Chilean Perspective: Role of the Regulatory Authority in developing EPR regulations, off-site emergency plans and harmonization of criteria for transnational emergencies.

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Outline

1. Regulatory Framework on Risk Management, *National Civil Protection System and National Emergency Office*
2. Regulatory Framework on Nuclear and Radiological Safety, Security and Emergencies, *CCHEN and MoH*
3. Key factors for harmonization and coordination
4. Lessons learned
5. Achievements, Challenges and Conclusions

National Context: *Regulatory Framework on Risk Management*

Conduction of the *Civil Protection System,* is based in the Ministry of the Interior and Public Security, function that carries out through *National Emergency Office, ONEMI,* created in 1974 by Decree Law Nº 369.

***Civil Protection System,* established by Decree N° 151, 2001.**

***Emergency Operations Committee, COE,* Decree Supreme N° 38/2011, Ministry of the Interior.**

National Context: *Civil Protection System*

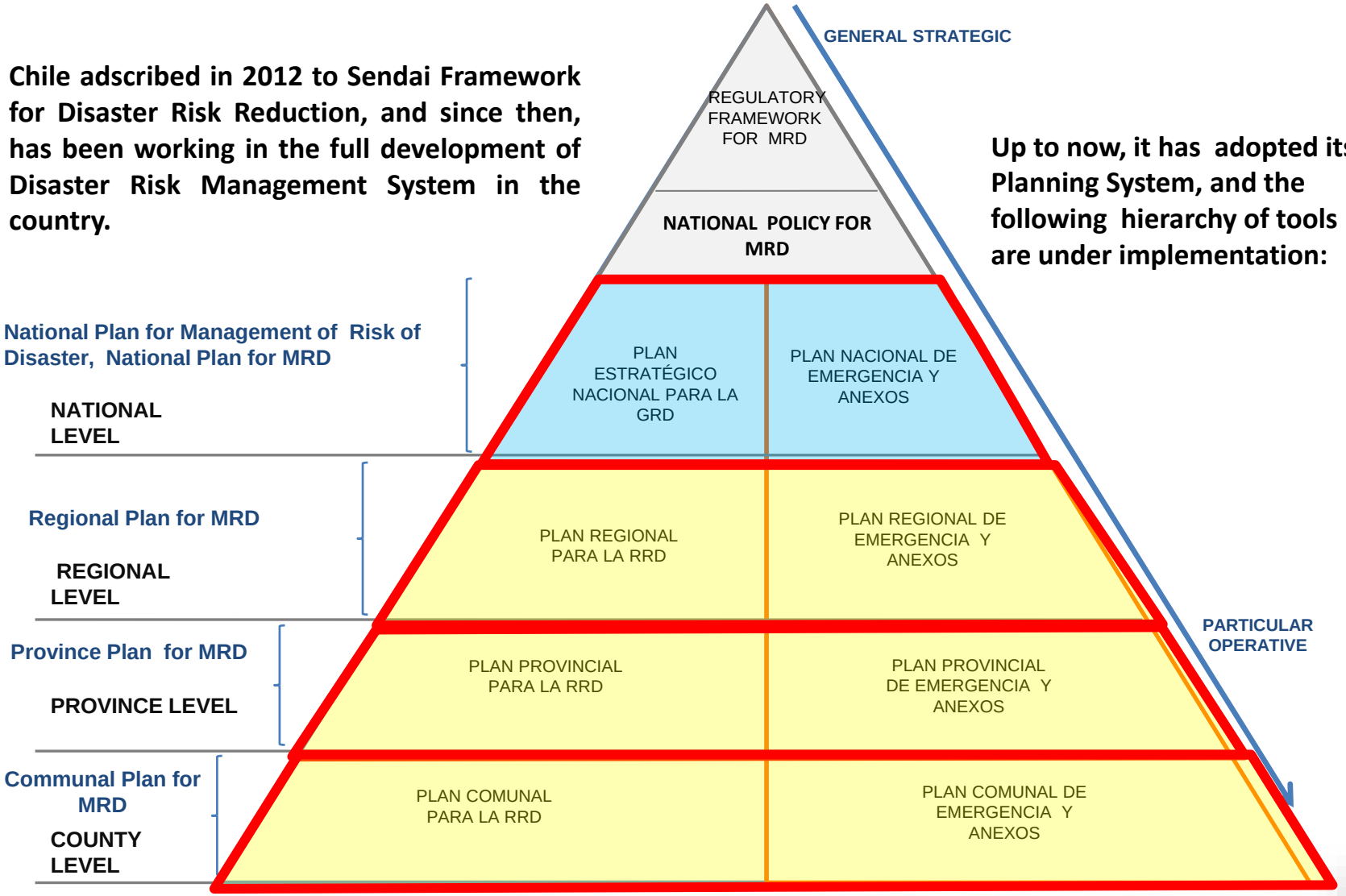
Civil Protection in Chile is assumed by a System that integrates public and private Authorities and Services, the world of Science and Technology and the organized community.

