FUEL COMPANY OF ROSATOM

TVEL

ROSATOM

JSC TVEL - Russian nuclear fuel fabricator

Establishment of regional infrastructure for integral solutions in providing customers with NF and NFC services

V. Konstantinov
Vice-president

June 6, 2012

Moscow, Russia

Basis for establishment of infrastructural objects

POLITICAL
commitment to observance and development of nonproliferation mode

INDUSTRIAL
guaranteed supply

COMMERCIAL
customers' satisfaction

Development of infrastructure

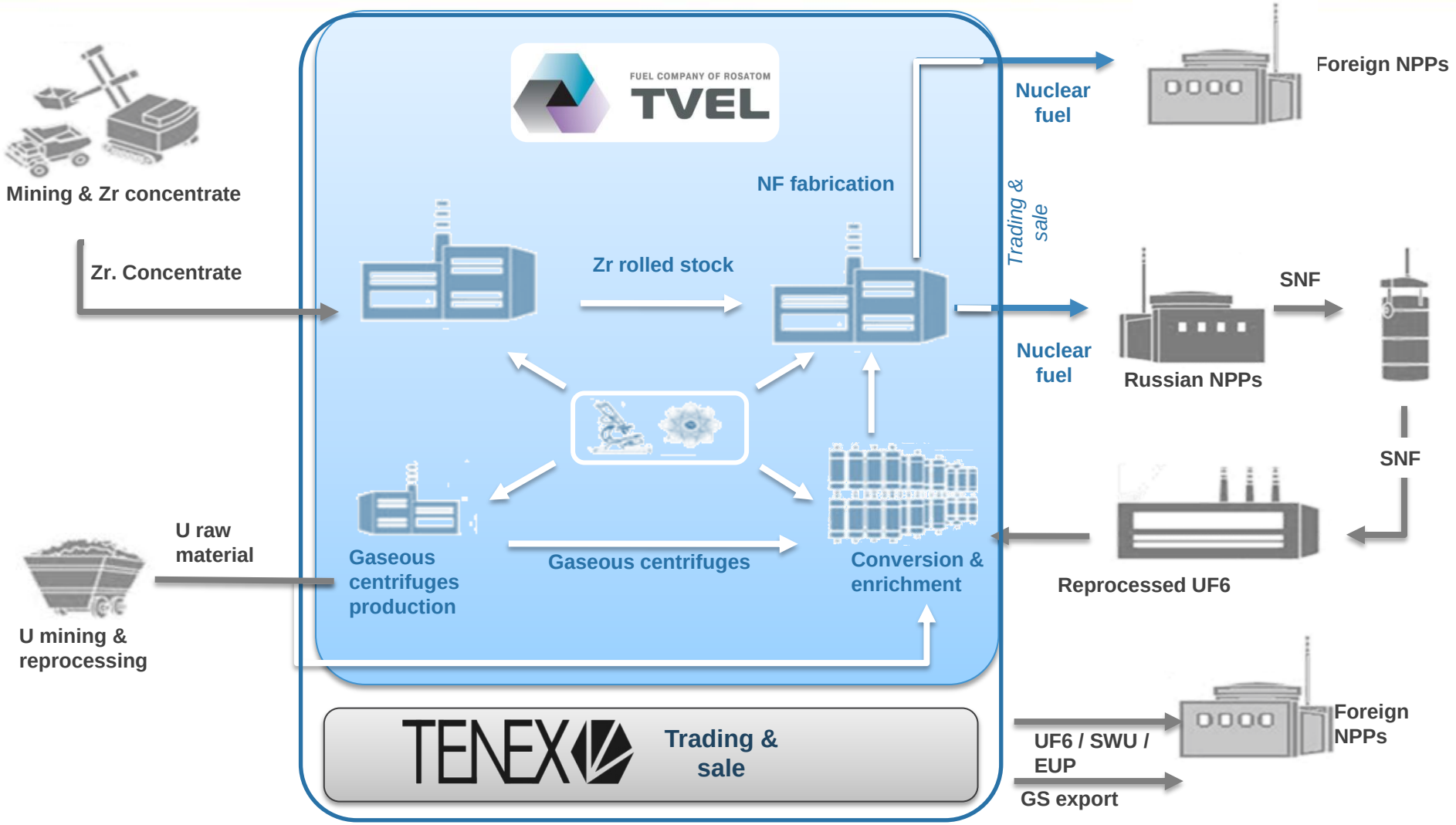
Minimizing of political risks of NFC services disruption – customers do not need to develop uranium enrichment capacities

- Backup capacities;
- Closeness to customer;
- Customers participate in control of production (via JV)

- Meeting customers' localization requirements;
- Interaction process optimization;
- Customer's additional revenue (via dividends).

