The Japanese Nuclear Liability Regime and the TEPCO Fukushima Daiichi Accident

11 December 2013

Toyohiro NOMURA

Professor, Gakushuin University

Taro HOKUGO

Counsellor, Permanent Delegation of Japan to UNESCO

Brief History of the System

- 1. Enacted in 1961
- 2. Major Amendments about every 10 years
- 3. First Application for JCO Criticality Accident in 1999

Major Amendments

- (1) 1971 •Financial security amount: 5 billion ⇒ 6 billion Yen
- Deletion of of the right to recourse against negligent third party
- Provisions for nuclear-powered ships
- (2) 1979 Financial security amount: 6 billion ⇒ 10 billion Yen
- Introduction of the damage of the employees of nuclear operators into nuclear damage
- (3) 1989 Financial security amount: 10 billion ⇒ 30 billion Yen
- (4) 1999 Financial security amount: 30 billion ⇒ 60 billion Yen
- (5) 2009 Financial security amount: 60 billion ⇒ 120 billion Yen
 - Guidelines of DRC
- Commission of part of administration for the indemnity agreements to casualty insurance companies

Purpose of the System

Article 1 (Purpose)
Act on Compensation for Nuclear Damage (Compensation Act)

The purpose of this act is to protect persons suffering from nuclear damage and to contribute to the sound development of the nuclear industry by establishing the basic system regarding compensation in case of a nuclear damage caused by reactor operation etc.

Liability of Nuclear Operators

Compensation Act applies by priority as a special act to the compensation of nuclear damage

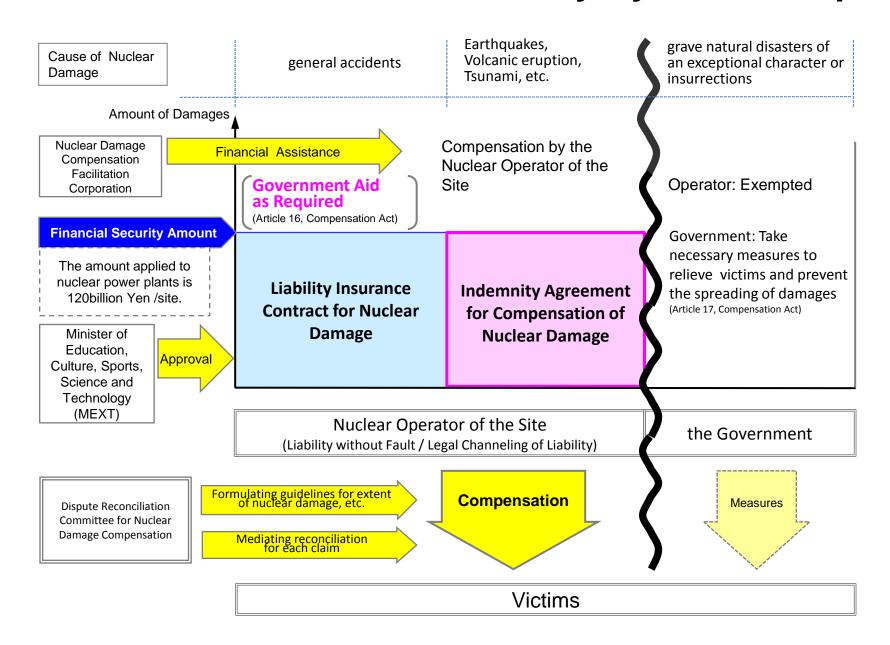
- No-fault liability for nuclear damage(Article 3, Paragraph 1)
- •Exemption of nuclear operators in the cases where the damage is caused by "a grave natural disaster of an exceptional character" or by an insurrection (Article 3, paragraph 1)
 - Legal Channeling of Liability (Article 4, Paragraph 1)
- Limited right of recourse against the third parties intent to cause damage(Article 3, Paragraph 2) etc.

