

# Perception and Tasks for the Occupational Protection

## Keynote Lecture on Occupational Protection

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# PERCEPTION

- new artificial sources around individual living
- Safety Culture integrates:
  - monitoring techniques and tools
  - guidance and systematic approach
  - motivations and benefits
  - feedbacks and implementation
- uncertainties in radiation risk estimation
  - study will continue for statistically significant during next decades
  - collecting and compiling global information including new radiation work sectors

# PERCEPTION

- the study of carcinogenic risk estimation will continue
  - technologies of medical treatment and diagnosis of earlier cancer will keep improving
  - average human age is getting over 80
  - still concerns of carcinogenic risk against low radiation dose
  - prevention of high dose and accident will should be high priority

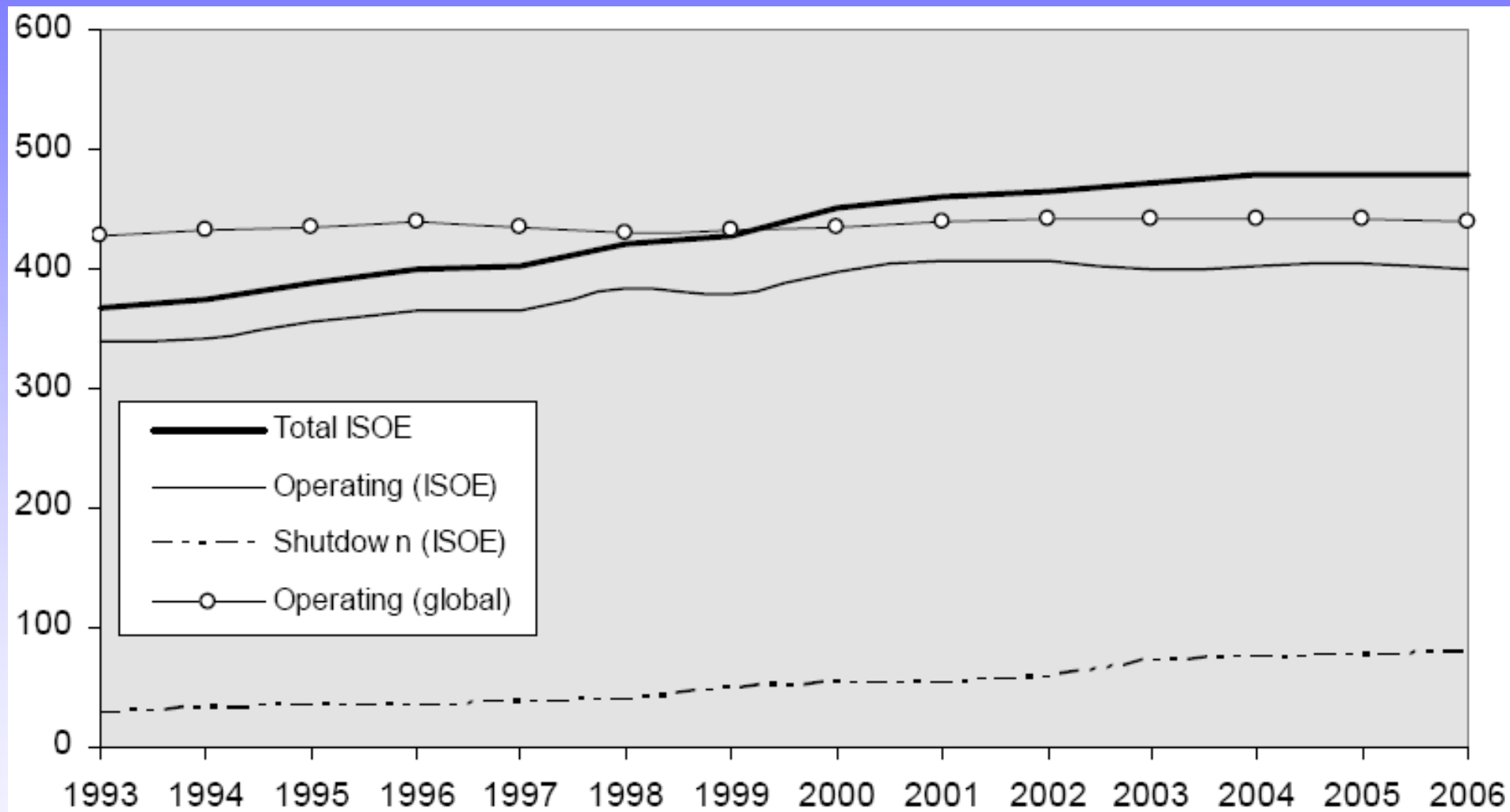
# PERCEPTION

- lower priority of occupational protection
- economic regression and deregulation
- the increasing nuclear facilities:
  - nuclear renaissance
- optimization:
  - safety
  - lacks of young professions
  - public acceptance

