Nexus between Nuclear Safety and Nuclear Security

Developing a Comprehensive Security Culture
Chemical, Biological, Radiological and Nuclear (CBRN)
Threat and Responses
8 October 2013, Vienna, Austria

IAEA

- Protect people and environment from harmful effects of ionizing radiation caused by:

  – Operational incidents/accidents, natural phenomena, unintentional human errors (safety)

  – Sabotage against materials and facilities, unauthorized removal and subsequent malicious use of materials (security)
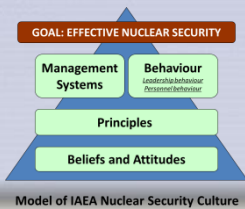
International background

- **CPPNM amendment Fundamental Principle F**

"All organizations involved in implementing physical protection should give due priority to the security culture; to its development and maintenance necessary to ensure its effective implementation in the entire organization."

- **Code of Conduct on the Safety and Security of Radioactive Sources (2003)**

The Summit 2010 in Washington DC, USA:

underlined the importance of NSC:

"Participating States will work to promote and sustain strong nuclear security culture"

The Summit 2012 in Seoul, Republic of Korea:

- Underlined that investment in human capacity building is fundamental to promoting and sustaining a strong <u>nuclear security culture</u>

- Encouraged governments, regulatory bodies, industry, academia, nongovernmental organizations and the media, to fully commit to enhancing <u>security culture</u>

- Welcomed the effort by IAEA to share experience and lessons learned and to optimize available resources

- Encouraged States to promote a <u>security culture</u> that emphasizes the need to protect nuclear security related information
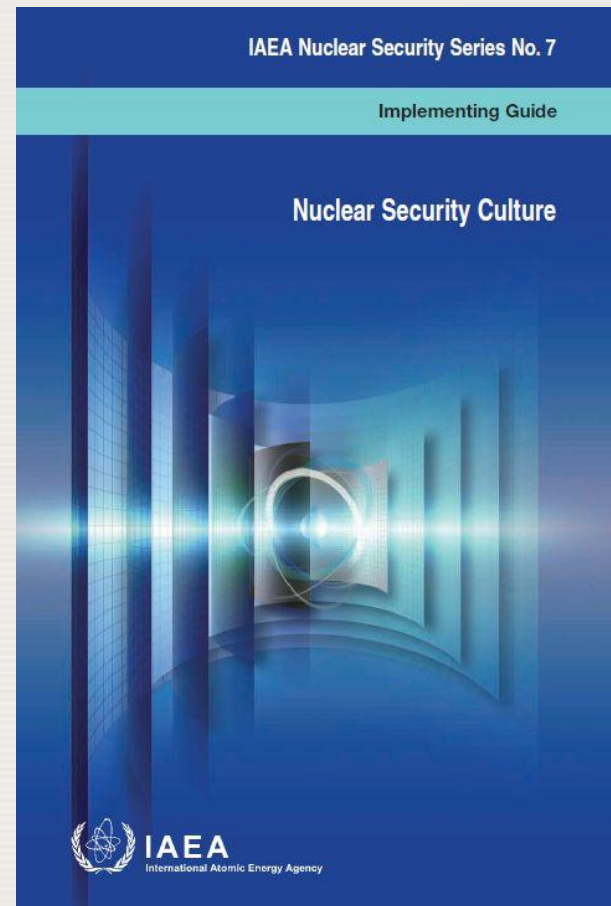

2012 Seoul Nuclear Security Summit

Nuclear security culture

- NSS No.7.

"The assembly of characteristics, attitudes and behaviour of individuals, organization and institutions, which serves as a means to support and enhance nuclear security"

