LIABILITY AND COMPENSATION FOR NUCLEAR DAMAGE

Ximena Vásquez-Maignan
Legal Affairs
OECD Nuclear Energy Agency

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PIME / WiN Europe
What is nuclear law?

A complete set of special rules created to regulate the conduct of people, companies or governments who are engaged in activities related to fissionable materials, ionising radiation and exposure to natural sources of radiation.

Nuclear law enables the safe, secure development of nuclear energy for the benefit of society.
Where does it come from?

**international law**
- international treaties, conventions, agreements
- international custom
- general principles of international law
- judicial decisions

**national law**
- acts, statutes
- regulations, ordinances
- decrees, orders
WHY IS NUCLEAR LIABILITY AND COMPENSATION IMPORTANT?

Resistance to nuclear energy use is largely due to public fear of the potential damage that could result from an accident at a nuclear facility or during the transport of nuclear material.
WHY IS NUCLEAR LIABILITY AND COMPENSATION IMPORTANT?

A nuclear accident can produce...

- detrimental effects to human health, property, the environment, the economy
- damage that does not stop at political or geographical borders

Governments have responded by...

- balancing public assurance of adequate compensation for damage with protecting investors/suppliers from ruinous liability claims
- adopting liability/compensation regimes at national and international levels for accidents at installations/during transport
NUCLEAR LIABILITY/COMPENSATION REGIMES ADDRESS EXCEPTIONAL SITUATIONS...

Most national/international regimes cover:

- liability and compensation for damage from a nuclear incident at a nuclear installation or during transport of nuclear substances
- exceptional risks arising from nuclear activities involving high levels of radioactivity
- damage suffered by third parties (including nuclear operator’s employees)
NUCLEAR LIABILITY/COMPENSATION REGIMES: TRIGGERING EVENTS

There must be:

- a “nuclear incident” which causes “damage”
- involving “nuclear fuel”...
- or “radioactive products or waste”...
- at a “nuclear installation” ... or during transport of nuclear substances
NUCLEAR LIABILITY AND COMPENSATION REGIMES: BASIC PRINCIPLES

A nuclear incident causes damage... what then?

- national level (domestic legislation)...
  - strict liability of nuclear operator
  - exclusive liability of nuclear operator
  - liability limited in amount
  - compulsory financial security
  - liability limited in time

- international level (conventions) ... as above plus
  - unity of jurisdiction
  - non-discrimination

Operator = licensee/other recognized entity
NUCLEAR LIABILITY/COMPENSATION REGIMES: BASIC PRINCIPLES

**Strict Liability:** victims need not prove fault or negligence

**Exclusive Liability:** liability channeled to operator regardless of “cause”; suppliers of goods/services/technology protected

**Limited Liability Amount:** liability limited to specified amount; protects vs ruinous claims (strict/exclusive liability trade-off);

**Financial Security:** liability amount there when needed; private insurance, operator pool (U.S., Germany), state/bank/corporate guarantee, self-insurance

**Limited Liability in Time:** 10 yrs from accident-insurance limitation (distinguishing cancers); “discovery rule”- claims w/in 2-3 years from discovery damage/operator
INTERNATIONAL NUCLEAR LIABILITY REGIMES: SPECIAL PRINCIPLES

Unity of Jurisdiction: courts of State where incident occurred have jurisdiction;
if incident outside Convention Party/place not certain,
courts of State where liable operator’s installation is located have jurisdiction
judgments to be recognized by other States Parties and be enforceable in their territories

Non-discrimination: courts apply relevant convention and national law without discrimination - nationality, domicile or residence
### INTERNATIONAL REGIMES UNDER OECD AUSPICES

<table>
<thead>
<tr>
<th>Year</th>
<th>Convention/Convention Amend</th>
<th>Signatories</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td><em>Paris Convention on Nuclear Third Party Liability (in force 1968)</em>&lt;br&gt;basic liability/compensation convention: 16 Contracting Parties/States (mostly Western Europe)</td>
<td>16 PC signatories</td>
<td></td>
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<tr>
<td>1963</td>
<td><em>Brussels Convention Supplementary to Paris Convention (in force 1974)</em>&lt;br&gt;supplementary funding instrument: all 13 Contracting Parties/States are PC states;</td>
<td>13 BSC signatories</td>
<td></td>
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<tr>
<td>2004</td>
<td><em>Protocols amending Paris + Brussels Supplementary Conventions (not yet in force)</em>&lt;br&gt;provides more money for more victims for more damage;&lt;br&gt;16 PC signatories/13 BSC signatories;</td>
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## INTERNATIONAL REGIMES UNDER IAEA AUSPICES

<table>
<thead>
<tr>
<th>Year</th>
<th>Convention/Protocol</th>
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<tbody>
<tr>
<td>1997</td>
<td>Protocol amending Vienna Convention on Civil Liability for Nuclear Damage (in force 2003)</td>
<td>provides more money for more victims for more damage; 9 Contracting Parties</td>
</tr>
<tr>
<td>1997</td>
<td>Convention on Supplementary Compensation for Nuclear Damage (not yet in force)</td>
<td>global liability/compensation regime (both basic and supplementary funding): 4 Contracting States</td>
</tr>
</tbody>
</table>

