



KOZLODUY NUCLEAR POWER PLANT

AN APPROACH TO NUCLEAR SAFETY KNOWLEDGE MANAGEMENT

*L. Pironkov,
Head of KNPP Training Center*



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BULGARIAN NUCLEAR POWER PROGRAM





BULGARIAN NUCLEAR POWER PROGRAM

Overall priorities

- To implement and maintain nuclear power installations over all life-time cycle (construction, start-up, operation, decommissioning);
- To implement and maintain the non-power nuclear applications.
- To perform R & D activities focused to application oriented researches, investigations and studies.

Human factor related priorities

- Regulatory bodies
- Nuclear power plant(s) operation
- Radioactive waste treatment and storage
- Multipurpose non-power nuclear applications
- Nuclear engineering support companies
- Nuclear education, training and R & D institutions.



BULGARIAN NUCLEAR POWER PROGRAM



KNPP

UNIT 5 – WWER-1000

UNIT 6 - WWER-1000

WSFS

DSFS



SE RAW

SD “RAW – Kozloduy”

SD “RAW Novi Han”

SD “National Repository
for RAW”

SD “Decommissioning 1-4
Units”



NON-POWER NUCLEAR APPLICATIONS

Food and Agriculture

Insect Control

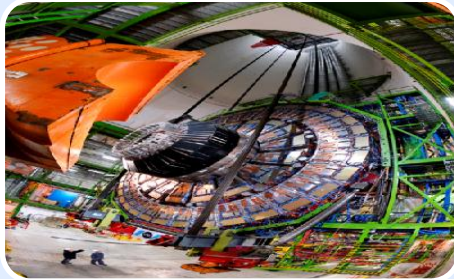
Food Preservation

Medicine

Industry



BULGARIAN NUCLEAR POWER PROGRAM



R&D, CONSTRUCTION, MAINTENANCE AND ENGINEERING

INRNE and at least ten high-capacity and experienced companies



EDUCATION AND TRAINING

Technical University of Sofia
Sofia University "St Kl. Ochridski"
KNPP Training Center

