Presentation Outline

- Overview of AREVA Logistics Business Unit capabilities and Expertise
- Overview of Transnuclear Inc Transportation Capabilities in the United States
- Questions

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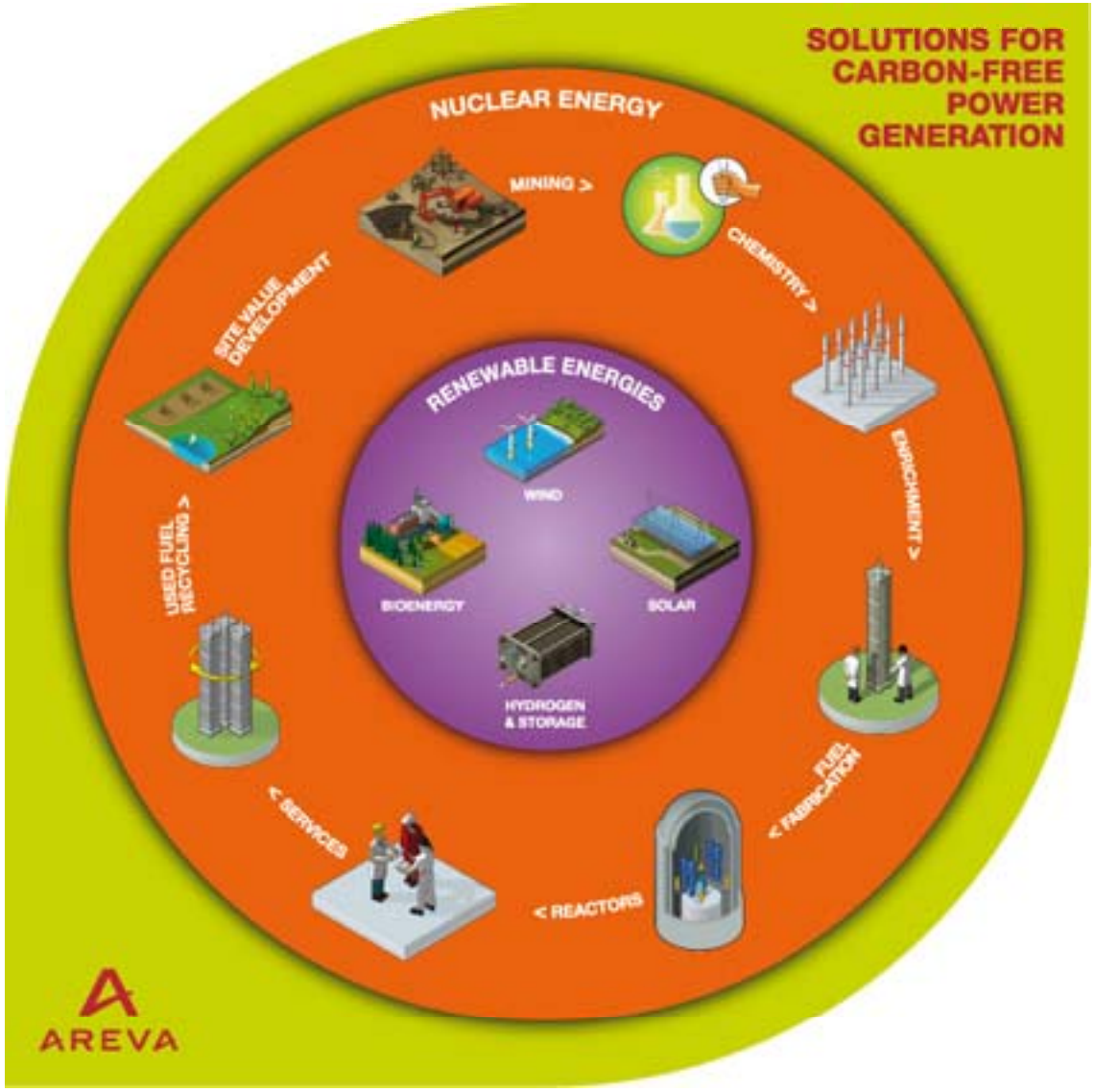
Quick Reminder of Fuel Cycle



