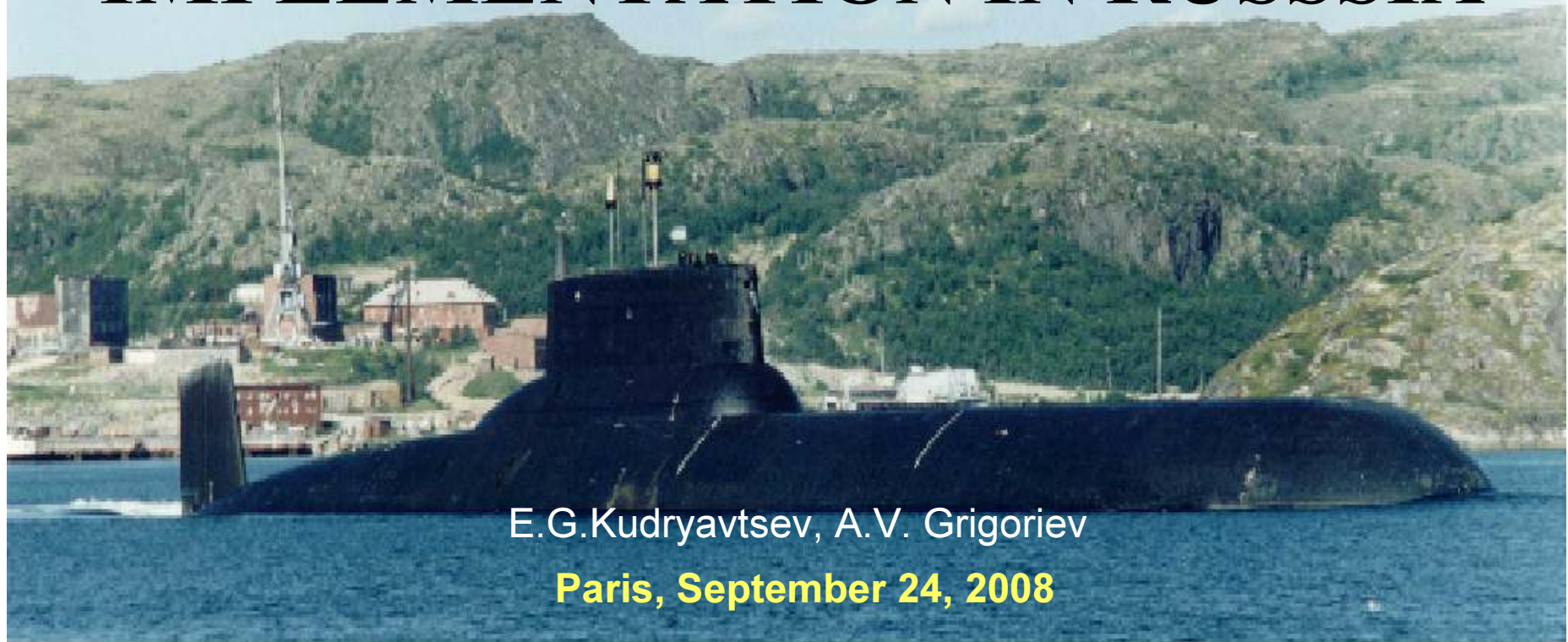




State Atomic Energy Corporation  
"Rosatom"



