



Korea Perspective for APSN

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Dr. Kwan-Kyoo CHOE

Korea Institute of Nuclear Non-proliferation and Control (KINAC)

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1. Global Movement and Korea Activities for Nuclear Nonproliferation - 1

❑ Strengthened Efforts for Nuclear Nonproliferation

- USA NPR Declaration (April 6, '10)
- Signing of START II at Prague (April 8, '10)
- Nuclear Security Summit at Washington, DC (April 12~13, '10)
- 2010 NPT Review Meeting at New York (May 3 ~21, '10)

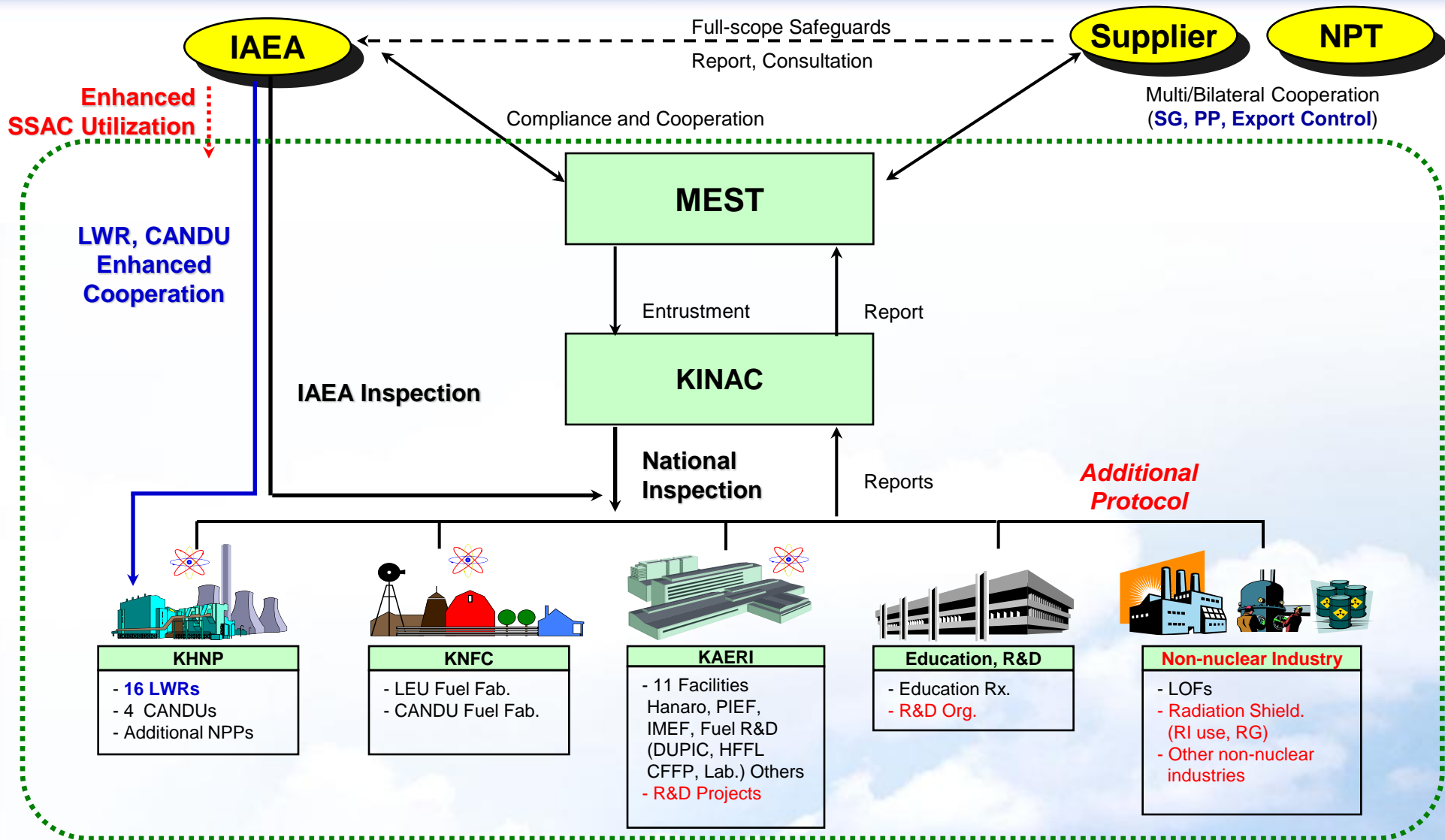
❑ Nuclear Renaissance and Nuclear Nonproliferation

