



ROSATOM



STATE ATOMIC ENERGY CORPORATION «ROSATOM»

# ‘Psychological Aspect of Safety Culture: Application of the Theory of Generations for the Formation of Safety Culture among Personnel’

OECD NEA-WS ‘The nuclear and social science nexus: challenges and opportunities for speaking across the disciplinary divide’

December 12-13, Paris, France

Author(s):

Prof. Tatiana MELNITCKAIA

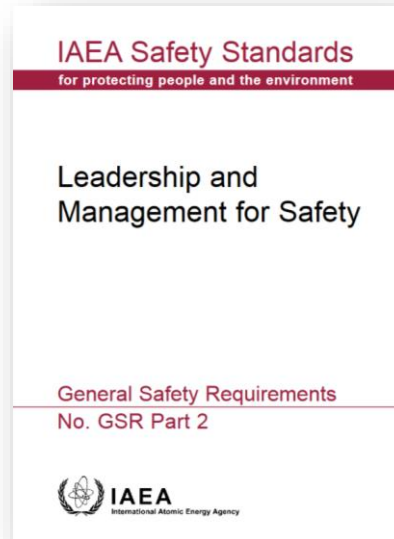
Ms. Alesia IUNIKOVA

Rosatom Technical Academy

# Leadership and Management for Safety (GSR Part 2)

3.2. Managers at all levels in the organizations taking into account their duties, shall ensure that their leadership includes:

**(b) DEVELOPMENT OF INDIVIDUAL AND INSTITUTIONAL VALUES AND EXPECTATIONS FOR SAFETY THROUGHOUT THE ORGANIZATION BY MEANS OF THEIR DECISIONS, STATEMENTS AND ACTIONS;**



## Secrets of Safety Culture Formation



Knowledge of specifics of the representatives of various generations is also the Leader's resource when fostering the new values relevant to a higher level of Safety Culture.

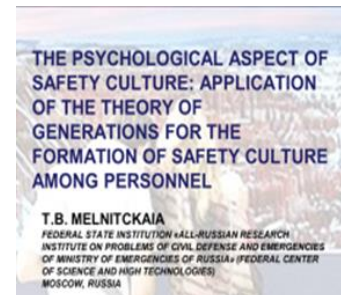
## International Conference “Human and organizational aspects of assuring nuclear safety”

22-26 February 2016, IAEA, Vienna, Austria

354 participants from 60 MSs of the IAEA

Scientific programme:

- Human and organizational factors
- Safety Culture/Culture for safety reasons
- Leadership and management for safety reasons
- Systematic approach to safety (interaction between human, technical and organizational factors)
- High reliability of organizations



## of Assuring Nuclear Safety — Exploring 30 Years of Safety Culture

Proceedings of an International Conference  
Vienna, Austria, 22–26 February 2016



*“Leaders should be aware of the peculiarities of values that are characteristics of different age groups of the personnel...”*

# The Theory of Generations

The theory of generations was developed by American scientists Mr N. Howe and Mr W. Strauss.

*Focus of their attention was the "conflict of generations", based on different values of generations, rather than age-related contradictions.*

*The Generation* is defined as an group of people who were born over a particular time range and experienced an influence of the same events and specific parenting style with similar values.



The theory of generations helps in the analysis and consideration of the staff values formed under the influence of many different factors. The development of safety culture may depend, among other things, on the age of the employees involved.

