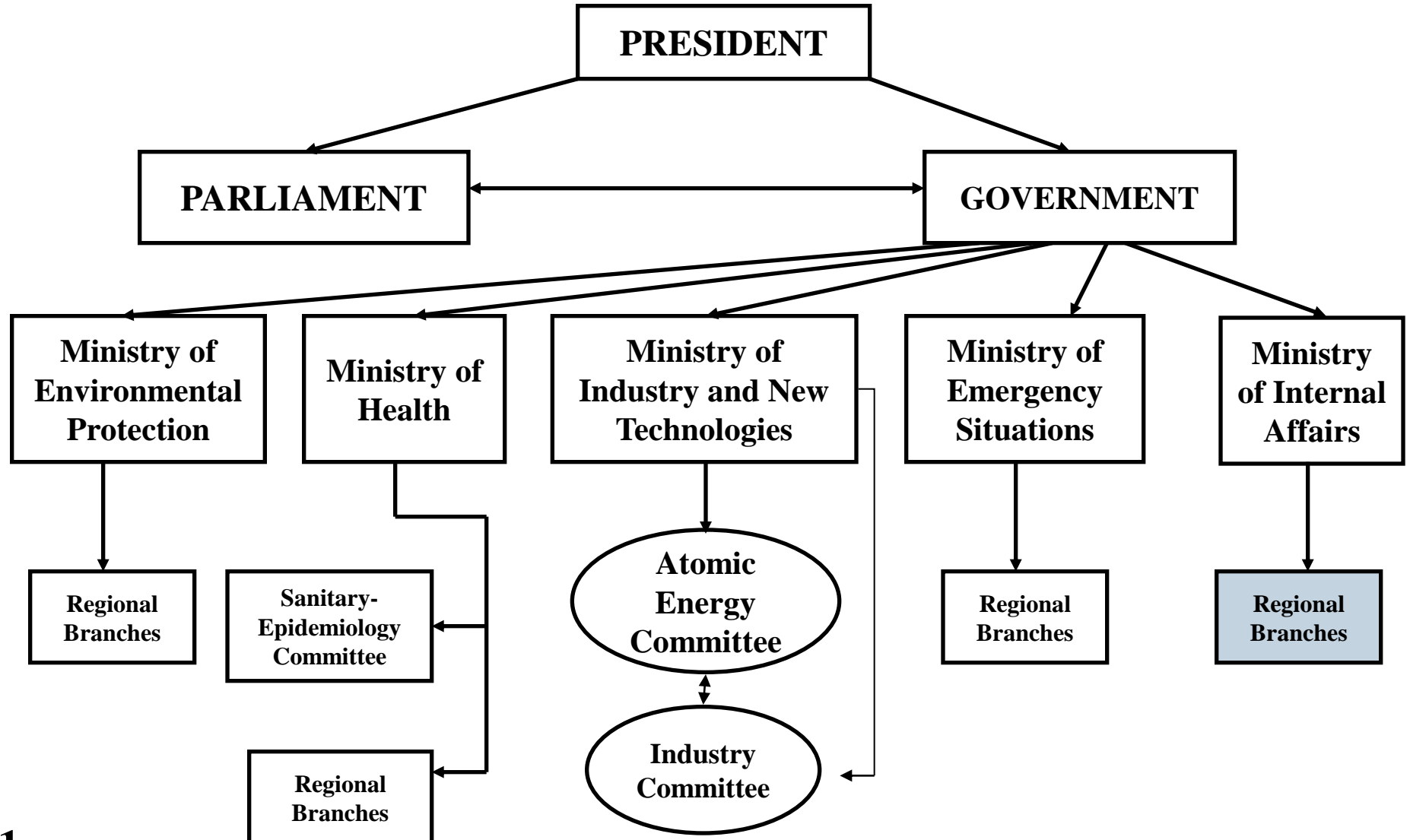


**KAZAKHSTAN ATOMIC ENERGY COMMITTEE**

**Radioactive Sources Handling in  
Kazakhstan**

S.Chelnokov

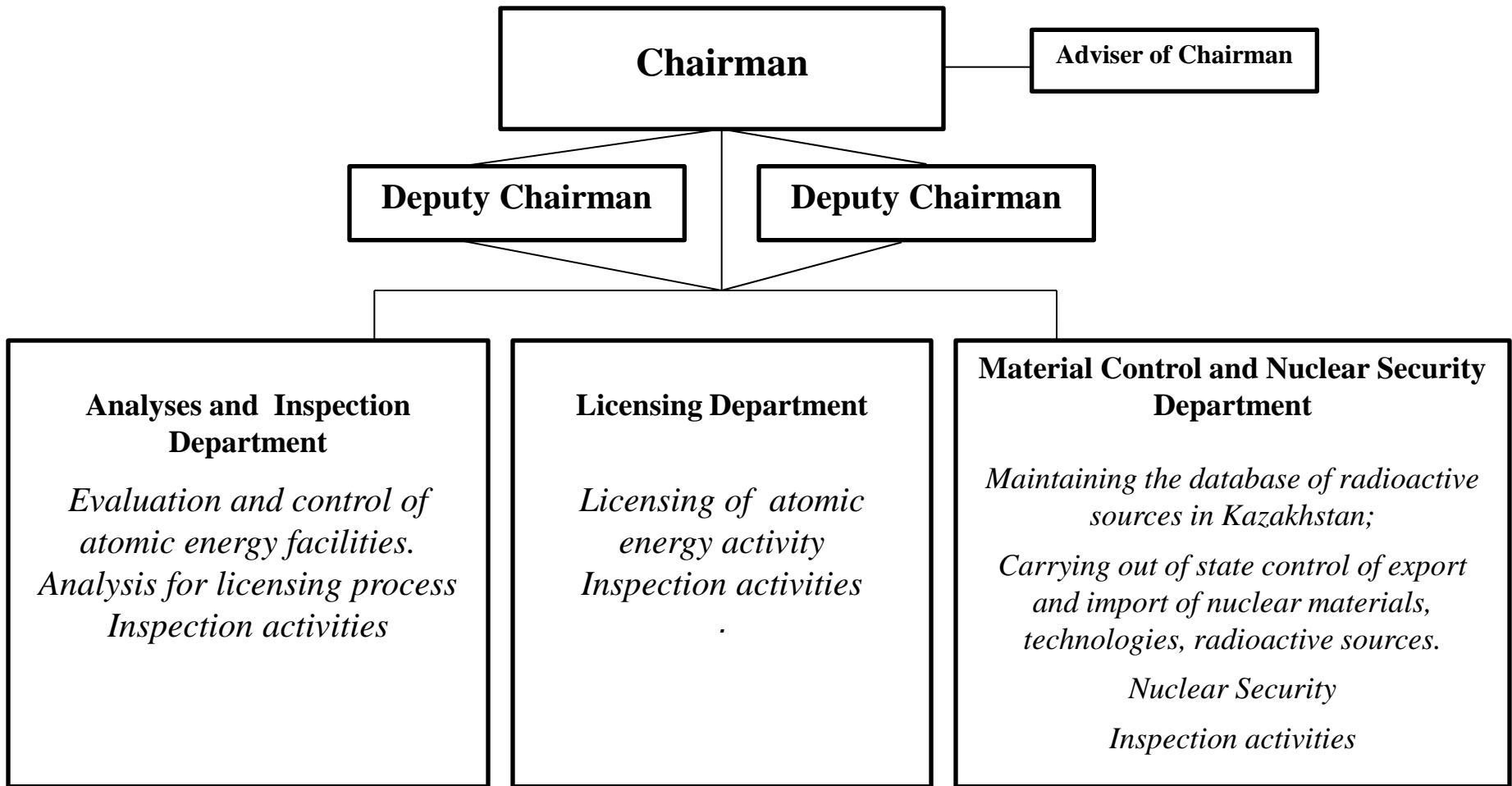
# State Structure for Atomic Energy Use



## **Kazakhstan Atomic Energy Committee (KAEC)**

is the department of the Ministry of Industry and New Technologies of Kazakhstan and as the regulatory body in Kazakhstan is responsible for supervision of nuclear and radiation safety, nuclear security and the nuclear weapon non-proliferation regime.