Its objective is to protect people, property and environment. It is under the responsibility of *Ministry of the Interior and Public Security,* and the coordination is performed by its specialized agency, the *National Emergency Office, ONEMI.*

National Context: *Overall Risk Management, Hierarchy of Tools*

Chile adscribed in 2012 to Sendai Framework for Disaster Risk Reduction, and since then, has been working in the full development of Disaster Risk Management System in the country.

Up to now, it has adopted its Planning System, and the following hierarchy of tools are under implementation:



1.- National Policy for the Management of Disaster Risks:

Decree Supreme Nº 1512, 2017, Ministry of Interior and Public Security:

National level instrument that delivers the guidelines, guides the actions and political decisions from a comprehensive perspective of Disaster Risk Management, as a component to achieve the country's sustainable development in the short, medium and long term.

National Context: ***Regulatory framework on Management of emergencies, disasters and catastrophes.*** **Planning tools for National Civil Protection System**

2.- National Strategic Plan for the Management of Disaster Risks:

Decree Exent, Nº 343, 14 December 2016, Ministry of Interior and Public Security.
National level instrument that defines strategic objectives,
actions, deadlines, responsible, targets
and indicators to materialize the provisions of National Policy at prevention phase.

Contains 5 axis for action:

- **Institutional Strengthening**
- **Strengthening Monitoring and Early Warning Systems**
- **Promotion of the Culture of Prevention and self-insurance.**
- **Reduction of the Underlying Factors of Risk**
- **Strengthening Disaster Preparedness to Achieve an Effective Response.**

It constitutes a basic instrument for the formulation of the Plans for DRR.

National Context: *Regulatory framework on Management of emergencies, disasters and catastrophes.* Planning tools for National Civil Protection System

3.- National Emergency Plan, All Hazards

MINISTERIO DEL INTERIOR
Y SEGURIDAD PUBLICA
01 AGO 2017
OFICINA DE PARTES
TOTALMENTE TRAMITADO

APRUEBA PLAN NACIONAL DE EMERGENCIA

DECRETO EXENTO Nº 1.434.-

SANTIAGO, 29 de Junio de 2017.

VISTOS: Lo dispuesto en la Constitución Política de la República de Chile; la Ley Nº 18.575 Orgánica Constitucional de Bases Generales de la Administración del Estado; la Ley N° 19.880 de Bases de los Procedimientos Administrativos que Rigen los Órganos de la Administración del Estado; la Ley N° 18.415 Orgánica Constitucional sobre Estados de Excepción Constitucional; la Ley N° 19.175 Orgánica Constitucional sobre Gobiernos Regionales y Administración Regional; Decreto N° 104 del 28 de enero de 1977, que fija el texto refundido, coordinado y sistematizado del título I de la Ley N° 16.282; la Ley N° 16.282 que fija disposiciones permanentes para casos de sismos o catástrofes; la Ley N° 19.095 que modifica Ley N° 16.282, en lo relativo a normas para casos de sismos y Catástrofes; la Ley N° 20.304 sobre operación de embalses frente a alertas y emergencias de crecidas y otras medidas que indica; la Ley N° 20.444 que crea el Fondo Nacional de la Reconstrucción y establece mecanismos de incentivo tributario a las donaciones efectuadas en caso de catástrofe; la Ley N° 19.061 que establece normas sobre fomento a obras de riego en zonas afectadas por sismos o catástrofes; la Ley N° 20.478 sobre recuperación y continuidad en condiciones críticas y de emergencia del sistema público del sistema público de telecomunicaciones; la Ley N° 19.886

Decree Exent Nº 1434, 29 June 2017, Ministry of Interior and Public Security.

