



IAEA

International Atomic Energy Agency
Atoms for Peace and Development



**67th REGULAR SESSION OF THE IAEA GENERAL CONFERENCE
SENIOR SAFETY AND SECURITY REGULATORS' MEETING
September 28, 2023**

**Chile's initiatives, efforts and valuable perspectives in the
domain of organizational readiness and agility**

Dr. Luis Huerta Torchio

**Director
Chilean Nuclear Energy Commission**

CCHEN - Chile



VISION

To be a competent regulatory body and example in the nuclear field, with technical autonomy and effective and transparent processes



MISSION

Regulate and supervise the peaceful and safe use of nuclear energy for society and the environment.

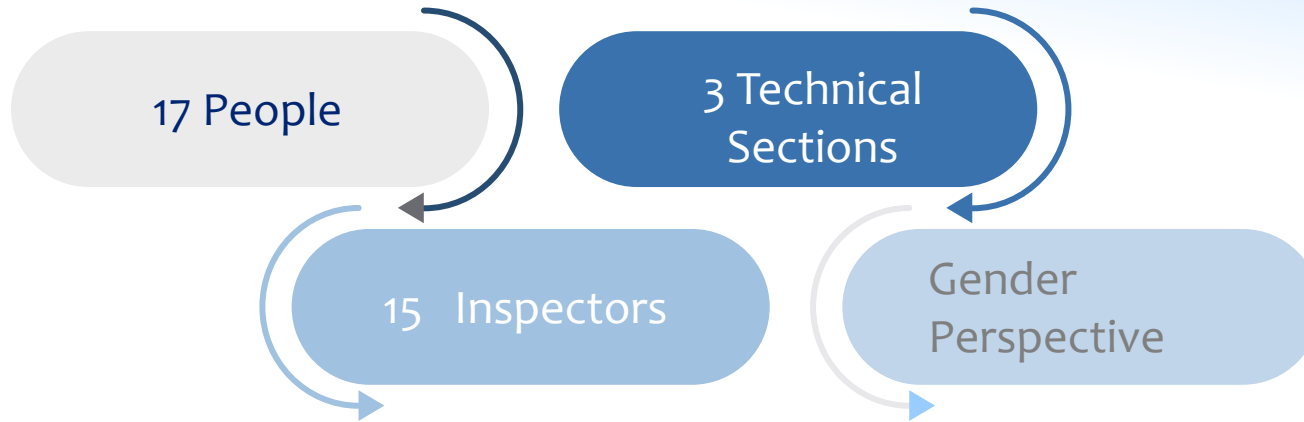


GOAL

Effectiveness in regulatory work and optimization of public resources

Work Team

Nuclear and Radiological Safety Division



Regulatory Scope

The array of facilities and personal authorized

Radioactive Facilities

The medical,
industrial and
research fields.

520

Nuclear Facilities

2 Research Reactors
and related facilities

04

End Users

Operators (87%)
Radiation Safety
Officers(13%) .

1397

Regulatory Model

Our Pillars...

01. Social Impact Endeavours



02. The Modernisation of Public Management



03. Human Resource Capacity



04. Prospective Vision



01. Social Impact Endeavours



Our initiatives and figures in Sep 2023

- 1 Promote an organizational culture with a high sense of urgency
- 2 Monitor and control all the regulatory processes (authorization, inspection and user attention) using IT tools and Key Performance Indicators (KPI)
- 3 Intensive use of communication channels and constant reporting to the legal representatives of facilities

161

Facilities
Authorized

516

Operators
Authorized

124

Inspections carried
out

150

Technical meetings
with end users held

75

Questions from
citizens answered

5

Workshops organized

02. Modernization of management

Usuario: CIRO FABIAN CARDENAS EYZAGUIRE Perfil: OFICIAL DE PROTECCIÓN RADIOLÓGICA

- DiSNR
- Organigrama
- Normativa
- Contactos ●
- Transparencia
- Herramienta Matriz Riesgo
- MPRO Creación(Cultura Seguridad)
- Inspección Activa Panel



