



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

# IRRS Mission in Canada June 2009



IRRS Workshop  
Sevilla, Spain  
November 3-4, 2008

Canada



# IRRS Mission

---



- Timing
- Scope
- Self Assessment
- Corrective Action Plan
- Complementary Self Assessment
- Current Status – Harmonized Plan
- Summary



# IRRS at the CNSC

---



- 2005 – Request for IRRS on NPPs
- May 2006 - Self-Assessment conducted using IAEA guidelines
- June 2006 – Corrective Action Plan (CAP) approved.
- May 2008 – Complementary Self Assessment Report (CSAR) completed – CAP updated
- October 2008 – Preparatory Meeting
- March 2009 – Update on corrective actions
- June 2009 – IRRS Mission



# Mission Scope

---



- Facilities and Activities
  - Nuclear Power Plants
  - Research Reactors
  - Processing Facilities
  - Fuel Cycle Facilities
    - Uranium mines, mills, refining, conversion and fuel fabrication
  - Nuclear Substances and Radiation Devices
  - Waste Management, Transportation and Radiation Protection

# The IRRS Mission in Canada

■ IN SCOPE  
■ OUT OF SCOPE

## Module I: General Requirements

**Module I.1**  
*Legislative & Governmental Responsibilities*

**Module I.2**  
*Responsibilities & Functions of the Regulatory Body*

**Module I.3**  
*Organization of the Regulatory Body*

**Module I.4**  
*Interfaces with other bodies*

## Module II: Regulatory Activities

### II.1 Authorization

a. NS   b. RS   c. WS   d. TS

### II.2 Dev. of Reg. & Guides

a. NS   b. RS   c. WS   d. TS

### II.3 Review & Assessment

a. NS   b. RS   c. WS   d. TS

### II.4 Insp. & Enforcement

a. NS   b. RS   c. WS   d. TS

II.5 *Emergency Preparedness*

II.6 *Security*

*NS: Nuclear Safety ; RS: Radiation Safety ; WS: Waste Safety ; TS: Transport Safety*

## Module III: Management System

III.1 *Management Framework*

III.2 *Corporate Policies*

III.3 *Operational Policies*

III.4 *Process Management*

III.5 *Performance Management*

III.6 *Continuous Improvement*



# Mission Dates



June 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	Site Visits 4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

NOTE: Due to logistics challenges, site visit arrangements including schedule and locations to be finalized prior to mission.



# Site Visits

---



- Nuclear Power Plants – Bruce Nuclear Generating Station
- Waste Management – Bruce Waste Management Facility
- Research Reactors and Isotope Production – Chalk River Laboratories
- Fuel Cycle Facilities – Cameco Port Hope Conversion Facility and GE Fuel Fabrication Facility
- Uranium Mines and Mills – Cameco McArthur River Mine and Key Lake Mill
- Nuclear Substances and Radiation Devices – Ottawa Region



# Self Assessment

---



- Self Assessment Review Team (SART) Report
  - Scope
  - Suggestions and Recommendations





# SART - Scope

---



- Module I - General Requirements
- Module II - Regulatory Activities – Power Reactor Service Line (PRSL)
- Module III – Management System



# Findings and Recommendations/Suggestions

---



- Compliant with many IAEA requirements
- 2 good practices and 18 recommendations and suggestions
- Good performance when dealing with government responsibilities
- Good practice in nuclear substance and radiation devices risk informed regulation
- Power reactor activities are satisfactory but inconsistent due to lack of policy, processes and procedures
- Ineffective change management and lack of MS hampering improvement initiatives



# Corrective Action Plan - Approach

---



- Review projects and prioritize based on CNSC-wide priorities, risks and benefits.
- Broaden scope of projects as appropriate to integrate and capitalize across branches and directorates
- Apply “Big Picture” approach that fits into Quality Management.
- Resource projects and appoint project leaders.