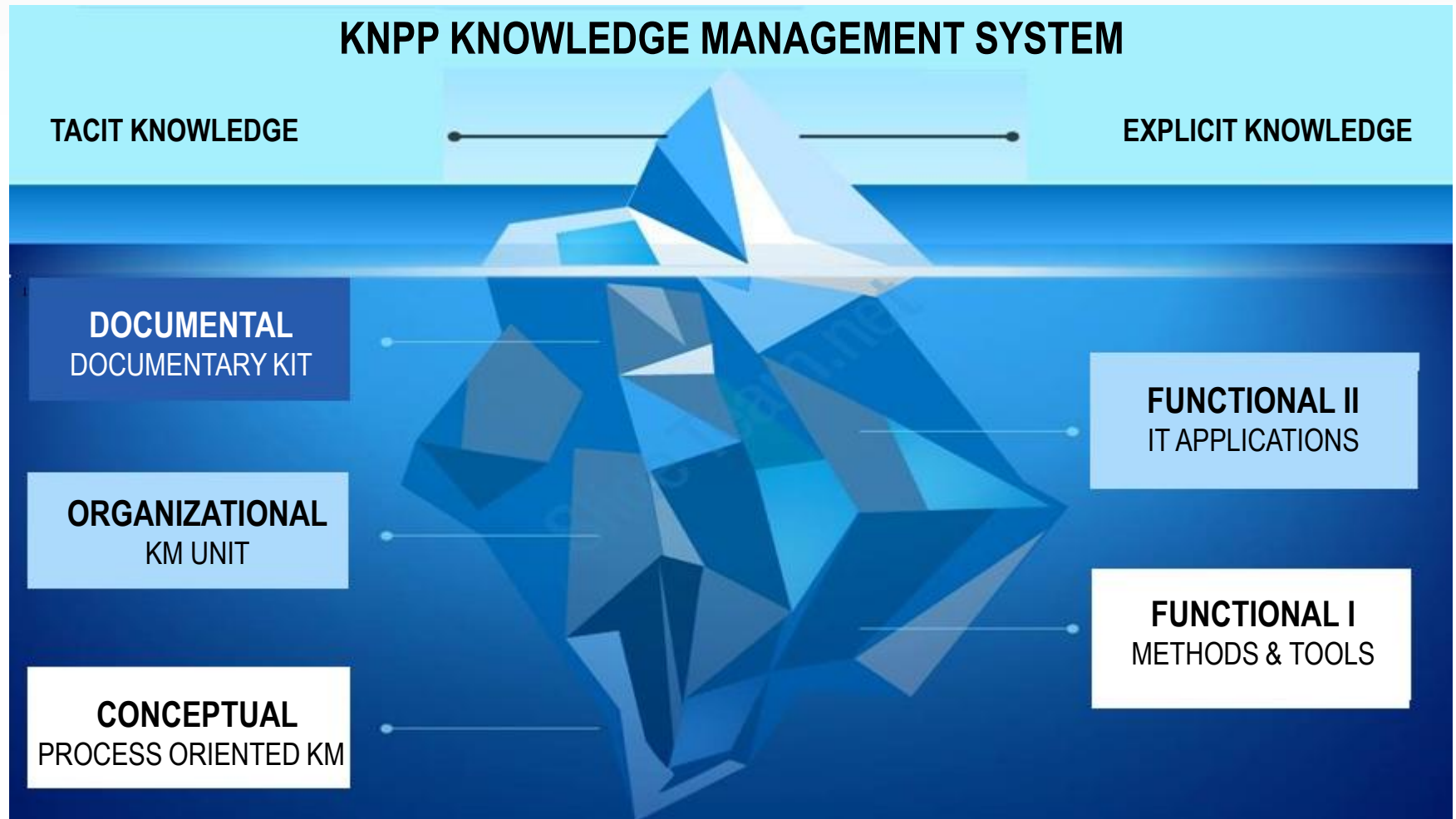


REGULATORY BODIES

Bulgarian Nuclear Regulatory Agency
National Center of Radiobiology and Radiation Protection