- NGSF Conferences of the USA in association with its harmonization meetings
 - Technology, Infrastructure, Human Resources Development
- IAEA's Infrastructure Development Efforts
 - TM/WS Topical Issues on Infrastructure Development: Managing the Development of National Infrastructure for Nuclear Power (Vienna, Feb. 9 ~12, '10)
 - Int'l Conference on HRD for Introducing and Expanding Nuclear Power Programmes (Abu Dhabi March 14~18, '10)

1. Global Movement and Korea Activities for Nuclear Nonproliferation - 2

- ❑ **Active Engagement of the Rep. of Korea (ROK) to the Global Nuclear Nonproliferation Movement**
 - Unique country in Northeast Asia, Pursuing of its Country's Denuclearization Policy
 - Declaration of Denuclearization of the Korean Peninsula('92)
 - Declaration of '4 Principles for Peaceful Uses of Nuclear Energy'(2004)
 - Host for the 2nd Nuclear Security Summit in 2012
 - Launching for Establishment and Operation of International Education and Training Center for Nuclear Security
- ❑ **KINAC's Activities**
 - Constant and Sound Implementing Activities on SG, EC, PP
 - HRD Program Application through USA/Korea PCG Meeting
 - Supports for UAE in connection with SSAC as well as Nuclear Control System Setting

Safeguards Implementation - 1





□ IAEA Inspection

- 36 MBAs (Nuclear Power Plant 20 units, KAERI, etc.)
- 202 PDIs(2009), while 343 PDIs (2008) and 460(2007)
cf. PDI means Person-Day-Inspection

□ National Inspection (SSAC)

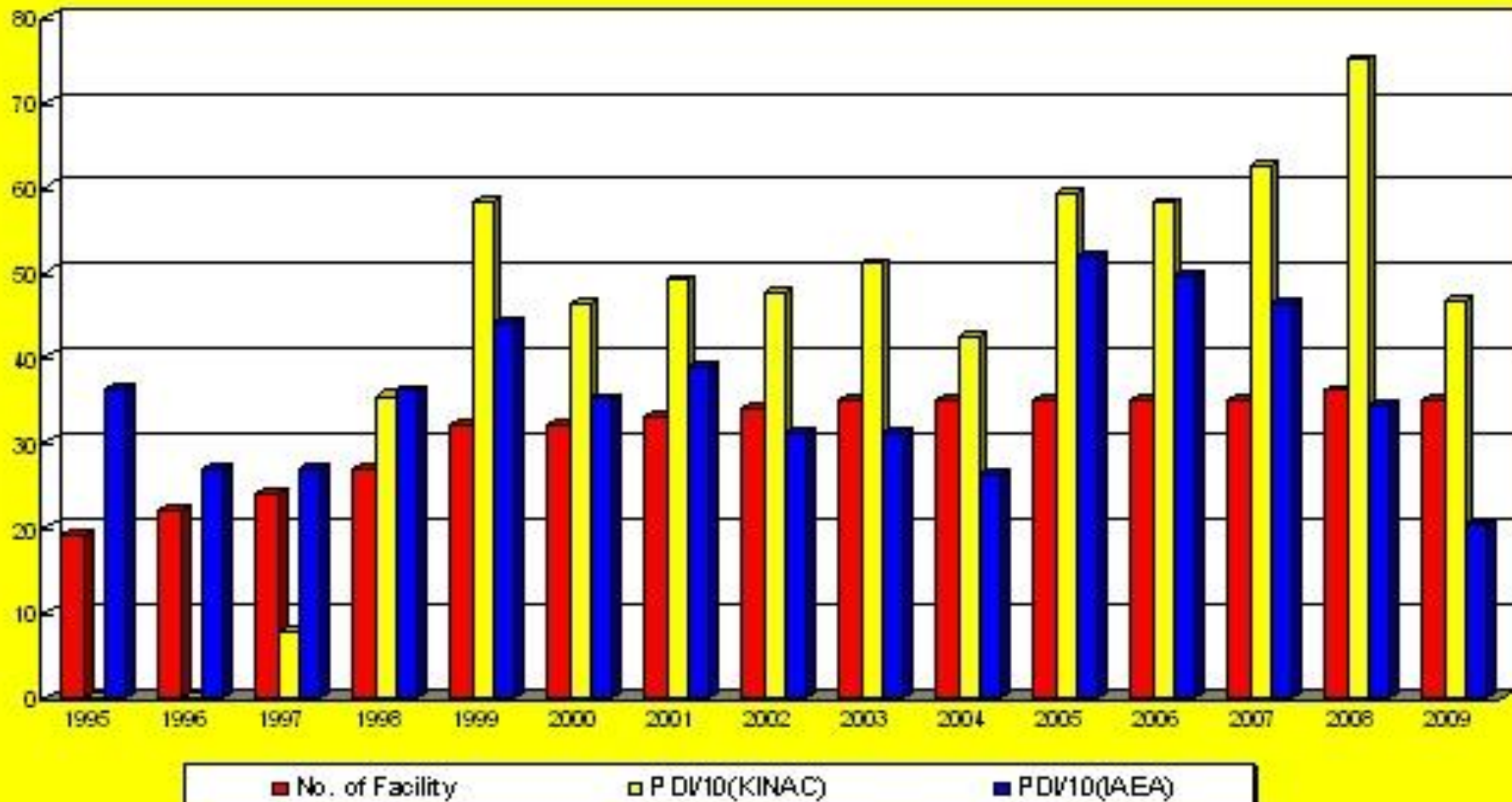
- Inspection Share with IAEA & SSAC at LWRs
- 465 PDIs(2009), while 749 PDIs (2008), 624(2007)