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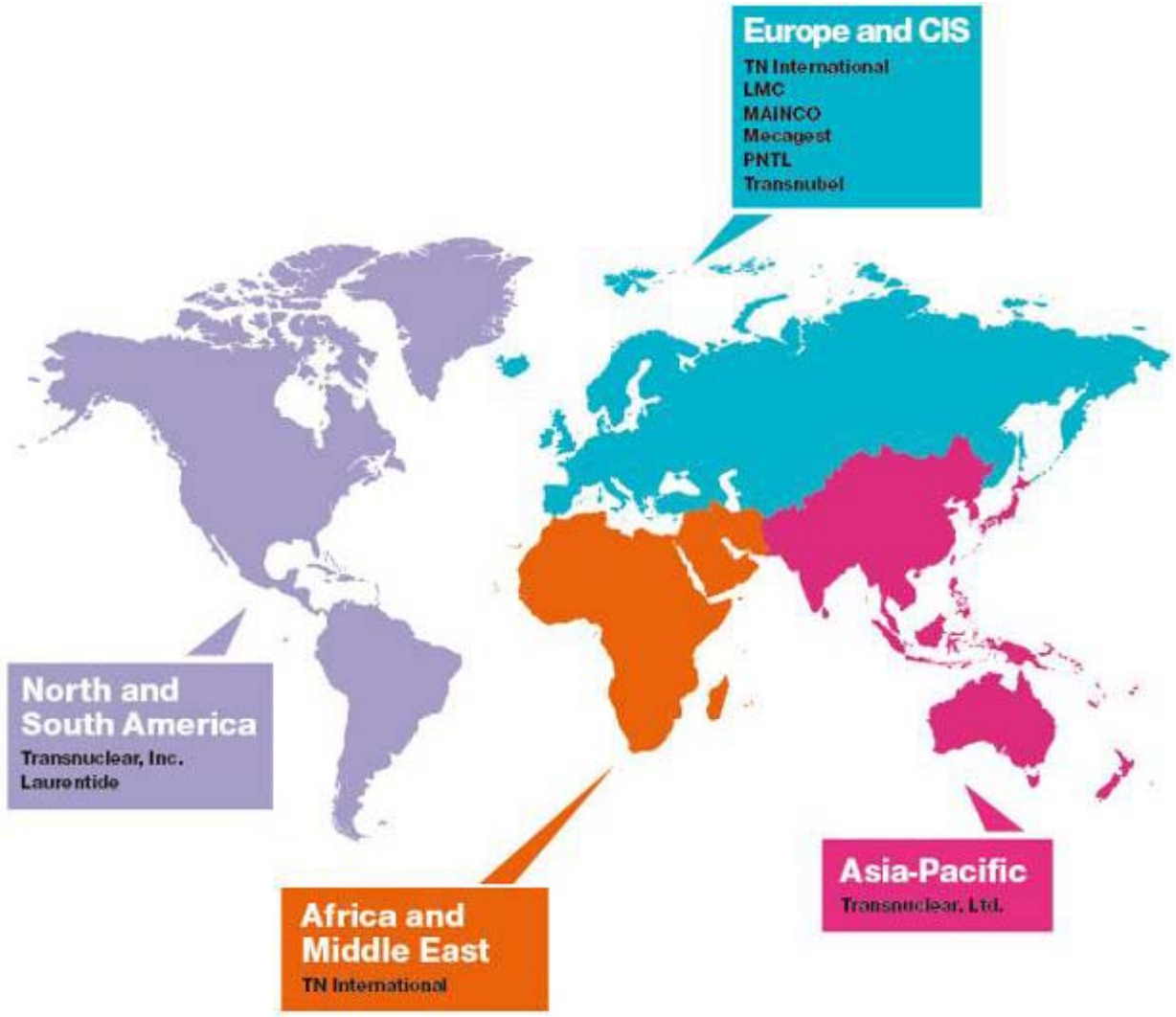
AREVA Logistics Business Unit