General Tort Liability (Article 709, etc., Civil Code) applies as a general law unless otherwise provided by the Compensation Act

- Compensation within Reasonable Causation from the cause
 - Comparative negligence (Article 722, Civil Code)
- Extinctive prescription of 3 years from recognition of the damage and the tort-feasor and 20 years after the act of tort (Article 724, Civil Code)

 etc.

Overview of the Nuclear Liability System in Japan



Interpretation of the Exemption Clause

Except ion in the case where the damage is caused by a grave natural disaster of an exceptional character or by an insurrection

- Making the non-fault liability of the operators not absolute
- Exempt exceptionally when making the operator liable is totally inappropriate

(1)a grave natural disaster of an exceptional character

Explained as "huge natural disaster beyond all expectations of humankind", "completely unimaginable situation", etc. in the Congress on the enactment in 1951

(2) an insurrection

Interpreted as armed attack by other nations or civil war Terrorism is not included

Scope of the Compensation

Nuclear Damage: any damage <u>caused by the effects of</u> the fission process of nuclear fuel or the radiation or toxic nature of nuclear fuel and contaminated materials except the damage suffered by the nuclear operator liable for it (Article 2, paragraph2, Compensation Act).

Nuclear operator is liable for the "Nuclear Damage" <u>caused</u> as a result of its reactor operation etc. (Article 3, paragraph 1, Compensation Act

"Reasonable Causation" doctrine from the interpretation of Civil Code

Financial Security

The operators are obligated to have financial security up to the amount specified for each category of site or transportation by the Compensation Act or the order delegated by the act for each site.(Article 6, Compensation Act)

- (1)A liability insurance contract for nuclear damage and an indemnity agreement for compensation of nuclear damage (2)Deposit
- (3)Other equivalent arrangement

The maximum amount category: 120 billion Yen (all of existing power plants belong to this)

Measures taken by the State

When the operator is not exempt:

The government shall give the operator such aid as is required for compensation when the amount of liability exceeds that of financial security and the government deem it necessary in order to attain the objectives of the Compensation Act. (Article 16, Compensation Act)

- ⇒Interpreted as a directory provision
- ⇒Embodied by the Nuclear Damage Compensation Facilitation Act

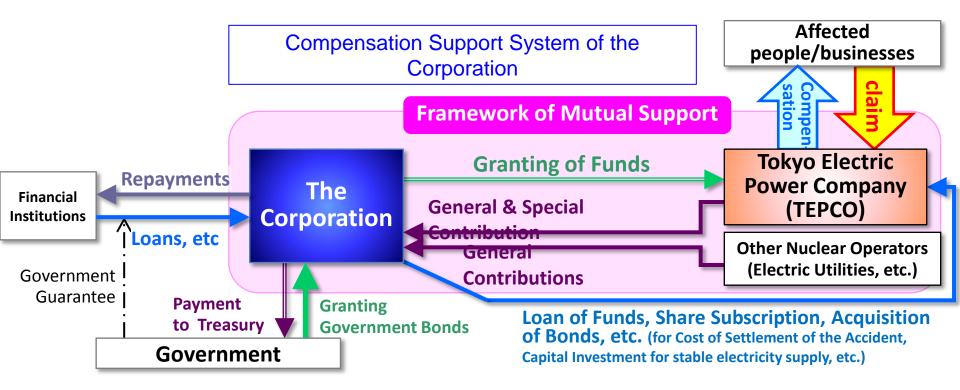
When the operator is exempt:

The government shall <u>take the necessary measures to</u> <u>relieve victims and to prevent the damage from spreading</u> (Article 17, Compensation Act).

⇒Relief by the government is limited

The Nuclear Damage Compensation Facilitation Act

- The Act is an institutional framework that embodies the governmental aid prescribed in Article 16 of the Compensation Act.
- The government has established the Nuclear Damage Compensation Facilitation Corporation (the "Corporation") to get ready for huge compensation payment exceeding the financial security amount in the future, not for the purpose of supporting the compensation this time but as a permanent organization.