# MAIN RESULTS OF GLOBAL PARTNERSHIP PROGRAM IMPLEMENTATION IN RUSSIA



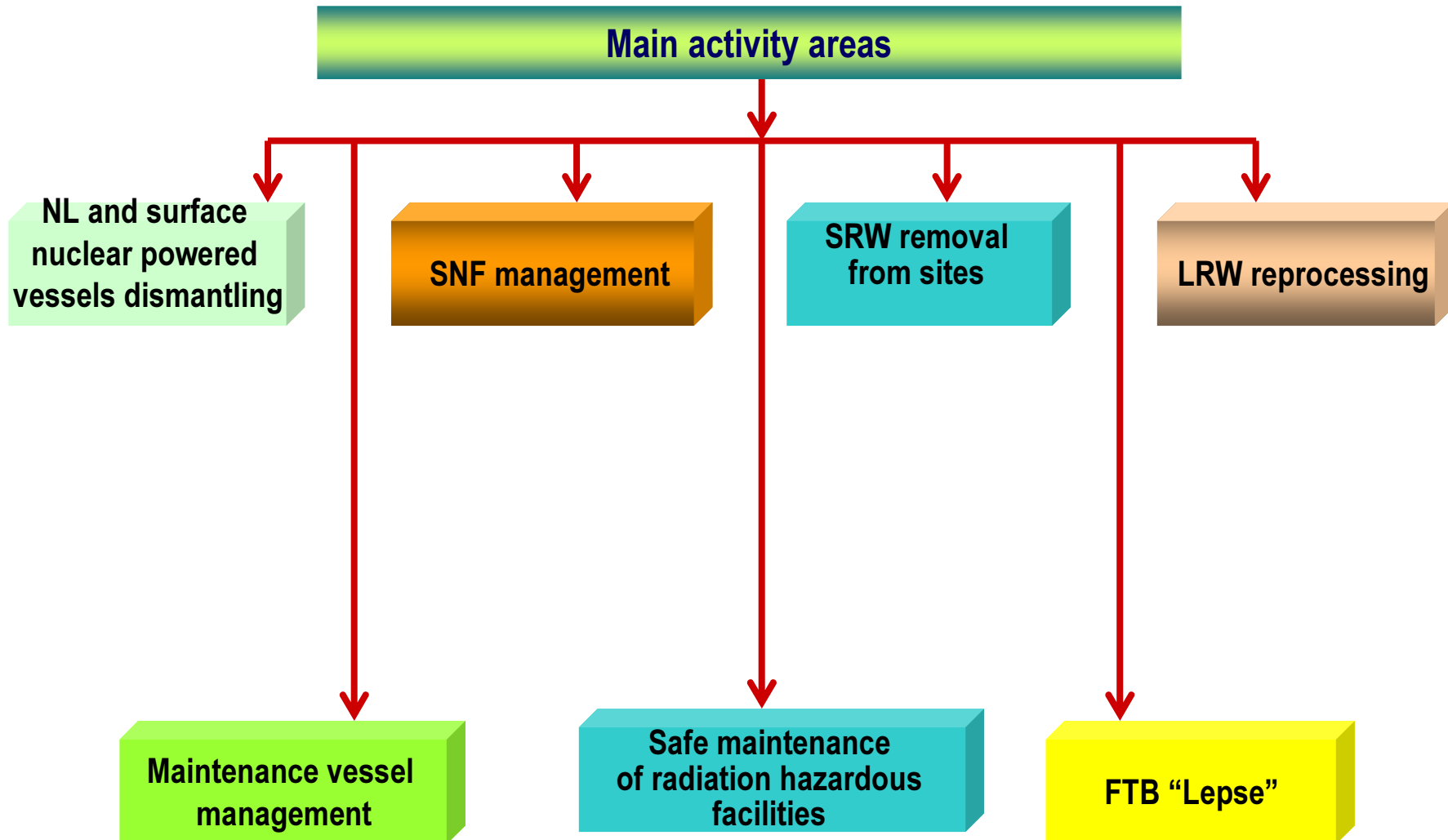
E.G.Kudryavtsev, A.V. Grigoriev

Paris, September 24, 2008

# **Specific character of the Global Partnership Program launched in Kananaskis on 27.06.2002.**

1. Against the spread of weapons and materials of mass destruction.
2. To improve the nuclear and radiation situation.
3. Intended for Russia .
4. Duration up to 2012.

# Structure of activities funded by Russia



# Dismantling nuclear submarines and surface ships with nuclear power installations

- Dismantled - 71 nuclear submarines;
- Prepared for storage - 9 reactor units;
- Reactor units placed for storage in the radwaste long-term storage facility at the Saida Bay;
- Radwaste long-term storage facility in the Far East under construction;
- Dismantling surface ships with nuclear power installations started in the Far East in 2007;

# SNF management activities outcomes

- 144 nuclear submarines have been defueled;
- Infrastructure has been prepared and defueling of 2 Alfa-class submarines has started;
- SNF removal to PO Mayak from the storage facility in the Far East has started;
- SNF from 139 nuclear submarines has been reprocessed at PO Mayak;
- 6 containers of SNF from FMB “Lotta” have been placed in the Atomflot on-shore storage facility;
- SNF preparation for removal to PO Mayak has started in Gremikha;
- Preparation for the Lapse vessel SNF unloading has started.

# SRW management activities outcomes

- 15.5 thousand cubic meters of SRW at the sites of the North-West and the Far East regions have been converted to environmentally safe condition;
- Solid low-level radwaste storage facility has been commissioned at FSUE “DalRAO”;
- Low- and medium-level SRW storage facility for FSUE “DalRAO” is under construction;
- Development of concept of SRW management in the North-West region is nearly completed.

# Liquid radwaste (LRW) treatment activities results

- In 2007 5.5 thousand cubic meters of LRW were reprocessed at the sites in the North-West and Far East of Russia;
- LRW treatment complex was constructed and commissioned in the Far East.

# Nuclear maintenance vessels dismantling activities results

- 6 floating tanks for LRW storage have been dismantled;
- 9 nuclear maintenance vessels have been prepared for safe storage afloat.

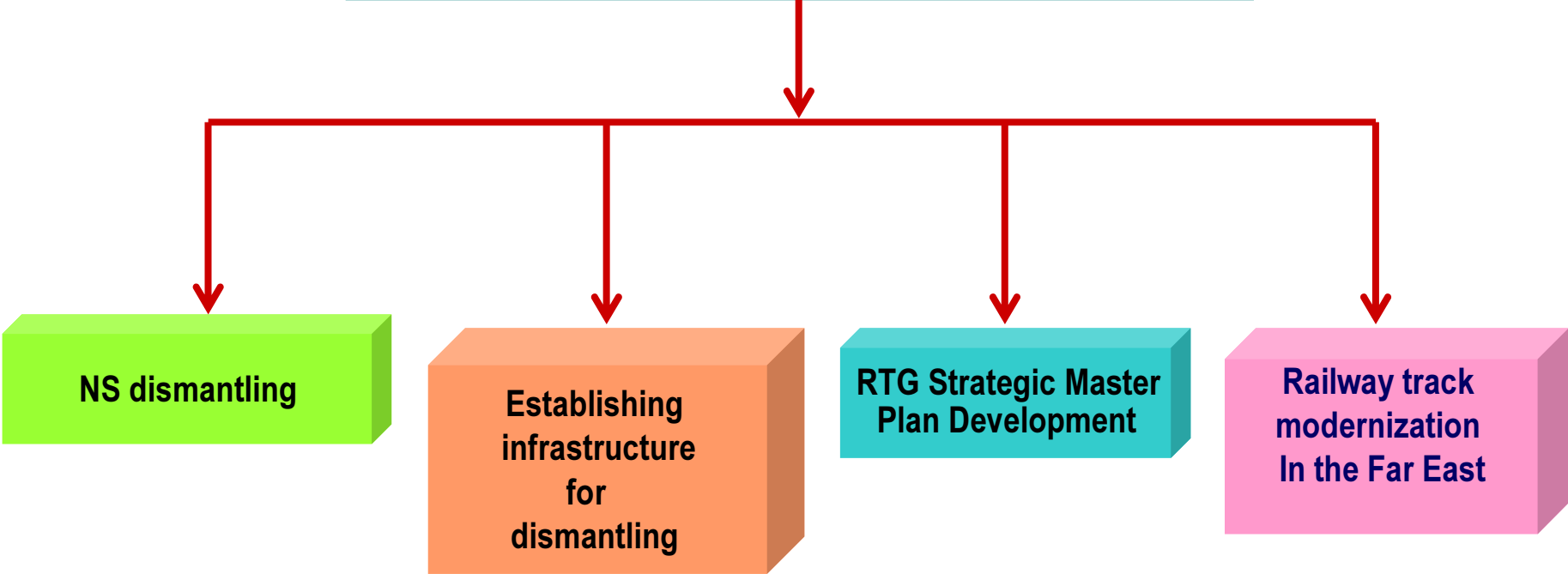
Safety assurance is implemented at the following radiation hazardous facilities:

- FSUE SevRAO sites at the Andreeva Bay, Gremikha and the Saida Bay;
- FSUE DalRAO sites at the Sysoeva Bay, the Krashennnikova Bay, Razboynik Bay;
- FSUE “Shipyard Center Zvezdochka” and its branches in the North-Western region;
- FSUE Zvezda in the Far Eastern region.