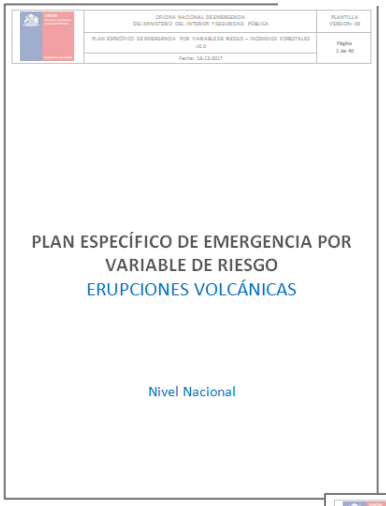
Instrument of an indicative and general nature, which establishes the response actions in emergency, disaster and catastrophe situations, through the roles, functions, capacities and competencies of the National Civil Protection System agencies.

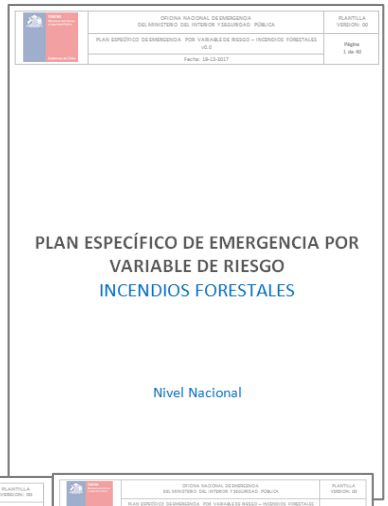
Specifically, for the Ministry of Energy requests:

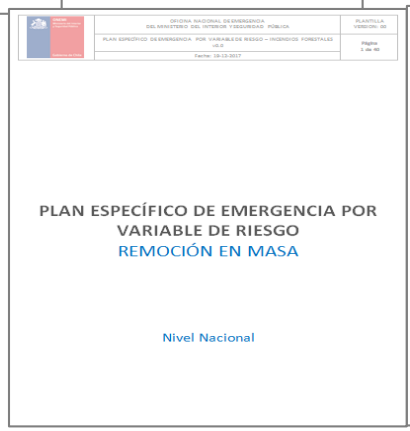
Basic instrument for the formulation of the Emergency Plans and their Annexes.

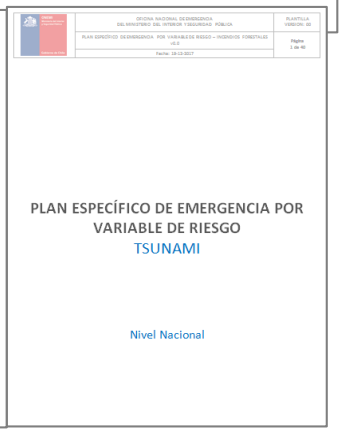
National Context: *Regulatory framework on Management of emergencies, disasters and catastrophes.* Planning tools for National Civil Protection System

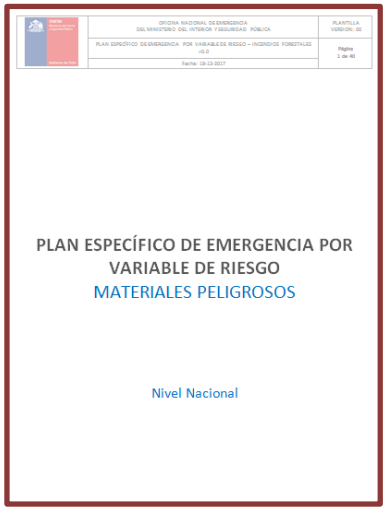
3.A.- Specific Emergency Plans by Risk Variable