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Around 4,000 transports each year

- More than 200 transports of used fuel (France and Europe), of vitrified and compacted waste (Europe and Japan)
- More than 150 MOX fuel transports
- More than 300 transports of low level waste
- More than 2,700 front-end transports
- More than 400 transports of heavy industrial equipment
- Around 150 transports for research reactors and laboratories

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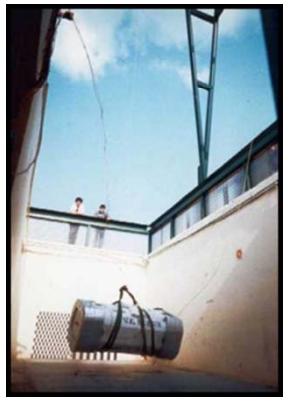
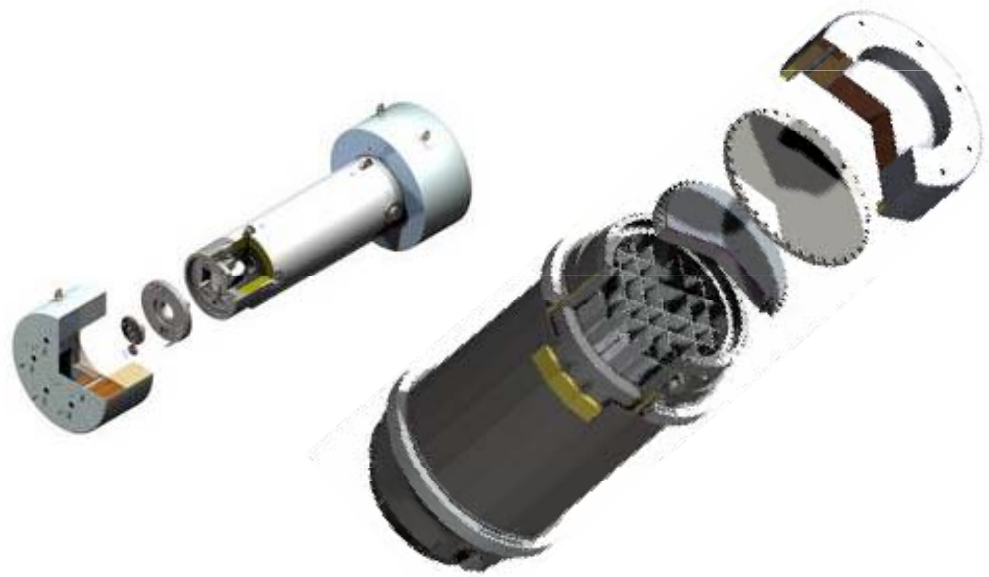
Design, Testing and Licensing: working for safety

- **Designing the right packaging system**
  - **up to 5 new concepts studied every year**
    - optimization of existing designs
    - new concepts
  - **more than 150 package types developed (Front & Back Ends)**
- **Constant Dialogue with Competent Authorities**



Drop tests



Fire tests

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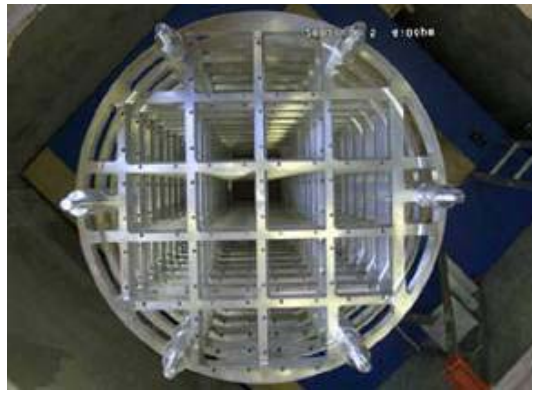
Manufacturing: ensuring quality

- Creating packaging systems under strong quality control
  - Using of proven material and technologies
- Around 6 heavy cask systems delivered per month



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Maintenance and fleet management, for continued compliance with regulations