Trámites de Solicitudes



Notificaciones de Incidentes Radiológicos o Denuncias



Notificación de los Explotadores



Preguntas al Regulador



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Internal

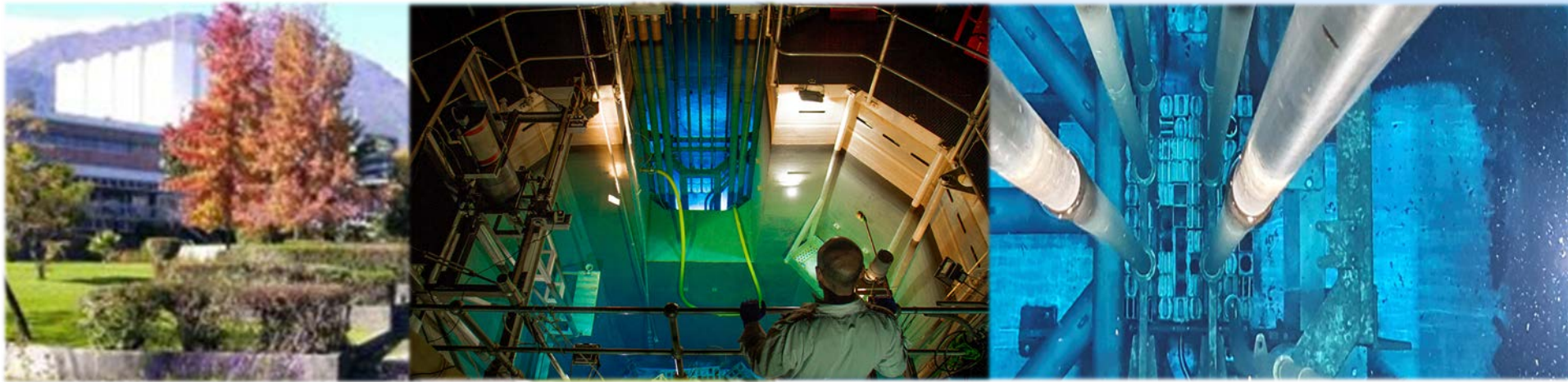
External

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OUR RESEARCH REACTOR WILL BE 50 YEARS OLD NEXT YEAR...

Nuclear Tasks

- 1 Update the risk analysis report
- 2 Conduct a review and safety assessment of the reactor and related facilities
- 3 Integrated team to RR licensing this year

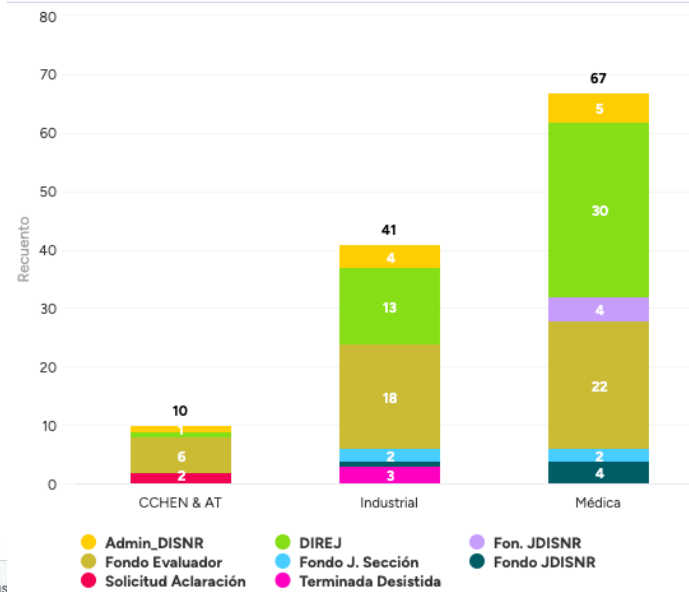
Challenges

- 1 Strengthen the technical capabilities of regulatory staff in the nuclear field
- 2 Update the nuclear regulatory framework

Our Initiatives...