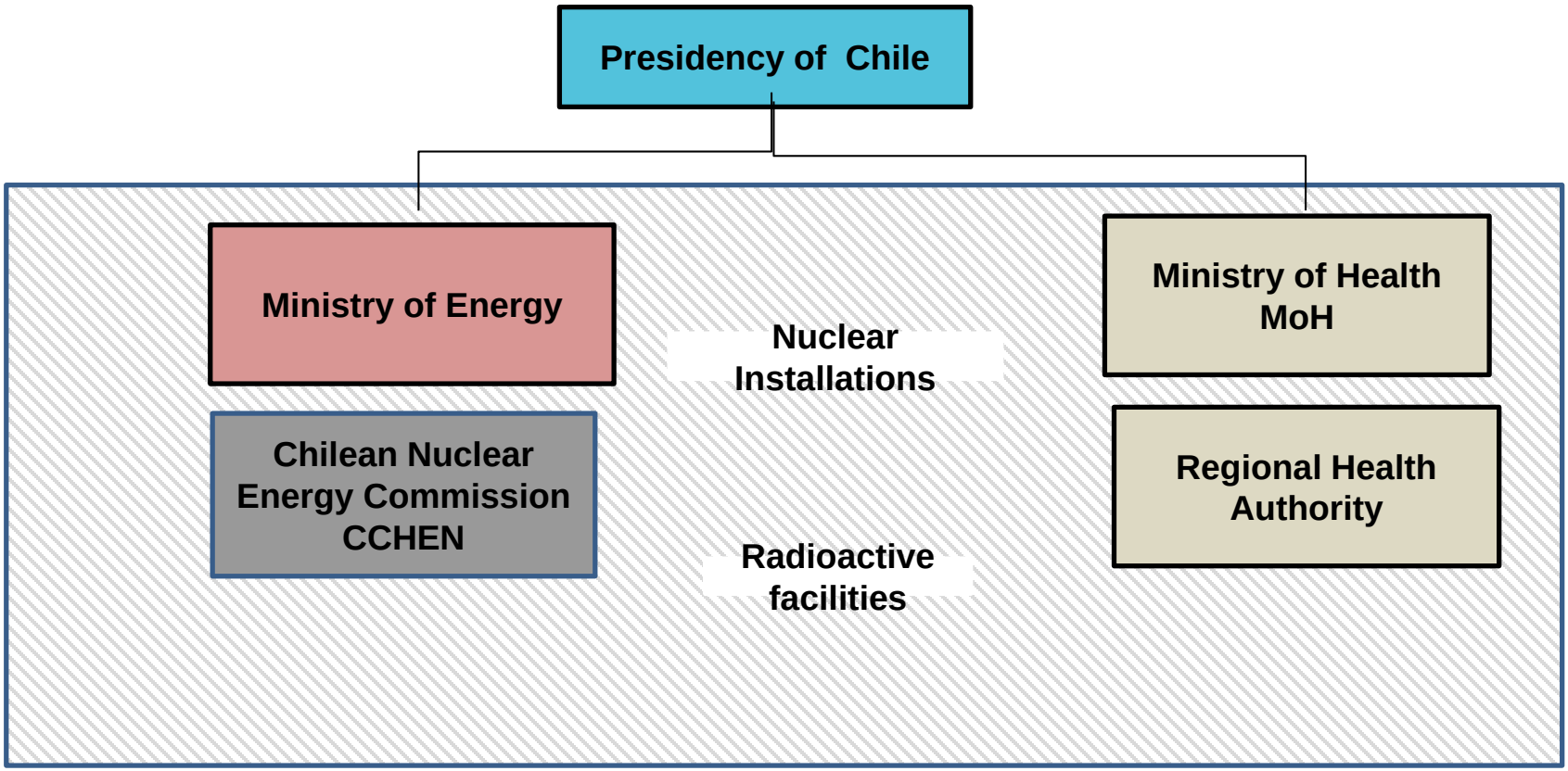


Radiological Emergency Plan

National Level

Constitute a basic instrument for the formulation of the Specific Emergency Plans by Risk Variable. ***Currently, it is under development the National Radiological Emergency Plan, assigned to Regulatory Authorities.***

National Context:
Regulatory Authorities for Nuclear and Radiological activities in Chile



Key factors for harmonization and coordination

National Coordination Mechanism, Commission for Safety and Security in Radiological Emergencies (CONSER) (2015)

Mission

Provide advice and support to National Authorities ***in the strengthening of national capabilities to prevent and respond to nuclear and radiological emergencies and nuclear security events,*** that could affect public security, people´s health and safety (integrity) or the environment.