# Corrective Action Plan (CAP)

---

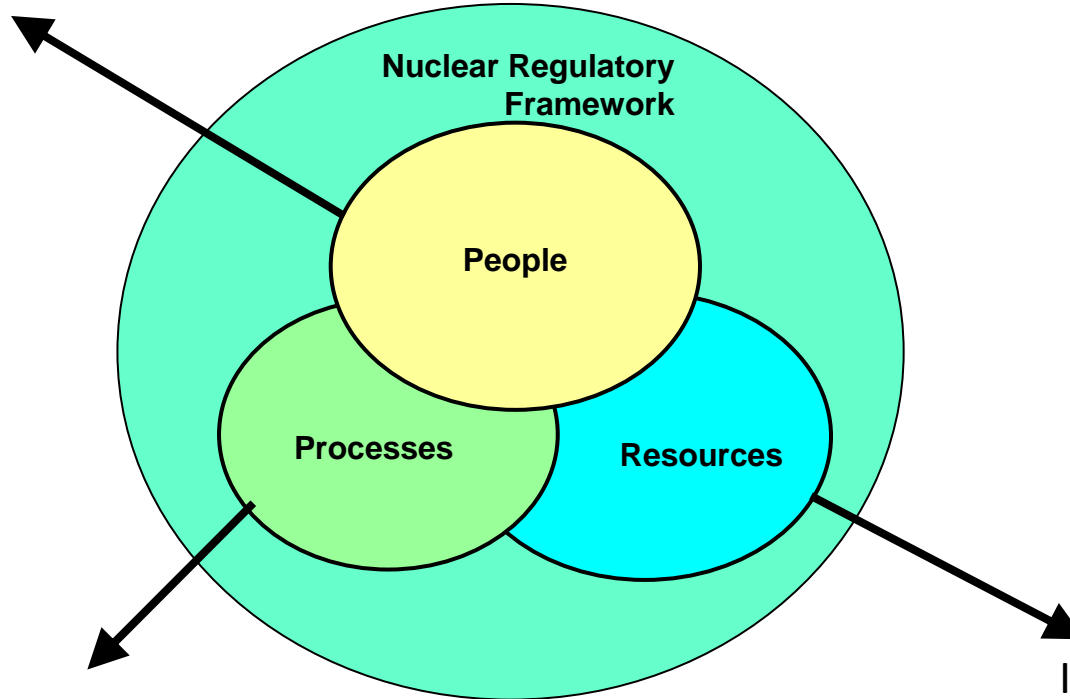


- Improvement Projects
  - Management System (continue implementation)
  - Integrated Planning and Performance Management
  - Compliance
  - Licensing
  - Leadership Development
  - Integrated Systems Project
- All projects form an integral part of the Management System
- Grouped under the Integrated Improvement Initiatives Programme (I3P)



# Integrated Improvement Initiatives Programme (I3P)

Leadership Development



Integrated Systems

Licensing  
Compliance  
Planning  
Performance Management



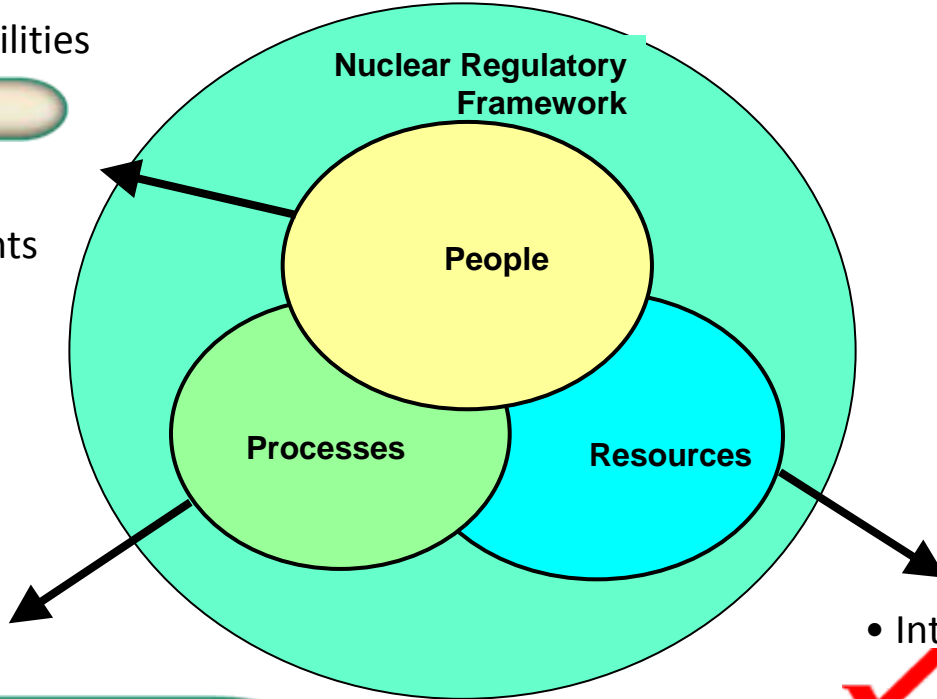
# I3P Licensing and Compliance Projects

- Roles and Responsibilities



RACI charts

- Recruitment Needs
- Training Requirements



- Process:



Licensing process maps,



Compliance process maps,

- Procedures,
- Guides,
- Criteria,
- Checklists
- Templates

- Integrated IT solutions



Business requirements

- Personal Protective Equipment
- Sampling tools
- Modeling programs



# Complementary Self Assessment (CSAR)

---



- Recognizes that recommendations from SART are applicable to other service lines but to varying degrees
- Recommends further integration and harmonization of improvement initiatives to focus resources and efforts in key areas
- Leads to formation of the Directorate of Regulatory Improvements and Major Projects Management and the initiation of the Harmonized Plan for Improvements



# Current Status - Harmonized Plan

---



- Considers the results of all recent audits and assessments including SART and CSAR
- Brings together all improvement initiatives under one plan
- Prioritized to optimize use of resources to deliver further improvements in key areas





# Harmonized Plan (Some Examples)

## Licensing:

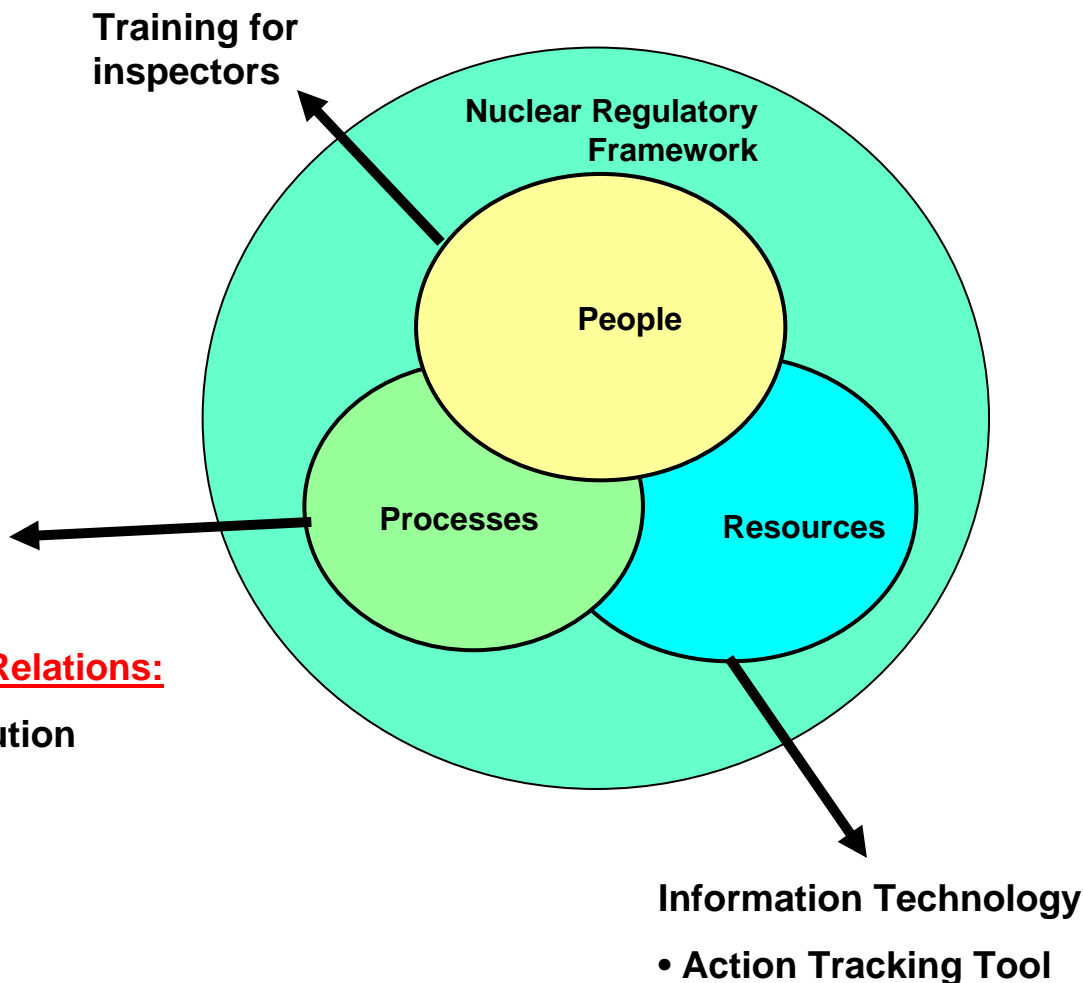
- Application guides
- Technical Assessments - review guides
- Licence preparation, review and approval - licence formats

## Compliance:

- Inspections
- Graduated Enforcement
- Action tracking

## Communications and Stakeholder Relations:

- Communication & Problem Resolution





# Summary

---



- Self Assessment and Complementary Self Assessment Completed
- CAP developed and being implemented
- Harmonized Plan – complete integration of all improvement initiatives
- IRRS Mission – on track for June 2009