- 1 Intensive use of IT tools to encourage a style of management
- 2 Key Performance Indicators (KPI)
- 3 Digital positioning using interactive platforms (Portal of the Regulator and the Regulated)
- 4 An Active Inspection Model using self-assessment tools. *(What is happening when we are not there)*

I.1 STATUS SS En Proceso por Sección y Etapa



##Persona## : BARBARA ROXANA MORALES KLINKERT (WOR/0127)

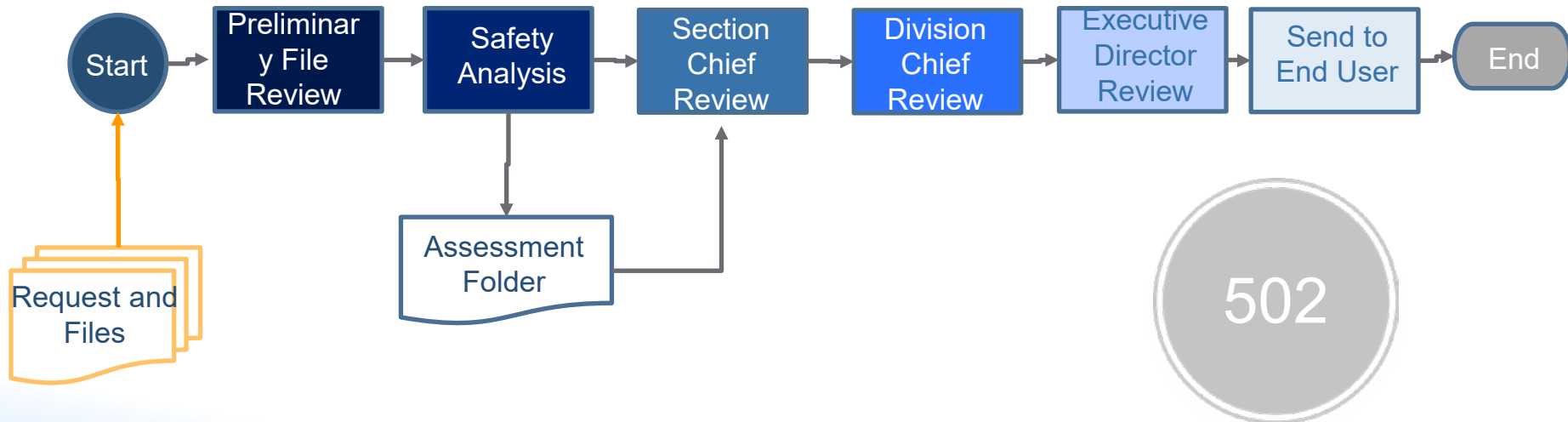
Current Process : Autorización Especial (AE-0681-2023)



Our Initiatives...

5 The incorporation of RAIS+ to our licensing processes:

- First pilot: authorization of operators
- Operator licensing process modeled in RAIS+ (see diagram)
- Next challenge: authorizations of facilities and related activities (transport, import-export)



502

Operators
Authorized
using RAIS+ Software



Regional Training Center for Regulators



Our Initiatives...

strengthening of soft and behavioural skills
in order to achieve an effective
regulatory role

1

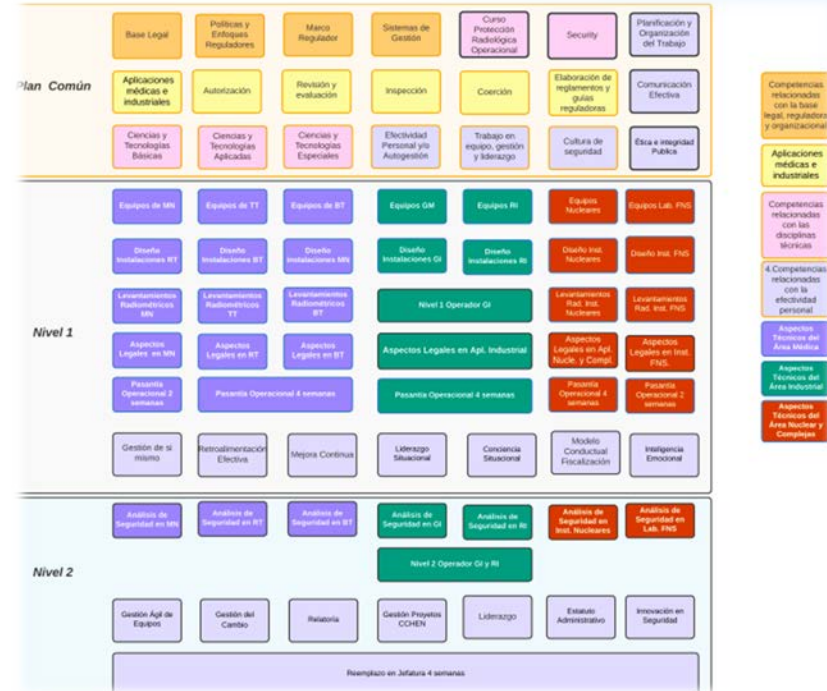
To launch a Regional Training Center with a
focus on specific technical competences
and soft and behavioural skills:

2

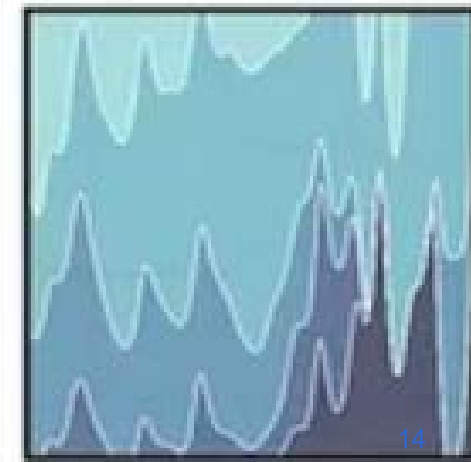
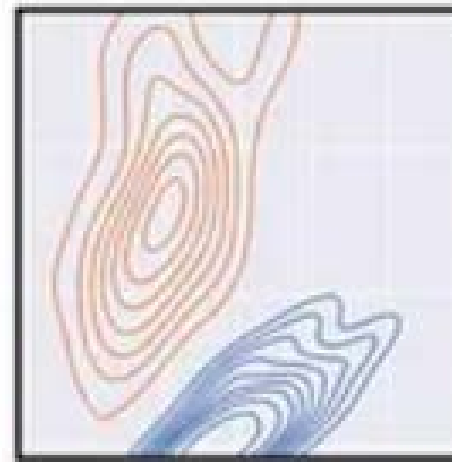
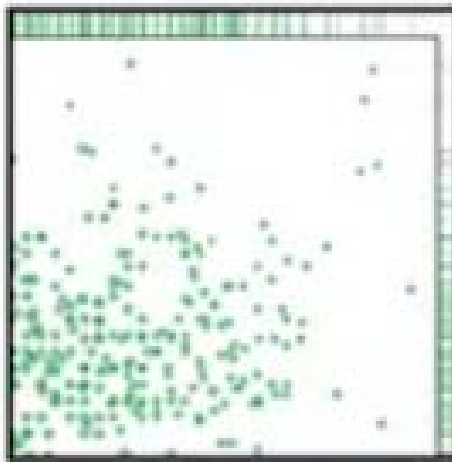
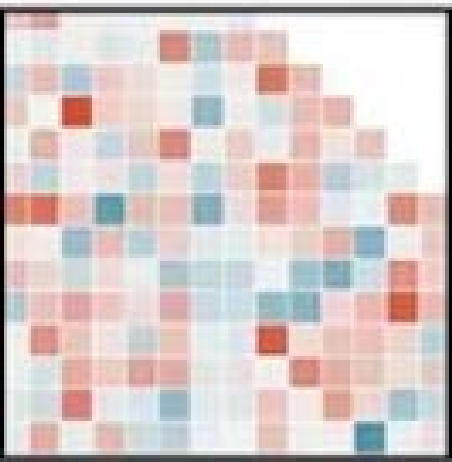
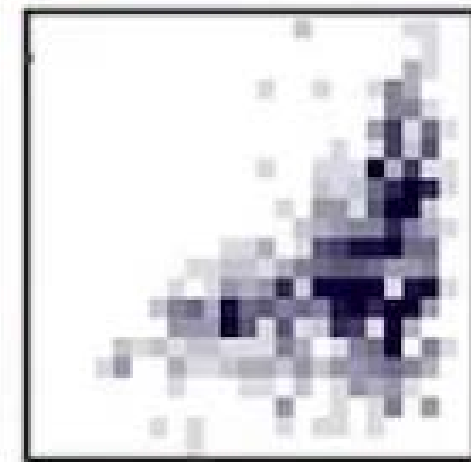
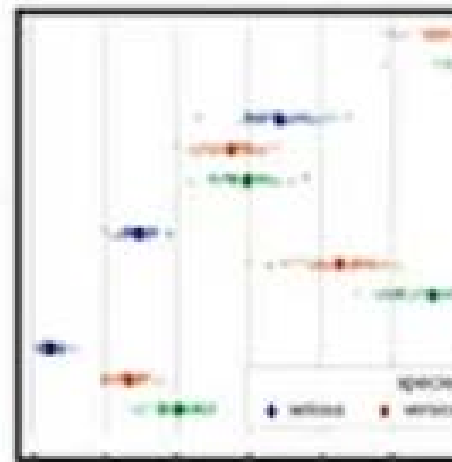
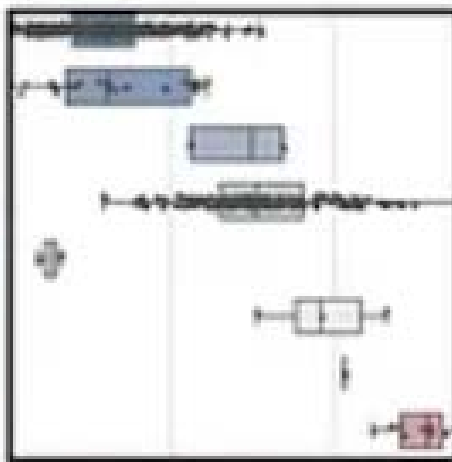
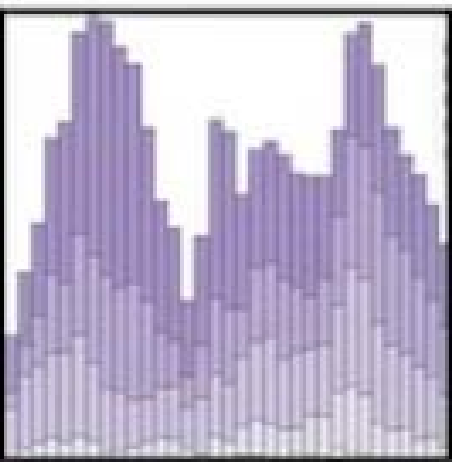
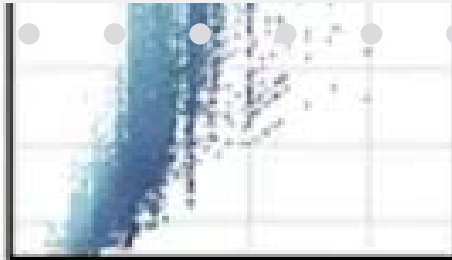
Locations: Santiago of Chile

