The Second International Conference on Risk Perception, Communication and Ethics of Exposures to Ionising Radiation (RICOMET 2016)



## THE UTILITY OF THE CONCEPT OF MENTAL MODELS RELATED TO IONIZING **RADIATION IN THE PROCESS OF THE POLISH NUCLEAR POWER PROGRAM** (PNPP) DEVELOPMENT

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After the unsuccessful attempts to construct the first NPP in Poland in the 80's, in 2009 new important govermental decisions have been made. 5 years later on 28th January 2014, the Council of Ministers has adopted the Polish nuclear power program (PNPP). PNPP schedule encomplishes several steps. Among them the stage 3, 01.01.2019 -31.12.2024,

One of very promising and potentially useful tools, which can be used in the field of communication and education about ionizing radiation (IR) is approach of mental models of radioactivity, ionizing radiation, their effects to human, and the risk associated to such radiation and possible protection against the ionizing

was formulated as follows: building permit and construction of the first unit in the first NPP; construction of subsequent units/NPP(s) to commence the first unit to start up.

NucNet Daily News in Brief / 23 February 2016

## 23.02.2016\_No37 / News in Brief

Polish Ministry Denies Reports That Nuclear Station Project Will Be Cancelled 23 Feb (NucNet): The Polish Energy Ministry has refuted claims in local media that the country's plans to build its first nuclear station are to be cancelled.

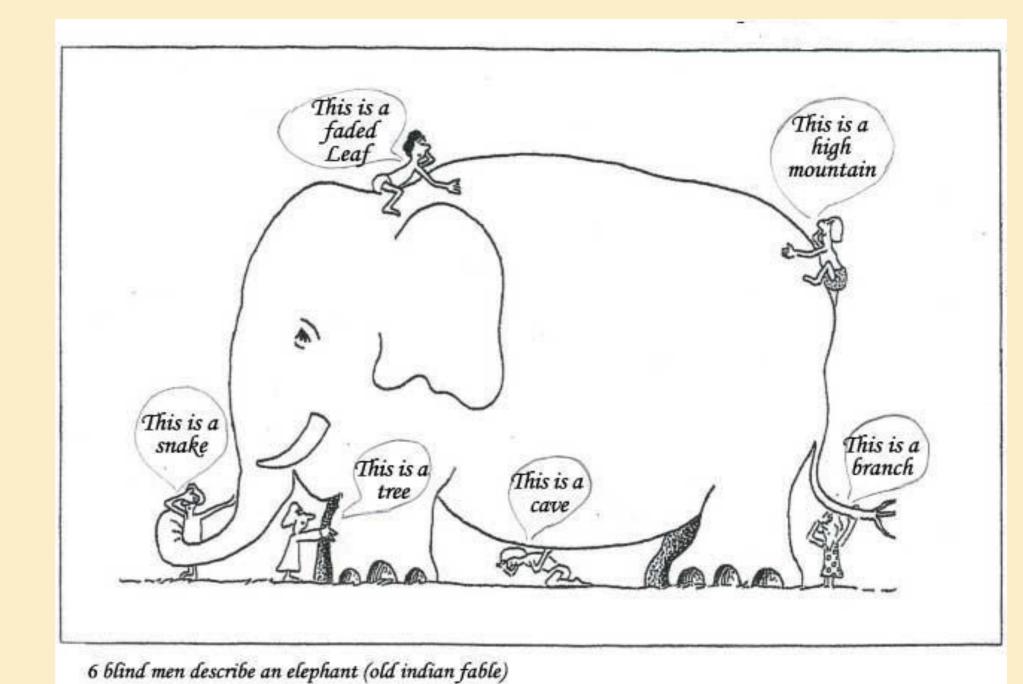
NucNet Daily News in Brief / 12 April 2016

## 12.04.2016\_No71 / News in Brief

Association Calls For Poland To Speed Up Nuclear Development 12 Apr (NucNet): Construction of nuclear power stations should be accelerated with the aim of generating up to 8,000 MW of energy from nuclear by 2030, the Association of Polish Electrical Engineers said.