Dispute Reconciliation Committee for Nuclear Damage (DRC)

Organization:

Temporal council system organization attached to the Ministry of Education, Culture, Sports, Science and Technology (MEXT) that may be established by the cabinet order (Article 18, paragraph 1, Compensation Act).

Functions:

- (1) <u>Mediating reconciliation</u> of any dispute arising from compensation of nuclear damage
- (2) <u>Determining general guidelines</u> such as instructions in establishing the scale of the nuclear damage to help the related parties reach a voluntary settlement of the dispute of compensation of nuclear damage
- (3) Investigating and assessing nuclear damage for the functions of (1) and (2)

Guidelines of DRC

Promotion of Impartial Out-of-Court Settlement

Decided through the discussions on fair and neutral ground by the members appointed from highly experienced or academic standing in the nuclear-related area such as law, medical practice and nuclear engineering, the guidelines are expected to be treated as trustable material for the basis of settlements by both the claimants and the nuclear operator without binding power.

Reducing Burden of Proof

In court, the guidelines are expected to play the similar role of the expert evidence for the claims of the damage which they suggest to be compensated.

Dispute Reconciliation of DRC

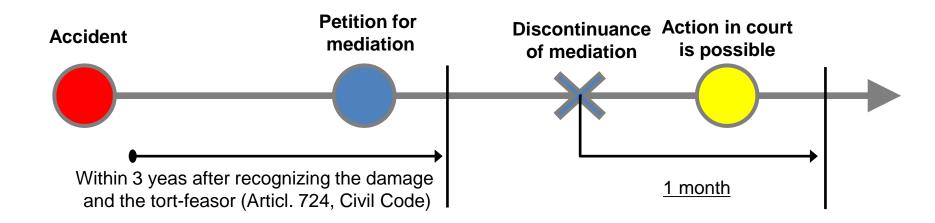
Dispute Reconciliation for Individual Disputes

Without binding power, settlement offers have to be made on fair and neutral ground in order to be accepted by the parties of both sides.

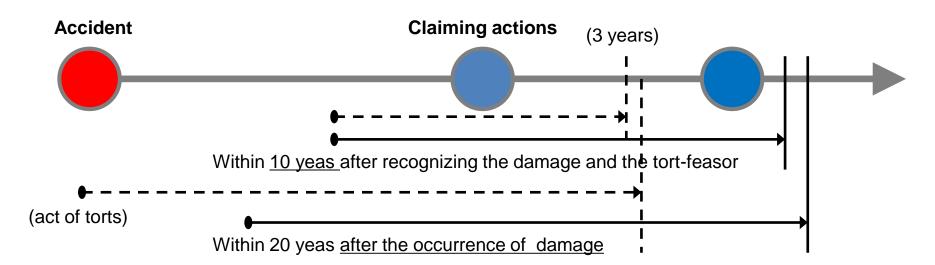
Establishment of Nuclear Damage Compensation Dispute Resolution Center (ADR Center)

Because of expected large number of the disputes to deal with, "special members" dedicated to dispute reconciliation are introduced into DRC by the amendment of the cabinet order in July of 2011. Based on this, ADR Center, whose offices are located in Tokyo and Fukushima Prefecture, was established under DRC and started its operations on September 1, 2011. ADR Center are hiring 127 special members and 33 investigators on February 29, 2012.