- Maintenance of our packaging systems and at their request, those of our customers
- Maintenance of our transport fleet
- Cask dismantling

5,000 transportation packages managed

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Transport commissioning & monitoring

- Assessment of transportation methods and resources
- Organization and Assistance for each operation
- Determining the right method
- Specially designed wagons and ships
- Ensuring the traceability and safety of transport
- Assistance to consignor
- Qualified staff trained to safety and security

20 to 30 transports organized daily by road/rail/sea/air

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BUL Staff Expertise

- **Very qualified staff (1,200 employees):**
  - **Transport analysts**
  - **Engineers (design, criticality, thermal, structural, manufacturing, etc.)**
  - **Regulatory and licensing experts and compliance managers**
  - **Public acceptance and communication experts**
  - **Technicians to support transport and cask operations**
  - **Package maintenance operators**
  - **Truck drivers**
  - **Transport auditors**
  - **Transport inspectors**

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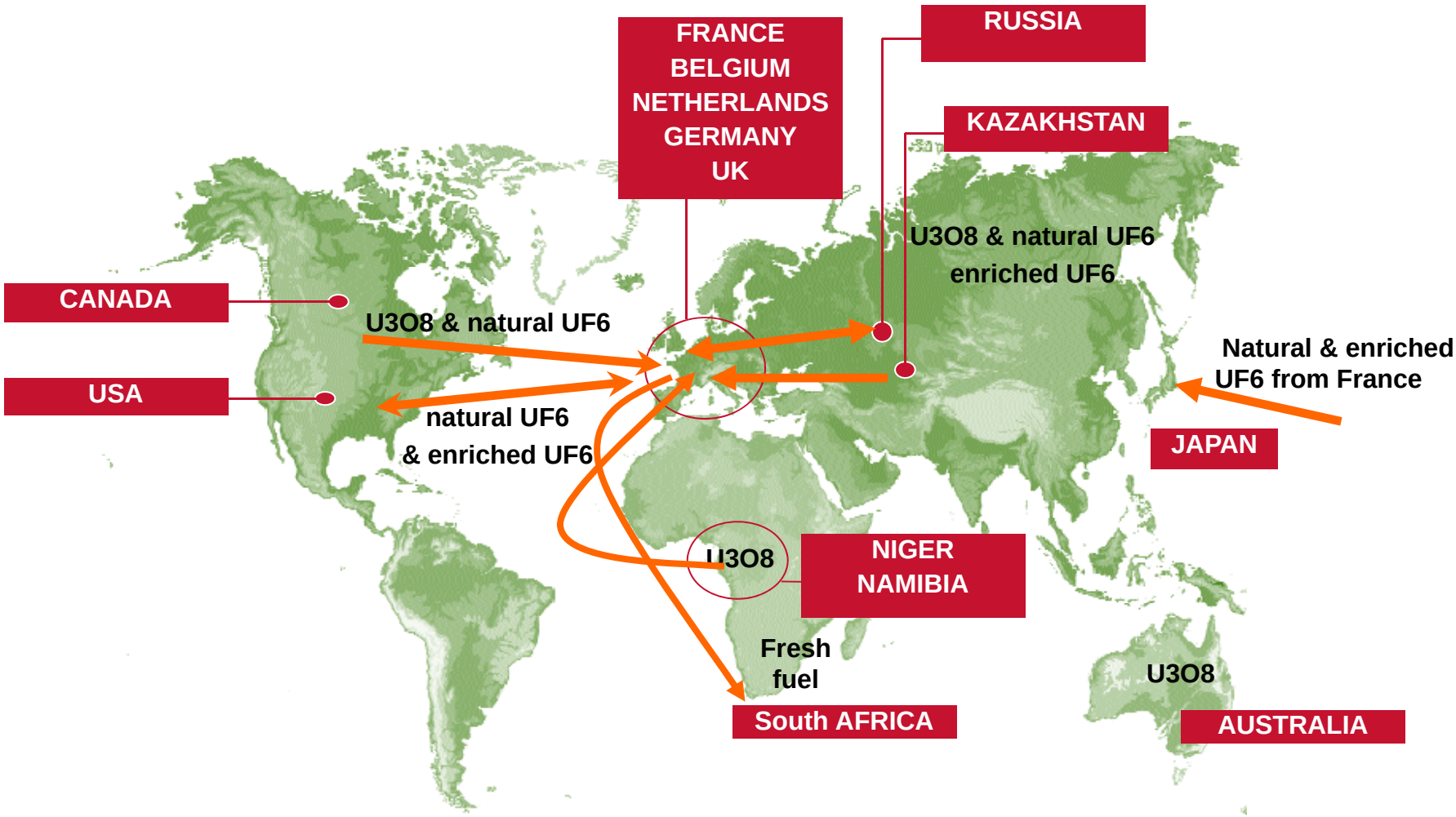
Main Front-End routes operated by Logistics BU



