

[Provisional Translation]

**Towards the Creation of “New Tohoku”
(The Interim Compilation of
Discussions)**

Reconstruction Promotion Committee

5 June 2013

Contents

Introduction

I. Acceleration of Reconstruction

II. Towards the Creation of “New Tohoku”

- 1. A Reliable Society to Promote the Fit and Healthy Growth of Children**
- 2. A Vibrant Super-Aged Society with “the Elderly People as Standards”**
- 3. A Society with Sustainable Energy (a Society with Autonomous and Decentralized Energy)**
- 4. A Leading Society Introducing Robust and Highly Resilient Social Infrastructure (System)**
- 5. A Society with the Ability of Wide Appeal in Utilizing Regional Resources**

III. Response to Common Tasks towards the Creation of “New Tohoku”

IV. Tasks to Respond to for the Time Being

Closing Remarks

Reference Material 1

**List of Members of the Reconstruction
Promotion Committee**

Reference Material 2

**Reconstruction Promotion Committee
Progress of Discussion**

Introduction

Since its inauguration in December 2012, one of the priorities for Prime Minister Abe's Cabinet has been recovery and reconstruction from the Great East Japan Earthquake. With Minister of Reconstruction, Takumi Nemoto, playing a central role, efforts have been made to accelerate the reconstruction process. The necessary measures have swiftly been taken so as to respond immediately to the following three themes: (i) strengthening of the Reconstruction Agency's function as "the Control Tower" and a thorough focus on the disaster-afflicted areas, (ii) revision of budget frameworks for reconstruction, and (iii) giving shape to and promotion of the measures to accelerate reconstruction. Careful measures have also been formulated to reconstruct and revitalize Fukushima, which suffered serious and vast damage from the nuclear disaster. From now on these measures need to be implemented steadily.

While accelerating the reconstruction process, Prime Minister Abe's Cabinet has set out the creation of "New Tohoku," a land of creativity and potential, as its additional target in proceeding with reconstruction projects. The Reconstruction Promotion Committee therefore started in March 2013 to conduct study and deliberation on the creation of "New Tohoku" and the acceleration of the reconstruction process.

In proceeding with the study and deliberation, the Committee conducted field surveys, recognizing that the issues to be dealt with and the key to solving them exist in the field of the disaster-afflicted areas, while the Reconstruction Agency putting counselors in charge of all municipalities in the disaster-afflicted areas, so as to listen carefully to their voices and to find out leading examples of reconstruction already executed in regions. Subsequently, based on the findings from these surveys, five Informal Meetings for Discussions were established with assignments of each individual theme, consisting of experts familiar with the disaster-affected areas, and deliberation was conducted from experts' point of view. Subsequently, the Reconstruction Promotion Committee further considered the results of the Informal Meetings for Discussions by such a new way of discussing them from the overall perspective and deepening them to be a policy. Based on the discussions to date, this report forms an interim compilation on the target images of "New Tohoku" and directions of policies and measures.

I. Acceleration of Reconstruction Process

- (1) Strengthening of the Reconstruction Agency's function as "the Control Tower" and a thorough focus on the disaster-afflicted areas

The system of the Government was strengthened by adopting a dual headquarters system in Fukushima and Tokyo, headed by the Minister of Reconstruction, consisting of the Bureau of Reconstruction and Revitalization of Fukushima in Fukushima City and the Headquarters for Reconstruction and Revitalization of Fukushima. In addition, task forces on rebuilding of housing, town development, decontamination, and reputational damage from harmful rumors were separately established, and consideration of measures has been cross-ministerially made.

Moreover, a budget system was created, which, at Reconstruction Minister's discretion, enables to add project costs, respond swiftly to emerging needs, and conduct survey plans for reconstruction, by filling gaps among various systems.

- (2) Revision of budget framework for reconstruction

In conjunction with compilation of the FY2013 budget, the budget framework for reconstruction was revised (from 19 trillion yen up to 25 trillion yen over the five years) to secure the required financial resources. At the same time, the reconstruction budget was allocated in a lump-sum to the Reconstruction Agency and the use of the budget was made stricter.

- (3) Giving shape to and promotion of acceleration measures of reconstruction

- (i) Early rebuilding of housing and revival of occupations, etc.

"The Task Force to Accelerate Rebuilding of Housing and Town Development" published a "roadmap for reconstruction of housing," which outlines annual targets of houses and land for houses in each district. In addition, to realize and accelerate the implementation of the roadmap, measures for prompt acquisition of lands and response to shortages of workforce and materials were formulated and are currently being implemented. Moreover, the amount of the Drawdown Funds for Reconstruction, which is to support the rebuilding of housing to promote resettlement of residents in areas hit by the tsunami, has been increased.

With regard to the revival of occupations in the areas affected by the

tsunami and nuclear disaster, the reconstruction of commerce is being promoted, by establishing a new support system regarding industrial location to create employment, and by adding construction of joint premises for shops and relocation of districts to eligible projects for Group Subsidies. Other than these, flexible implementation of Grants for Reconstruction has also been introduced.

With regard to the public infrastructure, it has entered, from a temporary recovery stage, into a real recovery and reconstruction stage, and based on the project plans and roadmaps for which the preparation started last fiscal year, improvement is being steadily promoted.