IAEA Nuclear Security Culture Model

GOAL: EFFECTIVE NUCLEAR SECURITY

Management Systems

Behaviour
Leadership behaviour
Personnel behaviour

Principles

Beliefs and Attitudes

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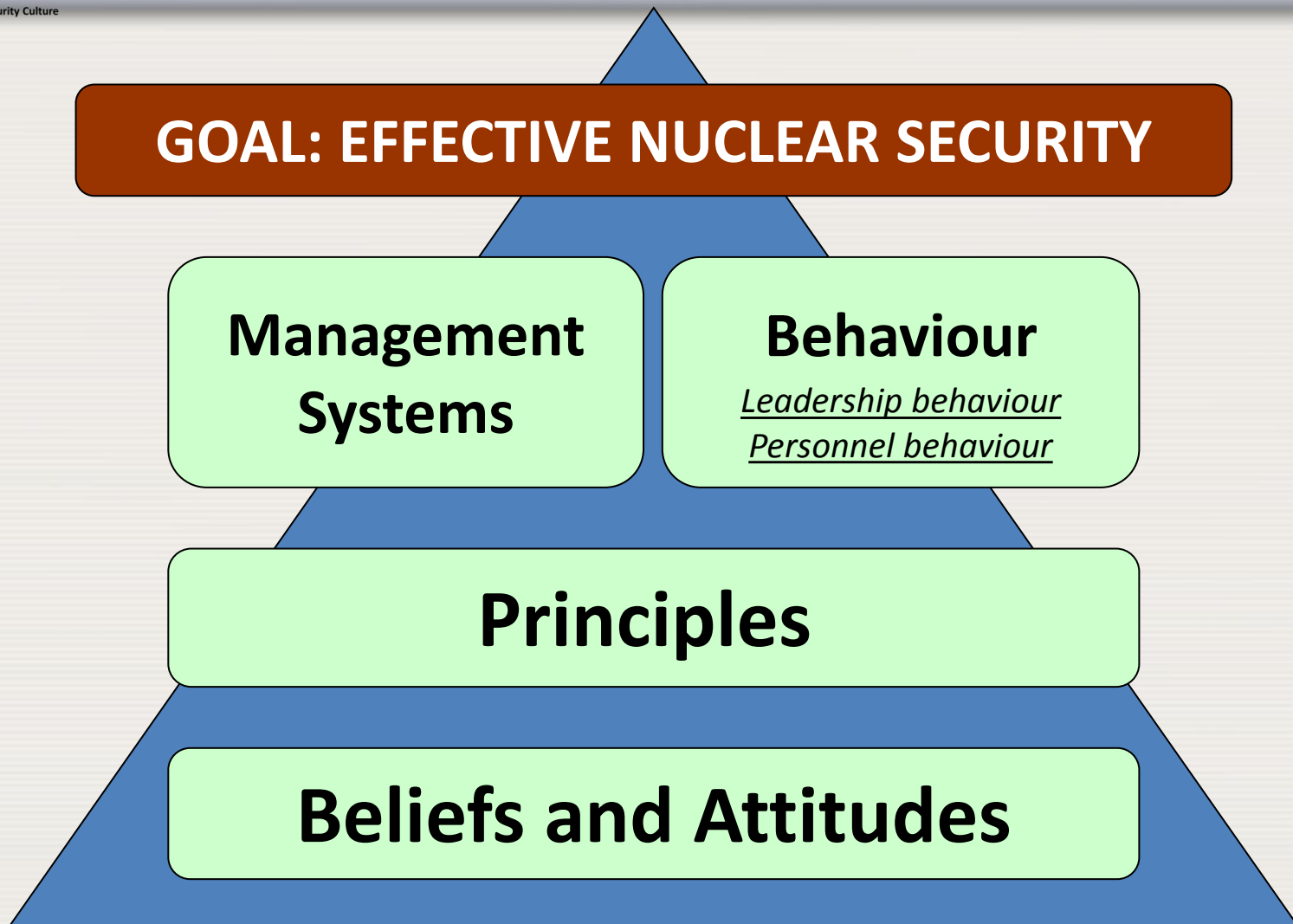# Beliefs and attitudes

GOAL: EFFECTIVE NUCLEAR SECURITY
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Beliefs and Attitudes
Model of IAEA Nuclear Security Culture

1) Credible threat exists;

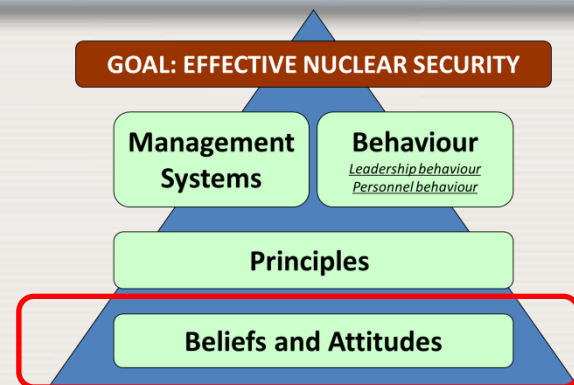2) Nuclear security is important

GOAL: EFFECTIVE NUCLEAR SECURITY

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**Model of IAEA Nuclear Security Culture**

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Principles for guiding decisions and behaviour

1) Motivation

2) Leadership

3) Commitment and responsibility

4) Professionalism and competence

5) Learning and improvement

GOAL: EFFECTIVE NUCLEAR SECURITY

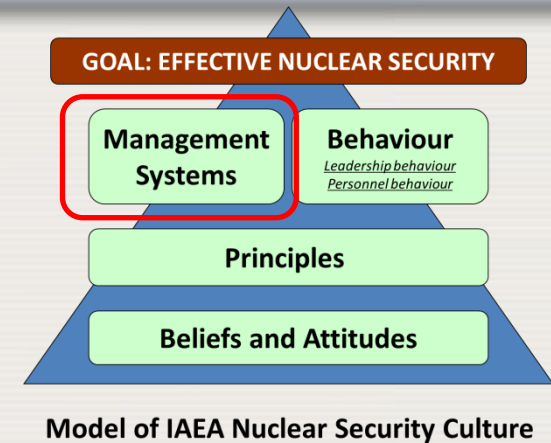| Management Systems	Behaviour
	Leadership behaviour
	Personnel behaviour