"Act on the Interruption of Statute of Limitations for Settlement Mediation Procedure in the DRC", enacted on May 29, 2013



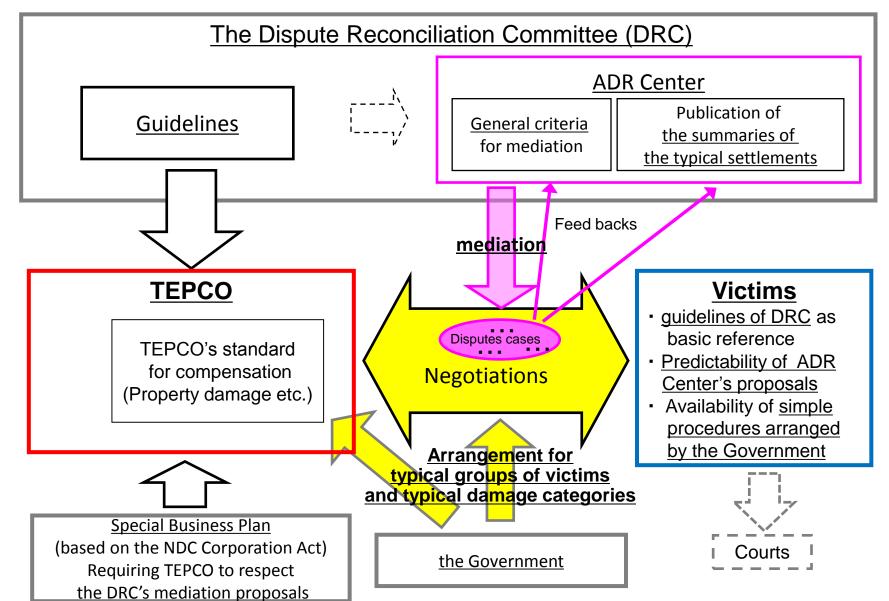
"Act on Sure and Prompt Compensation and the Special Exception on the Statute of Limitations for the Damage Caused by Nuclear Accident in 2011", enacted on November 29, 2013



General Observations of Compensation

- TEPCO made the compensation policies with referencing to the guidelines of DRC, which seems to cover broader scope of damage and to offer more than based on the guidelines.
- TEPCO seems to accepting the claims consistent with such policies in general, and most of the compensation payments have been decided in this way.
- 5,063 applications for mediation have been submitted to the ADR Center of DRC, and about 3,200 of them are left to be dealt with at the end of 2012.
- Limited cases go to the Courts.

Compensation Framework for Fukushima Daiichi Accident



Guidelines of DRC

DRC's Guidelines (1)

"Interim Guidelines" (August 5, 2011)

- Overall picture of the nuclear damage categories which were recognized and which could be broken down into patterns at that point.
- Giving the guidance on the scope of compensation for the listed categories, but not excluding the compensation of damage unlisted.

Listed Damage Categories

<u>Damages associated with Govt Instructions</u>

- Damage related to government instructions for evacuation, etc.
- Damage related to government establishment of navigation danger zone, etc., and no-fly zone
- Damage related to shipping restriction orders, etc. on agricultural, forestry and fisheries produce, etc. issued by the Government
- Other damage associated with Government instructions, etc.

Other Damages

- So-called rumor damage (general criteria, agriculture/forestry/fisheries, food industry, tourism, manufacturing, services, etc., exports)
- So-called indirect damage
- Damage resulting from exposure to radiation
- Adjustment between various benefits, etc. and damage compensation payments
- Property damage sustained by local authorities, etc.

DRC's Guidelines (2)

1st Supplement to the Interim Guidelines (December 6, 2011)

- Encompassing scope of nuclear damage concerning voluntary evacuation
- Period when accident initially occurred:
 - Certain rationality was recognized regardless of age etc. in experiencing fear and unease about exposure to radiation due to a large scale of release of radioactive materials
- Some time after the accident:
 - Information about radiation level etc. was obtained to some extent. Certain rationality was recognized at least in the case of children and pregnant women in experiencing fear and unease about exposure to radiation.
- Residents including those who continue to stay in designated area in the guideline are eligible for compensation. (\400,000 for children and pregnant women, \80,000 for others, as the damage until end of 2011)

DRC's Guidelines (3)

2nd Supplement to the Interim Guidelines (March 16, 2012)

Based on the change of evacuation areas, the matters to be specified in the guidelines are encompassed.