(ii) Reconstruction from the nuclear power plant accident

The major premise for reconstruction and regeneration of Fukushima, which suffered serious and vast damage due to the nuclear disaster, is to proceed safely and steadily with nuclear cleanup work. It is important to do this as a national issue by gathering wisdom all around the world. It is necessary, in addition, to respond to various tasks such as recovery of the environment, assurance of food safety, long term health care, support for the livelihoods of people affected by the disaster, recovery of the public infrastructure and improvement of the educational environment, so that people of Fukushima Prefecture can live with a sense of safety and security. Projects to Support Restoration of Hopes of the Region, the Grant for Community Restoration and the Grant for Revitalizing Children, have been created within the framework of “the Hometown Restoration Project in Fukushima,” by which new support measures have been taken to address issues not adequately dealt with previously. In addition, a fund was established in Fukushima Prefecture so as to provide seamless flow of support to a series of activities aimed at the resumption of farming, depending on the progress in the decontamination of farmland and the return of residents. Furthermore, a number of concrete measures have been taken, so that the people of Fukushima can return and settle and long-term evacuees can establish their living bases, through such initiatives as formulating “the Plan for Early Return and Settlement,” “the Package of Support Measures for Those Affected by the Nuclear Damage,” and “the Package of Measures against the Effect of the Nuclear Disaster including the Reputational Damage from Harmful Rumors,” establishing “the Plan for Reconstruction and Revitalization of Areas Such As the Evacuation

Orders Are Lifted” in accordance with the Act on Special Measures for Fukushima Reconstruction and Revitalization, and the amendment of the Act on Special Measures for Fukushima Reconstruction and Revitalization so as to incorporate (taxation) measures to swiftly promote the industrial location to secure employment opportunities in Areas such as the Evacuation Orders are lifted.

As described above, acceleration of the reconstruction process is the highest priority of Prime Minister Abe’s Cabinet. Under the Prime Minister’s instructions, all the members of his Cabinet have collectively striven to respond to these tasks, with an attitude that every Minister is a Minister of Reconstruction. Continuously, under Minister of Reconstruction, Takumi Nemoto, initiatives should be taken for speedy reconstruction, such as steadily implementing measures formulated to date as well as establishing measures reflecting the voices of the disaster-affected areas.

II. Towards the Creation of “New Tohoku”

Damage caused by the Great East Japan Earthquake is immense, extensive and on an extremely huge scale. It is an unprecedented national crisis caused not only by the earthquake and subsequent tsunami, but also by severe and vast damage from the nuclear disaster. Even today, around 310,000 people affected by the disaster are still forced to live in temporary housing, etc. Under these circumstances, it is needless to say that the acceleration of the reconstruction and regeneration process is the urgent and highest priority. Therefore, it continues to be necessary to develop measures, which accelerate the reconstruction process, and which reflect the voices of people in the disaster-afflicted areas.

While there are some areas where their reconstruction process has entered a new phase from temporary recovery, it is expected to develop, to be a model for Japan and the world, “a Future Society with Creativity and Potential,” not by simply restoring in those areas the current circumstances in Japan with issues of the decrease in and aging of population and the deindustrialization, but by solving those issues, through taking advantage of the reconstruction from the disaster. It is important to seize this opportunity to work on it as a forerunner of Japan.

We therefore take up, as future images of regional society, five types of society as below which will be the elements of “New Tohoku,” describing their target images, current status, and the directions of policies and measures to be aimed at in future.

- A reliable society to promote the fit and healthy growth of children
- A vibrant super-aged society with “the elderly people as standards”
- A society with sustainable energy (a Society with autonomous and decentralized energy)
- A leading society introducing robust and highly resilient social infrastructure (system)
- A society with the ability of wide appeal in utilizing regional resources

1. A Reliable Society to Promote the Fit and Healthy Growth of Children

<Target Images>

- Since the Great East Japan Earthquake and the subsequent nuclear power plant accident, challenges to the environment for children to grow have notably emerged in the disaster-afflicted areas. In conjunction with reconstruction in the disaster-afflicted areas, it is necessary to swiftly promote leading initiatives towards children-friendly towns through utilizing new activities rooted in local communities in collaboration with various agents of reconstruction. The target through such leading initiatives is to establish a local community capable of bringing up children who excel most in Japan in terms of physical strength, learning and survival capability, mutual support, creativity, challenging spirits and mental maturity.
- In addition, acknowledging that children will live in a coming age different from that of current adults, an educational environment needs to be developed, ahead of other parts of Japan, through which children can show to the full extent their ability, both academically and athletically, on a global scale, in the coming new age with more awareness and consciousness on globalization, multicultural symbiosis, high-level information technology, disaster prevention and the global environment.
- The Tohoku model as a result should be disseminated over Japan and the world.

<Perception of Current Status>

(1) Current status of children in Fukushima

- Due to the impact of radiation from the nuclear power plant accident, children practice self-control in playing outdoors, experience changes to their living environments and therefore build up stress. Moreover, because of a lack of physical exercise, increase of lifestyle-related diseases is observed among children such as decline of their physical ability and physical strength and obesity.
- The level of physical play among infants has been declining, and because there lacks opportunities to play outside the chances to play with others has decreased.

- Furthermore, children require mental care due to memories of traumatic experiences at the time of the disaster, while their parents have built up stress due to experiencing communities collapsed.
- There are schools which still have to have classes at places away from their own premises. There are schools at which the number of pupils and students has considerably decreased. These pose challenges to the areas concerned in undertaking town development for the future.

(2) Current status of children in areas hit by the tsunami

- Children are under continuous stress due to the memories of dreadful experience caused by the tsunami and experiences of loss by deaths of close relatives. Children are in need of mental care.
- Upbringing spaces for children are lost and limited due to the construction of temporary housing in schoolyards and vacant plots.
- Children build up stress due to a prolonged extraordinary life, while people who support such children are severely exhausted. It is necessary to support those people.
- In areas affected by the disaster, there exists shortages of experts for children's mental care such as child psychiatrists and clinical psychologists, as well as medical doctors such as obstetricians and gynecologists and pediatricians, who are key actors for enabling delivery and upbringing with a sense of security.

(3) Child-raising and effects of environmental changes

(i) Child growth and development

- Cranial nervous system develops in childhood before the age of about 8 to 9, during which the ability to move a body tend to be mostly acquired. Meanwhile, musculoskeletal system develops during and after the junior high school years, during which physical trainings are most effective. The speed of growth and development in the light of contents and stage differs according to the age.
- While various physical movements significantly influence the development of motor nerves, a lack of physical exercise and decline of physical ability might lead to the increase of health risks in the future. It should be noted that there tends to exist a certain linkage between physical strength and academic ability.

- It is important for child-raising to ensure three elements: friends, space and the time.
- Polarizations and disparities are emerging among children due to the differences in rebuilding their livelihoods.