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Transport for the Mines

- **Material to be transported :**
  - **U308, uranates from mines to Conversion facilities**
  - **Packages : Drums industrial package type IP1 - ISO 20' containers**
- **From Mines to Conversion faciliites**
- **Transport modes : road, rail, maritime, air**

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Transports for Chemistry & Enrichment

- Material :
  - UF6 : naturel , enriched, depleted
  - Reprocessed Uranium
- From mines to conversion facilities, then from Conversion to Enrichment facilities
- Packaging : 48Y, 30B / Transport Equipment : flat
- Transport mode : road, maritime, rail

4 X 30B cylinders/flat : enriched UF6

1 X 48Y cylinder/flat : Nat UF6

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Fuel Transports

Material: Powder, Pellets, Fresh Fuel

From Fuel manufacturing facilities to Utilities

Transport modes: Road, maritime, rail

MAP12

TN UO2

TNFXI

FCC 4

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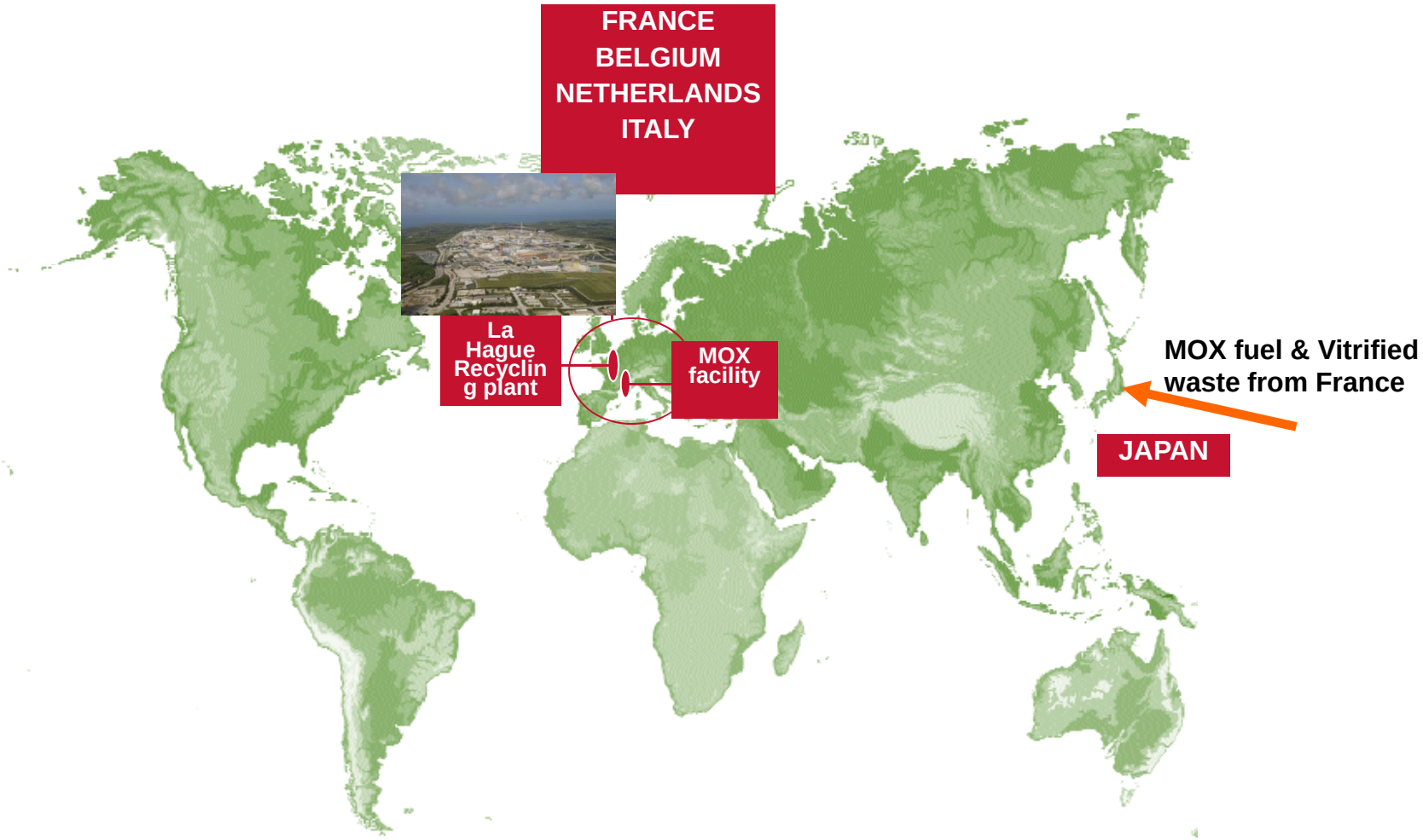
Back End routes operated by Logistics BU



