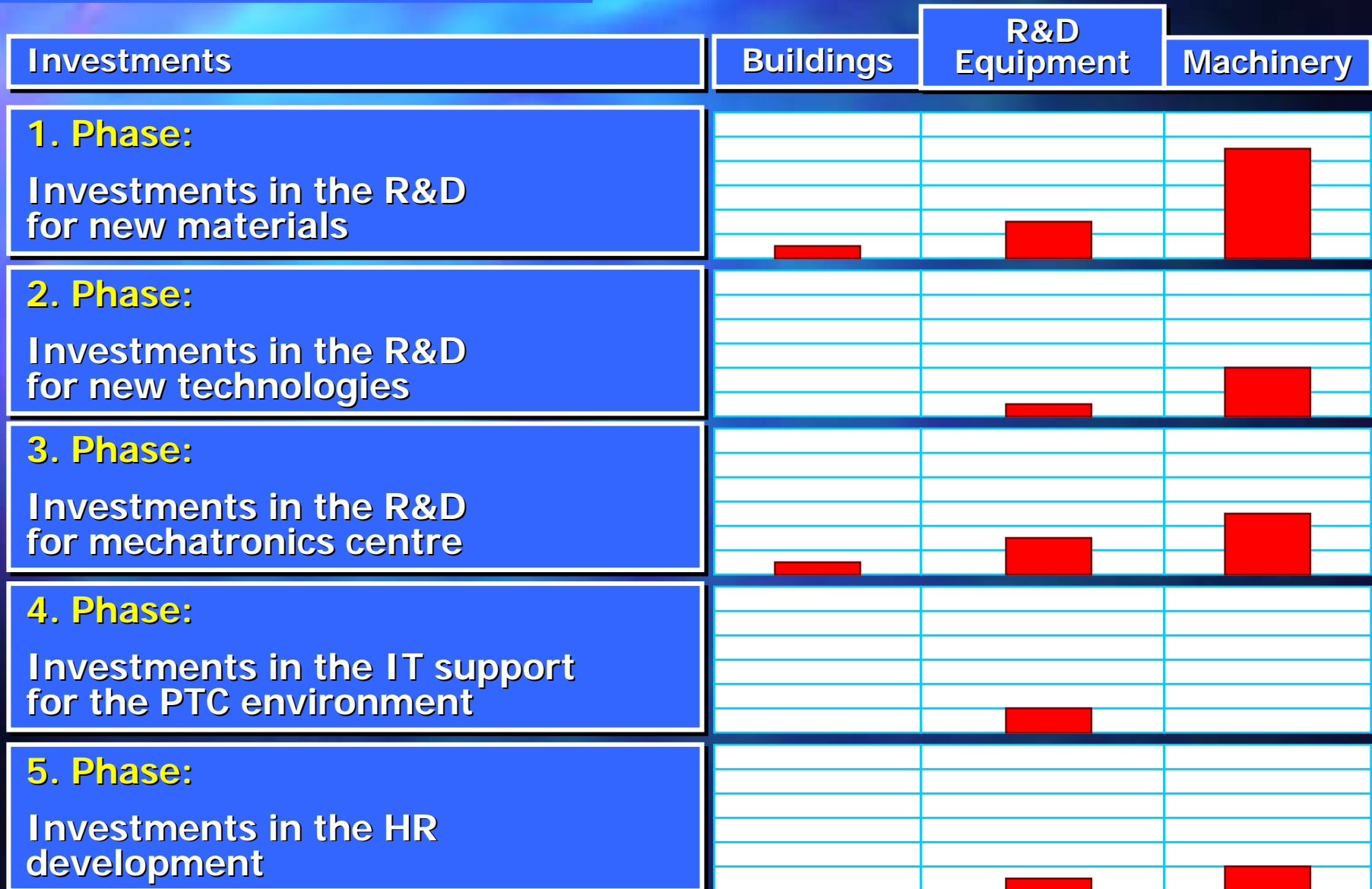
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Financial Resources Structure



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Costs Structure



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Total Costs Structure

Investments

Buildings:

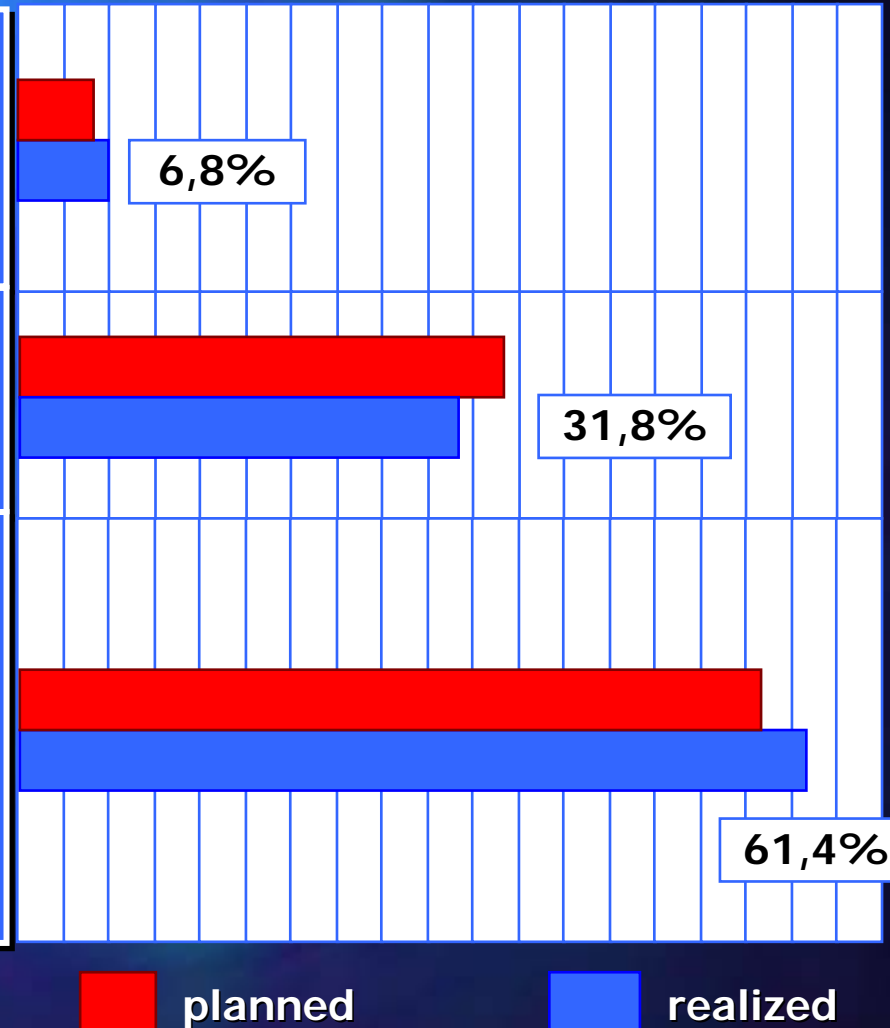
- ❖ Purchase of the buildings
- ❖ Construction of the buildings
- ❖ Reconstruction of the buildings
- ❖ Equipment for the buildings

R&D Equipment:

- ❖ Purchase of the instruments
- ❖ Purchase of the laboratory equipment
- ❖ Purchase of the computers and soft-wares

Machinery and Equipment:

- ❖ Testing and measurement devices
- ❖ Measurement devices and equipment
- ❖ Special ovens and equipment
- ❖ Rotors and soft-wares
- ❖ Rapid prototyping equipment
- ❖ Special tools and equipment
- ❖ Special tools for tooling testing



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Activities Time Table of the Project

Phases of the Project	2004	2005	2006	2007
1. Phase: Investments in the R&D for new materials		█		
2. Phase: Investments in the R&D for new technologies		█		
3. Phase: Investments in the R&D for mechatronics centre		█		
4. Phase: Investments in the IT support for the PTC environment		█		
5. Phase: Investments in the HR development		█		

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Project's Achievements - New Products