(ii) Changes of play environment for children in Japan as a whole

- While children play less outdoors, they spend more time in watching TV programs and playing video games. These have led to the decrease of physical exercise, segmentation of living hours, distortion of habits to go to bed early and get up early. Compared to around 1985, the basic physical abilities of children are lower, while the increasing number of children tends to be obesity.
- It is necessary for children to learn various physical movements through different forms of physical play and play in nature, rather than through organized games.
- Issues emerging among children in the disaster-afflicted areas are the epitome of those facing children nationwide. Solving the issues in the disaster-afflicted areas is therefore the first step to solve them nationwide.

(4) Children, with the experience of the disaster, acting on their own initiative

- It became apparent through the disaster that children are not just objectives to be given and protected but the agents who can create ideas and act on their own initiative.
- Children's participation provides an opportunity for themselves to solve issues on their own initiative.
- It is important to provide opportunities for children to share their experience of the disaster with their generation, and promote participation by residents and adults in town development initiated by children.
- There are high expectations to opportunities for children's participation in sport which generates their dreams.

<Directions of Policies and Measures>

With the perception that the meaning of one year differs between adults and children, i.e. one year means much to children, speedy undertaking is indispensable. Initiatives on tasks below should be undertaken, through taking

opportunities to develop hardware in conjunction with the reconstruction, and gathering wisdom of people around Japan in an integrated manner without vertical division.

Furthermore, through sharing perception among economic circles, local governments and academic circles, strong ability to get things done should be generated.

(1) Establishment of places where children belong (playgrounds)

- Safe environment
- A plan which enables children to feel joy and enjoyment of exercise; Environment in which children feel nature, freedom and ease; A device which makes children who dislike exercise take exercise unintentionally.
- In conjunction with the above, a place where the quality and quantity of physical exercise appropriate for individual physical development can be ensured in the higher level than before the disaster (guarantee of indoor playgrounds and all-weather playgrounds such as schoolyards and parks where children can move about freely; utilization of parks to which facilities with useful devices are introduced)
- Promotion of initiatives in coordination with various sports and martial arts; Establishment of a community with a focus on sports as a theme
- Establishment of a place where children and parents can enjoy together, a community for children, and a community for parents
- Training of playleaders
 - Playgrounds with good adults to accompany children
 - Bringing out curiosity, interests and creativity in children
 - Understanding the importance of movements and play
 - Knowledge of food education to prevent lifestyle diseases; Response to mental care
 - A training program for playleaders (instructors) (Promotion of local people's participation; Consideration of possible collaboration with teacher training)

(2) Reestablishment of communities for child upbringing

- Establishment of a social environment focused on various experiences such as the experiences apart from studying, the group playing and the interaction with children of different ages (Facilities and community activities which

generate such interaction)

- Response to isolated parents and nursery teachers with anxiety; Reestablishment, based on the disaster, of relations among households, schools and local communities
- An increase of adults who support the sound development of children; Promotion of interactions with elderly people
- Establishment of communities through learning in collaboration with local residents
- Securing of human resources who support children's growth and carry out medical services (obstetricians and gynecologists, pediatricians, child psychiatrists, clinical psychologists, etc.)
- Promotion of appropriate understanding through risk communication of the impact of radiation on health

(3) Improvement of time for children to grow

- Establishment of an environment, for children to grow, not affected by adults' lifestyle
- Securing of time for children to play outdoors
- Securing of time for physical contact and peace of mind
- Securing of time of pleasant memories through experiences of festivals and the nature
- Restoration of habits of going to bed early, getting up early and having breakfast
- A society in which children can accumulate experiences that means much even when they become adults

(4) Participation by children on their own initiative

- Participation by children, from their perspectives and on their own initiatives, in reconstruction and town development to encourage them to grow up soundly; Taking out children's inherent creativity and ability to form communities, and promotion of ability to respond to a new era, through sharing among children of the same generation of experiences at the time of the disaster

(5) Tools of children's play, life and study, and appropriate method of their utilization

- Appropriate use of IT media such as TV
- Enrichment of the reading environment and securing of time to read
- Playing outside; playing in the nature; traditional play
- Securing of upbringing method which enables children to gain various experiences

(6) Development of an ability to respond to a new era

- Fostering of an ability to think and act, without giving up, with an appropriate perception of circumstances at the time of difficulties
- Establishment of an environment at the highest level in Japan of fostering an ability to respond to a new era and of linking a school to an occupation, such as globalization and multicultural symbiosis, education on disaster prevention, environmental education, informatization education, education for science and mathematics, and leadership education
- Creation of a hub of sports to give children future dreams
- Continuous undertaking to foster awareness to be the agents of local reconstruction

2. A Vibrant Super-Aged Society with “the Elderly People as Standards”

<Target Images>

- Since the Great East Japan Earthquake and the subsequent nuclear power plant accident, acceleration of aging of population due to workers moving out has been notably emerged in the disaster-afflicted areas. The areas have become leading places of super-aging of population.
- In promoting the reconstruction of the disaster-afflicted areas, it is necessary to undertake, in a speedy and comprehensive manner, model initiatives which promote various and new local activities and which set the elderly people as standards of regional development, with the cooperation of various agents of reconstruction. The target through such model initiatives is to establish a community in which elderly people can live happily and actively (a community not only with safe and barrier-free space, but also comfortable, interactive and subsumable where “elderly people feel like going out”).
- Furthermore, based on the community above, “a Society of never-retire (aging in-community)” should be realized, ahead of other parts of Japan, where elderly people can participate actively in local community and live active and self-reliant lives as long as possible. At the same time, a system of next-generation type in terms of local medical care, nursing, and preventive medicine should be established so that elderly people can live at ease, even when they become mentally and/or physically weak.
- The Tohoku model as a result should be disseminated over the rest of Japan and the world which will be confronted with the issues of super-aging of population in future.

<Perception of Current Status> (with a view to improving the lives of elderly people in the disaster-afflicted areas)

- (1) Current situation surrounding community participation (employment)
 - The number of active elderly people aged over 65 is increasing. However, there exists a shortage of coordinators whose function is to connect the elderly people to community participation and employment, and therefore the number of active elderly people who do not have places to take an active part is increasing.