Key factors for harmonization and coordination
SPECIFIC OBJECTIVES

- **Propose measures to strengthen national capacities to deal jointly with the various stages of an event that may endanger the nuclear/radiological safety or security**

- **Advice for proper intersectorial (inter-agency) coordination**

- **Suggest actions to the dissemination of knowledge and international standards on nuclear/radiological safety and security.**

Coordination Mechanism Members (CONSER)

Ministry of Health

Chilean Nuclear Energy Commission

Ministry of Interior & Public Security
- National Emergency Office
- Police Carabineros
- Investigation Police
- National Intelligence Agency

Ministry of Foreign Affairs

Customs

Ministry of Environment

Agricultural &Livestock Service

Ministry of Defense
- Civil Aviation Directorate
- Maritime Authority
- Mobilization Directorate for Army
- Chilean Army

Medical Forensic Service

Ministry of Transport &Telecomm.

National Firefighters Board

National Prosecutor

Key factors for harmonization and coordination

CONSER Working Plan for 2018, Development of the National Radiological Emergency Plan

- **Deadline:** **November 2018. According to the following roles:**
- **National Emergency Office, ONEMI:** **As CONSER Presidency, received the ministerial mandate and provided the general structure and format according to Emergency Plans, already established.**
- **Regulatory Authorities: CCHEN and MoH:** **as CONSER Executive Secretariat, generate the full plan proposal, supported by National Emergency Office.** ***Plan proposal addresses requirements from Chilean National System for Civil Protection and GSR Part 7.***
- **All CONSER Member Agencies:** **Provides key inputs, such as: Responsibilities and Functions, Commitmment for generation of their specific emergency plans for radiological emergencies, according to established responsibilities and functions.**
- **Each organization is responsible for providing human resources, equipment, capabilities for EPR.**

Some Lessons Learned

IMPORTANCE OF NATIONAL COORDINATION MECHANISM FOR RADIOLOGICAL EMERGENCIES

From Notification Protocol established and issued by Regulatory Authorities, through Forms R2, R24, other Competent Authorities have been able to initiate their own specific response actions in case of some events or were attentive to initiate them, if needed.

ORGANIZATION OF THE RESPONSE AT THE FIELD: Incident Command

Only one command leader and meeting point in the field: Even if 2 regulatory authorities-team are acting, a well organized and coordinated Incident Command is required, to which external logistic support is to be provided.

DETECTION AND RESPONSE TO NON CONTROLLED RADIOACTIVE MATERIAL AT SCRAP SMELTERS

Need to include Scrap Smelters as a non-regulated facility, but a place where possible MORC is to be found.

DETECTION AND RESPONSE TO NON CONTROLLED RADIOACTIVE MATERIAL AT BORDER POINTS

Need to consider Points of Entry at borders, as places where possible MORC is to be found.

Some Lessons Learned (cont.)

COORDINATION AND EXCHANGE OF TIMELY INFORMATION (national and international)

Response to a radiological emergency or to a nuclear security event involves extensive coordination/communication at national level (another authorities, media, public) and to international level (IAEA and neighbouring countries). Processes are not so easy to perform and also time-consuming.

Need to establish a clear set of criteria at national level, before an international notification to IAEA is to be performed.

Evaluation of an event by INES criteria is not an easy task. Public impact is a key factor.

COMMUNICATION TO THE PUBLIC

Need to define, harmonize and adopt only one national criteria for communication to the public in case of a radiological emergency. This action should allow the communication of one single and easily understood message to the public. *This aspect is to be included at the National Radiological Emergency Plan, now under development.* Currently, CCHEN and MoH have different criteria in the matter.

Some Lessons Learned (cont.)

REINFORCE SOME ASPECTS OF REGULATORY AND CONTROL SYSTEM

Need for Regulatory Authorities, to reinforce transport regulations, in order to avoid or reduce the appearance of orphan sources, mainly derived from transport incidents and from practices out of regulatory control. This is based on statistics arising from notification reports.

Need to establish Exemption Criteria to release radioactive materials from regulatory control. Currently, national legislation only has established criteria to define radioactive material.