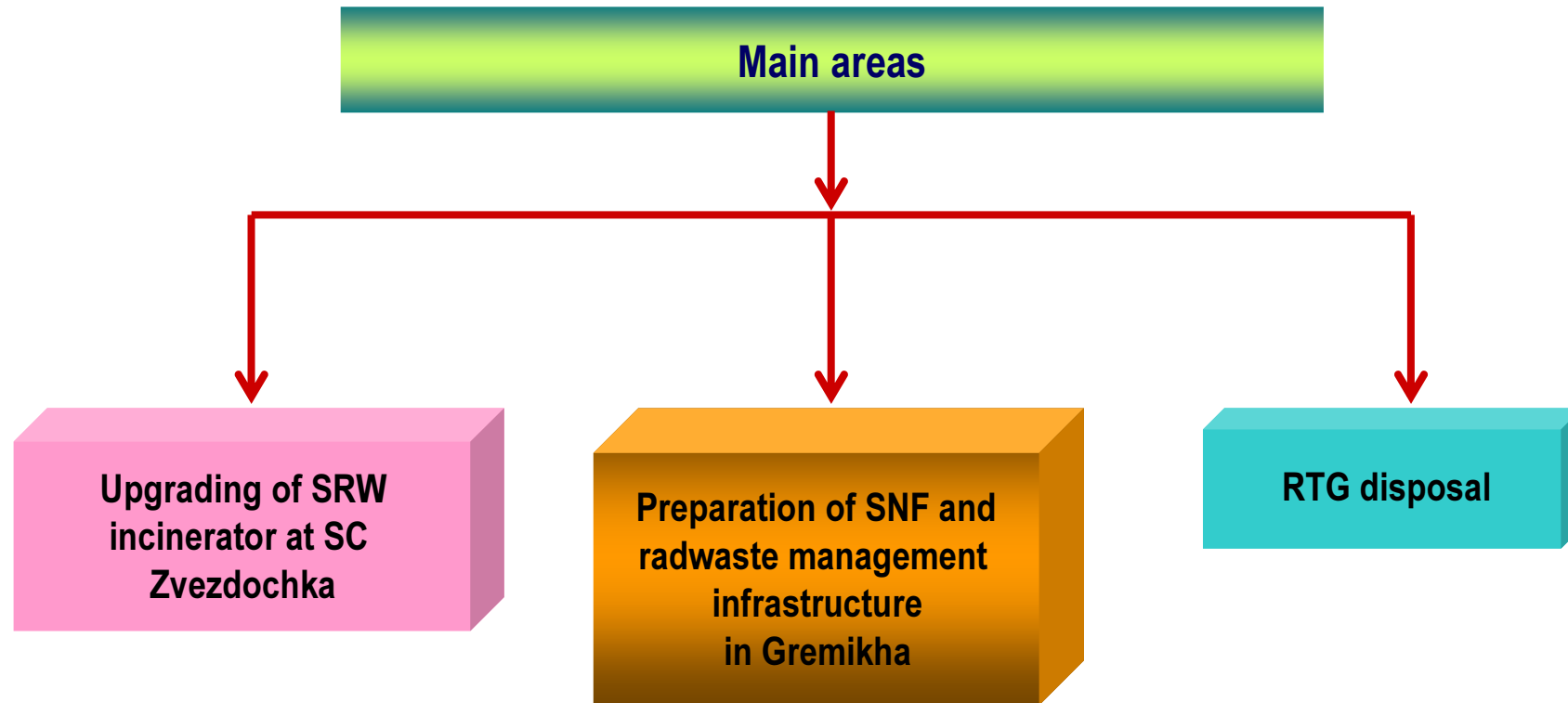
# Implementing cooperation with Canada.