New areas subject to evacuation instructions	Mental anguish	Real Property
Area preparing for lifting of evacuation instructions Annual exposure dose <20mSv	\100,000/p/m	Reduction rate in period until lifting of instruction
Area subject to living restrictions Annual exposure dose 20 - 50mSv	\100,000/p/m Or \2,400,000/p lump sum	Reduction rate in period until lifting of instruction
Area in which homecoming is difficult Annual exposure dose >50mSv (may not fall below 20mSv even in 5 years)	\6,000,000/p lump sum	Reduction rate 100%
	Uniform termination regardless of actual timing of homecoming	Take into account replacement cost

- Termination of damage of business and incapacity to work is judged in individual circumstances. Income by temporary job etc should not be deductible as it by special effort.
- Concerning voluntary evacuation from January 2012 onward, damage for children and pregnant women is judged in individual circumstances.

DRC's Guidelines (4)

3rd Supplement to the Interim Guidelines (January 31, 2013)

Based on the survey of the market of the agricultural, forestry and fishery products after the Interim Guidelines, the scope of rumor-related damage was broadened in areas and in categories of items.*

<Added categories for "rumor-related damage">

- Agricultural products from Iwate and Miyagi Prefecture
- Green tee from Miyagi Prefecture and Tokyo
- Edible forestry products from Aomori, Iwate, Miyagi, Kanagawa, Shizuoka Prefecture and Tokyo, and Shiitake mushroom from Hiroshima Prefecture
- Milk and dairy products from Iwate, Miyagi and Gunma Prefecture
- Fishery products for food and for feeding livestock from Hokkaido and Aomori, Iwate and Miyagi Prefecture
- Feed for livestock, firewood and charcoal from Iwate, Miyagi and Tochigi Prefecture
- Compost made with livestock excretion from Iwate, Miyagi, Ibaraki, Tochigi and Chiba Prefecture

^{*}The expansion of damage found by this survey was accounted for mainly by newly issued "government restrictions on shipment" following the "Reference Value of Maximum Acceptable Radioactivity Levels on Foods" decide on December 22, 2011, enforced on April 1, 2012

Situation of Compensation

Progress of Compensation Payment by TEPCO

	Individuals	Individuals (Losses due to voluntary evacuation)	
Applications			
Applications received (cumulative)	517,000*	1,297,000*	221,000*
● Agreement			
Agreed Cases (cumulative)	470,000*		194,000*
Agreed Amounts (cumulative)	1,301.9 Bil Yen**		1,505.8 Bil Yen**
●Indemnification based on agree	ments		
Number of permanent indemnification cases(cumulative)	446,000*	1,285,000*	191,000*
Amount of permanent indemnification	1,2091.1 Bil Yen**	352.6 Bil Yen**	1,456.8 Bil Yen**
●Cumulative Payouts			
Indemnification based on agreements			3,018.5 Bil Yen**
Provisional compensation			150.2 Bil Yen**
Total amounts paid			3,168.7 Bil Yen**

^{*:} approximately number of cases **: approximately amount As of November 29, 2013.