Infrastructure development takes place both in Russia and abroad (including the opportunity to invest in Russian enrichment facilities)

Fuel Division. Competences in the whole range of NFC Front End*



* Except uranium mining

Fuel Division.

ROSATOM

Fuel Division (FD)

TVEL

TENEX

R & D | GC Production | Conversion & enrichment | NF fabrication




- VNIINM
- KMP
- Toch mash
- AECC
- UEIP
- MSZ
- NCCP
- Centrotech-SPb
- NRDC
- UGSMP
- Ural pribor
- SGHChE
- ECP
- CMP
- MZP
- EDB-N .Novgorod

JV with foreign partners
- UEC
- JV in Ukraine

Transport & logistics assets
- SPb-Isotop »
- TENEX-Logistics »
- TENEX-Complect

Overseas marketing assets
- TENEX-Korea Co. (South Korea)
- INTERNEXCO GmbH. (Germany)
- TENEX-Japan Co. (Japan)
- TENAM Corporation (USA)
- TRADEWILL LIMITED (Great Britain)

Fuel Division. Important player in the NFC world market

17% of NF fabrication world market

45% of uranium enrichment world market

15% of the world fabrication capacities*

22% of the world conversion capacities

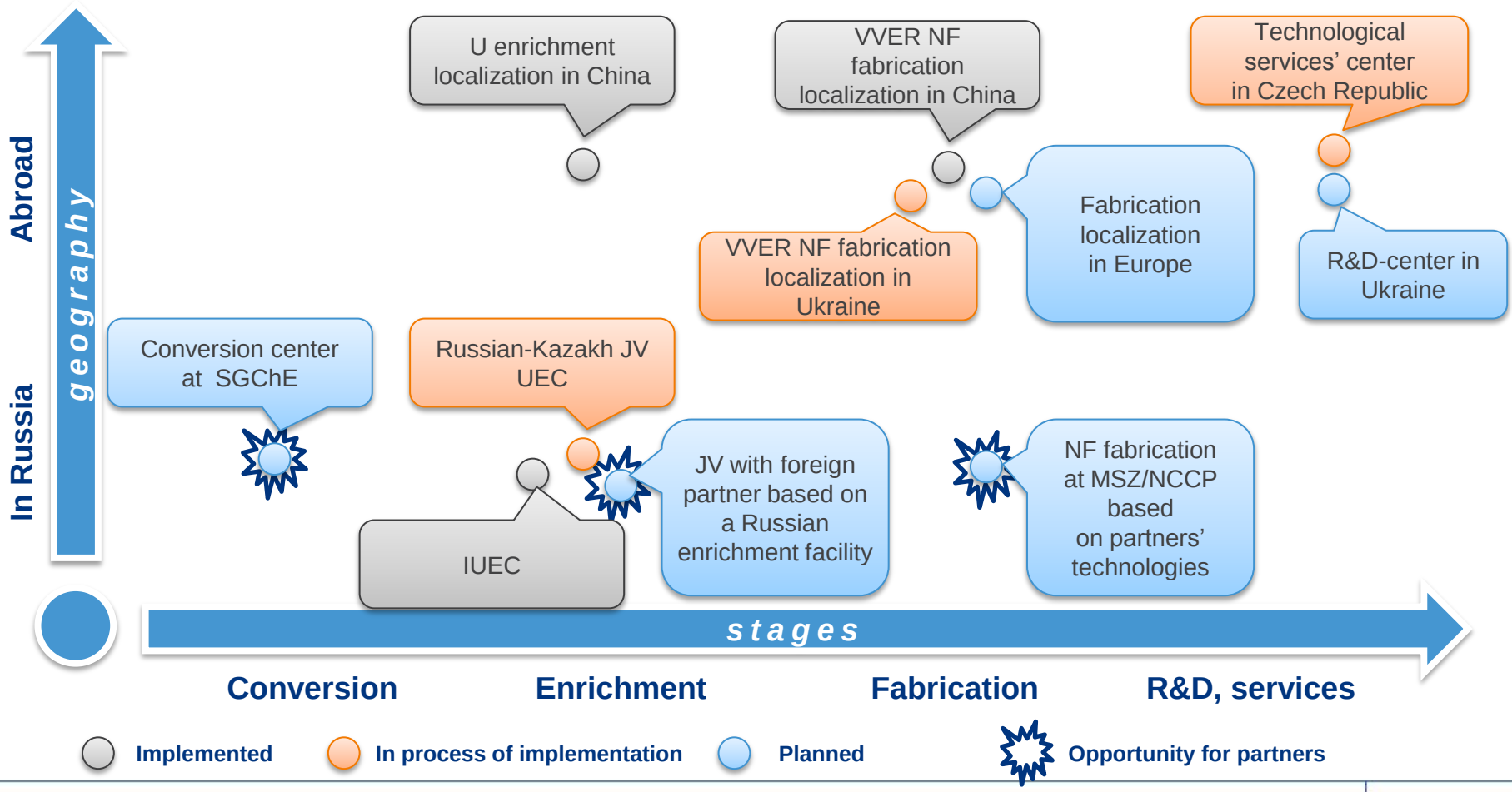
42% of the world enrichment capacities

* Only LWR

Infrastructure development trends

Two dimensions of Infrastructure development:

1. **Stages**
2. **Geography**



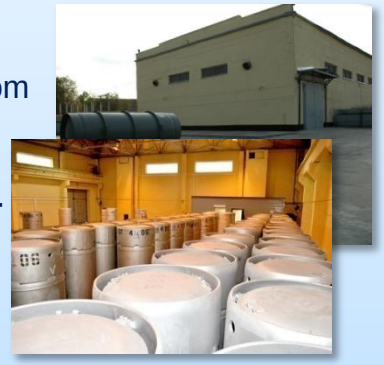
Projects in process of implementation

IUEC

International fuel bank

IUEC functions: storage, servicing and sale of LEU from guaranteed supply

Location: Angarsk Electro-Chemical Complex's site



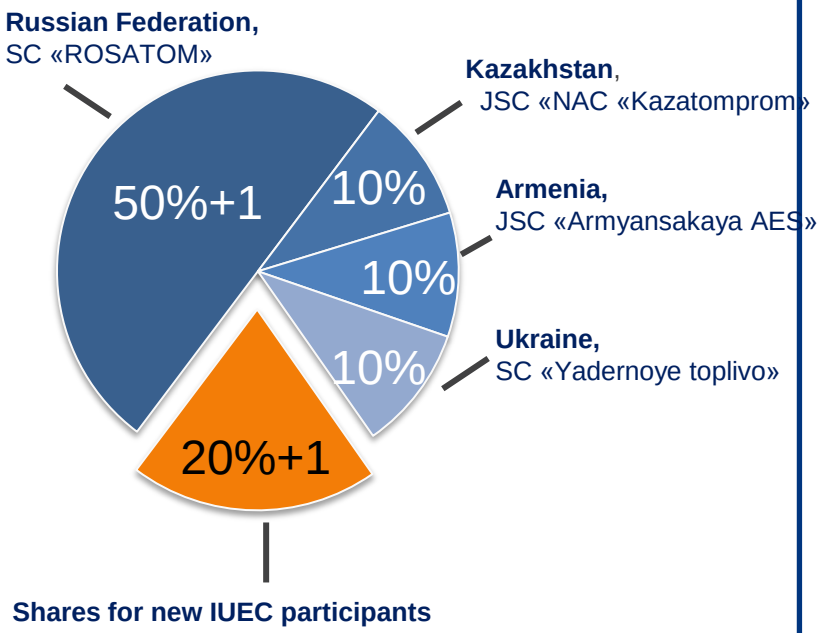
June 01, 2010 IUEC storage sites were selected by IAEA as a facilities under safeguards.

November 28, 2010 materials for guaranteed reserve were loaded into storage facility in full volume determined by the Agreement (more than 120 tons).

December, 2010 according to IAEA request and in presence of its representatives samples of material stored as guaranteed reserve of IUEC were taken.