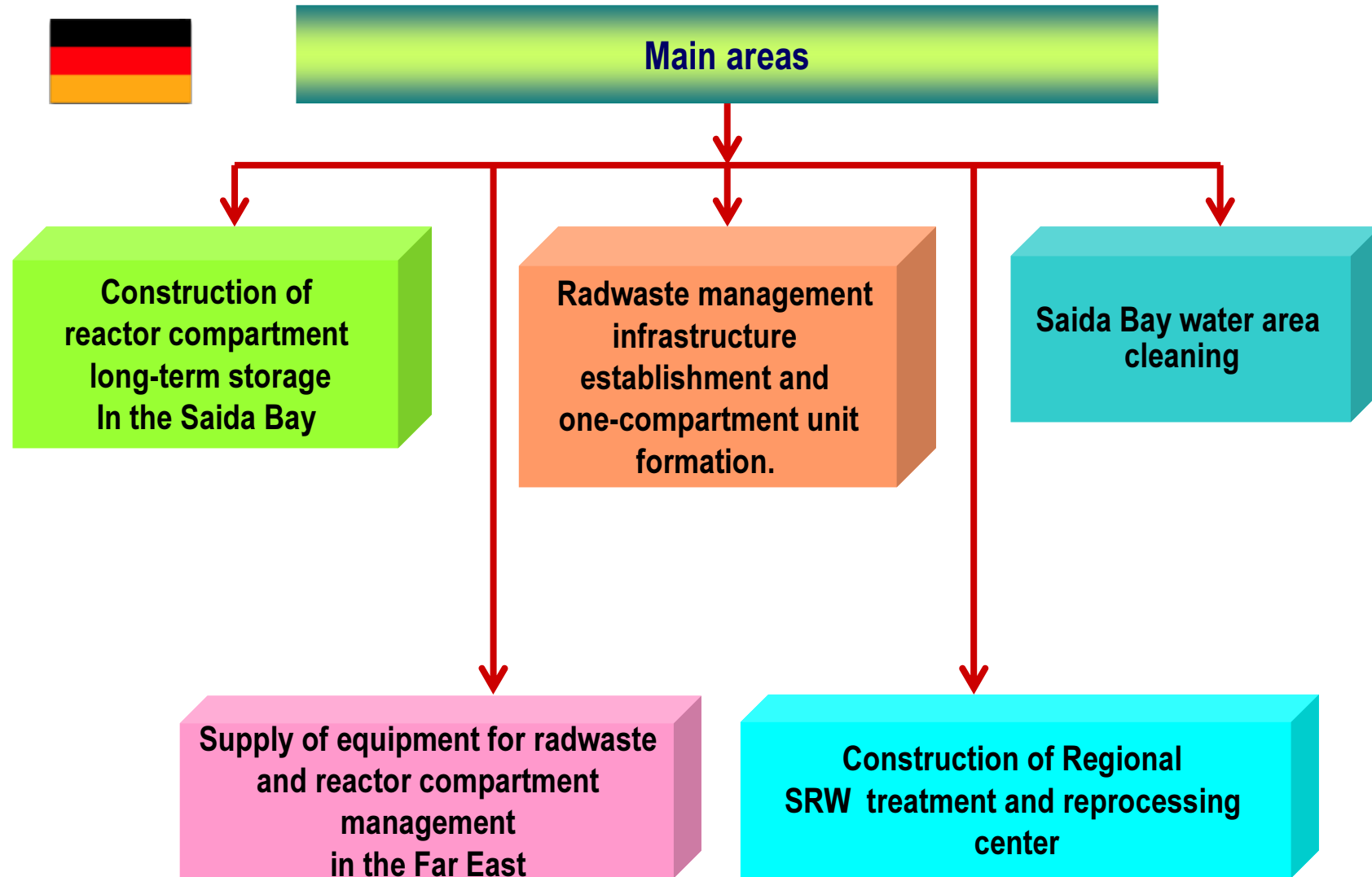
**Main areas**



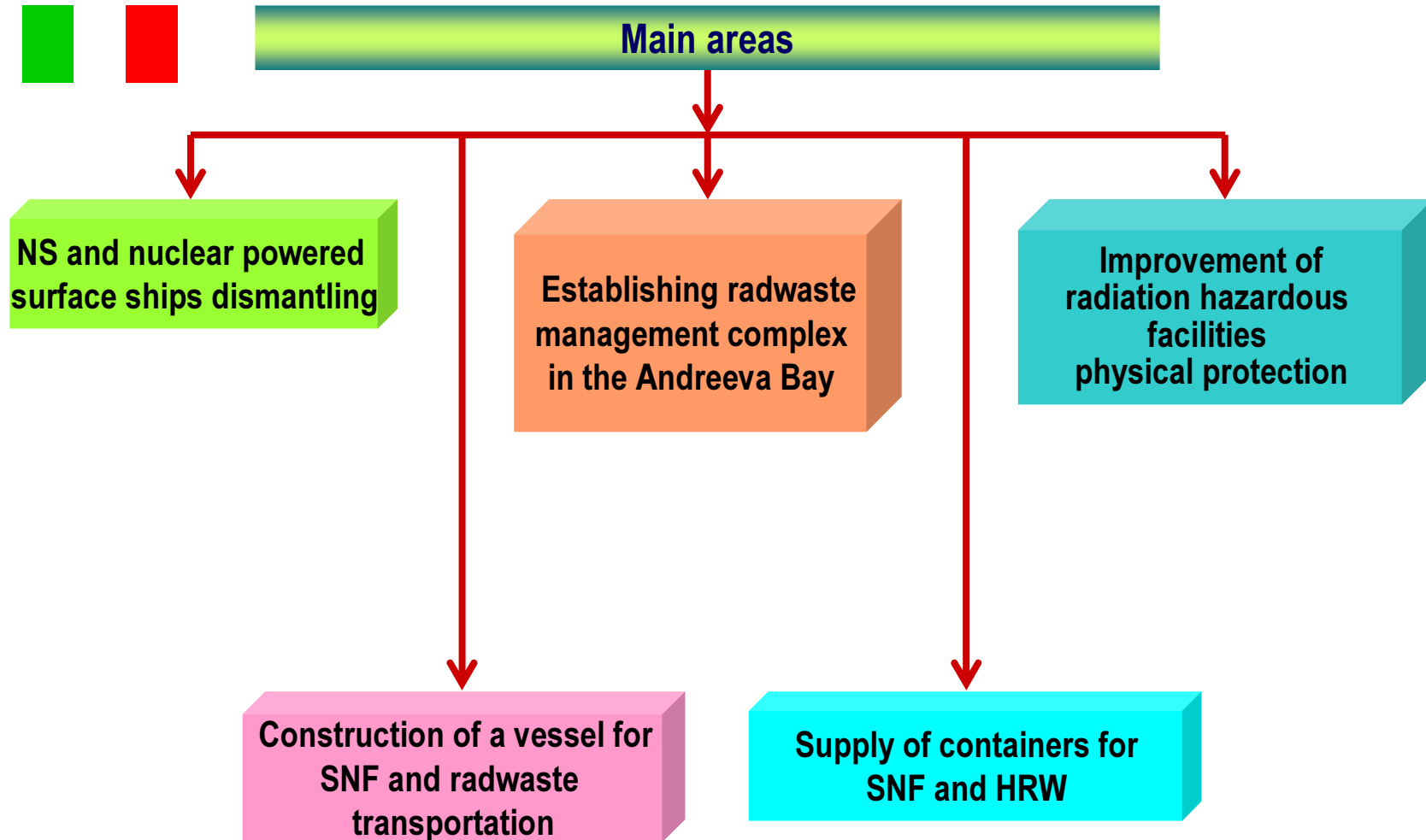
# Implementing cooperation with France.