# Structure of KAEC



# Key Provisions of KAEC

- Setting of criteria and norms, working out regulations on nuclear and radiation safety, nuclear security, control conformity of activities to those norms and regulations by the enterprises, authorities and organisations irrespective to their types and status;
- Elaboration of proposals regarding establishment of necessary legislative and organization conditions for effective maintenance of enterprises and organizations in atomic energy sector;
- International scientific, technical, and legislative co-operation in the field of safety and security of atomic energy and nuclear technologies use.
- **Responsible for state account and control of nuclear materials, radioactive sources and their storage and use.**

# Kazakhstan Laws And Regulations

- Law of RK on Atomic Energy Use, (*under revision*)
- Law of RK on Radiation Safety of Population,
- Law on Licensing,
- The Ecological code of the Republic Kazakhstan

# Kazakhstan Laws And Regulations

- Provision on the licensing of export and import (*under revision*)
- List of production, subject of export control
- Radiation Safety Standards, NRB-99 (*under revision*);
- Basic Sanitary Rules for Radiation Safety Assurance (*under revision*),
- Regulations of licensing and qualification requirements for Activities related to usage of Atomic Energy
- Provision on the state systems of the account and the control of nuclear materials and ionizing radiation sources in Republic Kazakhstan (*under revision*)

**THE SYSTEM ACCOUNTING AND CONTROL OF  
RADIOACTIVE SOURCES MUST BE CARRIED OUT WITH  
THE PURPOSE OF**

- the available number of radioactive sources in the places of their location, storage and disposal;
- prevention of the losses, unauthorized use and plunder of radioactive sources;
- classifications of radioactive sources according to the degree of represented danger;
- control of handling, write-off and a disposal of radioactive sources;
- control of radioactive sources shipments.



# **KAEC accumulates information about radioactive sources through:**

- procedure of the licensing of the activities in the field of atomic energy use;
- procedure of the licensing of the export and import of nuclear materials and radioactive sources;
- the report forms about all radioactive sources received or transferred by the enterprises (after each operation);
- the reporting forms with the results of annual sources inventory (once a year);
- inspection activities

Main information on the radioactive sources database:

<b>Number of enterprises (objects)</b>	<b>Category (IAEA)</b>	<b>Number of sources</b>
230 (290)	1	~30
	2	~340
	3	~700
	4	~3000
	5	~5500

<b>Type of sources</b>	<b>Number of sources</b>
Sealed sources	~ 9600
Smoke detectors	~ 3000

# Management of disused sealed sources:

- The disused sealed sources are radioactive waste.
- Shelf life of disused sealed sources in organizations depository - no more than 6 months.

# Management of disused sealed sources (continue):

Procedures of moving of disused sealed sources  
to long-term storage:

- Enterprises must have:
- Prescription of Regional Branches of the Sanitary-Epidemiology Service;
- Conclusion of Atomic Energy Committee;
- Permission of Regional Branches of the Ministry of Environmental Protection;
- Agreement with specialized depository;
- Agreement with transport organization.

# Management of disused sealed sources (continue):

During transportation of the sources to long-term storage must be kept of “Rules of Safe Transportation of Radioactive materials”

# Management of disused sealed sources (continue):

- All organizations send information about termination of transportation of the sources to the Atomic Energy Committee.
- This information include to the database of the Atomic Energy Committee

# Total of the sources placed on long-term storage

<b>Depository</b>	<b>Number of sources</b>
<b>Ulba metallurgical plant (Ust-Kamenogorsk)</b>	<b>~ 116500</b>
<b>Institute of Nuclear Physics (Almaty)</b>	
<b>MAEK-Kazatomprom (Aktau)</b>	
<b>Institute of atomic energy -“Baikal-1”(Kurchatov)</b>	

## **KAEC prospects:**

New versions of :

Law of RK “On Atomic Energy Use”

“Regulation of the organization of the state systems of the account and the control of nuclear materials and ionizing radiation sources in Republic Kazakhstan”

New Requirements :

«Categorization of radioactive sources»

«Regulation for ensuring physical protection of nuclear materials and radioactive sources»



**Thank you for your attention!**

