

Case Study Presentation Template

Group: A

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Case Study - Group Work

- **Group A Members:**
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Task 1: ANRB SWOT analysis and identification of challenges and risks

Task 1: SWOT Analysis

Contents:

SWOT analysis:

- internal strengths
- internal weaknesses
- external opportunities
- external threats

Assumptions:

- ANRB is not assigned in the NEPIO.
- Existing NPP has a design life time 30 years.
- Existing RR has also passed 40 years services.
- Spent fuels are being stored at dry storage out-side the NPP.
- New NPP will be of different design from a different Vendor.

ANRB SWOT Analysis

Internal strengths

- Has experienced management system. Regulator has confident (more than 50% public are in favour of NPP).
- Nuclear Law is in place; Party to IAEA conventions and other International instruments.
- Regulatory experiences:
 - RR and other radiation facilities for 30 years
 - NPP for 20 years
- Adequate number of 185 staffs
 - got nuclear engineering degree in the supplier country
- Leadership (Chairman) competency:
 - highly educated nuclear expert;
 - teaching experiences;
 - NPP operator professional experience; and
 - self-motivated to act as an consultant after retirement.

Internal weaknesses

- Its management system needs to be updated as per IAEA and ISO latest requirements (ISO 9001:2008).
- One (1) new inexperienced communication officer.
- KM sharing Culture is very bad.
- Inexperience deputy chairman to replace the current chair.
- No experience on decommissioning activities specially the RR case.

ANRB SWOT Analysis

- **External opportunities**

- A very good university exists with major departments including nuclear engineering department.
- Good reputation up to now, favorable public acceptance (more than 50%) for nuclear power program and confidence on regulatory body.
- Has good relations with the media.

ANRB SWOT Analysis

- **External threats**

- Many staffs out of 185 will be retired by 2 – 4 years.
- New 30 graduates will get max 6 months to acquire experience from Tacit knowledgeable old staffs.
- Shortage of new nuclear engineering students to be recruited in the regulatory body.
- If it is assumed that the earlier plant design life 30 years (~2032) or so, than regulatory body will have to start conducting review and assessment of either decommissioning SAR or extended SAR now.
- RB has to also update non power related regulations to issue authorization (facility license, import permit, etc.) for related to new medical facility equipped with innovative medical equipment.
- Public perception about NPP may be changed in future (56% favours nuclear power program now).

KM Challenges and Risks

KM challenges:

- Organizational KM culture needs to be established.
- Organogram with procedure on organizational KM reporting system needs to be developed.

KM risks:

- Retiring Chairman during the establishment of the Organizational KM.
- New chair will be overloaded due to licensing of new NPP in addition to managerial tasks

KM Challenges and Risks

Based on IAEA SARCoN: four quadrant model analysis:

Q4: <ul style="list-style-type: none">1. KM culture shall be established.2. Staffs' behavior of knowledge sharing attitude shall be changed.3. Competent new leader shall be appointed.4. Competent Communication officer to mass and public media shall be appointed.	Q1: <ul style="list-style-type: none">1. ANRB shall be included in the NEPIO2. Regulations shall be updated based on new Vendor.3. NSKM shall be legally established4. Decommissioning plan and spent fuel management policy shall be established.
Q3: <ul style="list-style-type: none">1. Review and Assessment results of FSAR of vendor country NPP shall be needed.2. New regulations and guides specific to new NPP (assuming different design from the existing one) shall be developed or adopted.3. Decommissioning or life extension related R&A, Authorization process shall be started.4. Enforcement must be strengthened (since introduction of new medical facility was done without getting prior import license of the ANRB).	Q2: <ul style="list-style-type: none">1. For new medical facility, equipment design related specialized training will be required.2. Decommissioning technology specific training shall be provided for regulators.3. Vendor country technology specific training shall be required for newly recruited staffs.

Task 2:

- **Development of a KM strategy with vision statement and objectives**
- **Development a programme plan with roadmap**

Task 2: KM Strategy

Develop a high-level **KM Strategy** outlining:

- A lead or vision statement (clearly define the purpose)
- Set objectives to address challenges and risks (consider people, process, technology, structure and culture)

Please note:

- Text can be presented in bullet form
- Focus should be on the content, not how you present the information
- When presenting your KM strategy and plan, aim for no more than 10 minutes to allow time for questions

Task 2: KM Plan

Develop a **KM Plan** (the implementation roadmap) that includes:

- Activities that you believe should be pursued (consider various KM methods and tools - see day 1 presentations for inspiration)
- Resource needs and defined roles
- Timeline and financial budget*
- Stakeholder engagement and programme communications
- Change management activities
- Internal interdependencies (e.g., staffing, learning, training, IT)
- National alignment / cooperation
- Key Performance Indicators (KPIs)

*Financial budget would be a consideration in a real KM plan but can be omitted for the case study

KM Strategy

Vision Statement:

- KM shall be established with Policy, process and procedure within ANRB.
- Vision of KM of ANRB: *“ANRB is committed to managing nuclear knowledge to ensure ethically safe, secure, sustainable and reliable nuclear and radiological practices.”*
- Moreover, it must cover all areas of regulatory core processes.

KM Plan

- NSKM related KPIs must be established. Time bound knowledge sharing activities shall be conducted with use of experienced tacit knowledgeable retired regulatory staffs.
- All quantitative and qualitative data regarding experts, % of at risk positions, legacy reports, experts' directory, staff number accessing knowledge, survey results, etc. shall be analyzed quarterly.

KM Culture:

- ANRB shall establish KM policy, process and procedure with clear vision and practice it through a clear line management system (Within organization structure a dedicated KM unit with specific job responsibilities with allocation of financial power shall be legally established).
- Recent INSAG 27 shall be followed. GNSSN participation shall be introduced.

Critical positions:

- Appointment of a new competent chairman for ANRB or contractual extension of his position shall be required.
- New NPP Design approval must consider Fukushima lessons learning design requirements. It's a huge task for this ANRB consisting of aged staffs and newly appointed inexperienced graduates. INSAG 21 and 27 shall be followed.
- Decommissioning experience, specially for RR is absent.
- Spent fuel management of existing NPP is a huge challenge for regulatory decision making process.



Questions?

Thank you