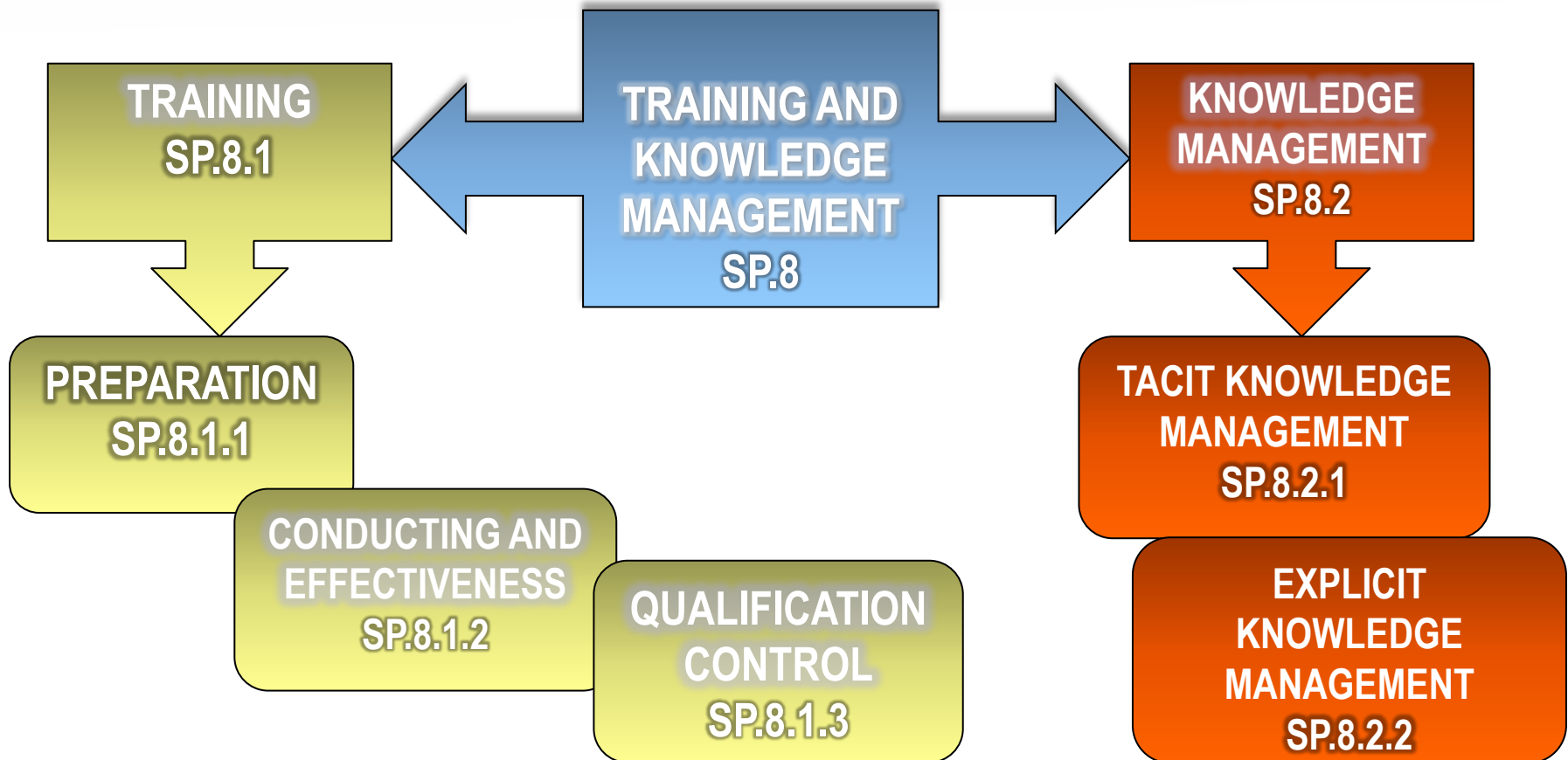
KNOWLEDGE MANAGEMENT ASPECTS *CORPORATE LEVEL*





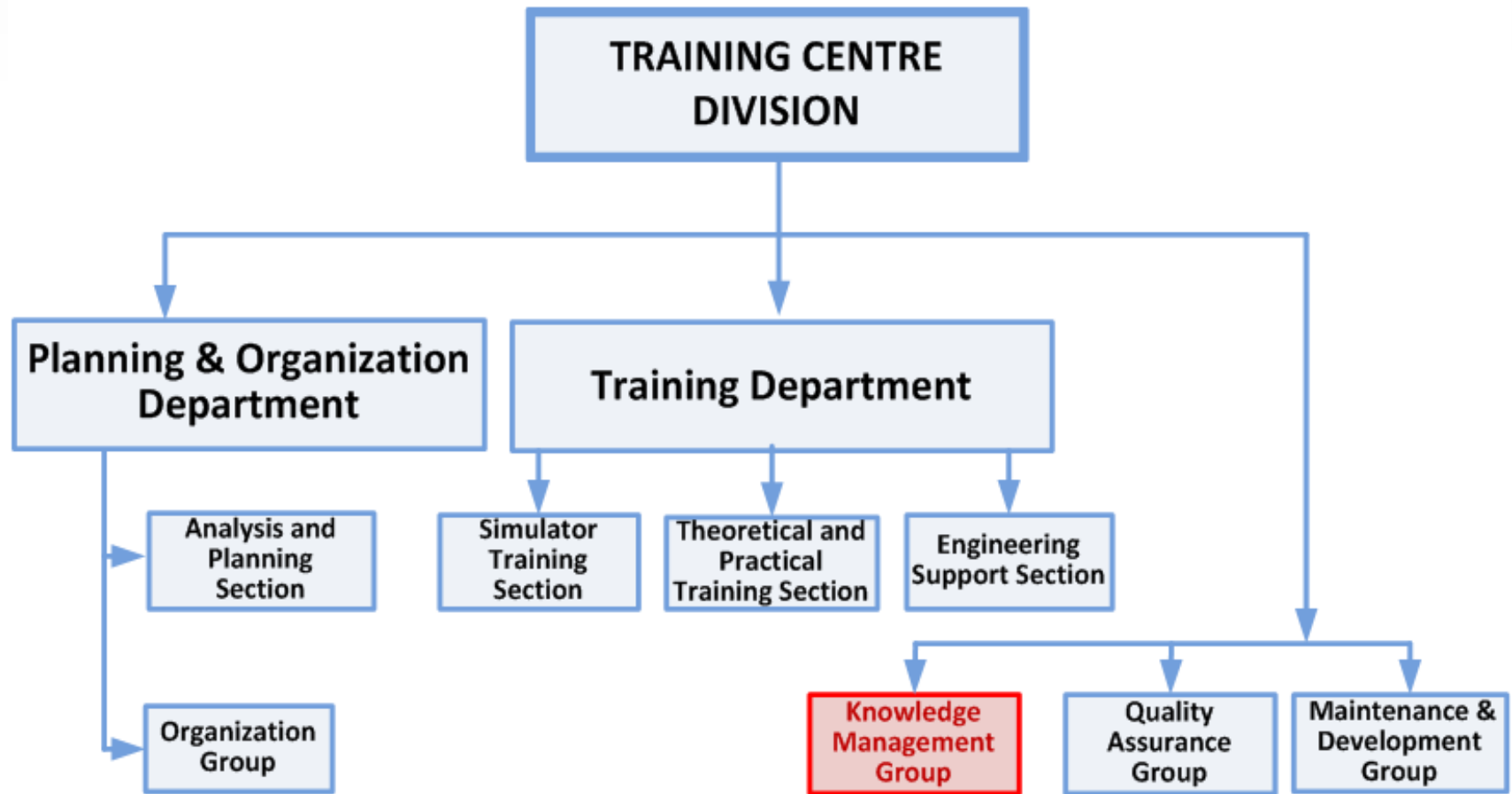
PROCESS ORIENTED KNOWLEDGE MANAGEMENT

SUPPORTING PROCESS





ORGANIZATIONAL ASPECTS





DOCUMENTARY KIT

A blue pyramid is positioned on the left side of the slide, with its base at the bottom and its apex at the top. It is partially obscured by the text boxes on the right.

**KNOWLEDGE MANAGEMENT
STRATEGY**

**QA RULES, KNOWLEDGE
MANAGEMENT SYSTEM**

**GUIDELINE FOR MONITORING OF
TACIT KNOWLEDGE**

**GUIDELINE FOR CAPTURING OF TACIT
KNOWLEDGE**

**TRAINING COURSE “KNOWLEDGE
MANAGEMENT”**



FUNCTIONAL ASPECTS

FUNCTIONAL I METHODS & TOOLS

APPLIED METHODS & TOOLS ARE SPECIFIED IN RESPECTIVE GUIDELINES

FUNCTIONAL II SPECIALY DESIGNED IT APPLICATIONS

- DB “SMARTDOC”
- DB “ANALYSIS OF OPERATIONAL ACTIVITY”
- DB “TRAINING AND QUALIFICATION”
- DB “E-LIBRARY”
- DB “MONITORING OF TACIT KNOWLEDGE”
- E-LEARNING PLATFORM “ESTRA”
- INTRANET PORTAL



BEYOND CORPORATE LEVEL

- OPEN VERSION OF E-LEARNING PLATFORM “ESTRA” IS AVAILABLE FOR FREE
- KNOWLEDGE MANAGEMENT COURSE IS INCLUDED IN MASTER OF SCIENCE IN NUCLEAR POWER ENGINEERING PROGRAM OF TECHNICAL UNIVERSITY OF SOFIA
- BILATERAL AGREEMENTS FOR CO-OPERATION BETWEEN KNPP AND UNIVERSITIES
- COMMON KM RELATED ACTIVITIES PERFORMED TOGETHER WITH NON-GOVERNMENTAL ORGANIZATIONS (BULATOM, BULGARIAN NUCLEAR ASSOCIATION, UNION OF NUCLEAR VETERANS)