- Aging of population is advancing particularly in the disaster-affected areas, and therefore elderly people are expected to play a large role as local workforce. It is necessary to establish a mechanism through which the elderly people can demonstrate their ability as much as possible.

(2) Current situation surrounding living spaces

- Due to difficulties in securing sites for temporary housing and reconstruction housing, residential areas are being dispersed. It is therefore difficult to secure means of transportation including public ones, while there is also a shortage of commercial facilities within walking distance.
- Supply of affordable housing for elderly people, which correspond to their wish to live in a beloved place (my town), is insufficient.
- There are many elderly people who find difficulty in daily shopping such as food and cooking, and therefore there are high demands for delivery service of food.
- Local communities which have existed are weakened by dispersion of residents through moves to temporary housing and a shortage of community space.
- As the number of elderly people living alone has increased, interest in collective housing for communal living is getting higher.

(3) Current situation surrounding medical care and nursing

- There are insufficient medical facilities and medical doctors in the disaster-afflicted areas. One of the issues to be dealt with is to increase the number of graduates, from the medical department of a local university, who establish themselves in the region where such university is located.
- There is a limit to providing medical services in a conventional way to residents dispersed over a broad area.
- It is all the more necessary that the collaboration is undertaken across the fields and categories of business so that multiple functions are performed at a single base, such as provision of medical and nursing services at elderly people's housing, compound service of medical care and nursing and sharing of information among medical, nursing and welfare sectors.
- Lack of exercise by elderly people in temporary housing is an issue to be dealt with.
- While the number of elderly people nursing elderly people has increased, it is

more necessary to take care of those elderly people providing nursing.

<Directions of Policies and Measures>

In solving issues of the super-aged society in the disaster-afflicted areas, extensive consideration should be given, from the view point of five aspects as below and its underlying community, to the establishment of a society with the elderly people as standards. Those five aspects are “residency (housing and living environment),” “movements (means and system of transportation),” “food (dietary habit),” “connections with society (employment and inclusion in local activities),” and “health and longevity (livelihood support and preventive care to be self-reliant, and regional medical care).” In so doing, it is important to maximize the use of ICT in every aspect.

On that basis, initiatives should be undertaken in an integrated manner without vertical division, and in the form of (i) utilizing regional characteristics and cultures, (ii) taking into consideration the characteristics and demographics of each region, (iii) optimally utilizing limited resources, and (iv) furthering various new initiatives emerging in the regions.

Furthermore, synergistic effects should be enhanced through the interactions across generations (in collaboration with development of environment for child upbringing) and the promotion of the restoration of families such as three generations living together, with the understanding that a society friendly towards the elderly people is also one friendly towards all, including children and the handicapped people.

In promoting these initiatives, considerations should be given to systems, such as a system which ensures that municipalities do not become disadvantageous when they act jointly, and a mechanism which makes multiple use of facilities possible.

- (1) Residency (reliable and safe housing, and living environment)
 - Appropriate allocation of community space of various sizes and types
 - A system supporting the relocation of housing by elderly people within a community (residency circulating within a community)
 - Socialization of a living function service targeting elderly people (development of human resources to connect various services and elderly people)

- Development of a housing estate with serviced housing for elderly people equipped with a hub of functions for medical care at home, 24-hour health visiting and home-visit nursing care to be provided by private-sector vitality, and region exchange
 - Introduction of a natural and user-friendly information interface adjusted to physical and mental conditions
 - Diffusion of civil guardianship services to ensure the safety of elderly people's prosperity, etc.
 - Town development with cooperation between soft sectors (health and welfare sectors) and hard sectors (urban planning sectors) of the public services
- (2) Movements (means and system of transportation and system suitable to the elderly people)
- Establishment of a daily living area where the elderly people can live their lives on foot; utilization of personal mode of transportation within an area
 - Introduction of combination of user-friendly public road transportation system suitable to the regional circumstances
 - Introduction of facilities to support outdoor transportation for various needs of elderly people, and safety technology to equipment
 - Information infrastructure for movements such as information boards understandable to the elderly people
- (3) Food (dietary habit)
- Establishment of programs to improve the nutritional health
 - Development of food delivery services for the elderly people and the handicapped people
- (4) Connections to society (employment and inclusion in local activities as long as possible)
- Redefinition of the role of elderly people in regions
 - A mechanism to invite broadly the elderly people to local activities, such as support for child-raising (cooperation within the community)
 - Facilities and condominiums which provide ample opportunities of natural interactions among all the people such as children, the elderly people and the handicapped people (“ningen-yoku”)
 - Promotion of “Community business for employment with purpose of life”

which corresponds to the increase of healthy elderly people and which makes possible for them to work for the community at a nearby place for a long time (a society in which the people aged over 65 can start new work)

- Activities to rediscover regional resources and culture, which are the key to promoting community business
- Realization of a system to circulate knowledge, experience and skills beyond the generations
- Introduction of a system for flexible employment, and consideration of a neutral social system concerning employment

(5) Health and longevity (recovery of hubs, and development of integrated community care system for preventive and home-based assistance – “Next-generation type integrated community care system”)

- Development of a system of collaboration among various categories of 24-hour business such as medical treatment, care and nursing at home, and various information infrastructures which support the aforesaid system of collaboration (development of a network on medical and welfare information for sharing those such as health management of the elderly people using a smart sensor and location information, electronic medical records, and test data; database (information accumulation))
- Improvement of life support systems such as the prevention of isolation of the elderly people who nurse other elderly people, the prevention of keep staying indoors and the mental care, and securing human resources for welfare and nursing service
- Early rebuilding of welfare facilities for the elderly people and base hospitals in the disaster-afflicted areas
- Securing of medical human resources to respond to the areas with serious shortages of medical doctors, etc. (concrete consideration, by stakeholders with a focus on the disaster-afflicted areas in the Tohoku district, of measures to dispatch additional medical doctors)
- Promotion of the team medicine by the implementation of pilot projects on training systems for nurses regarding specific medical practices
- Establishment, based on the projects in the disaster-afflicted areas, of a regional network among educational and training organizations related to medical treatment, nursing and care
- Further utilization of medical and welfare information, and thus enhancing

healthcare and nursing, and ensuring a sense of security at the time of disasters; Establishment of a medical database to be used as an indicator of effectiveness of medical treatment

