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**Current status of NuclearPower Programme in Poland**  
*(Presentation)*

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# Current status of Nuclear Power Programme in Poland



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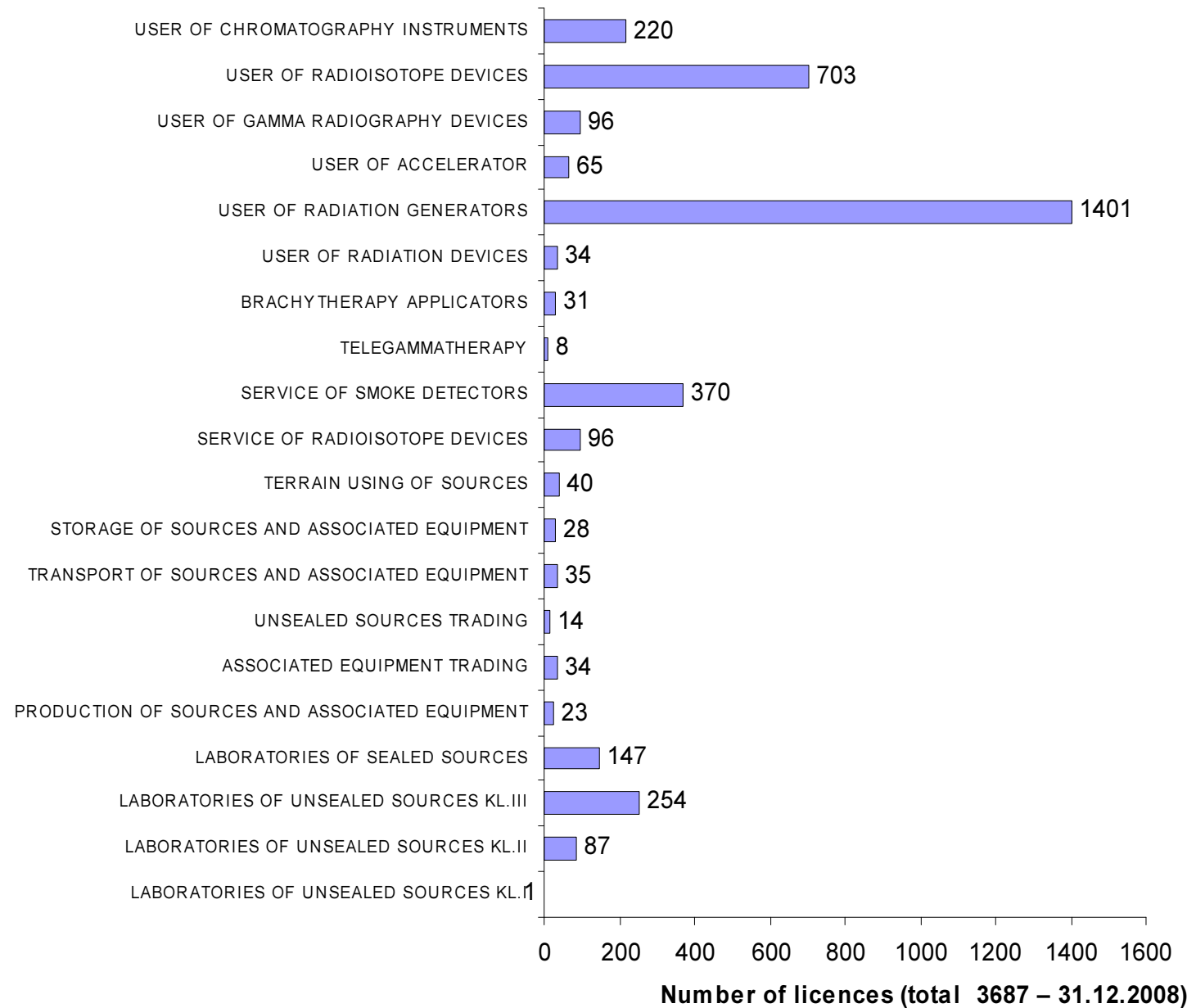
# Presentation outline

- NAEA status
- Nuclear facilities and activities in Poland
- Nuclear Programme
- Siting criteria for NPPs

# NAEA activities:

- regulatory control and supervision of radioactive sources and nuclear facilities, e.g. issuing licences, inspections;
- assessment of national radiation situation;
- Radiation Emergency Centre CEZAR (24/7);
- accountancy and control of nuclear materials;
- non-proliferation tasks;
- maintaining the Central Dose Registry;
- drafting of legal acts and implementing international guides (IAEA, WENRA) and EU regulations;
- international cooperation;