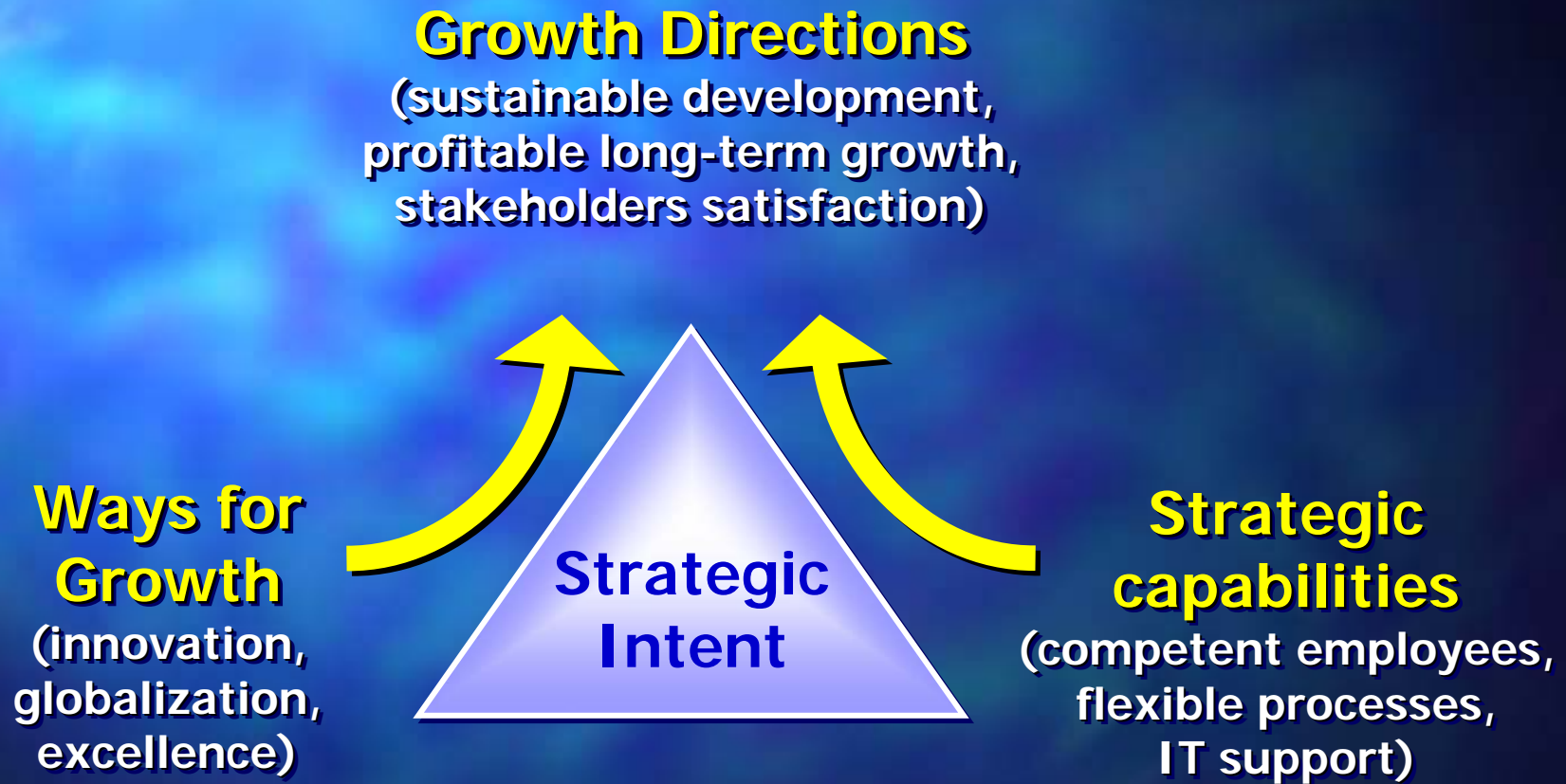


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Achievements of the Project

Achievements of the Project	Existing	Planned	Achieved
❖ Average annual sales growth	5 %	11 %	11 %
❖ Return on capital	6,2 %	12,9 %	13,0 %
❖ New innovative materials		5	5
❖ New innovative products		30	50
❖ New innovative technologies		5	30
❖ N° of working places	77	261	713
❖ N° of technological centres		1	1
❖ N° of the innovation projects	16	30	46
❖ N° of the international projects		5	12
❖ N° of the registered researchers	10	40	138
❖ N° of the common R&D projects with the academic institutions	3	10	40