From TEPCO's website: http://www.tepco.co.jp/en/comp/index-e.html

Financial Assistance by NDF Cooperation*

		Decided allowance (Million Yen)	Granting (Million Yen)	Capital injection (Million Yen)
September 26, 2011	Start up of operation			
November 4, 2011	Decision to grant	890,900		
November 15, 2011	Execution of granting		558,700	
February 13, 2012	Decision to grant	689,400	·	
March 27, 2012	Execution of granting		104,900	
April 23, 2012	Execution of granting		218,600	
May 9, 2012	Decision to grant	845,900		
	Decision to inject capital	1,000,000		
May 22, 2012	Execution of granting	·	46,600	
June 29, 2012	Execution of granting		80,900	
July 26, 2012	Execution of granting		107,100	
July 31, 2012	Execution of capital injection			1,000,000
August 21, 2012	Execution of granting		155,100	
September 24, 2012	Execution of granting		54,700	
October 24, 2012	Execution of granting		49,700	
November 27, 2012	Execution of granting		93,200	
December 18, 2012	Execution of granting		29,200	
December 27, 2012	Execution of granting		250,300	
January 15, 2013	Decision to Grant	696,900		
January 22, 2013	Execution of granting		271,700	
February 22, 2013	Execution of granting		210,600	
April 18, 2013	Execution of granting		223,500	
May 21, 2013	Execution of granting		154,900	
June 24, 2013	Execution of granting		115,100	
July 24, 2013	Execution of granting		73,200	
August 21, 2013	Execution of granting		176,200	
September 24, 2013	Execution of granting		74,100	
October 23, 2013	Execution of granting		48,100	
November 22, 2013	Execution of granting		119,200	
	Total	4,123,100	3,215,600	1,000,000

^{*} Nuclear Damage Compensation Facilitation Cooperation

—Tendency of Compensation Payments —

MEXT conducted the survey on the situation of TEPCO's compensation from April 2012 to March 2013 with contracting with NDF Cooperation. This survey includes:

- Background survey on the settlement proposed by the ADR center
- Arrangement of the settlements in accordance with the guidelines
- Statistical survey of all applications to the ADR center
- Statistical survey of TEPCO's all payments until the end of January 2013

The survey indicates some tendency of compensation payments.

Applications for Mediation to the ADR Center

<Sep 2011 - Dec2012>

Applications by Region at the time of the Accident

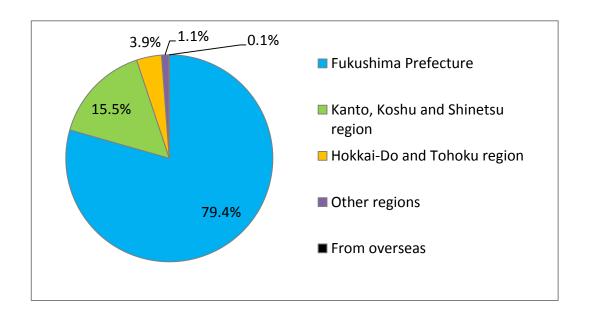
	number of applications	Rate against total (%)
Fukushima Prefecture	4021	79.4
Kanto, Koshu and Shinetsu region	783	15.5
Hokkai-Do and Tohoku region	198	3.9
Other regions	56	1.1
From overseas	5	0.1
Total	5063	100.0

Rate of applications represented by attorneys: 32% (51 % of applicants)

Number of applications:

5.063

(13,030 applicants)



Compensation Payment by TEPCO

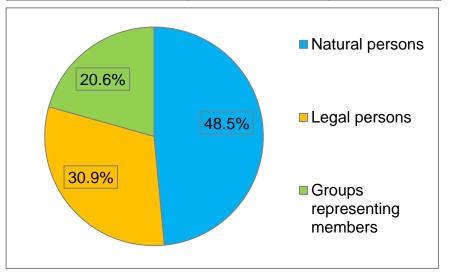
By place of damage

	Amount Paid** (Million Yen)	Rate (%)
Fukushima Prefecture*	1,348,200	75.0
Kanto region*	307,300	17.1
Hokkaido and Tohoku region*	83,400	4.6
Other regions*	58,300	3.2
Total	1,797,200	100.0

4.6% 3.2% Fukushima Prefecture Kanto region Hokkaido and Tohoku region Other regions

By character of compensated persons

	Amount Paid** (Million Yen)	Rate (%)
Natural persons	871,500	48.5
Legal persons and sloe proprietors	555,000	30.9
Groups representing members(***)	370,700	20.6
Total	1,797,200	100.0



^{*} Based on the place of damage. If not specified, based on the place of abode.