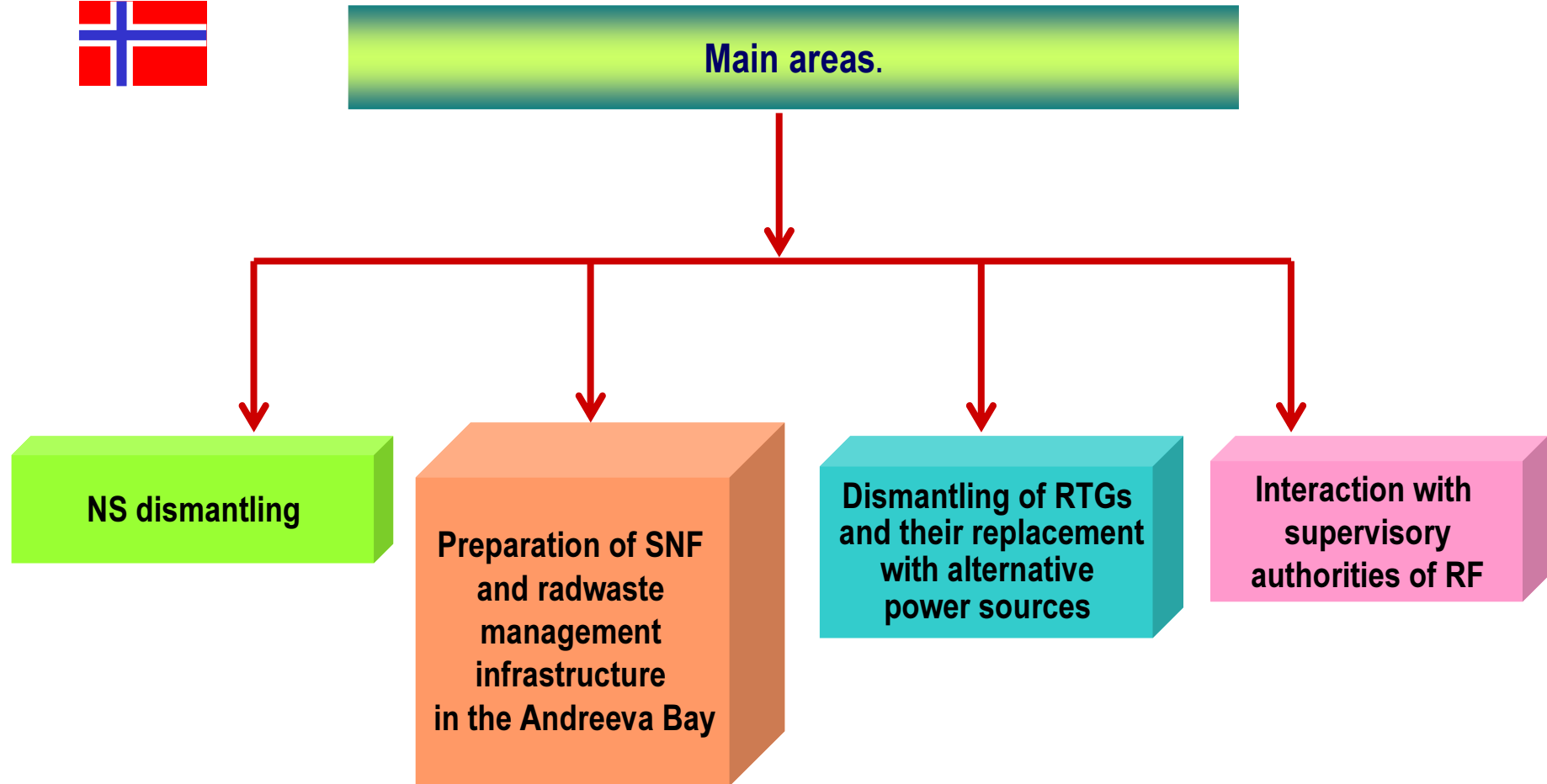
# Implementing cooperation with Germany



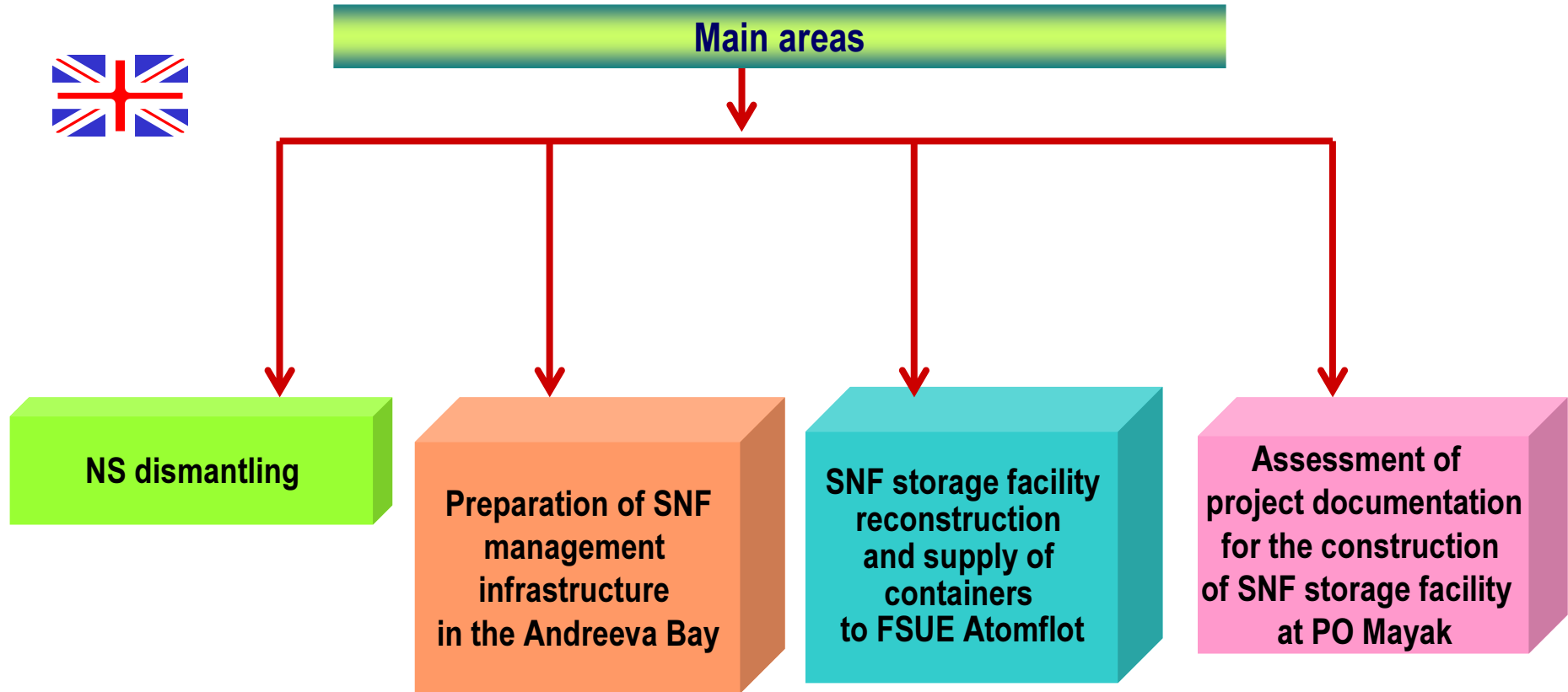
# Implementing cooperation with