□ IS (Integrated Safeguards) Preparation and Implementation

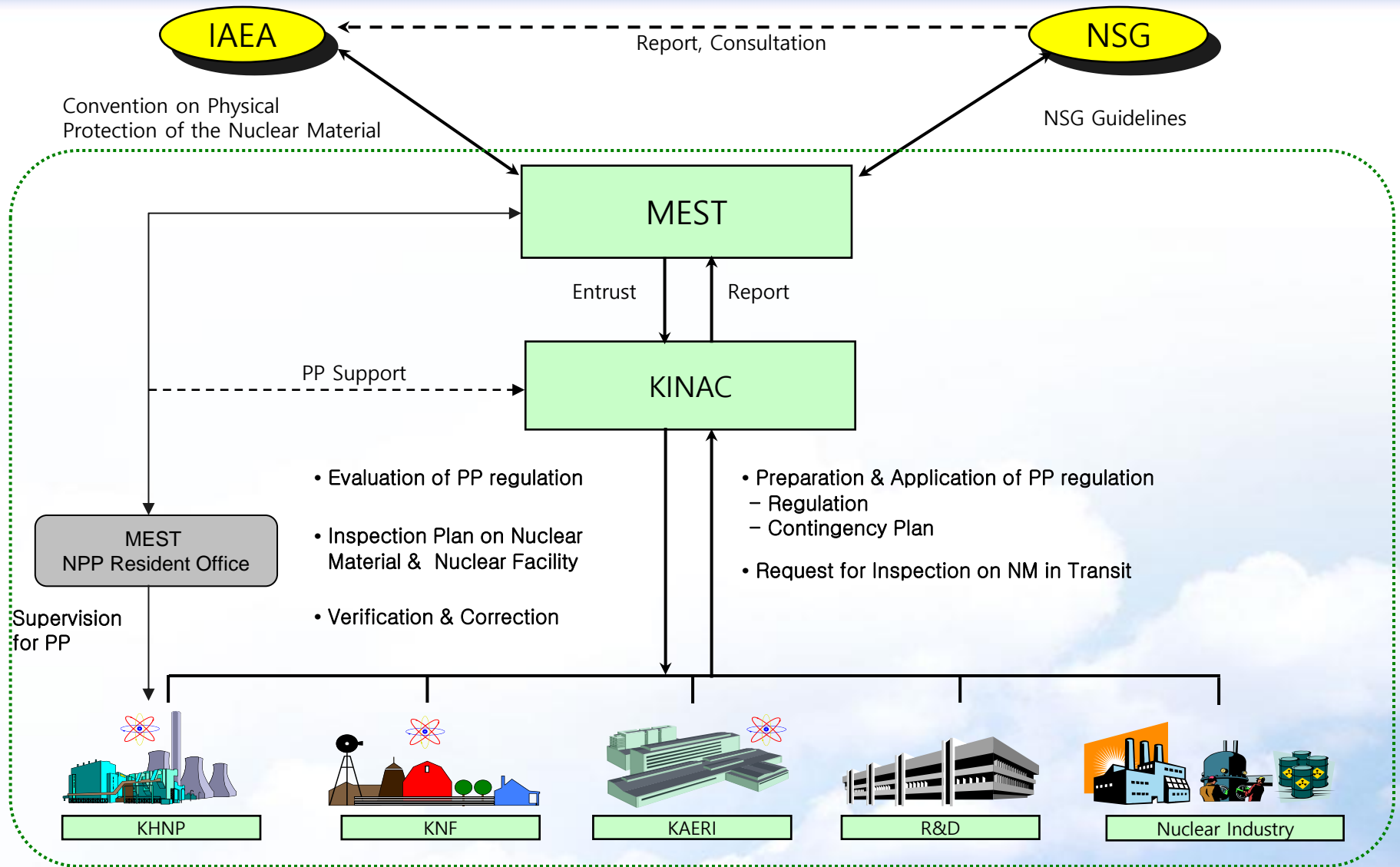
- 7 times Working Group Meeting (Mar. 2005 ~ Dec. 2007)
- Broader Conclusion (IAEA Board of governors, Jun. 2008)
- Implementation of IS from Jul. 1st, 2008

