**FANR Case study for Third international NKM conference**

**Case study**

Case studies should illustrate concrete experiences or examples on knowledge management (KM) methodologies, processes, programmes and tools.
In structuring the content of their submission, authors of case studies should adhere, as far as possible, to the predefined template below.

| **Section Name** | **Description** |
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| **Abstract / Summary** *Max 200 words*  | In 2011 FANR officially started the establishment and development of Nuclear knowledge Management (NKM) program. During the past period, the program went through different challenges, obstacles and successes. Some of current FANR NKM initiatives and practices considered as new solutions in the field of KM practices. For example using knowledge Resource Matrix, KM process integration and others. However applying new practices and tools does not mean that FANR NKM found the solutions of all the challenges can be faced by similar KM programs. Challenges like preparing for identifying critical knowledge required in the operation phase period, identifying and capturing the establishment phase and construction knowledge. FANR management are aware about those challenges and working as one team with internal and external stakeholders to solve them in priority biases through open discussions, direct directives, collaboration and bench marking, well strategic planning and support innovative solutions. The methodologies and practices that it will be share in the conference might change some of NKM programs implementation approaches, however it is for sure something new related to NKM implementation philosophy will be picked up from this case study.   |
| **Section1**Organizational context | Knowledge Management program is managed through knowledge Management section under Education and Training Department (ETD). The stakeholders of KM section are other sections in ETD, Human Resource Department (HR), IMS program, operation departments, KUSTAR and IAEA. Knowledge Management program (KM) is acting as one of the inputs for the Education and Training Department (ETD) through the results of identifying the critical knowledge which to be transferred through training. However, ETD is acting as one of the inputs for KM to identify the subject matter experts and related process to mitigate the risk of losing critical knowledge. KM and HR just started this year to draw the cooperation points in terms of linking Knowledge transfer and knowledge sharing activities among the employees with performance appraisal. Also considering contributing to the responsibilities of knowledge Management via including some obligations in the job descriptions. About KM and IMS, the relation started in 2011 and it is progressing where now both programs employees are working together to integrate KM process and procedures with other processes and procedures under the management of IMS which will assure maximizing the knowledge flow between the targeted employees, capturing operation departments processes knowledge and assure business sustainability. Finally, KUSTAR and IAEA as external stakeholder is an important knowledge partner in disseminating awareness and transferring knowledge about Knowledge Management implementation activities through Nuclear Knowledge Management school, virtual networks and other activities particularly by IAEA. **Organization’s KM challenges or issues at start of project/initiative.**Knowledge Management program went through different challenges like:* Understaffing.
* The non-clarity of Knowledge Management concept for FANR employees and unavailability of Knowledge sharing culture, which lead to internal resistance.
* Knowledge Management activities were not integrated which made the implementation difficult.
* There was no strategy department which effect in knowledge Management Strategy planning.
* There was no knowledge Management Policy.
* The maturity of implementing Nuclear Knowledge Management worldwide was still developing in many countries and unavailability of publish practical implementation documents.