- Diffusion of a fall-prevention exercise, and various precautionary measures to prevent weakening before becoming to require nursing (participation in health promotion activities; enhancement of employment with purpose of life such as participation in the community business)

(6) Regeneration and development of the community in the disaster-afflicted areas

- A system to undertake relocation to higher ground while maintaining the community as much as possible
- Implementation of the three plans as below to regenerate community in implementing disaster-related public housing and projects focused on promoting group relocation for disaster mitigation:
 - (i) plans for taking applications (considerations for people from the same community to move in as a group)
 - (ii) plans for design (establishment of a meeting place and conversation room; crossing of living traffic lines)
 - (iii) interaction with existing neighboring communities (establishment of a community support center, etc.)
- Expansion and improvement of “a space for interaction,” which serves as bases for various care support and community activities and which also prevent the elderly people from being isolated
- Transition from temporary housing with community care to rebuilding of housing and town development for regeneration of community
- Development of a model of “disaster-related public housing,” which is equipped with the function to establish community
- Strengthening nursing capacity by a community, through increasing the number of the elderly people with certified nursing qualification
- Further utilization of agents, other than municipalities, who facilitate town development by incorporating software elements (utilization of the Urban Renaissance Agency, etc.)

(7) Dissemination of “the Tohoku model” based on an actual proof, etc. in the disaster-afflicted areas

- Even outside the disaster-afflicted areas, there occurs a rapid development of structural changes of a society, such as the increase of the aging ratio of population, aging of population in urban areas, aging of the elderly population (increase the proportion of people aged over 75), increase of active elderly people, and increase of the elderly people living alone.
- There are foreign countries, at the heels of Japan, which are also facing the same structural changes as Japan, such as Singapore, South Korea, and China.
- Therefore, if “the Tohoku model” comprised of the six aspects above is established, it will contribute to solve the same issues in the rest of Japan and the world.
- With those facilities to be established as bases, such as “a Center for Development and Safety Evaluation of Medical Devices” and “a Medical Industries Promotion Hub (drug development),” an environment (the Tohoku health and medical cluster) which produces one after another medical devices, drug development, medical, nursing and preventive services, a means of transportation, and new social systems, indispensable to “the Tohoku model,” should be established.

3. A Society with Sustainable Energy (a Society with Autonomous and Decentralized Energy)

<Target Images>

- While responding to the Great East Japan Earthquake and the subsequent nuclear power plant accident, it is necessary to undertake the promotion of utilizing renewable energy, the improvement of utilization efficiency of energy, and the autonomous and decentralized regional development.
In promoting reconstruction in the disaster-afflicted areas, it is necessary, based on the surrounding natural environments and geographic situations, the state of utilization of renewable energy, and the situation of energy consumption, to undertake model initiatives towards the establishment of a sustainable society, with the cooperation of various agents of reconstruction. The target through such initiatives is to establish a regional society with low-carbon and energy-saving as well as autonomous and decentralized energy system.
- In particular, there is close linkage between the toughness of a region (response capabilities to the disaster) and the society with autonomous and decentralized energy. In managing such a society, participation by agents such as residents and regional community is indispensable. It will become a leading example to undertake such initiatives in the disaster-afflicted areas which are experiencing decline in and aging of population more than other parts of Japan. The Tohoku model as a result should be disseminated over the rest of Japan and the world.
- At the same time, we aim to realize the Tohoku region as a land of potential and creativity, through conducting in the Tohoku region leading research and development regarding clean technology and establishing an environment in which a chain of economic effects, such as research and development, verification, making into a product and accumulation of related industries, circulates in the disaster-afflicted areas.

<Perception of Current Status>

In conducting new regional development by utilizing lessons learnt from the disaster, initiatives are undertaken in various districts in such fields as introduction of renewable energy and creation of new industries.

(1) Initiatives aimed at realizing in regions a model autonomous and decentralized

○ Potential to introduce renewable energy

The disaster-afflicted prefectures on the Pacific side of the Tohoku region are the regions with the potential to introduce renewable energy, endowed with power generating conditions for solar power generation such as a higher rate of fine weather and comparatively low average temperatures, those for wood biomass generation such as abundant forest resources, those for wind power generation such as the expectation of constant air flow on the coastal areas and those for geothermal power generation such as the expectation of ample geothermal resources in inland areas.

○ Introduction of renewable energy in the disaster-afflicted areas in conjunction with the reconstruction projects

There are systems to support the installation of equipment and the feasibility studies on projects, so as to promote introduction of renewable energy in the disaster-afflicted areas. Model projects are being undertaken in such areas.

○ Introduction of smart grid and smart community in conjunction with the town development for reconstruction

Because of the experiences soon after the disaster of the energy supply systems being interrupted, initiatives are accelerated in the areas to introduce autonomous and decentralized energy. Initiatives towards town development which is to achieve high energy utilization efficiency are being undertaken in conjunction with town development for reconstruction through projects focused on promoting group relocation for disaster mitigation.

○ Energy utilization not only by electric power but also by heat

Initiatives are being undertaken to promote energy utilization with combination of electricity and heat through the introduction of cogeneration (combined heat and power) at the occasion of town development for reconstruction and the recovery of industries in which initiatives to build compact cities are undertaken.

(2) Initiatives utilizing the most advanced technology through the cooperation

among industry, academia and government

In the disaster-afflicted areas, advanced experimental study projects and establishment of research and development hubs, which leads to the creation of new clean technology industries, are being conducted in cooperation among industry, academia and government.