Safeguards Implementation - 3 : Changes of Inspection PDIs

연도별 검사량(사찰량) 추이



Physical Protection Implementation -1





❑ Design Basis Threat

- Establishment of Design Basis Threat
- Re-evaluation and Maintenance of Design Basis Threat

❑ Establishment of Implementation System

- Establishment of a PP system for each NF
- Development of technical standards for inspection and review
- Vulnerability and risk assessment of a PP system
- Establishment of a central control system
- Establishment of education and exercise program

❑ Establishment of Measures against Terror

- Development of techniques for evaluation of radiological terror (RT)
- Establishment of a response system against RT



		2009	2008
Review (if necessary) - To examine PP Plans (Written Documents)		26	44
Inspection	Initial Inspection - Once/life time	2	0
	Periodic Inspection - Once/2 years	7	8
	Special Inspection - If necessary	5	13
	Transport Inspection - If necessary	69	56

Nuclear Export Control System (NEPS)

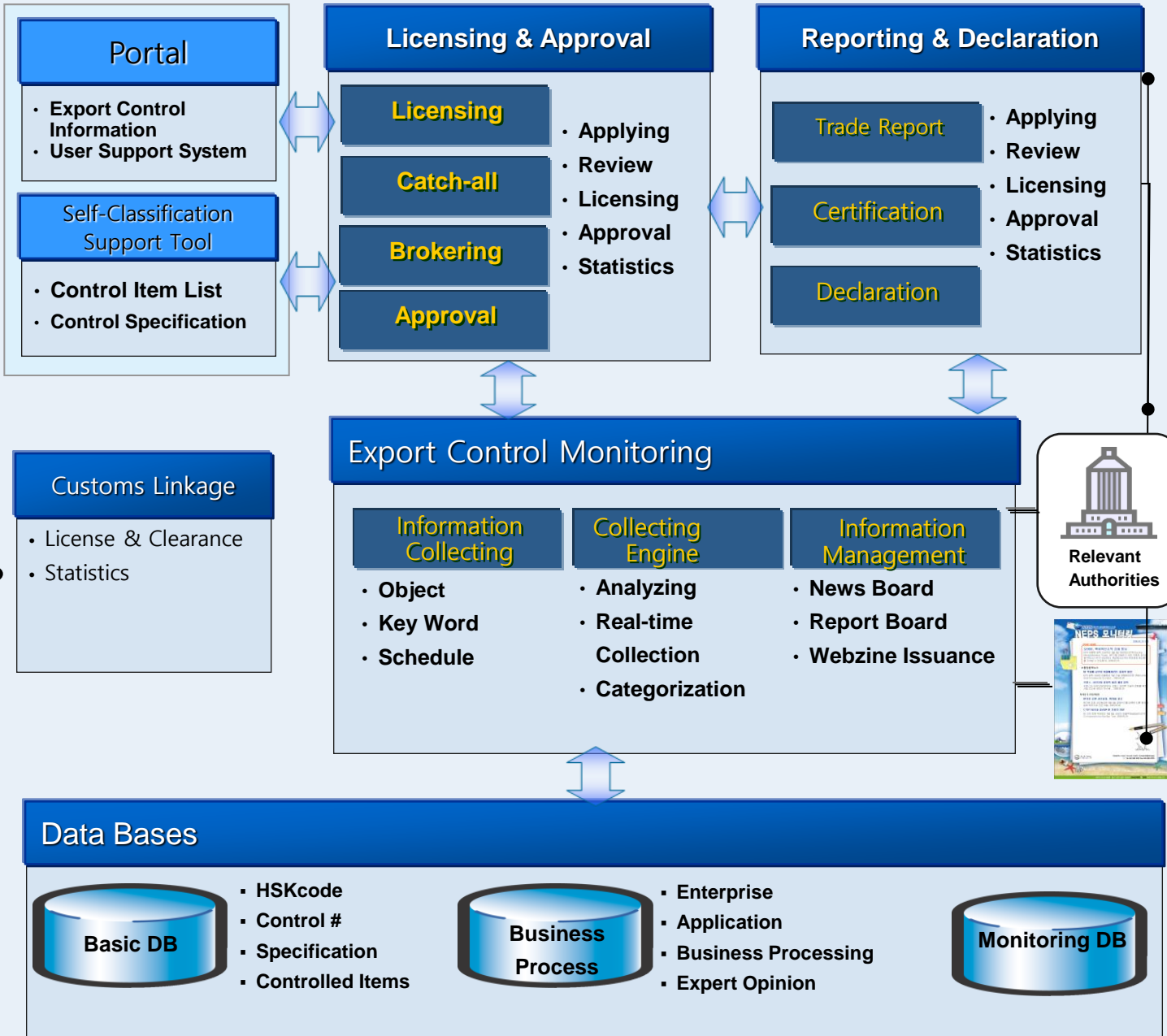


Enterprises (User)

Digital Certificate



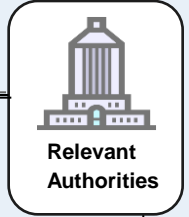
Customs Service



MEST
Implementation



KINAC
Technical assistance



Relevant Authorities



Expert Group

2. Why APSN in International Society and What its Roles ?



❑ Why APSN in International Society ?

- Nuclear Geopolitics in Asia–Pacific Region
 - 3 Nuclear Countries Located
 - Nuclear nonproliferation & Disarmament Efforts Necessary
 - First Place in Nuclear Energy Uses and Nuclear Renaissance
- Absence of Regional Safeguards Community – cf. EURATOM, ABACC
- Strong Interdependence Required for Social–Economic Peace

❑ What Roles APSN Can Play ?