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Used Fuel and Vitrified Waste Shipments

Material: Used Fuel and vitrified Wastes

From Utilities to recycling Facility And Recycling facility to Repository

Transport Modes: Road, Rail, Maritime

Tractor& trailer for used fuel and HLW packages

Maritime terminal used fuel/HLW/MOX

Railway terminal

Rail car for used fuel and HLW packages

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MOX fresh fuel

- ***Material: MOX fuel***
- ***From MOX manufacturing Facility to Utilities***
- ***Transport Modes: Road (secured conveyance), Maritime***

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Used Fuel Dry-Storage

- **Dry Storage Solutions:**

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Transnuclear Inc

Transnuclear Inc Overview

- **Established in 1965**
- **Corporate office in Columbia, MD**
- **Offices in Aiken, SC and Richland, WA**
- **Staff of about 115 employees**
- **Quality Assurance Programs: 10CFR71 &72, ASME Section III, Division 1 and Division 3 – IS014001 certification scheduled for November 2010**

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Our Core Competencies

- Engineering & Licensing
  - **Design, licensing and manufacturing of dry storage and transportation packages**
- Logistics
  - **Front & back end transportation, domestic & international**
- Services
  - **Fuel loading, handling, inspection, characterization, repair, etc.**

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Transportation Services

- **Provide Transport Services for Radioactive and Nuclear materials (Domestic and International)**
  - **Scheduling**
  - **Permit and notifications**
  - **Shipment follow-up and security**
  - **Carrier coordination**
- **Support to AREVA Logistics Business Unit for implementation of the Transportation Risk Management in North America**
  - **Risk analysis**
  - **Supplier qualification and audits**
  - **Transport inspections**
  - **Emergency response coordination**

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Expertise with Radioactive and Nuclear Transports

- **Products Transported**
  - **Natural UF6**
  - **Enriched UF6**
  - **U02 Powder and Pellets**
  - **Fuel assemblies**
  - **Sources**
  - **Contaminated objects**
  - **Irradiated material**
  - **Spent nuclear fuel (research reactors)**

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Expertise with radioactive and nuclear transports

- **Transport Types and Modes:**
  - **US Domestic (commercial and governmental facilities)**
  - **International (Mainly Europe and Asia for international)**
  - **Road, barge, vessel, rail and air**
- **Main US carriers**
  - **CAST**
  - **Hittman**
  - **FedEx Custom Critical**
  - **Southern Pines trucking**
  - **Savage**
- **Others:**
  - **Qualified to handle Safeguard Information (SGI)**