Achievements

- **Actions described have allowed Chile advance to strengthen its level of Emergency Preparedness and Response to radiological emergencies, both at facility level, at national level and at bilateral level, in a first phase.**

- **Basic capabilities have been established in a group of national agencies, that integrates CONSER, Commission for Safety and Security in Radiological Emergencies, including trained personnel and detection equipment.**

- **From Notification Protocol established and issued by Regulatory Authorities, through Forms R2, R24, other Competent Authorities have been able to initiate their own specific actions in case of some events or were attentive to initiate them, if needed.**

- **Also, Chile has started building capabilities for the prevention, detection and response to MORC.**

Challenges: *Enhance and sustain initiated efforts*

- **Although advances has been made, many challenges arise, i.e:**

- **Development of protocols for coordination and response to national, regional and local level, for radiological emergencies and nuclear security incidents and ensure its adequate implementation**

- **Continue awareness, on regular basis, to decision-makers from CONSER agencies**

- **Regulatory Authorities, i.e, CCHEN and MoH, should harmonize safety and security requirements concerning the use/ transport of radioactive sources, emergency plans, etc.**

- **Continue building capabilities, i.e, provide regular training to first responders, perform regularly interagency exercises, ensure full-implementation of pilot project on radiation detections at border points, strengthen radiation detection capabilities along the country**

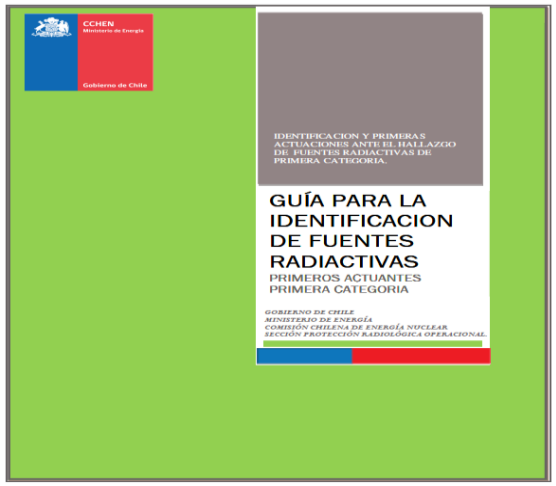
- **Ensure sustainability of detection capabilities, i.e, efforts to ensure a regular budget for training activities and provision of detection equipment to first responders**

- **Regular program of exercises and drills, within agencies and inter-agencies**

- **Broaden control for scrap smelters, for borders, etc.**

Conclusions

- **In recent years, CCHEN has performed actions intended to strengthen the national EPR system and the infrastructure for nuclear security, with external support from IAEA and US-DOE.**
- **A sustained work by CCHEN and others, led to the *establishment of a national coordinating body on EPR, CONSER, on legal basis, in December 2015.***
- ***CONSER agencies* have been actively involved in training activities, establishing a Notification Procedure between Regulatory Bodies and *now, in the development of the National Radiological Emergency Plan.***
- **Experience acquired through training activities and from response to real incidents and emergencies have been shared among all agencies, not only Regulatory Bodies.**
- **CCHEN requested IAEA to perform an IRRS mission to evaluate all its regulatory system, including EPR activities. Its results with minor observations regarding this aspect.**
- **Bilateral exercises with Argentina have contributed to achieve, *on informal basis, a fluid bilateral communication in case of radiological emergencies, as an initial step towards harmonization of procedures.***
- **Interest to establish an specific communication protocol between regulatory authorities has also been declared.**


CCHEN
Ministerio de Energía
Gobierno de Chile
IDENTIFICACION Y PRIMERAS ACTUACIONES ANTE EL HALLAZGO DE FUENTES RADIACTIVAS DE PRIMERA CATEGORIA.
GUÍA PARA LA IDENTIFICACION DE FUENTES RADIACTIVAS
PRIMEROS ACTUANTES PRIMERA CATEGORIA
GOBIERNO DE CHILE
MINISTERIO DE ENERGÍA
COMISIÓN CHILENA DE ENERGÍA NUCLEAR
SECCIÓN PROTECCIÓN RADIOLÓGICA OPERACIONAL

MANY THANKS