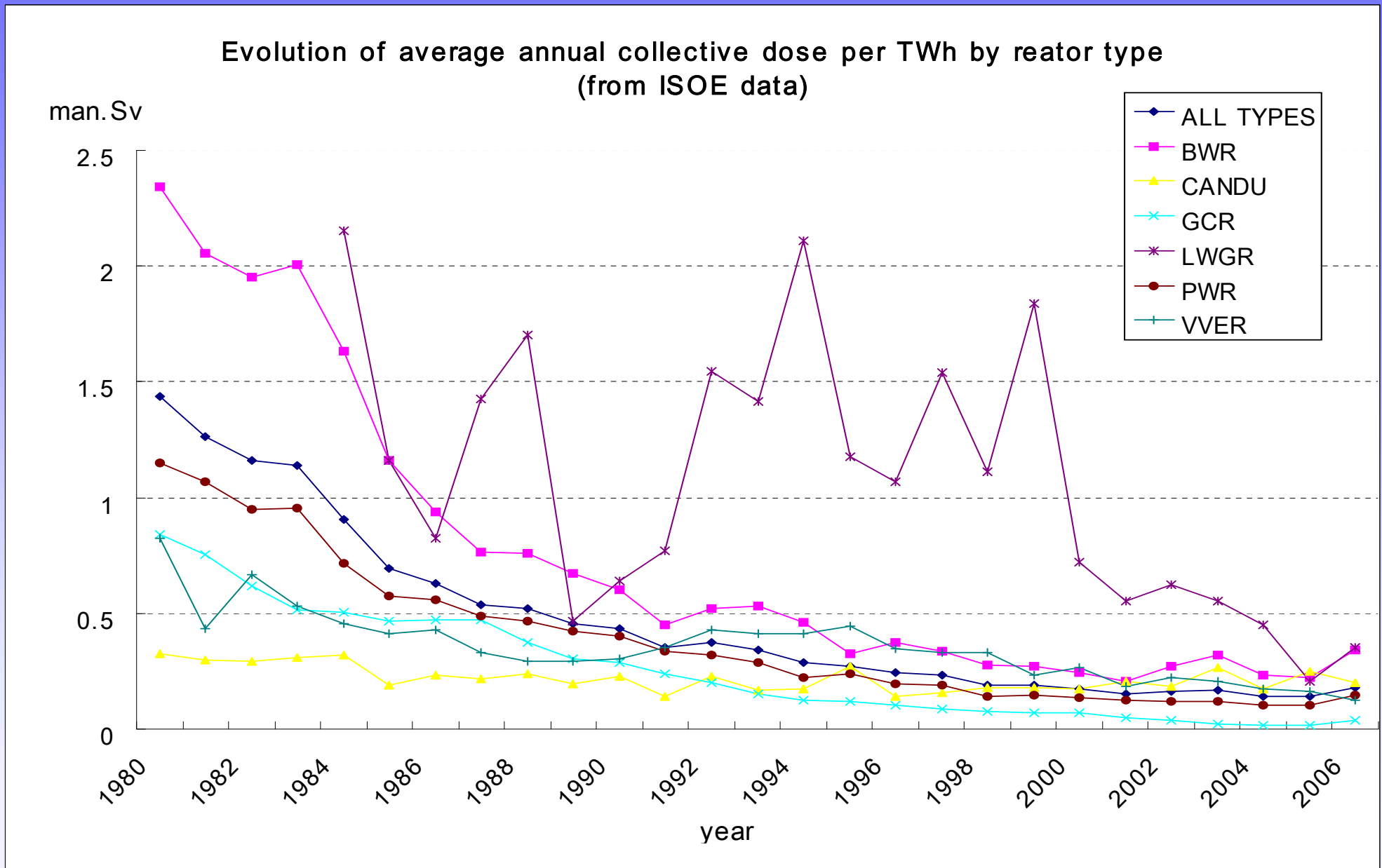
# PERCEPTION

- current trend in nuclear sector :  
Fig. 1-3
- other radiation work sectors :  
Fig. 4-5