Génération  
XYZ

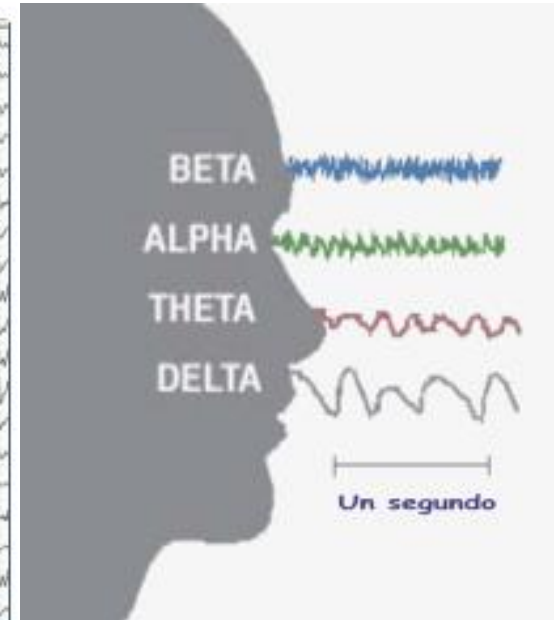
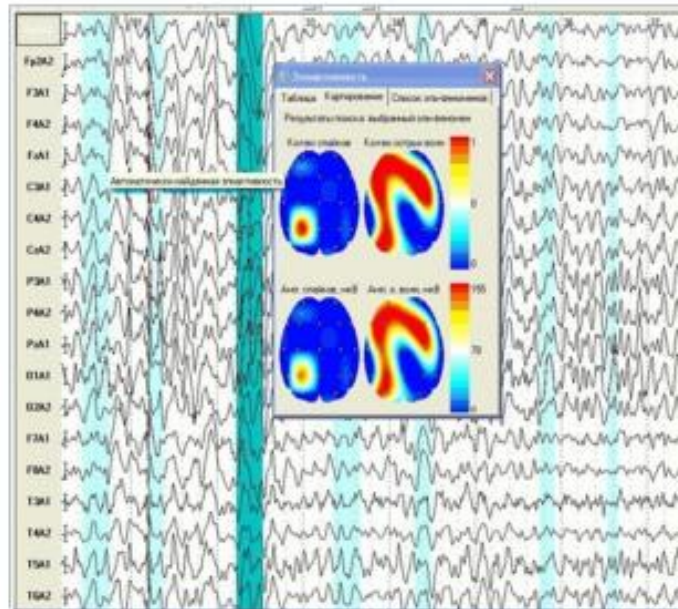
Currently three age-diverse generations are actively working in organizations:

- Baby Boomers (borne 1944-1963),
- "X" (borne 1963-1983), and
- "Y" (borne 1984-2003)



(Bruce H. Lipton, "The biology of belief", 2007)

The evolution has endowed our brain with the abilities to imprint in our memory an unthinkable variety of facts and behavior patterns. The scientists are of the opinion that the key to understanding this ability is the **electrical brain activity**.



Every second our unconsciousness processes about **20 million external stimuli per second** and over the same second the consciousness is able to process **only 40 stimuli**.

# Example: Generations Currently Work at Russian Enterprises

Currently three age-diverse generations are actively work at Russian enterprises.


**Baby Boomers** (1944-1963 years of birth)

**“X”** (1964-1983 years of birth)


**“Y”** (1984-2003 years of birth)



	2015	2025
Baby Boomers Generation (1944-1963 years of birth)	26 %	8 %
“X” Generation (1964-1983 years of birth)	45 %	39 %
“Y” Generation (1984-2003 years of birth)	29 %	49 %

# Baby Boomers Generation (1944-1963)

External Conditions for the Formation of Generation	<ul style="list-style-type: none"><li>▪ Baby boom</li><li>▪ Space exploration</li><li>▪ USSR is the world superpower</li><li>▪ “Cold War”</li><li>▪ Lines and coupons</li><li>▪ Common educational standards at schools</li><li>▪ Medical care security, etc.</li></ul>	
Values	<ul style="list-style-type: none"><li>✓ Cult of youth</li><li>✓ Responsibility</li><li>✓ Ambition to personal growth, striving to lead</li><li>✓ Personal reward and status</li><li>✓ Collectivism, Team spirit</li></ul>	
Recommendations how to motivate	<ul style="list-style-type: none"><li>✓ Propose to share the experience in the area of Safety Culture, act as mentors for the young adults</li><li>✓ Emphasize, that the work on safety culture assumes a great responsibility</li><li>✓ Provide access to the up-to-date information, latest news on safety culture</li><li>✓ Stimulate by letters of appreciation, rewards, plaques , etc.</li></ul>	