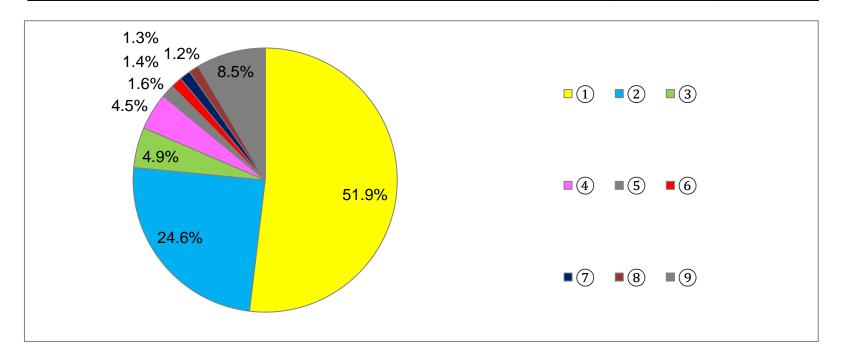
^{**} Amount at the end of January 31, 2013

^{***} Typically, agricultural cooperatives, fishery cooperatives and other industry organizations delegated from the victims.

Payment to Natural Persons

By damage categories

	Amount	Rate against
	(million Yen)	total(%)
1) Mental anguish	289,700	51.9
2) Damage from incapacity of work	137,400	24.6
3 Loss or reduction of property value	27,600	4.9
4 Damage demanded by the simplified form for evacuation expenses	25,200	4.5
⑤Injury or death	9,000	1.6
6 Damage from Evacuation to the area of "voluntary evacuation compensation"	7,600	1.4
7)Temporary access expenses	7,500	1.3
8 Evacuation and homecoming expenses	6,900	1.2
9Others	47,300	8.5
Total	558,100	100.0

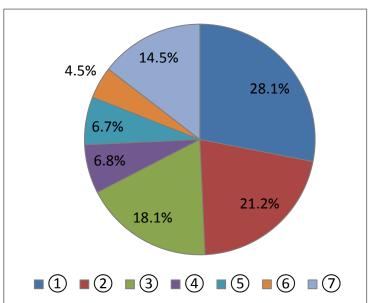


Payment to Legal Persons and Sole Proprietors(1)

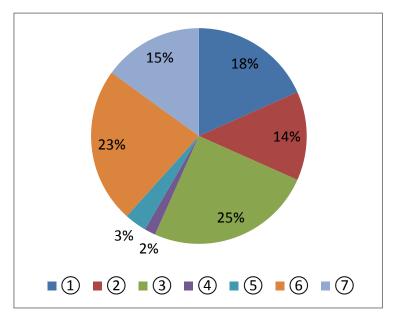
By categories of businesses

Categories*	Payment Amount (Million Yen)	Rate against total(%)	Number of Bodies**	Rate against total(%)
1)Other than agriculture, in the "evacuation areas"	155,800	28.1	11,000	18
2)Tourism industry	117,700	21.2	8,000	13
③Service Industry etc.	100,700	18.1	15,000	25
4 Manufacturing	38,000	6.8	1,000	2
5 Processing and distributon	37,300	6.7	2,000	3
6 Agriculture	24,800	4.5	14,000	23
7 Others	80,700	14.5	9,000	15
Total	555,000	100.0	60,000	100

<Payment Amount>



<Number of Bodies>



^{*} Based on the classification by TEPCO's claim forms

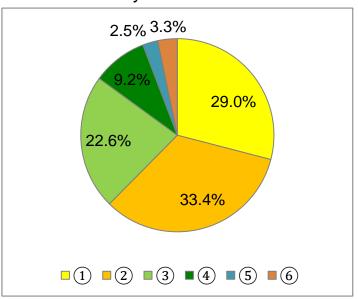
^{**} Approximate number by 1000's

Payment to Legal Persons and Sole Proprietors(2)