# Fig 1. Total number of reactors included in ISOE



# Fig 2. The global trend of collective dose in Nuclear Power Plants



# Fig 3. The trend of collective dose by country in Pressurized Power Reactor

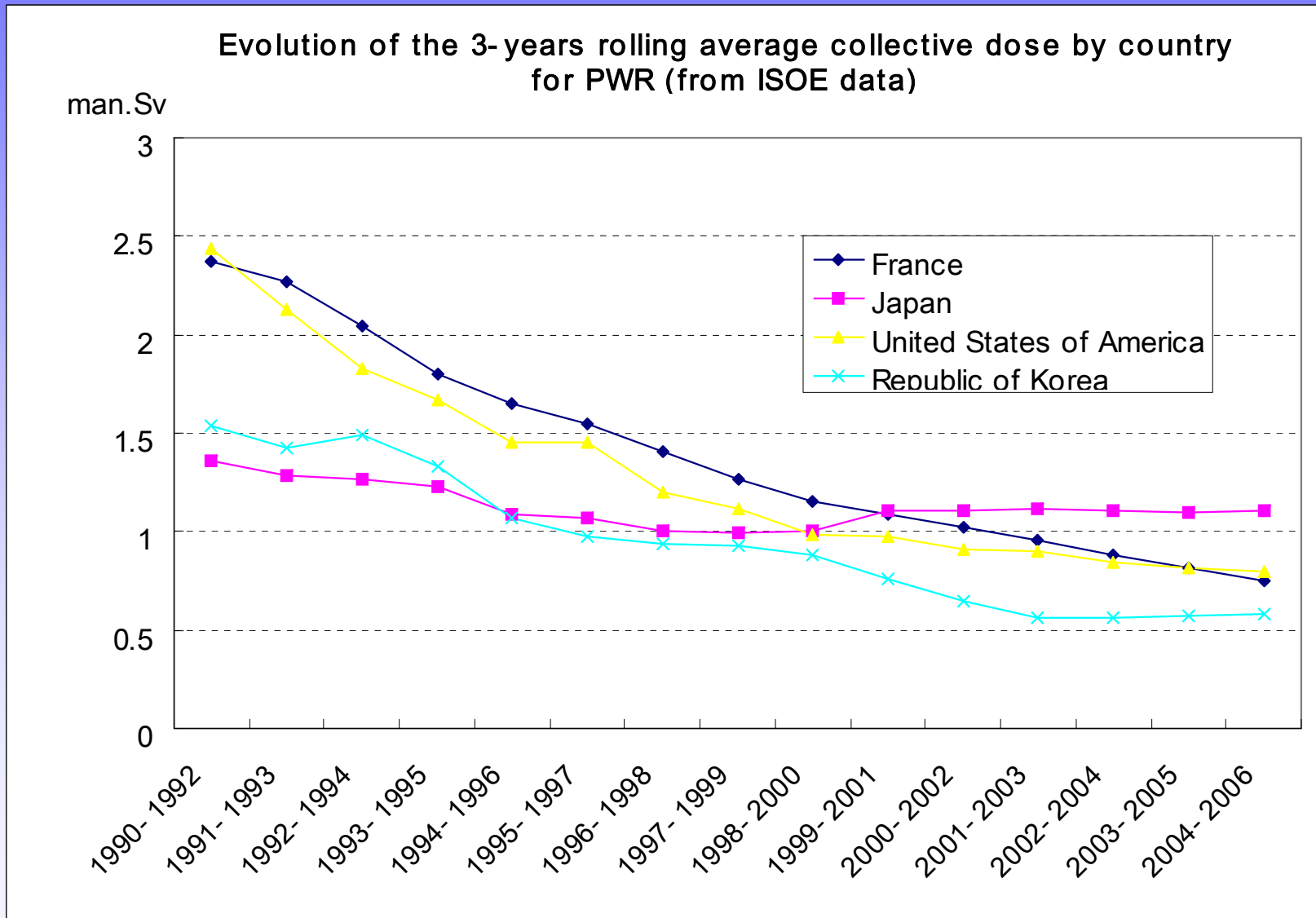


Fig.4 Annual Collective Dose by Category in Korea

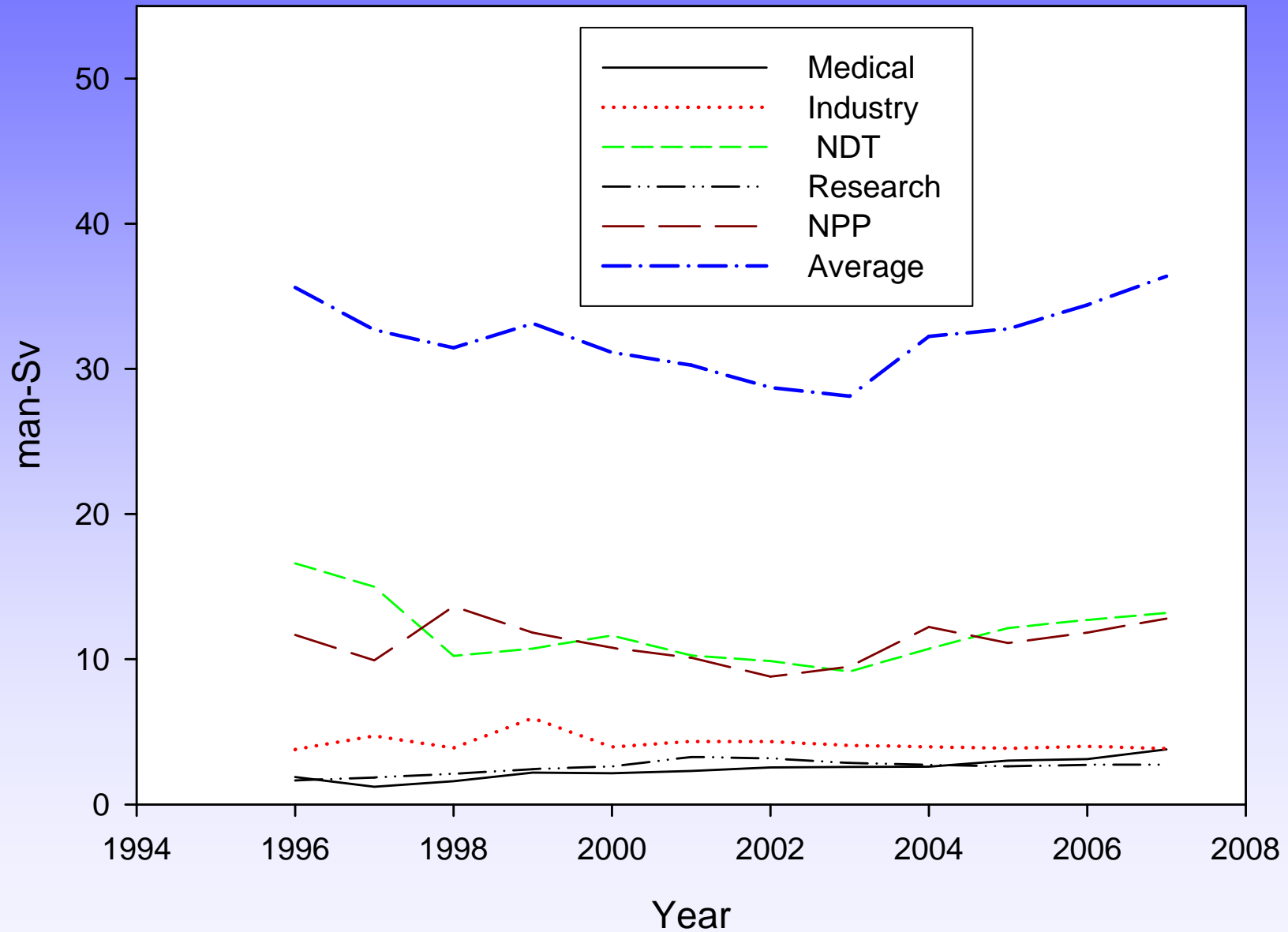
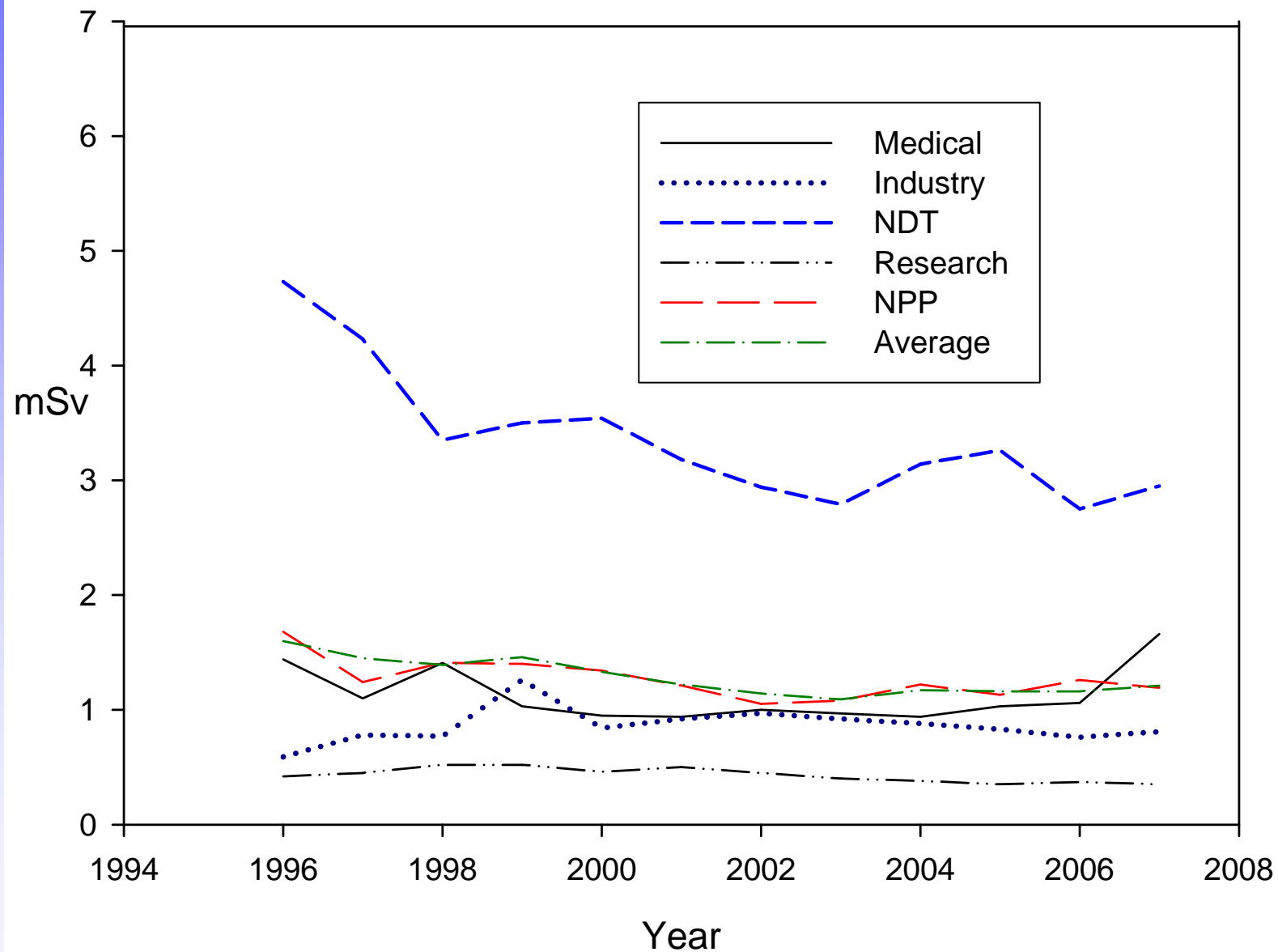


Fig. 5 Average Annual Dose per Worker by Category in Korea



# CONCLUSIONS

- natural source modified by human activities
- the medical exposures to the patient and the public,
- the proactive roles of regulatory body and international organizations.
- structural approach to feedback experience and lessons learned into current actions
  - keep the occupational protection regime in alive.

# CONCLUSIONS

- Integrated radiation protection and a good safety culture
- phenomena of the current dramatic changes
- real time basis communication mechanism
- sharing fast developed information of technologies and various radiation field
- involvement of different stakeholders
- use of existing standards and guidance first and following feedback
- integrate information and share for further improvement.

# CONCLUSIONS

- experience in the Republic of Korea with on-line communication basis
- much valuable outcomes:
  - practices are balanced with on-line stakeholders
  - purchasing from vendors and its licensing process are runs in a same track
  - producing a source and its decommissioning are in the same track
- an terror like accident occurs in a remote city is controlled shortly within initial stage
  - on-line communication with relate local organization and alert voluntary radiation experts around the site.

Thank you for  
your attention

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