# Generation 'X' (1964-1983)

External Conditions for the Formation of Generation	<ul style="list-style-type: none"><li>▪ Continuation of the “Cold War”</li><li>▪ Perestroika</li><li>▪ Afghanistan War</li><li>▪ Drugs</li><li>▪ AIDS</li></ul>		
Values	<ul style="list-style-type: none"><li>✓ Pragmatism</li><li>✓ Existence and understanding of the rationale</li><li>✓ Individualism (self-reliance)</li><li>✓ Liberty</li><li>✓ Readiness for changes (one step ahead)</li><li>✓ Global information awareness</li><li>✓ Technical and computer competence</li><li>✓ Life-long learning (one step ahead)</li></ul>		
Recommendations how to motivate	<ul style="list-style-type: none"><li>✓ Elucidate the sense of the target, goal, certain activity and what it implies</li><li>✓ Clarify why reaching this goal is important for the employee himself, indicate its benefit</li><li>✓ Demonstrate prospects for advancement, career development</li><li>✓ Get them involved in a few projects at a time, give a chance to choose where they prefer to participate</li></ul>		

<b>External Conditions for the Formation of Generation</b>	<ul style="list-style-type: none"><li>▪ Collapse of the Soviet Union</li><li>▪ Terroristic attacks and military conflicts</li><li>▪ Crisis of 2008</li><li>▪ Mobile telephony and Internet</li><li>▪ Branding Era</li></ul>	
<b>Values</b>	<ul style="list-style-type: none"><li>✓ Individualism.</li><li>✓ Submission.</li><li>✓ Interesting work and comfort.</li><li>✓ Computer addiction.</li><li>✓ Immediate reward.</li><li>✓ Training.</li><li>✓ Competition and perspective.</li></ul>	
<b>Recommendations how to motivate</b>	<ul style="list-style-type: none"><li>✓ They need an experienced mentor.</li><li>✓ It is necessary to split up the goals set for the employees. And it is still better, if the leader assigns the tasks for a week and sometimes for a day and keeps track of the employee's performance together with the employee.</li><li>✓ It is important to hold dialogues with them through social networking websites (SC blogs).</li></ul>	

# The Issues of InterGenerational Interactions

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- We often judge the behavior of other people in accordance with **our own values**;
- The **same words have different meanings** and sometimes do not agree with the visual representations;
- We often suggest that others do something what we consider **good for ourselves**.



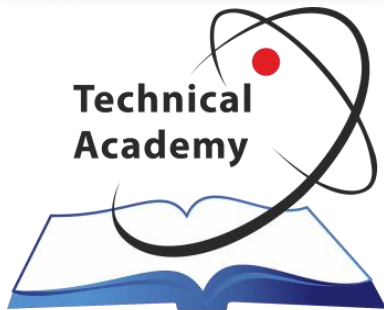
# Results of Generation 'Y' values study (1983-2003)

	ARGENTINE	ARMENIA	BANGLADESH	HUNGARY	VIETNAM	EGYPT
'Y' Generation Values	Multitasking Internet <b>Individualism</b> Short-term / immediacy	<b>Individualism</b> Subordination Interesting work and comfort Computer addiction Immediate reward Training Competitiveness and prospects	<b>Individualism</b> A new form of entrepreneursh ip (developing together with individualism)	<b>Individualism</b> Flexibility Creativity Hedonism Comfort Immediate reward	Activity <b>Individualism</b> Creativity Quick information updating Motivation	Global awareness Computer addiction Training

- *Studying the values of generations will allow to take into account national aspects when fostering a safety culture in different countries developing nuclear power engineering.*
- *For the effective management of age-diverse personnel the leaders need to understand how to communicate with a certain employee with regard to their values and beliefs that will allow the problems of intergenerational interaction to be minimized.*
- *When fostering more progressive organizational norms and values among the personnel, it should be taken into considerations how they correlate with the real-world beliefs and values of different generations.*



# Thank you for Your Attention!



Technical  
Academy

Rosatom Tech

**Ms Alesia IUNIKOVA**

Head of the Project Office

Rosatom Technical Academy

[AVIunikova@rosatomtech.ru](mailto:AVIunikova@rosatomtech.ru)

+7 910 594 6789

**Спасибо!**  
**(Spasibo!)**  
**Thank You!**