Iskra Avtoelektrika Group – Strategic Intent



Iskra Avtoelektrika Group Vision

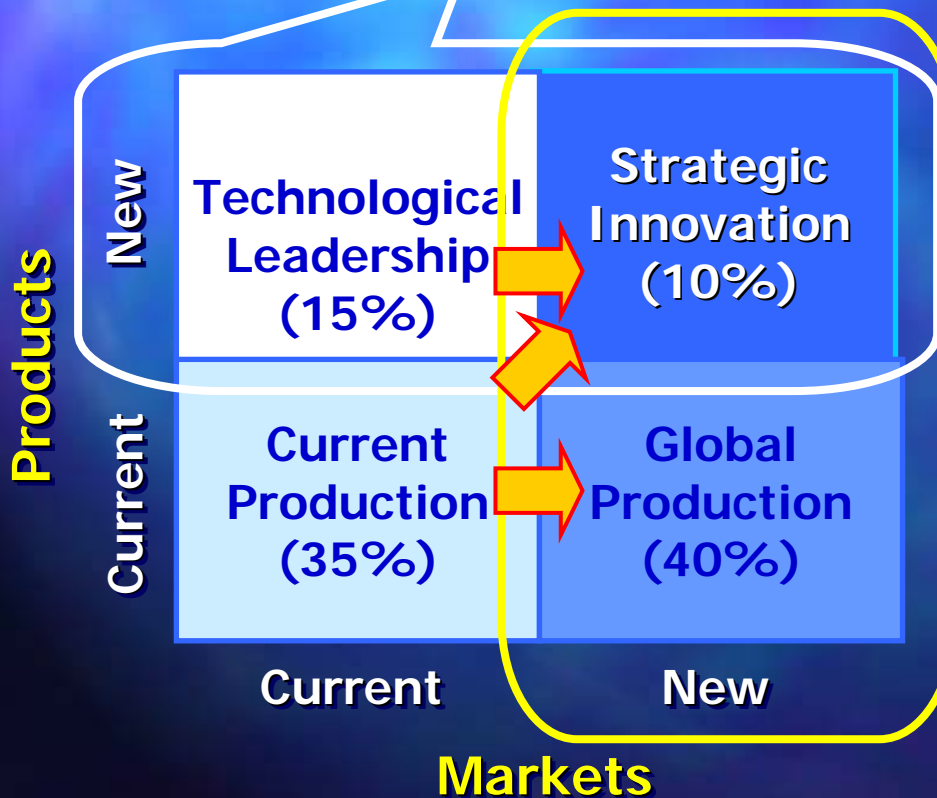


The vision of Iskra Avtoelektrika Group is to be among the world leading manufacturers of the electrical rotating machines and systems for the automotive and material handling industries.

Global Growth and Innovation Strategy

Product Development (Sales Share of the New Products up to 3 Years)

> 25%

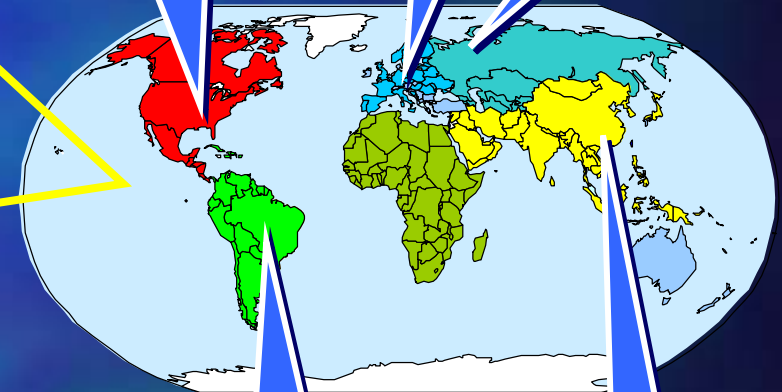


Market Development

Northern
America
(11%)