Italy



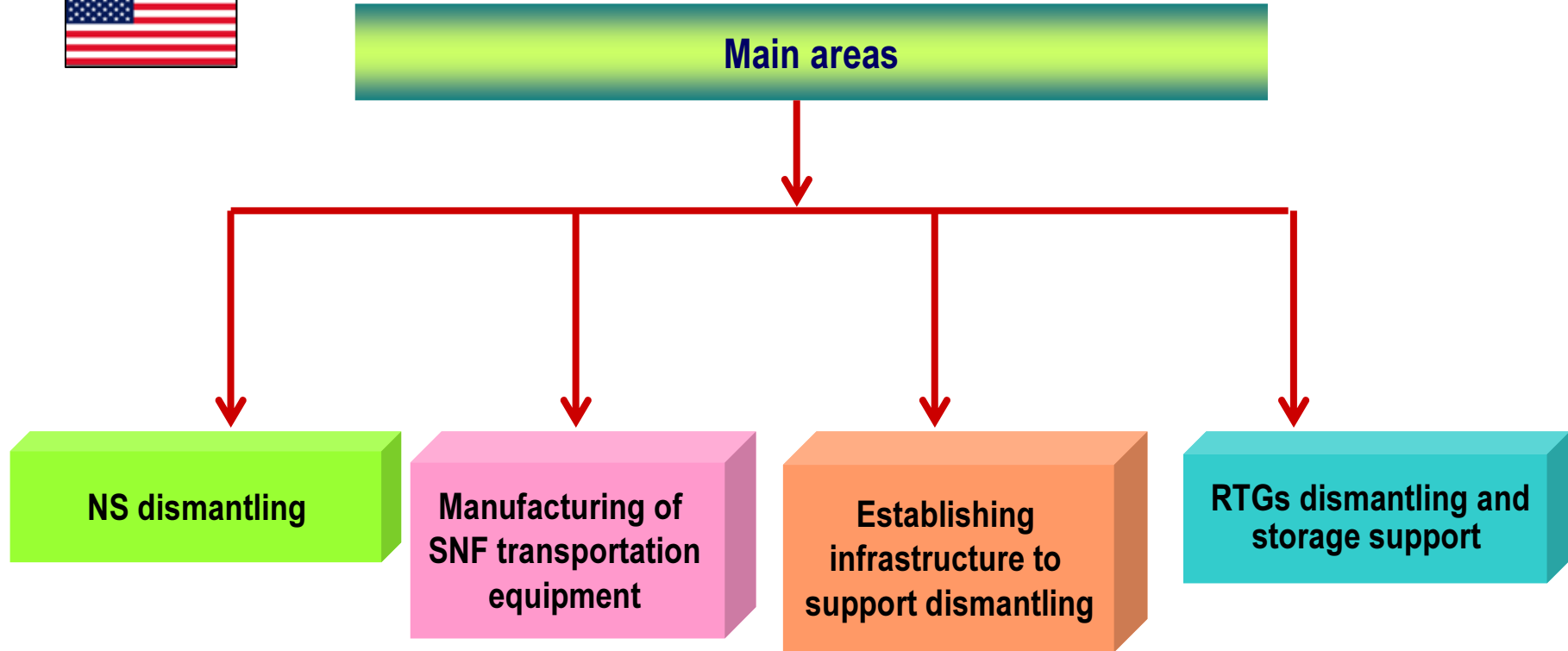
# Implementing cooperation with Norway



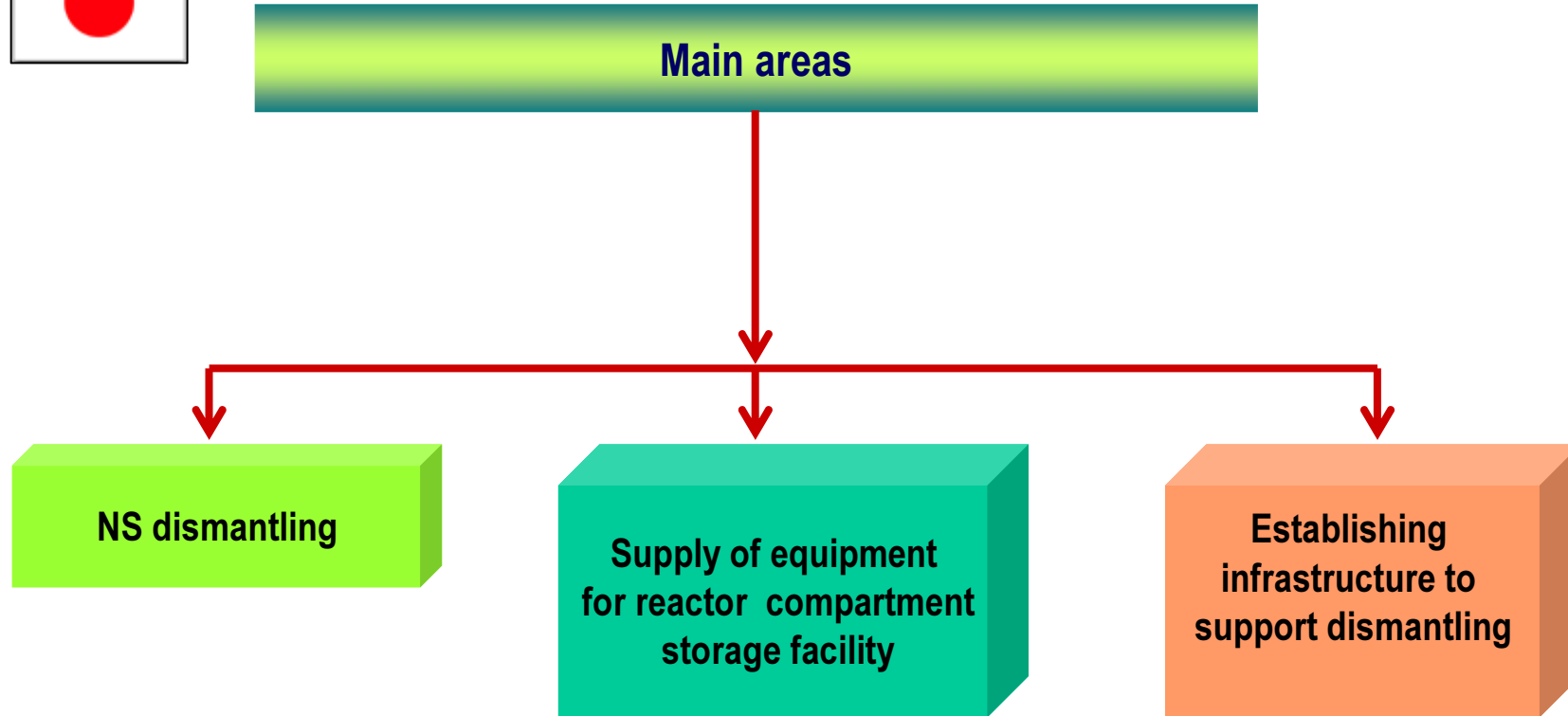
# Implementing cooperation