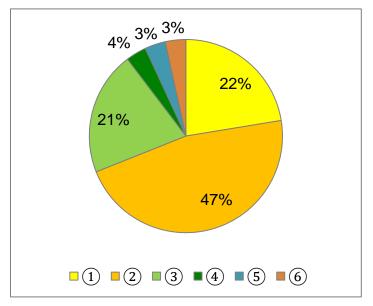
Local Distribution

Place of abode of bodies*	Payment Amount (Million Yen)	Rate agaisnt total(%)	Number of Bodies**	Rate agaisnt total(%)
1)Fukushima Prefecture, within the evacuation areas	161,200	29.0	13,000	22
②Fukushima Prefecture, out of the evacuation areas	185,200	33.4	27,000	45
③Kanto region, except Tokyo	125,400	22.6	12,000	20
4 Tokyo	51,000	9.2	2,000	3
5 Hokkaido and Tohoku region	14,000	2.5	2,000	3
6 Other regions	18,200	3.3	2,000	3
Total	555,000	100	60,000	100.0

<Payment Amount>



<Number of Bodies>



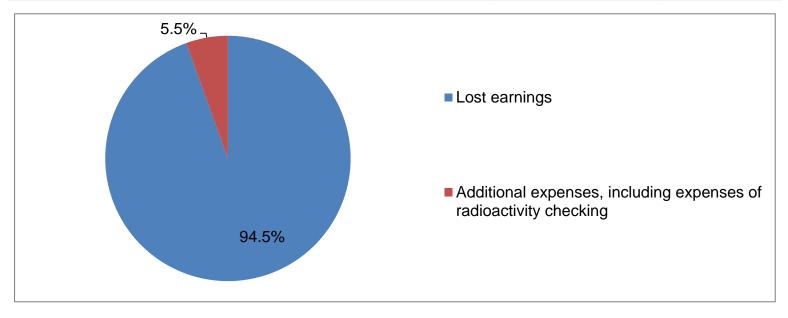
^{*} Based on the place of legal person, regardless of place of damage

^{**} Approximate number by 1000's

Payment to Legal Persons and Sole Proprietors(3)

By damage categories

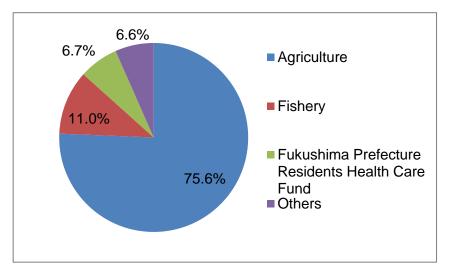
	Payment Amount (Million Yen)	Rate against total(%)
Lost earnings	524,400	94.5
Additional expenses, including expenses of radioactivity checking	30,600	5.5
Total	555,000	100.0



Payment to Groups Representing Victims

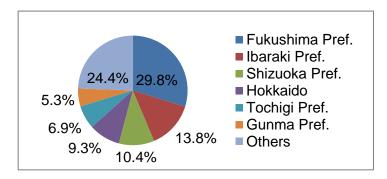
By damage categories of groups

	Payment Amount (Million Yen)	Rate against total(%)
Agricultural cooperatives (JA)	280,400	75.6
Fishery cooperatives (JF)	40,800	11.0
Fukushima Prefecture Residents Health Care Fund*	25,000	6.7
Others	24,500	6.6
Total	370,700	100.0



^{*} The Fund reserved in Fukushima Prefectural Government for the finance of long-term healthcare of its residents

	Payment Amount (Million Yen)	Rate agaisnt total(%)
Fukushima Pref.	83,600	29.8
Ibaraki Pref.	38,800	13.8
Shizuoka Pref.	29,300	10.4
Hokkaido Pref.	26,100	9.3
Tochigi Pref.	19,300	6.9
Gunma Pref.	14,800	5.3
Others	68,500	24.4
Total	280,400	100.0



	Payment Amount (Million Yen)	Rate agaisnt total(%)
Fukushima Pref.	15,400	37.7
Ibaraki Pref.	17,100	41.9
Others	8,300	20.3
Total	40800	100.0