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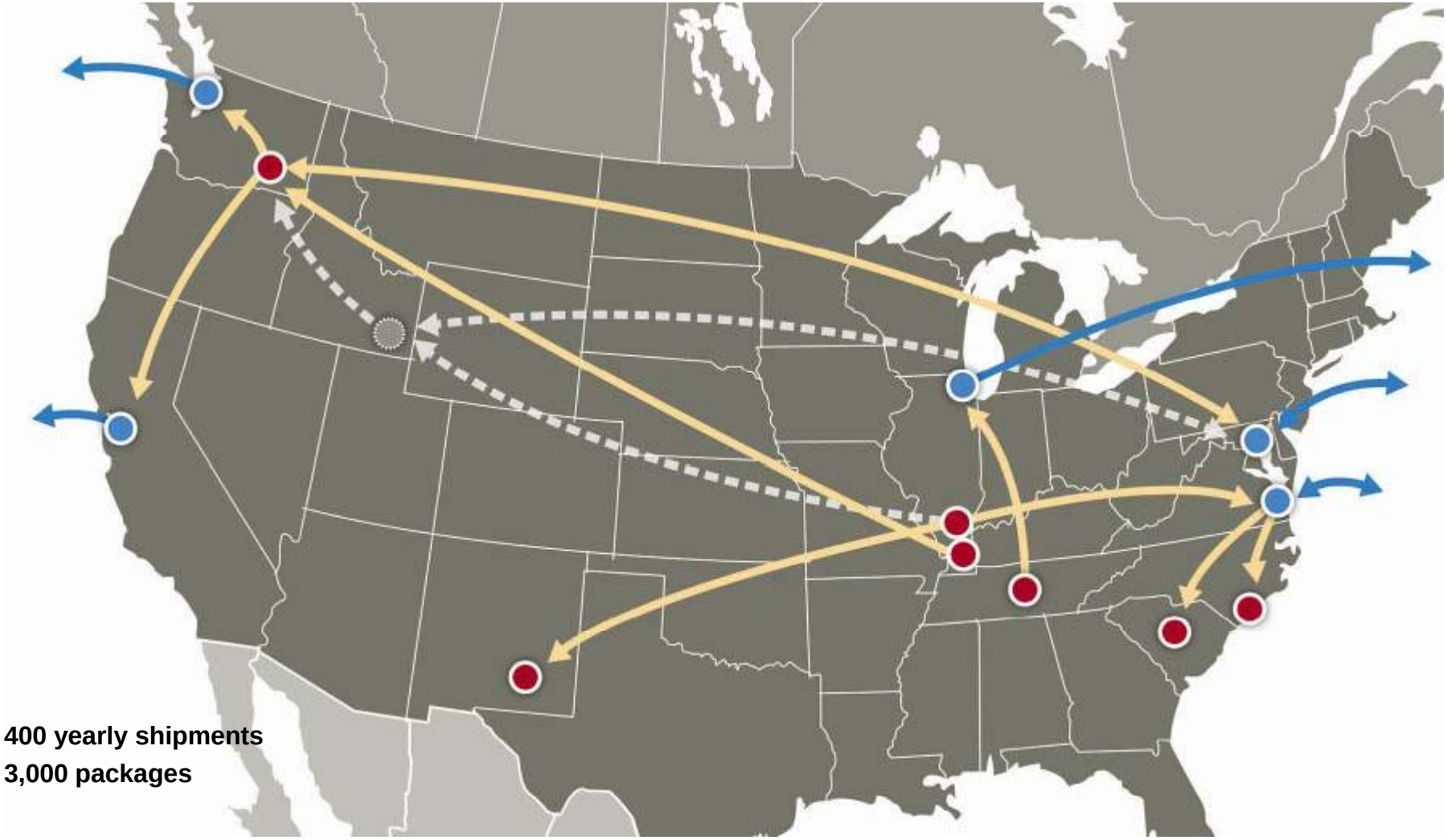
Routine Shipments



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Questions