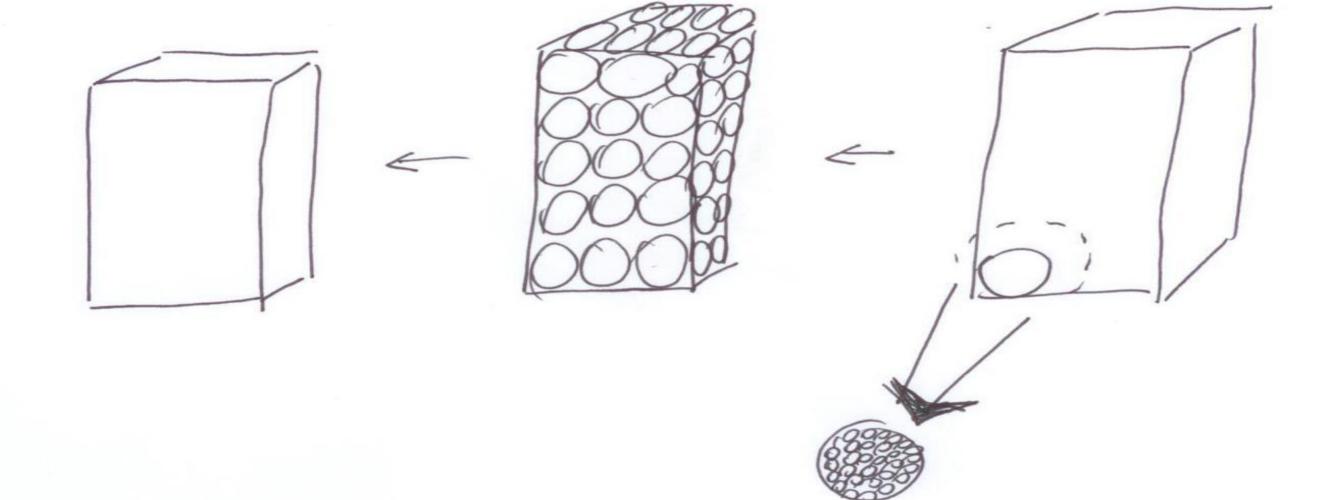
It is evident that the introduction of nuclear power into the

radiation. The models were studied on the basis of individual interviews conducted in Poland in the frame of EAGLE project (Task 3.2.).



Among many interesting answers for more than thirty questions only two in the graphic form is quoted below.

Q. 2. 1.

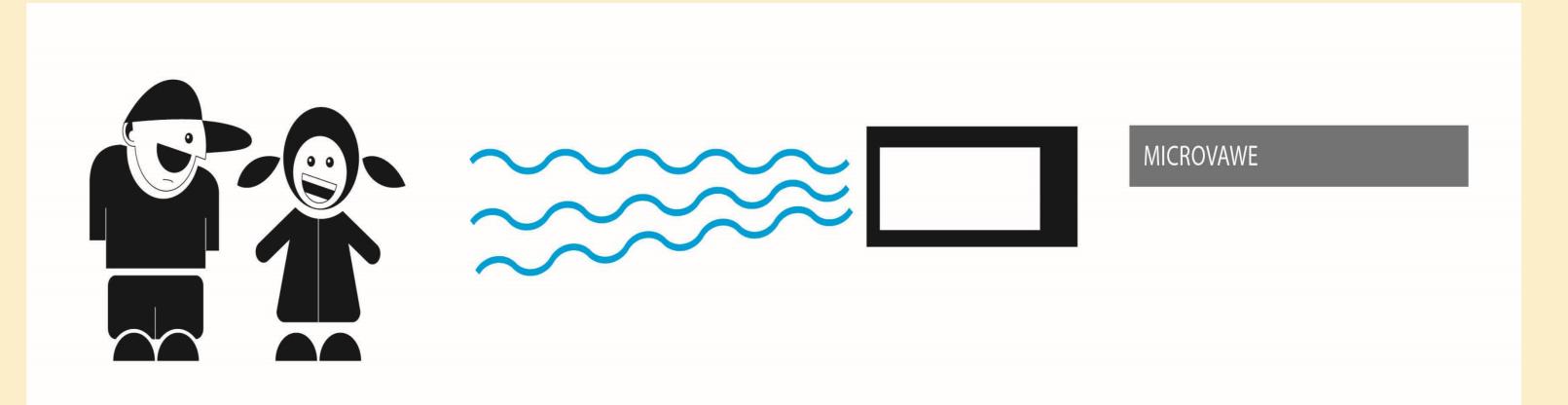


national power system requires public support. The public acceptance of PNPP can be attained by carrying out a wide information and education campaign. Ministry of Economy carried out an information campaign on nuclear energy: Meet the atom. Let's talk about Poland with energy.



The main aim of the campaign is to provide the Poles with current reliable information on nuclear power and available technologies as well as ionizing radiation.

The example of image of atom and the matter structure



The image illustrating how the IR interacts with human body. Author of the picture made a mistake showing the microwave as a source of IR.

The campaign included a number of actions making use of traditional (the press, radio, publications) as well as modern communication tools (social media, social debates). A website was launched, along with the campaign's profiles on community portals (Facebook, Twitter).

The projects supported by Euratom, like EAGLE, PLATENSO have brought essential help in development of sociallyoriented programs in the country, planning the actions that allow understanding of the necessity of nuclear energy and increase public participation.

The usability of the models was verified during the seminar with Polish stakeholders (public administration, industry, regulator, academia, R&D institutes, mass media).

In conclusion of the studies and analysis of MM, the following opinion can be formulated: even the evident limitations and imperfection of mental models exist, their careful using and analysis of results obtained can help in realization the specific actions (information, communication, education) to consolidate in public consciousness such essential concepts like ionizing radiation. This is a key factor in the process of planning and implementation of nuclear power in Poland.