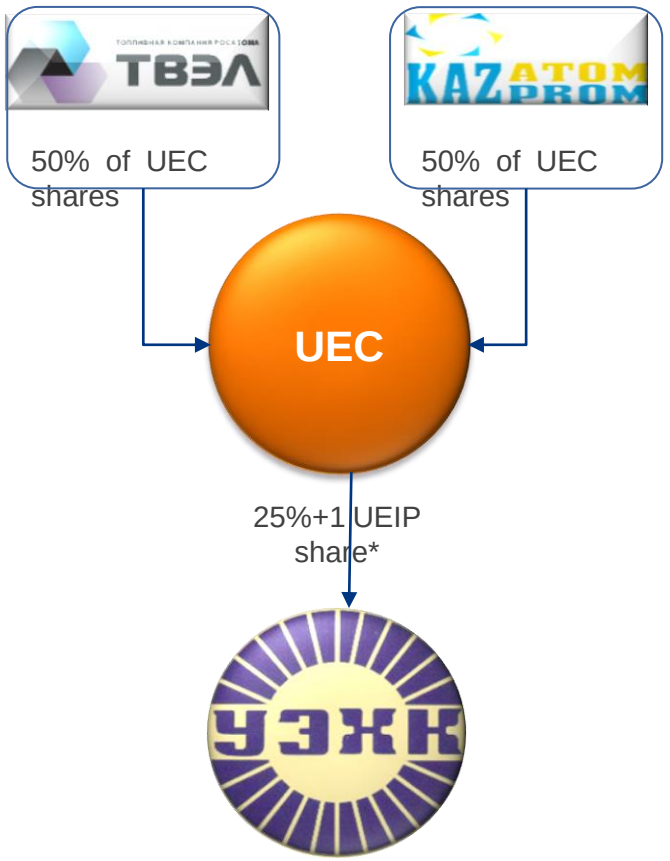
March, 2011 samples were sent to IAEA.

IUEC participants



UEC

Basic diagram



* - preliminary assessment

Main stages

2011

- TVEL – Russian shareholder
- Signing of the Road Map and updated Complex program
- UEIP shares evaluation and development of FEM project completed
- Signing of marketing agreement

2012

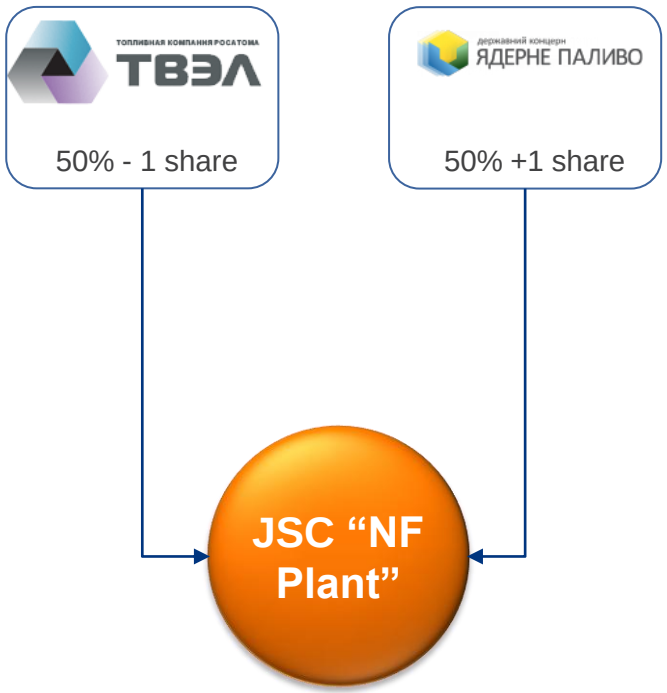
- Preliminary approving of main parameters of the project by Kazakh party. Final approval of parameters by KAP shareholder.
- Shareholders' agreement and contract for purchasing of UEIP shares, contracts for delivery of products
- Approval of the transaction by Russian authorities.
- Purchasing by UEC of UEIP shares

2013-…

- Practical implementation of the project

Fabrication localization in Ukraine

Basic diagram



Capacity – 800 FAs/year

Nomenclature – TVSA for VVER-1000

Main stages

2011

- Establishment of JV
- Feasibility study development
- Site selection, public hearings

2012

- Approval of feasibility study by the Cabinet of Ministers of Ukraine
- Financing of the project
- Development and approval of the project
- Acquiring of the necessary authorizations (licenses)
- Russian technologies’ assessment

…

2015

- Commissioning of the first stage of the plant (FAs assembling, fuel rods production, fabrication of Zr and steel components)

…

2020

- Commissioning of the second stage of the plant (powder, pellets)

Center for technological services in Czech Republic

Prerequisites for establishment

- Integration of the Russian-Czech scientific potential
- Localization of fuel services
- Customers' satisfaction rise due to package servicing
- Creation of the site for implementation of conventional projects

(established in 2011)