- Regional Synergetic Networks of IAEA Safeguards Activities
- Mediate between the Nuclear Advanced and the New Comers in Association with IAEA
 - For the Development of Nuclear Power in connection with Nuclear Safeguards Technology, Infrastructure and HRD
 - Making of New Concept on Regional States Supports Program

3. Proposal of APSN Vision and Outcomes



❑ Vision

- Regional Cooperative Unity in Association with IAEA Safeguards Implementation
 - Regional DB Networks on Safeguards Activities (Open Sources Base)
 - State Information DB (Not Sensitive Information)
- From Non-Binding Unity to Regional Safeguards Community
 - Based on Philosophy for Regional Peace and Coexistence
- Ultimate Goal to Become a 'Track 1' Organization
 - State Membership joined by Nuclear organs in Each State

❑ Anticipated Outcomes

- Transparent Peaceful Uses of Nuclear Energy in Asia-Pacific
- General Set of Efficient and Effective SSAC: Safeguards Culture Up
- Application of IS to All Member States
- Strong Interdependence and Operation of RSAC
- Nuclear Arms Free Northeast Asia & the World

4. APSN Activities Proposed in Short, Mid and Long Term

❑ Approaches in Timing Frame

- Vision and Outcomes must be shared commonly by members
- Set of milestones could be an agenda for the next meeting
- Members are to decide in consensus the timing span of milestones according to its feasibility and capacity
- APSN Meetings could be diversified during the year
 - Annual conference (In Turn)
 - Working group meetings & Seminars (Voluntary Base)

❑ Short, Mid and Long Term Approaches

- Short Term: Strengthening of Network (Information, etc)
- Mid Term: Starting of Annual Joint Review Meeting with IAEA
 - Dealing with commonly agreed facility
- Long Term: Cooperation for Common Inspection with IAEA
 - Based on Equality, Mutuality and Universality
 - Fuel Bank & Spent Fuel Issues, etc.

4-1. Proposed Short Term Activities of APSN



❑ Objectives

- Strengthening of Network among members
 - Regional Networks of DB on Safeguards related Information
 - State Information and Generalization of Transparency
- Set of Efficient and Operative DB System
 - Discussion how to solve 'Fund' issues
- Figuring out Needs of Members for Sound Set of SSAC
 - Through working group meetings and seminars
- Strengthening of Secretariat of APSN
 - Full time staff necessary for APSN (On-line Staff in turn by State)

❑ Strategy

- Holding of regular meeting in association with international conferences
 - IAEA General Conference, NGSi Conference, etc
- Assurance of massive capacity of DB computer system
- Regular visits of the Chairman for APSN member State and Organs
 - Conference and Meeting invitation, etc.

4-2. Proposed Mid Term Activities of APSN



❑ Objectives

- Maximization of efficiency & effectiveness of IAEA activities in close cooperation with APSN
 - Universal application of AP and Strengthening of SSAC of each member State
- Starting of Annual Joint Review Meeting (JRM–APSN) with IAEA
 - No touching sensitive facilities of individual State
 - Evaluation of regional transparency and nonproliferation efforts
- Preparation of how to enter a common system into APSN member states in association with APSN
 - Long discussion on scope and its ways of application

❑ Strategy

- Application of IS to All Member States
- Close cooperation between IAEA regional office and APSN
- Finding out of application boundary (feasibility) of common inspection system among member states

4-3. Proposed Long Term Activities of APSN



❑ Objectives

- Ultimate goal to make APSN as 'Track 1' organization
 - State membership joined with nuclear organizations in each State
- Strong cooperation for joint common inspection system
 - Joint common inspection with IAEA based on multilateral (APSN) agreement of APSN States
- Leading in nuclear nonproliferation movement of the World

❑ Strategy

- Common efforts to make APSN become a subsidiary agenda of discussion/cooperation of the respective APEC and 'ASEN + 3' from the mid term stage
- Strong interdependence in social and economic fields
- Further significant nuclear disarmament and dismantlement
- Nuclear arms free Northeast Asia & the World

5. Conclusion



- ❑ **Changes of geopolitics in 20th C in Asia–Pacific**
 - From Military imperialism to Self–determination of Peoples
 - End of ideological conflict (End of Cold War)
 - Strong Interdependence among regional countries, connected with Changes of Russia, China, Vietnam in its economic system and political feature
- ❑ **What should we do in 21st century ?**
 - Interdependence 1) in social and economic aspect 2) through strengthening of safeguards efforts in nuclear energy uses 3) by enforcing multilateral mechanism against new advent of WMD
- ❑ **APSN**
 - Transparency mechanism for peaceful uses of nuclear energy
 - Space of regional cooperation, CBM and interdependence