Europe
(62%)

Russia
(8%)

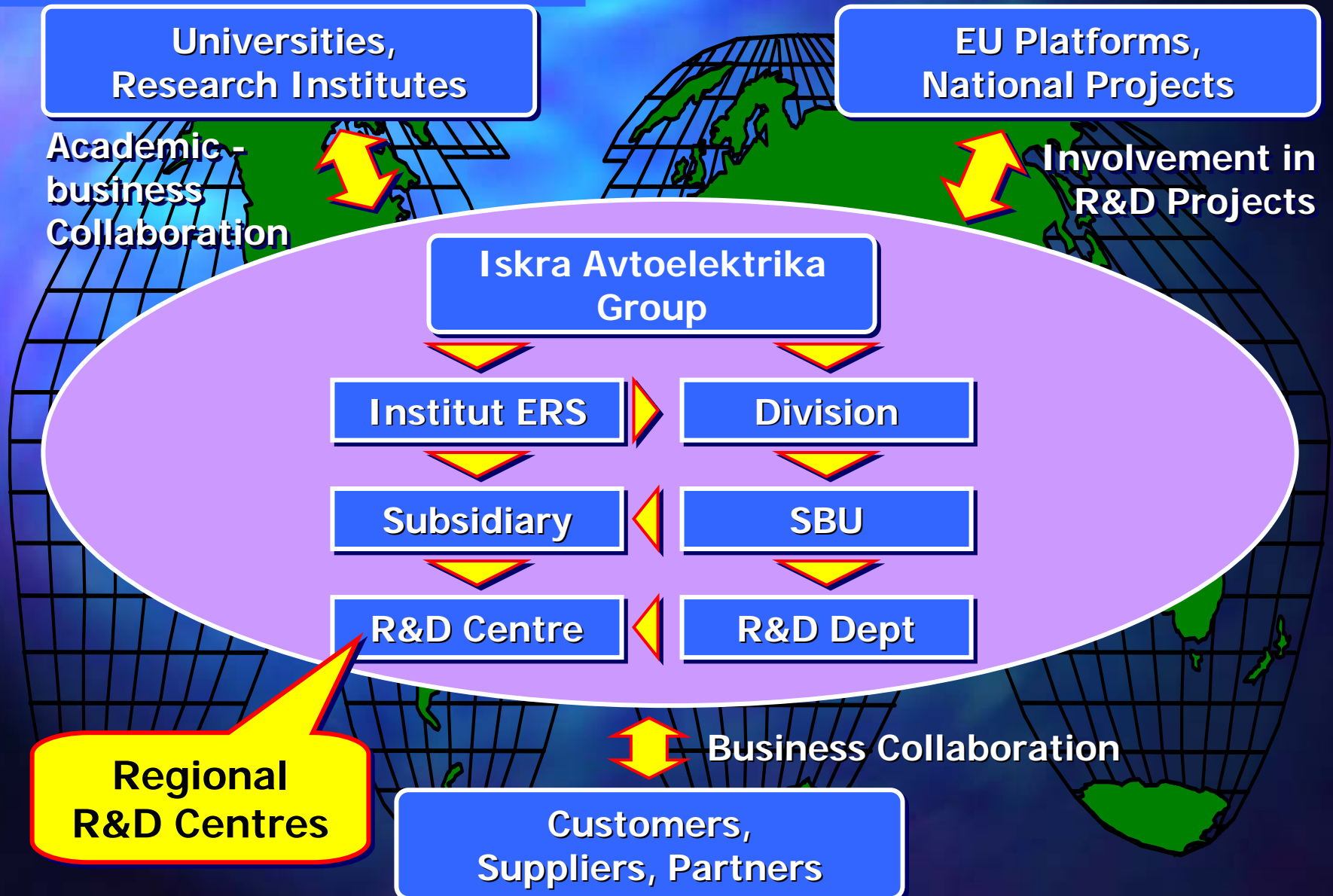


Latin
America
(2%)

Asia
(17%)

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R&D in Iskra Avtoelektrika Group



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Thank You All for Your Attention!

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