Principles

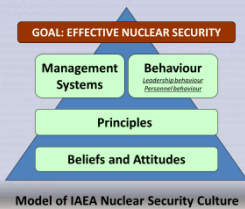**Beliefs and Attitudes**
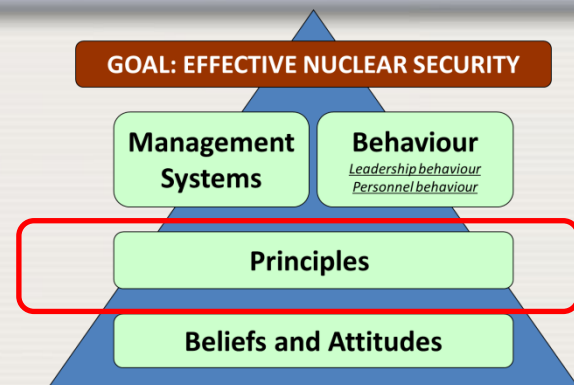
Model of IAEA Nuclear Security Culture
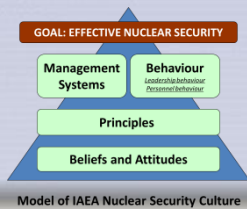
Management systems (1-9)
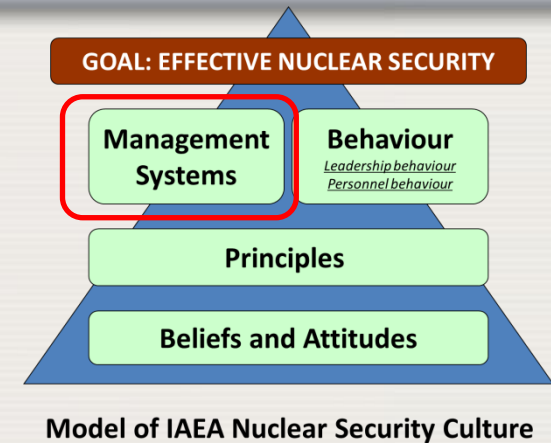
1) Visible security policy
2) Clear roles and responsibilities
3) Performance measurement
4) Work environment
5) Training and qualification
6) Work management
7) Information security
8) Operations and maintenance
9) Determination of trustworthiness

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Management systems (10-17)

10) Quality assurance

11) Change management

12) Feedback process

13) Contingency plans and drills

14) Self-assessment

15) Interface with the regulator

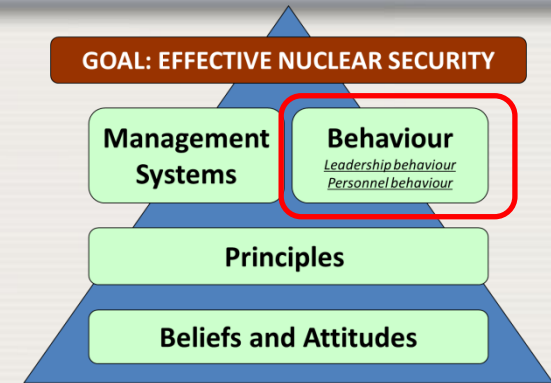16) Coordination with off-site organizations

17) Record keeping

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Leadership behaviour (8)

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1) Expectations

2) Use of authority

3) Decision making

4) Management oversight

5) Involvement of staff

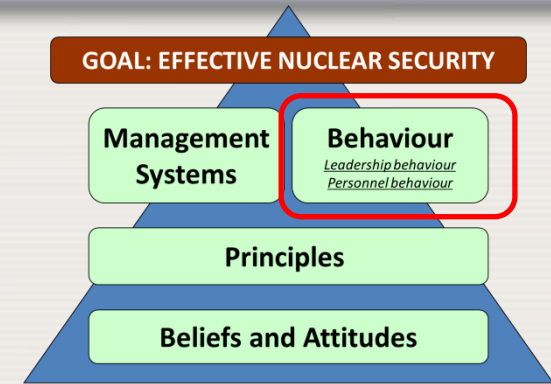6) Effective communications

7) Improving performance

8) Motivation

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Personnel behaviour (5)

1) Professional conduct
2) Personal accountability
3) Adherence to procedures
4) Teamwork and cooperation
5) Vigilance

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Model of IAEA Nuclear Security Culture

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- Principal shared objective of Nuclear Security and Nuclear Safety:

the protection of people, society and the environment

from harmful consequences of a nuclear event
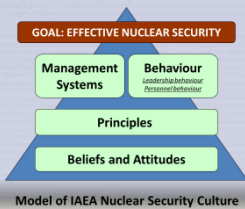
Goal: Effective nuclear safety and security

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Security & Safety culture

- Same aim in protection public and environment

- Sometimes the two cultures conflict

- Coordination mechanism is required
  - At legislative, requirement level
  - Responsibilities at regulatory level (licensing, inspections)
  - At operator level

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Any Question?

Thank you for your attention!