Main activities

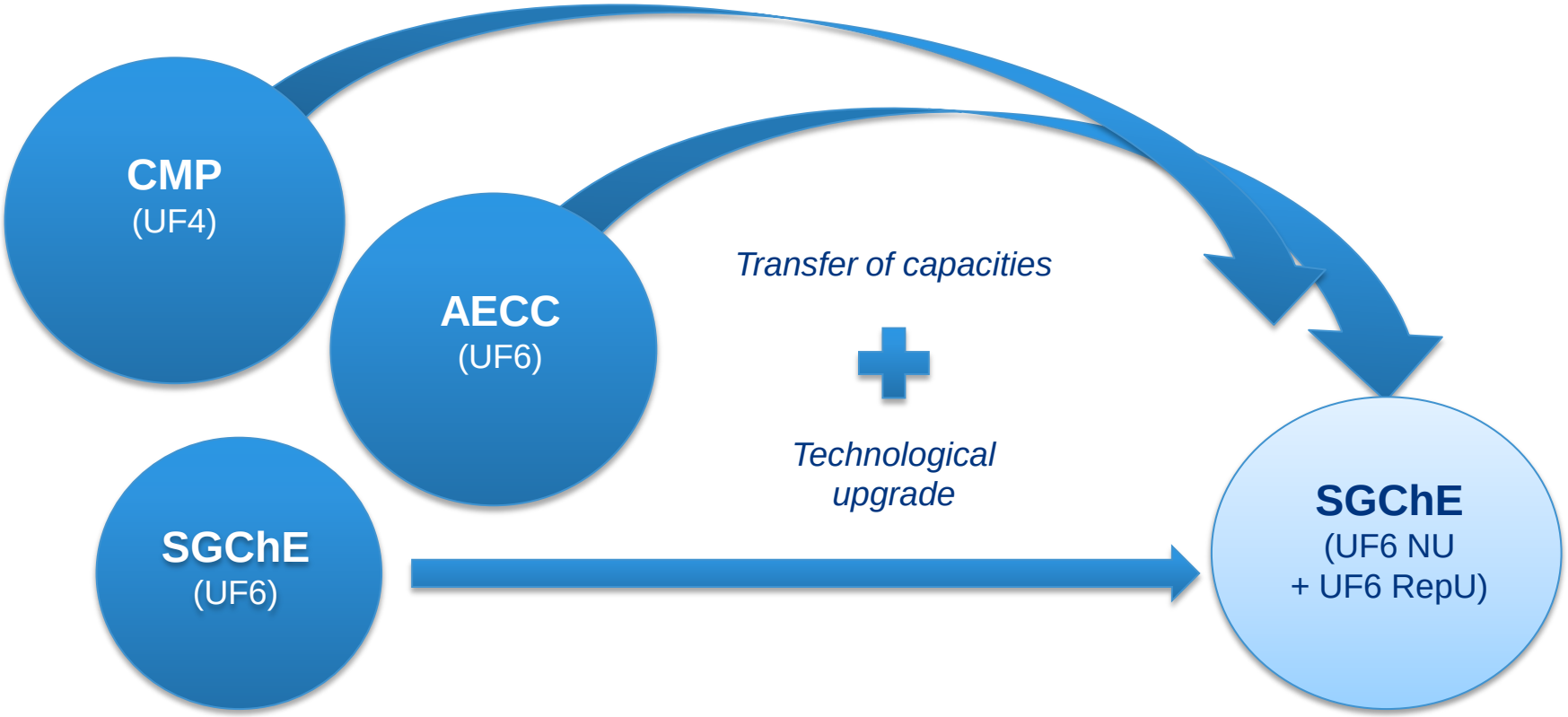
- Scientific and technical follow up of Temelin units' operation
- • Core monitoring;
  • Thermohydraulic calculations;
  • NPP data collection, processing and evaluation
- Development of design and substantiating documents for Temelin units' current reloads

Promising projects

Conversion center at SGChE

Current status
Numerous sites

Targeted status
Integrated conversion center



NF fabrication setting up at MSZ/NCCP based on technologies of partners

Current status

- **Since 1996 MSZ in cooperation with AREVA has been producing RepU NF for PWRs and BWRs**
- **About 2600 FAs have been supplied to customers**

AREVA

Setting up of joint fabrication of NF from natural and reprocessed uranium at MSZ for the markets of Europe and South East Asia

Advantageous geographical location of MSZ relative to European markets

NCCP relative to Asian markets

Setting up of joint fabrication of NF from natural and reprocessed uranium at facilities of JSC TVEL in partnership with companies that do not have their own fabrication capacities in the vicinity of the targeted markets

Possible trends

We are opened for cooperation in infrastructure development projects and cordially welcome you as:

- business partners;
- co-investors;
- technological partners;
- subcontractors.

Thank you for your attention!