# Nuclear activities in Poland



# Nuclear facilities in Poland

Żarnowiec  
(Zharnovets)  
VVER 440

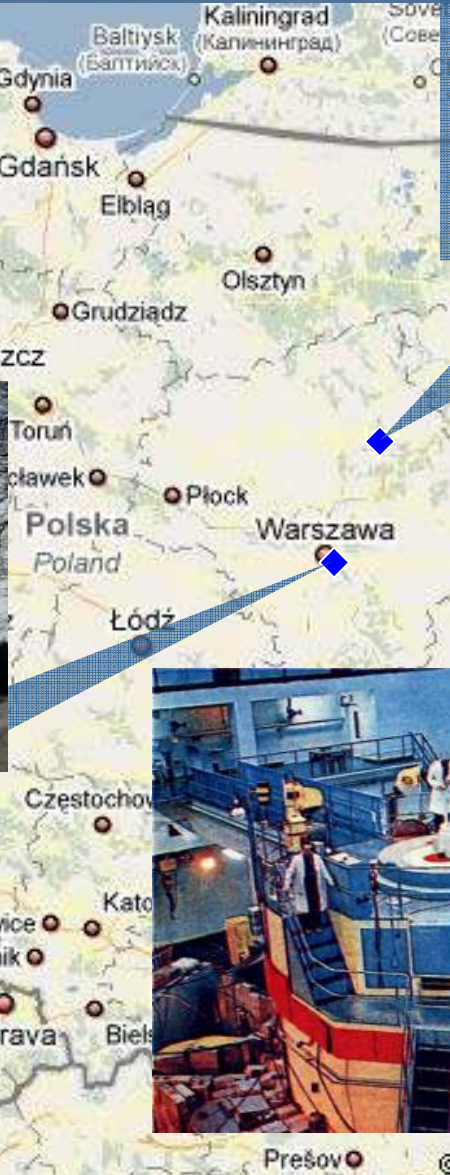
1972-1982-1990



Surface repository  
LLW/ILW  
Różan (Roozhan)



Research reactors in  
Świerk (Sverk)  
Ewa 1958/1995  
Maria 1974



# Nuclear Programme

- ❖ On January 13, 2009, the Government of Poland declared its intent to develop nuclear power in Poland.
- ❖ The Minister of Economy proposed a plan of the development of energy production in Poland up to 2030 which includes a nuclear energy component.

## Preliminary schedule:

- ❖ I    until 31.12.2010    the Polish Nuclear Power Programme preparation and approval by the Council of the Ministers (done)
- ❖ II    2011 – 2013    NPP site selection and contracting the NPP construction
- ❖ III    2014 – 2015    preparation of technical design and obtaining all required decisions and permits
- ❖ IV    2016 – 2020    construction of the first NPP

# Siting criteria

- Main external hazards in practise
  - Geotechnical – karst, bearing capacity, landslides (...)
  - Hydrological – flooding
  - Seismics
  - Strong winds



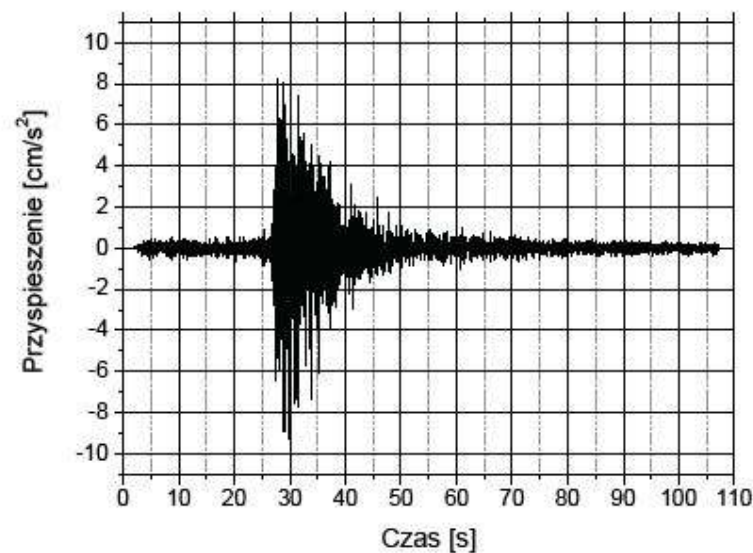




2004 event

Ryc. 2. Zapisy przyspieszeń ze stacji sejsmologicznej z Suwałk dla drugiego wstrząsu z 21 IX 2004 r. (godz. 15.32)

Fig. 2. Acceleration time history for the second quake of September 21, 2004 recorded at Suwałki seismological station (time 15.32)



Czas	$PGA_{hor}$ [cm/s <sup>2</sup> ]	$PGA_z$ [cm/s <sup>2</sup> ]	$PGV_{hor}$ [cm/s]	$PGV_z$ [cm/s]
13.05	4,3	4,7	0,2	0,1
15.32	10,2	7,0	0,5	0,3

# Main directions for the future

- Cooperation with scientific institutions
- More stress upon establishing appropriate monitoring
- Seismic siting – sharp boundary or liberal approach?

# Thank You for the attention

## References:

- Zembaty Z., Jankowski R., Cholewicki A., Szulc J., 2007, Technical Journal of Cracow Technical University
- Institute of Geophysics, Polish Academy of Sciences  
<http://www.igf.edu.pl/en/>