(3) Verification of initiatives in advanced areas

In conducting the promotion of utilization of renewable energy, the improvement of energy utilization efficiency, the autonomous and decentralized town development and the experimental studies leading to the creation of new industries in the disaster-afflicted areas, considerations are given to the climate, geographical features, a structure of existing industries and geographical scale of the region. Therefore considerations should be given to various models.

Initiatives in various districts have various driving forces and potential capabilities, such as one that makes use of the indigenous climate and geographical features, one that is endorsed by a high level of public awareness for conversion from the past lifestyle which put heavy burden on the environment, and one by a social consensus through the strong leadership or risk-taking by head of a local government or a locally-based large corporation . It is conceivable that these driving force and potential capabilities exist in the disaster-afflicted areas. With the disaster as an opportunity, many districts have observed dramatic changes in public awareness as well as the local environment, and the time is ripe for new undertakings. It is therefore meaningful to verify and demonstrate in the disaster-afflicted areas the leading examples of initiatives in Japan and foreign countries.

<Directions of Policies and Measures>

In conjunction with town development for reconstruction, it is important to give considerations to the way how the autonomous and decentralized energy should be, so as not only to restore the district as it was before but also to create “New Tohoku” as a district of potentiality, based on the viewpoint of utilization of regional resources and revitalization of regional communities.

In conducting regional development in areas severely damaged by the disaster, an energy system needs to be reestablished from the very beginning. With perception that this is an unprecedented opportunity, it is important to establish,

from the viewpoint of initial investments and administration costs, efficient and low-cost systems which ensure a stable energy supply and necessary quality.

Such systems need to be operated in an integrated and rational manner without vertical division. Also, through sharing perception not only by national and local governments but also by economic and academic circles, strong ability to get things done should be enhanced.

(1) Creation of the Tohoku model which is autonomous and decentralized, and by which values circulate within a certain region

The objective is to create a model suitable for Tohoku which utilizes value added, such as town development resilient to disasters based on local industries and local resources (*resilience*) and town development with less burden on the environment (*green*).

In concrete terms,

- Utilization of sites from which relocation was undertaken through projects focused on promoting group relocation for disaster mitigation; Introduction of various incentives in conjunction with development of new housing and disaster-prevention facilities, equipment for renewable energy which utilized simplification of regulations and procedures, and cogeneration
- Promotion of initiatives, with the region involved based on a social consensus, which utilize regional resources such as biomass and hot springs, and which take note of effects on the natural environment and scenery as well as continuous creation of employment
- Realization of low carbonization, with regard to public facilities and public transportation infrastructures, and a compact city in conjunction with the town development resilient to disasters
- Establishment of a broad network of natural gas pipelines
- Establishment of support to advisors to districts and a network of energy specialists
- Considerations to establish and verify the electricity grid for wind power generation in an area with a good air flow and weak grid
- Promotion and introduction of an evaluation method through which regional initiatives are evaluated by three values which are the environment, society and the economy

(2) Creation, from New Tohoku, of technologies and industries by utilizing the

most advanced technologies

The objective is to turn the Tohoku district into a place at which leading projects for a society with new energy can be experimented, and a place at which a new system is installed and new industries are created ahead of other parts of Japan.

In concrete terms,

- In addition to the maintenance of support systems as the basis for initiatives, considerations on accumulation of clean technology industries in collaboration among the industry, academia and government, and on promotion measures for collaboration in relation to the creation of new industries (such as next-generation solar batteries, offshore wind power, next-generation technologies for power grids, storage batteries, oceanic renewable energy, saving energy); Optimization of energy through combining ICT and energy technologies
- Introduction to and implementation in the Tohoku district of leading experimental evidences in Japan and overseas such as smart grids
- Undertaking, in a comprehensive manner from the basic to the practical application, of research and development at hubs such as the National Institute of Advanced Industrial Science and Technology and universities beyond the framework of the ministries so as to overcome the limits of existing technologies, and implementation of the result of such research and development in the society
- Promotion of human resource development of energy experts by utilizing, in collaboration with organizations concerned, research and development hubs as places for practical education
- Research and development towards the realization, by utilizing renewable energy, of disaster-resilient farming and fisheries
- Development and promotion of hubs of local wisdom focused on facilities such as universities

4. A Leading Society Introducing Robust and Highly Resilient Social Infrastructure (System)

<Target images>

- Immense damage caused by the Great East Japan Earthquake and the subsequent nuclear power plant accident forced us to renew the understanding of the limitless scale of disasters as well as the importance of protecting people's lives and promoting prompt reconstruction.

The target therefore is to realize, by utilizing in the course of reconstruction process wisdom and lessons learnt from the disaster, the local community which introduces comprehensive safety measures in a pioneering manner to avoid fatal damage in the event of various crises including earthquake and to undertake swift recovery. Those comprehensive safety measures include controlling damage by hardware infrastructure, avoiding damage by relocation to higher ground, deflecting and mitigating critical power, taking shelter as a software measure, and enhancing the defensive capability of local communities.

We also aim at developing a society safe from various crises, not only in the field of preservation of national land and regions from natural disasters but also in the fields of medical care in an aged society and the social system such as energy, and information and communication.

- Particularly in the disaster-afflicted areas, the level of safety consciousness among the residents and local governments is high, while population decline and aging of population is in progress faster than the national trend. It will therefore become a pioneering model to undertake, in the light of population trends, these initiatives in cooperation with agents concerned with the reconstruction. The Tohoku model as a result should be disseminated over the rest of Japan and the world.