**Background drivers and rationale of the KM programme/initiative.**Currently FANR Nuclear knowledge management have knowledge Management Framework, long-term strategy, policy, integrated processes and procedures, have number of services and products, and the most important thing is more of management interest and support. **Status and maturity of NKM implementation**Currently FANR NKM program have more clarity about what dose it need to support UAE nuclear program and this is based on identifying the following drivers for implementing the program:* **National Level**: NKM program must Contributing to UAE Nuclear program sustainability.
* **Organizational Level**: NKM program need to assure the efficiency of the used KM methodologies and related activities effectiveness.
* **Individual Level**: NKM program to support the potential grow of an individual, which will lead the organization to grow as worldwide module.
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| **Section 2**Objectivesof the KM initiative  | **Objectives of the KM programme/initiative.**Knowledge Management is implemented within FANR to meet the following objectives: * The sustainable growth, dissemination and sharing of the FANR’s existing knowledge, continuous learning, and cultural exchange, which support the discharge of the FANR responsibilities under the Nuclear Law (6/2009) and in particular which ensures that the FANR knowledge assets and skills are managed in an efficient and sustainable manner.
* The eradication of the repetition of error, mitigation of the risks of reliance on a rotational workforce and achieving the goal set by the Government for Emiratization of nuclear competence by ensuring the right knowledge to be available to the right people at the right time for the safe, secure and efficient regulation of UAE’s nuclear activities.
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| **Section 3**Descriptionof the KM initiative | The following lines will take the readers over the list of projects and initiatives that had been executed over the past five years. * Projects and initiatives in FANR:
	+ Projects and initiatives in FANR.
		- Enhancements projects: NKM program review, Library management system, library portal, automation and integration of mission reports, introducing and promoting CLP4NET, Launch Media site capturing system.
		- NKM from the first year of the program supported Safety Culture change through handbook, which assured to have safety culture element.
		- List of Initiatives: Storytelling, Expert debriefing, Did you know, conducting KLRA, installing generic simulator, Book of the moth, Library news, Thesis section, Launch KM website, Integrate missions report with KM website, knowledge networking, Introducing mission reports to FANR employees as per the directives of UAE Permanent Mission office in Vienna.
		- Developed Knowledge Management process/ procedures: We do have one KM process and five procedures. MP.4 K-identification procedure, MP.4 K-capturing and Transfer procedure, MP.4 Knowledge Loss Risk Assessment (KLRA), MP.4 K-retention procedure, MP.4 Library Borrowing procedure.
* **Collaboration activities**
	+ Meeting the US Nuclear Regulatory Commission (NRC) to discuss and to exchange best practices and experience in capacity building, and knowledge Management.
	+ FANR sent number of employees as secondees to the US Nuclear Regulatory Commission (NRC) to develop their knowledge and skills to actively contribute to FANR’s core functions through hands-on experience they gained.
	+ **IAEA events**
		- In 2011 FANR send the first staff to attend NKM school.
		- Conducted one IAEA pre-mission on Nuclear Knowledge Management in 2012 and one IAEA NKM Assist Visit in 2014.
		- In 2015 we have send our second staff to ICTP-IAEA School of Nuclear Knowledge Management.
		- Contributing to ICTP-IAEA NKM School in Trieste to share FANR experience and to evaluate the course materials with other experts.
		- Participated in IAEA Workshop on Best Practice Regulatory Bodies in their Capacity Building Programmes, which was held in Abu Dhabi.
		- FANR NKM Contributed in IAEA General Conference in 2014 through our former DDG-O Dr. John Loy to share FANR experience in KM.
		- FANR NKM had arranged Nuclear Management School with IAEA in Abu Dhabi.
		- FANR NKM employee was part of Consultancy Meeting on Implementing Knowledge Management in Integrated Management System IMS.
* **Bench marking and sharing experience.**
	+ - Abu Dhabi security market.
		- Pakistan Nuclear Regulator.
		- Turkey Nuclear Regulator.
* Related business management systems that support NKM program implementation are IMS, EDMS and Basic KM portal.

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| **Section 4**Major challenges and achievements | This may include description of * **Difficulties encountered and Remedies solutions.**
	+ Knowledge Management was strange program for FANR employees and couldn’t achieve much in the first two years. By April 2013 the NKM specialist had conducted business analysis to identify the issues, root causes/effect and possible solutions. Also, IAEA NKM Pre-mission in 2012 and Evaluation mission on 2014 helped in identifying more issues and recommend solutions.
	+ Reducing the impact of knowledge mobility phenomena, through implementing storytelling, knowledge resource matrix, expert debriefing and following the steps of KM Process.
* **Impacts of the KM activity:**
	+ The internal stakeholders who are FANR employees had showed satisfaction for the measure activities. However still we are lacking to having a continues measurement for all KM program activities that we have in FANR.
* **Excellence recognition:**
	+ NKM program registered First Excellence Award in FANR in May 2015. The award was part of The 20th Middle East smart Government and smart Services Excellence Awards by the Middle East Excellence Awards Institute for the Category of “Corporate Knowledge Management Initiatives Excellence Award”. This award had been provided during the “21st GCC smart Government and smart Services Conference”.
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| **Section 5**Lessonslearned /knowledge derived | For those new comer countries who are thinking to establish their own NKM or for then new established ones the following is advisable:* Knowledge Management program should start with at least with two to three experienced and skilled employees for faster and robots execution. The experience and skills I’m refereeing to are related to engineering, knowledge management, strategy management, quality management collectively. If not at least one experienced staff. If not the organisation need to put a development plan to develop one of the employees to acquire those skills and competencies.
* Integrating KM methods in the business processes will assure the effectiveness of KM program initiatives and activities. Consider to do pilot project with small number of processes before going in full scale.
* Assure that the organisation management team know the exact impact of not having knowledge management in place throughout the Nuclear program phases. Implementing this lesson will lead for great support and benefits for the organisation. Not implementing this point will lead to resistance and many obstacles that will slow the progress of implementing the NKM program.
* Having Department Representative for Knowledge Management (DRKM) will help KM execution team, however training, yearly goals and plans, regular meetings and recognitions need to be in place to assure the effectiveness of the DRKM group. This is feasible if there is an experience knowledge management employee who can manage this group to maximize utilizing group members to identify the challenges as well as the recommended solutions.
* Knowledge Management team need to identify the intersection points of collaboration (it might lead to identify roles and responsibility) with E&T, HR, Strategy department, IMS, document control and IT to assure the maximum benefits from Knowledge Management program.
* Management of new organisation need to understand that having the right setup of knowledge Management team and direct follow up will assure the fast development of the program, which is required in all phases from design and construction to operation phase.
* Using and updating Knowledge Matrix is mitigating the risk of losing process or procedures functional knowledge. Also, it can be used as reference for decision making related to the discussed process even if the process initiator left the organisation.
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| **Section 6**Additional information | Screen shoots of mission reports and photos of different events will be provided in the presentation slides.  |