with the United Kingdom



# Implementing cooperation with the USA.



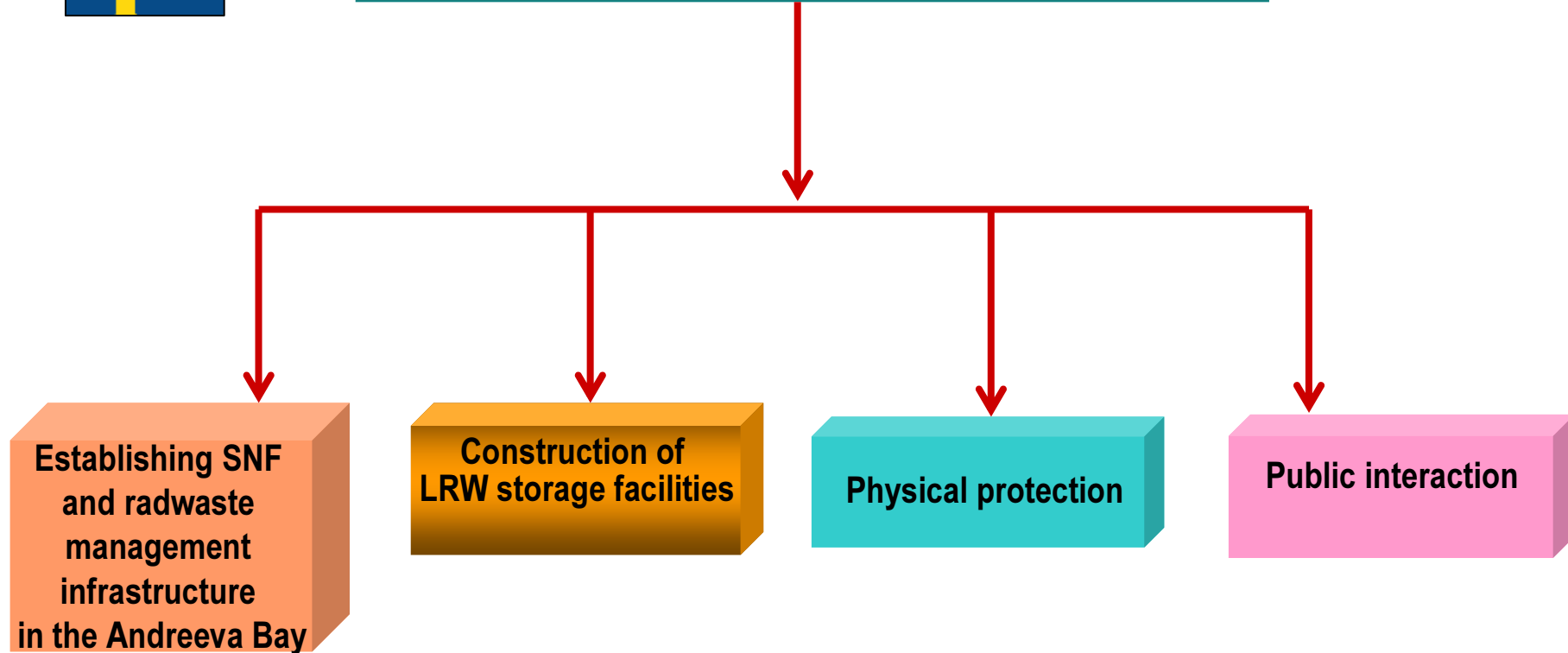
# Implementing cooperation with Japan.