<Perception of Current Status> (with a view to preventing increase of damage and securing prompt recovery)

- (1) The situation of emergency measures taken soon after the Great East Japan Earthquake
 - Evacuation and guidance
 - The height of the Tsunami which took place far exceeded anticipated

levels; Improvement of the tsunami warning; Regular drill and evacuation guidance

- Provision of safety information
 - Utilizing mobile telephones and the Internet
- Grasping and provision of the damage situation
 - Provision and sharing of information of aerial photographs, roads and lifelines through collaboration among private companies and administrative organizations
- Opening and operating evacuation shelters
 - Extensive areas were damaged by the disaster and the number of evacuees reached nationwide approximately 470,000; Distinctions in response capabilities of evacuation shelters owing to the damage situations; Reorganization undertaken at some shelters
 - Facilities managed not only by public administrators but also by facility administrators, neighborhood associations and volunteers; Diversifying needs as time went by
- Securing water and food; Supplying goods; Building temporary housing
 - Prompt reopening of business by major companies such as supermarkets and convenience stores; Provision of water and food; Huge quantities of emergency supplies from all over the country
 - Construction works for about 50,000 temporary housing started within 4 months after the disaster; Utilization of rented temporary housing; Examples of building reconstruction housing at the time of constructing temporary housing
- Securing livelihood and employment
 - About 60% recovered out of the farmland damaged by the disaster; About 70% recovered out of the damaged seafood processing facilities in the 3 disaster-afflicted prefectures; Employment measures such as emergency employment projects to respond to the earthquake and reconstruction-oriented employment generation projects

(2) Challenges confronting local communities which support disaster prevention and mitigation

- Decline in and aging of population; weakening communities caused by such movements of population
- Necessity of extensive collaboration

- Collaboration among private companies, NPOs, and individual volunteers
 - Preparedness by residents in the event of a malfunction of the public administration damaged by the disaster
- (3) Challenges on the recovery of infrastructure in the disaster-afflicted areas
- Challenges in accelerating the recovery and reconstruction
 - Shortages of construction materials, engineers and workers; Increase of material costs and labor costs; Malfunction of bids; Concerns over the prolonged time to be required for acquisition of project sites
 - Initiatives to prolong the lifetime of infrastructure, etc.
 - A change of infrastructure management from a “post-disaster conservation approach” to a “preventive conservation approach”; Necessity to develop plans to prolong the lifetime of infrastructure
- (4) Major lessons learnt from the Great East Japan Earthquake
- (i) Providing information
 - Safety confirmation through mobile phones and the Internet
 - Sharing map information by using the Internet in collaboration between the public and private sectors
 - Necessity to establish a local medical care system by using ICT
 - (ii) Establishing various networks
 - Necessity to establish a system for extensive collaboration among the local governments in case of disasters
 - Securing transport in case of emergency such as by eliminating road obstacles through the Operation Teeth of a Comb
 - A broad network of transport by harbors and road networks on the side of the Sea of Japan
 - (iii) Consciousness of disaster prevention
 - The importance of enlightenment on consciousness of disaster prevention such as education, rooted in a local community, for disaster prevention from damage caused by the tsunami
 - (iv) Regeneration of local communities
 - Reconstructing the disaster-afflicted areas with the initiatives taken by various agents
 - Importance of the measures to prevent isolation and the mental care of people affected by the disaster so as to regenerate local communities

- (v) Regional development resilient to disasters
 - Promotion of town development for disaster prevention through multiple protection based on disaster mitigation
- (vi) Strengthening resilience of the country
 - Promoting the development of network systems complementing the hierarchical response so as to respond more promptly and swiftly

<Directions of Policies and Measures>

It is indispensable to establish a social system aiming at avoiding serious damage and recovering promptly and swiftly, by making use of the lessons learnt, and through more flexible and determined initiatives, with the understanding that ‘unexpected’ crises similar to the Great East Japan Earthquake and the Nuclear Power Plant Accident in Fukushima might happen in future.

In establishing such a social system, it is important to conduct, in a manner overcoming the vertical hierarchies of the administration, multiple initiatives for safety (controlling, deflecting, mitigating, taking shelter, and avoiding) in conformity with convenience, comfort and economic efficiency of both personal life and local communities as a whole.

A system of collaboration and cooperation with a broad range of actors such as private business operators, NPOs and individual volunteers needs to be established. The sharing of understanding on the necessary to develop integrated measures against damages as a social system should be promoted among those such as the national government, economic circles, local governments, and academic circles. With securing the understanding of residents, capability to quickly respond to massive and extensive disasters should be strengthened.

Furthermore, with a view to strengthening resilience of the country, we aim at developing network systems complementing the hierarchical response, in the light of initiatives taken in foreign countries to respond to crises.

(1) Avoiding serious damage and recovering swiftly

(i) Providing information

In the light of lessons learnt from this massive and extensive disaster, initiatives, in which various agents participate, should be conducted to be the model for improving regional capabilities of disaster prevention, by developing a system for providing information promptly and swiftly.

- With a view to visualizing the information of the disaster-afflicted areas, providing information by utilizing ICT and through public-private partnerships (on warning, safety information such as the Person Finder, damage situation, evacuation shelters, and transportation) and developing a mechanism to collect and disseminate information (such as establishing at ordinary times a system to build a consensus on provision of information among the national and local governments, and companies); With the above in view, improving the capability of each citizen on ICT skills and information literacy
- Consideration of giving, soon after the disaster, priority of utilizing information and communication to the disaster-afflicted areas
- Establishing a collaboration system for regional medical care by utilizing ICT
- Strengthening of functions of the control tower over the whole, and swift deregulation in case of emergency, to facilitate prompt recovery (flexible operation based on assumptions)
 - Strengthening a crisis management system; From the Business Continuity Plan (BCP) to the development of a District Continuity Plan (DCP)

(ii) Developing the measures to avoid huge risks and the various networks

Based on the supposition from the viewpoint of soft human so as to avoid risks to human life, measures should be developed on those such as destinations, methods and consciousness of evacuation (measures should be developed on the supposition that risks to human life cannot be avoided only by hardware facilities for disaster prevention).

In conjunction with quick recovery, a system, which enables not only prompt evacuation but also swift and continuous support for those affected by the disaster, should be developed, through establishing the extensive bases, of disaster prevention, for the activities and the accumulation of goods, through developing the extensive network for cooperation among the local governments in case of massive disasters, and through establishing the transportation network with substitutability and multiplicity.