26 Contracting Parties

“bridge” – ensures only one convention applies to a nuclear incident

effectively extends geographical scope of both conventions (Western/Eastern Europe)
Existing Paris Convention (Article 7)

- maximum liability limit: 15 million SDRs
- 1990 NEA S.C. recommended limit: 150 million SDRs
- minimum liability limit: 5 million SDRs

Revised Paris Convention

- maximum liability limit: none
- minimum liability limit: 700 million EUR
- minimum reduced liability limits*
  - low-risk installations: 70 million EUR
  - transport: 80 million EUR
  - State guarantees up to 700 million EUR

Excludes interest and costs

At 10/02/2012: 1 Special Drawing Right (SDR) = € 1.17 / US$ 1.55

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1963 Vienna Convention (Article V)
- minimum: US$ 5 million (based on U.S. $ gold value on 29/04/1963)
  US$ 177.9 million (based on today’s price of gold)
- maximum: none

Revised Vienna Convention
- minimum: 300 million SDRs
- maximum liability: none
- minimum reduced liability*: 5 million SDRs

* State guarantee up to 300 million SDRs

Excludes interest and costs

At 25/08/2011: 1 Special Drawing Right (SDR) = € 1.12 / US$ 1.61
SUPPLEMENTARY FUNDING CONVENTIONS: HOW MUCH MONEY IS AVAILABLE?

**Existing Brussels Supplementary Convention: Article 3**

1\textsuperscript{st} tier: operator liability (PC) = min. 5 million SDRs
2\textsuperscript{nd} tier: operator’s State’s funds = 1\textsuperscript{st} tier to 175 million SDRs
3\textsuperscript{rd} tier: all Parties’ contributions = 125 million SDRs
TOTAL: = 300 million SDRs

**Revised Brussels Supplementary Convention: Article 3**

1\textsuperscript{st} tier: operator liability (PC) = min. 700 million EUR
2\textsuperscript{nd} tier: operator’s State’s funds = 500 million EUR
3\textsuperscript{rd} tier: all Parties’ contributions = 300 million EUR
TOTAL: = 1.5 billion EUR

**Convention on Supplementary Compensation: Article III**

1\textsuperscript{st} tier: 300 M SDRs: inside/outside installation state
2\textsuperscript{nd} tier: 300 M SDRs (expected): 50% as for 1\textsuperscript{st} tier/50% for trans-boundary victims only

At 10/02/2012: 1 Special Drawing Right (SDR) = € 1.17 / US$ 1.55
WHO MAY CLAIM COMPENSATION?

Current Paris/Vienna Conventions
- Paris: incident and damage must occur in PC State; *may* apply if incident or damage on high seas or incident outside PC State
- Vienna: damage must occur in VC State or on high seas

Revised Paris/Vienna Conventions
- Paris: applies to PC States and non-PC States if latter is Party to VC/JP or has no installations or has installations + PC based legislation + equivalent reciprocal benefits
- Vienna: applies to damage wherever suffered; nuclear states without reciprocal equivalent benefits may be excluded

Convention on Supplementary Compensation
- applies to incidents in CSC States; may apply to others if base convention or Annex provides
WHAT TYPE OF DAMAGE IS COMPENSATED?

**Current Paris/Vienna Conventions**
- damage to or loss of life
- damage to or loss of property (other than on-site)
- (1963 VC only) any other loss/damage if and to extent provided by law of court with jurisdiction to hear claims

**Revised Paris/Vienna Conventions; Convention on Supplementary Compensation**
- as above +
- economic loss from above
- cost of reinstating impaired environment
- cost of preventive measures + loss/damage caused thereby
- loss of income from direct economic interest in use of environment
WHAT EXONERATIONS ARE GRANTED TO OPERATOR?

Current Paris/Vienna Conventions
- No liability for damage caused by nuclear incident directly due to:
  - armed conflict, hostilities, civil war, insurrection: does not include "terrorism"
  - grave natural disaster of exceptional character (national law may provide otherwise)
- If damages results wholly/partly from gross negligence/intent to cause damage by person suffering damage (act or omission)

Revised Paris/Vienna Conventions
- As above but grave natural disaster exemption revoked

Convention on Supplementary Compensation
- as for current Paris/Vienna Conventions
**NUCLEAR POWER GENERATING STATES PARTY and international nuclear liability conventions**