# Implementing cooperation with Sweden.



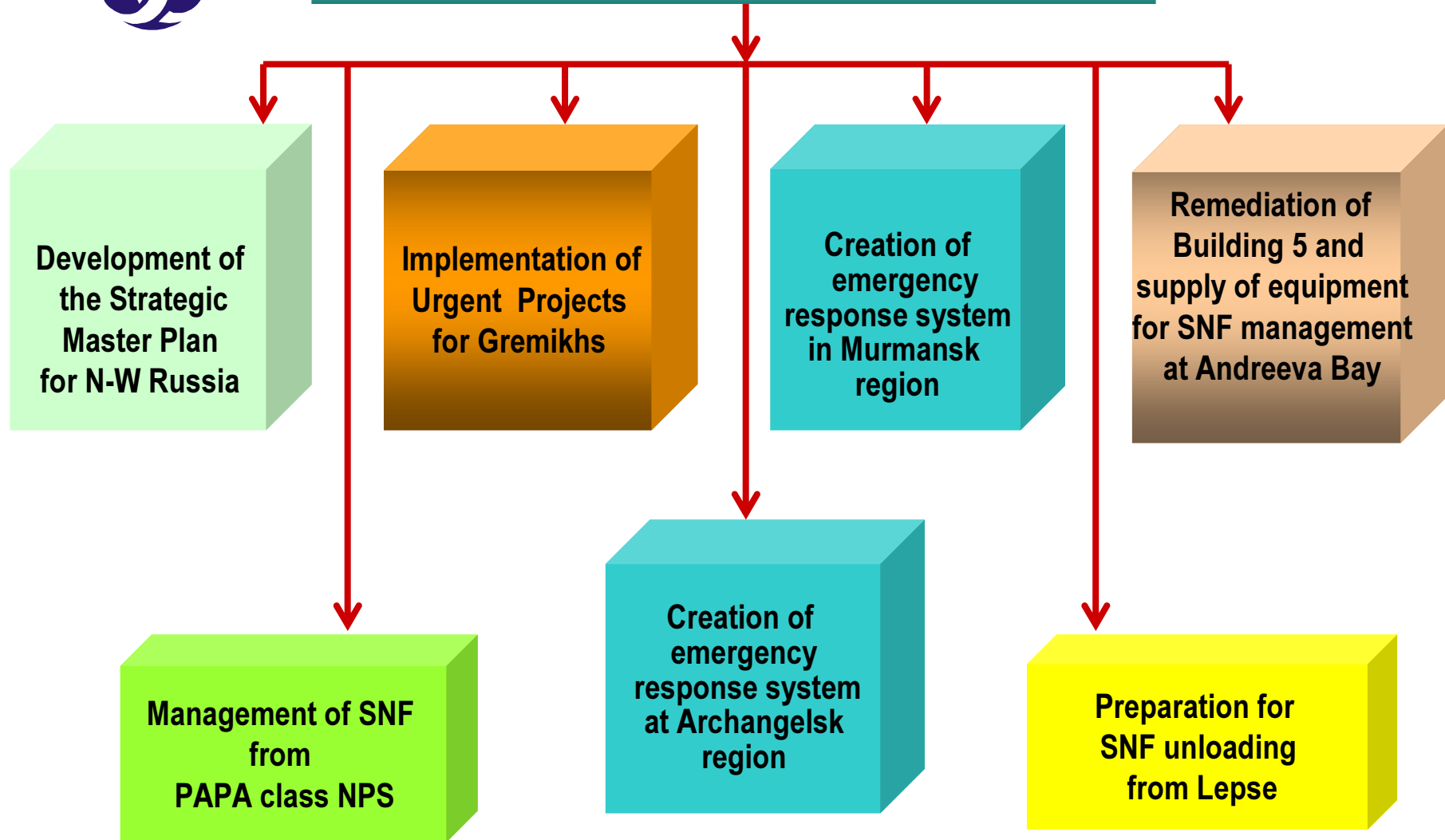
**Main areas**



# Cooperation with NDEP



## Main Activities



# Principal results of international cooperation

- Reduction of total NS dismantling period minimally by three years;
- Construction and commissioning of radwaste long-term storage facility in the North-West region of Russia (the Saida Bay). 20 reactor compartment units have been placed for storage;
- Construction and commissioning of physical protection units of SevRAO radiation hazardous facilities;
- Commissioning of non-reprocessable SNF storage facility has been commissioned at RTP Atomflot;
- Establishing and operation of emergency response system in Murmansk region;
- Construction of facility units to support safe SNF unloading and NS dismantling;
- Determination of safe technologies of SNF management in the Andreeva Bay and start of supporting unit construction;
- Development of Strategic Master Plan that enables to determine long-term prospects of the Russian North-West.

# **Assessment of current Global Partnership Program status**

1. The objectives of Global Partnership in the field of non-proliferation of weapons and materials of mass destruction will not be reached in full scope.
2. The most complex and radiation hazardous state facilities still remain under cooperative program.

# Russian Priorities of Global Partnership up to 2012

1. Completion of nuclear submarine dismantling;
2. Decommissioning of surface ships with nuclear power installations;
3. Completion of radwaste long-term storage facility construction in the Saida Bay.
4. Preparation of SNF removal from interim storage facilities in the Andreeva Bay and Gremikha;
5. Establishing SRW management complexes in the Northern region of Russia ;
6. Construction of a vessel for SNF and radwaste transportation.
7. Remediation of radiation hazardous facilities (Building No.5 in the Andreeva Bay, the Lapse vessel);
8. Development of a Strategic Master Plan for the Russian Far East.

# Issues exceeding Global Partnership frames beyond 2012.

1. Dismantling surface ships with nuclear power installations, nuclear ice-breakers and nuclear maintenance vessels.
2. Isolation of NS with damaged reactor facilities.
3. Supply of equipment and completion of on-shore reactor compartment storage facility construction in the Far East.
4. Providing for SNF removal for reprocessing from storage sites in the Sysoeva Bay, Andreeva Bay and Gremikha.
5. Construction of regional radwaste conditioning and long-term storage center in the Russian North-West and Far East.
6. Placing reactor units for storage.
7. Project development and remediation of radiation hazardous facilities in the North-West Region and in the Far East.
8. RTGs collection, transportation and disposal.