BEYOND CORPORATE LEVEL



CORONA ACADEMY– CONTRIBUTION TO VVER NUCLEAR EDUCATION AND TRAINING



Kozloduy NPP – Bulgaria (coordinator)



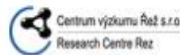
Institute for Nuclear Research and Nuclear Energy (INRNE) of the Bulgarian Academy of Sciences



Engineering Support and Intellectual Solutions (ESIS) – Germany



TECNATOM – Spain



Centrum výzkumu Řež (CV ŘEŽ)– Czech Republic



Moscow Engineering Physics Institute (MEPhI) - Russia



Risk Engineering (REL) – Bulgaria



Budapest University of Technology and Economics (BME)



European Nuclear Education Network (ENEN)

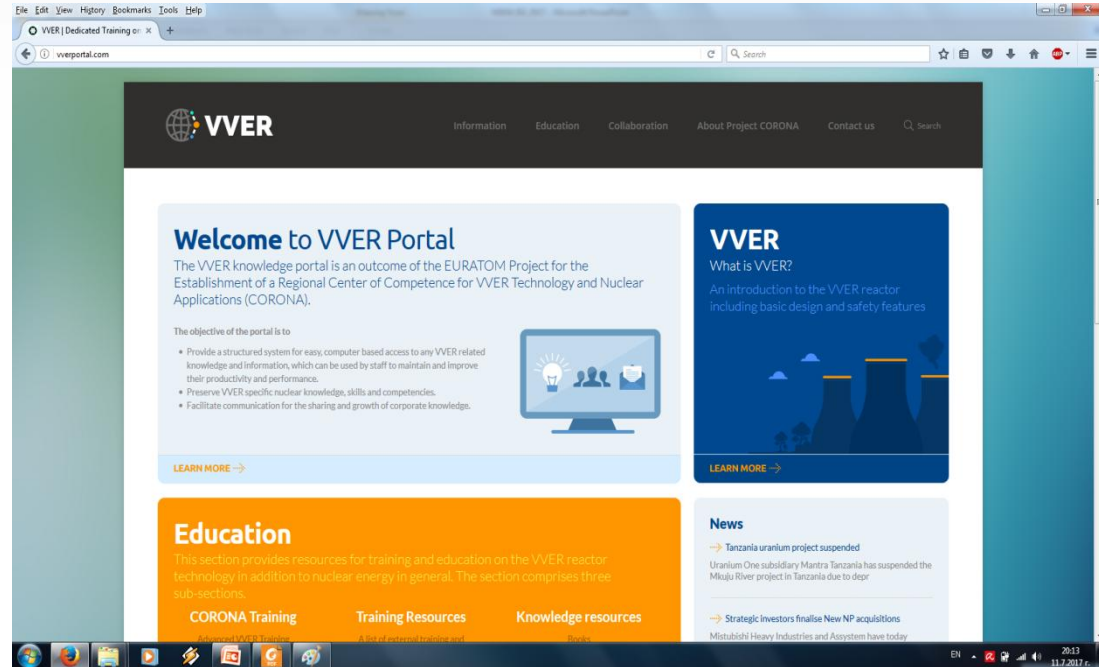




BEYOND CORPORATE LEVEL



Separate work package:
Development of the
concept for the Knowledge
Management (KM) portal.



The portal is intended to provide information relevant to the key stakeholders of the nuclear power industry such as scientific organizations, academia, industry and government.



BEYOND CORPORATE LEVEL

Key components of KM portal:

Knowledge Management portal serves to identify, capture, store, organize and present nuclear knowledge
<http://www.vverportal.com/>



Information

- i. News
- ii. VVER Reactor Information

Education

- i. Training resources from Project CORONA
- ii. Links to external training and education providers
- iii. Knowledge Resources

Collaboration

- i. Discussion Forums
- ii. Blogs
- iii. Social networks

About Project CORONA

- i. Overview
- ii. Work Packages
- iii. Project Participants
- iv. Achieved Results
- v. Reference Documents
- vi. Contact Us



QUESTIONS?

THANK YOU FOR YOUR ATTENTION!