<table>
<thead>
<tr>
<th>Country</th>
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<tbody>
<tr>
<td>ARGENTINA</td>
<td>VC ; RVC ; CSC</td>
</tr>
<tr>
<td>ARMENIA</td>
<td>VC</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>PC ; BSC; RPC; RBSC</td>
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<tr>
<td>BRAZIL</td>
<td>VC</td>
</tr>
<tr>
<td>BULGARIA</td>
<td>VC; JP</td>
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<tr>
<td>CANADA</td>
<td>SLOVAK REP.</td>
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<tr>
<td>CHINA</td>
<td>SLOVENIA</td>
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<tr>
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<td>VC ; JP</td>
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<td>FINLAND</td>
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<td>FRANCE</td>
<td>PC ; BSC; RPC; RBSC</td>
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<td>GERMANY</td>
<td>PC ; BSC; JP; RPC; RBSC</td>
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<tr>
<td>HUNGARY</td>
<td>VC; JP</td>
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<tr>
<td>INDIA</td>
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<td>IRAN</td>
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<td>NETHERLANDS</td>
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<td>PAKISTAN</td>
<td>VC</td>
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<td>ROMANIA</td>
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<td>TAIWAN</td>
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<td>UKRAINE</td>
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<tr>
<td>UNITED KINGDOM</td>
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11 March 2011: Level 7 nuclear event due to a massive earthquake followed by a tsunami on the pacific coast of Japan

20 000 deaths or missing persons from the earthquake and the tsunami, no casualties from the accident at the NPP but an important release of radioactive material
Evacuation Areas
(Map provided by Japanese Ministry of Economy, Trade and Industry)

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APPLICABLE LEGAL FRAMEWORK

- Japan is NOT a party to an international nuclear liability convention: claims for transboundary damage to be based on general tort law but until now no transboundary damage

- Main applicable laws:
  - Civil Code
  - Act on Compensation for Nuclear Damage (Compensation Agreement)
  - Act on Indemnity Agreements for Compensation of Nuclear Damage (Indemnity Agreement)
NUCLEAR LIABILITY REGIME

**Operator’s Strict Liability**: Yes

**Operator’s Exclusive Liability**: Yes

**Limited Liability Amount**: Unlimited liability

**Financial Security**: Operator must have financial security (usually insurance) up to the amount specified for each category of site or transportation (¥120 billion for NPPs) + *Governmental Indemnity Agreement* up to ¥120 billion for non-insurable risks (e.g. earthquakes, tsunami, eruption)

**Limited Liability in Time**: right of action fully extinguished 20 years following the date of the tort / actions must be brought within 3 years from the date the victim has knowledge of both the damage and the person liable
Grave natural disaster of an exceptional character

- Compensation Act: exclusion of operator’s liability in case of a grave natural disaster of an exceptional character

- Accident due to an earthquake followed by a tsunami of exceptional force, of an exceptional character?

- Government considers that TEPCO shall not benefit from the exception

- BUT only civil courts may interpret this provision: TEPCO has not until now taken the opportunity to request the benefit of this exemption

- Consequences:
  - Event not covered by private insurance
  - Indemnity Agreement provided by Government was triggered
  - TEPCO has been in great financial difficulties due, among others, to the amounts of compensation to be paid to the victims
“Definition of the damages to be compensated”

- Compensation Act defines “nuclear damage” as any damage caused to third parties by the effects of the fission process of nuclear fuel or the radiation or toxic nature of nuclear fuel and contaminated materials.

- Does not specify the heads/nature of damages: to be specified on a case by case basis pursuant to the “adequate causation” principles by the civil courts.

- Guidelines (non legally binding) issued by the Dispute Reconciliation Committee for Nuclear Damage Compensation (Reconciliation Committee) determine the type of damages which give right to compensation, e.g.
  - Damages resulting from instructions issued by the central and local governments (evacuation instruction, restrictions of marine areas, restrictions of shipments of agricultural products and marine products).
  - Damages suffered by workers, bankruptcies, costs of decontamination measures, damage caused by unfounded rumors.
Facing the financial burden

- No estimation of compensations to be paid is available, but TEPCO has already nearly went bankrupt because of the financial burden.

- Compensation Act: where nuclear damage occurs in excess of the financial security amount, Government must give the operator such aid as is required for him to compensate the damage and as approved by the National Diet. 
  
  \[ \rightarrow \textit{Act to Establish the Nuclear Damage Compensation Facilitation Corporation, approved by the Japanese National Diet on 3 August 2011} \]

- Compensation Facilitation Corporation was set up in September 2011 and manages a fund which received contributions from the government and the Japanese nuclear installations operators in order to support operators in providing compensation to victims of nuclear accidents.

- Operator shall only obtain financial support after proceeding to cost-cutting measures and will be expected to pay back over the years.
Claims handling

- TEPCO is solely liable for claims handling

- In case of dispute between TEPCO and a victim, the latter may at his/her own discretion, either individually or as part of a group, file a claim against the operator:
  - directly to the operator
  - before the Reconciliation Committee (conciliation committee)
  - before the civil courts
JAPANESE DEDICATED WEB SITES

TEPCO:  
http://www.tepco.co.jp/en/comp/index-e.html

Ministry of Economy, Trade and Industry:  

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WEBSITES FOR NUCLEAR LAW

OECD/Nuclear Energy Agency website

International Atomic Energy Agency website
www.iaea.org/Publications/Documents/Conventions/index.html

European Union
http://ec.europa.eu/energy/nuclear/index_en.htm
OECD/NEA Education Programmes

International School of Nuclear Law

University of Montpellier 1

OECD Nuclear Energy Agency

International Nuclear Law Essentials

3-7 October 2011

OECD Nuclear Energy Agency

Isy-les-Moulineaux, France

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THANK YOU!