Duration: 4 months

Background: specialization in
radiological safety. Work experience
greater than two years

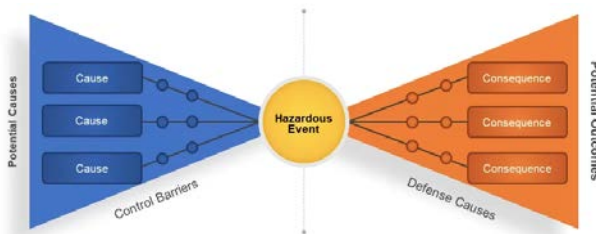


04. Prospective Vision



Our Initiatives in the innovation field...

- 1 Linked up with the local academic in order to develop tools as a means to support regulatory activity



Incorporate predictive Analysis Tools

- ❖ Risk models for facilities and regulated activities
- ❖ A mathematical model to quantify the team workload.

Incorporate real-time simulation tools (e.g., virtual reality)

Operator exams based on simulated situations: more efficient processes, better evaluation of operator skills.

Conclusions

- 1 CCHEN makes efforts in different fields to be effective in its regulatory task.
- 2 Strengthening the capacity of human resources in soft and behavioral skills allows us to improve our regulatory and inspection role.
- 3 The incorporation of informatics tools allows us to optimize our processes, reducing response times and balancing the staff's workload.
- 4 The launch of a Regional Training Center will allow us to share our regulatory model and the experience acquired.
- 5 CCHEN has important challenges in the nuclear regulatory area: many efforts are currently being made, mainly through technical cooperation with other countries.
- 6 The link with local academia allows us to develop open innovation projects, focused on the fields of data science. These initiatives will better integrate forward-looking capabilities into our work teams and improve processes and decision-making.



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Comisión
Chilena de
Energía Nuclear

Ministerio de Energía

Gobierno de Chile

Thank you!