- Securing emergency evacuation sites (establishing multifunctional facilities, including tsunami evacuation functions, etc.)
- Securing lifelines (emergency transport and evacuation routes)

- Developing evacuation plans; Implementing evacuation drills, etc.
- Promoting extensive collaboration in case of disasters; Making preparations to receive volunteers
- Establishing extensive networks for transportation such as roads and harbors
- Considering official utilization of private transportation enterprises (such as buses) to transport people soon after the disaster; Considering how to secure fuel for transport and heating; Considering a mechanism to secure continuous support such as donations

(iii) Sharing consciousness of disaster prevention at the level of the populace

In order to enhance the regional capability of disaster prevention and avoid serious damage, it is important to raise consciousness of disaster prevention that one is responsible for one's own life rather than only relying on hardware facilities for disaster prevention. Sharing of consciousness of disaster prevention should be promoted at the level of the populace through learning from the history and enlightening themselves on the consciousness by education for disaster prevention. Various data of the Great East Japan Earthquake should be publicized and shared, and utilized for future disaster prevention. The lessons learnt should be disseminated over the world.

- Promoting the development of facilities and the establishment of archives to pass on the records of the Great East Japan Earthquake to subsequent generations
- Developing a mechanism for memories of the Great East Japan Earthquake not to be weathered
- Promoting the making of study tours to the disaster-afflicted areas to learn the processes of disaster prevention and reconstruction
- Disseminating the lessons learnt from the disaster and the technologies for disaster prevention measures by making use of the 3rd World Conference on Disaster Risk Reduction in Sendai, March 2015

(2) Regeneration of communities so as to improve the regional capability to respond to crises

Communities are the core to respond to crises. In the disaster-afflicted areas, where experiences are shared in conjunction with the reconstruction, initiatives at the community level should be promoted, such as the development of the regional plan for disaster prevention, and initiatives to be a model for improving

the regional capability for disaster prevention should be conducted.

In doing so, it should be promoted to strengthen the collaboration among local municipalities, universities, private companies, NPOs and individual volunteers as well as to utilize communities through social networking services. A register of the disaster-afflicted persons should be prepared so that they can efficiently support each other in response to their own needs.

In addition, the comprehensive regional development should be conducted, including not only the safety but also the regeneration of the regional communities.

- Creation and regeneration of the regional communities in collaboration, which has been formed in implementing projects for reconstruction, among NPOs, private business operators, municipalities and prefectural administration
 - Return of evacuees by making use of Councils for Town Development for Reconstruction
 - Developing communities as major agents to comprehensively undertake not only disaster prevention but also welfare and child-raising
 - Compact town development with a focus on constructing human relationship; Promotion of reconstruction by strengthening community capabilities (Social Capital)

- Comprehensive regional development resilient to disaster, including various aspects such as life, welfare and industry (new regional development in conjunction with reconstruction projects)
 - Development of a town where people can live on foot (securing industries and employment in the disaster-afflicted areas)
 - Development of transport infrastructure in a manner integrated with town development
 - Embracing regional development which prevents the elderly people from isolation and ensures the environment for child-raising (Establishment of a community space as an annex which invites provision of software; Housing which enables three generation live together)
 - Implementing the integrated community care which provides, in an integrated manner, health, medical care, nursing, welfare and livelihood support services, etc.

- Combining farmlands into larger plots by utilizing sites from which people relocated through projects focused on promoting group relocation for disaster mitigation; Reducing production costs and ensuring efficient and organized land usage

(3) Multiple protection and examples of measures in various fields

Based on the lessons learnt that measures supported only by hardware have limitations in case of massive disasters, regional development should be conducted, aiming at avoiding serious damage and recovering swiftly, by comprehensive measures of both hardware and software.

(Hardware Measures)

- Establishment of the tsunami protection facilities (multiple protection)
 - Regional development in the light of historical characteristics of the region
 - Disaster prevention and mitigation taking risks into account
 - The raising of seawalls, river levees, coastal dykes, disaster-prevention forest at the seaside, disaster prevention open space, and roads (the 2nd levees) and the multiple disposition of such facilities
 - Relocation to higher ground and raising of housing
 - Establishment of the tsunami protection facilities taking the environment and the scenery into consideration
- Establishing facilities for evacuation (reproduction)
 - Securing evacuation routes
 - Establishing evacuation facilities
 - Establishing extensive networks for transportation such as roads and harbors
- Prompt recovery from the disaster and acceleration of the reconstruction
 - Response to shortages of engineers, workers and construction materials, and to problems with tenders
 - Shortening the construction period through parallel implementation of a work schedule (implementing different stages of a work schedule at a time where possible)
 - Prompt and efficient land acquisition
 - lightening burdens on ordering parties

(Software Measures)

- Developing evacuation plans; Implementing evacuation drills, etc.
- Implementing regulations on land use and building structure such as setting habitable and uninhabitable land according to risks
- Developing a District Continuity Plan (CDP)

(Maintenance and Management)

- Initiatives to prolong the lifetime of infrastructure, including the Private Finance Initiative (PFI)
 - The energy saving of and the prolongation of lifetime of maintenance and management
 - Promoting preventive conservation
 - Training doctors for regional infrastructure (general practitioners of town development)
 - Reducing regional infrastructure while promoting compact cities
- Developing and implementing health monitoring technologies for assessing safety

(Medical Care)

- Strengthening capability to respond to extensive and serious disasters
- Establishing a system for the regional medical care by utilizing the Information and Communication Technology (ICT) (such as utilizing electronic medical records)

(Industry and Energy)

- Introducing autonomous and decentralized energy system by making use of renewable energy
- Developing and implementing a system to support restoration of supply chains which utilizes website technologies

(Information and Communication)

- Securing the means of information and communication which respond to an extensive power outage (such as securing availability in case of a power outage)
- Correcting the concentration of cross connection points and data centers for internet in the city centers

- Establishing backup systems for emergency power source to secure communication means in case of emergency
- Developing a mechanism to make possible close collaboration between private and public sectors in the information field in case of emergency

5. A Society with the Ability of Wide Appeal in Utilizing Regional Resources

<Target image>

- In the Tohoku region there exists rich regional resources (they are the elements available in the region such as the geographical features, climate, food, scenery, history, culture, technology, and skills).
- The time, when the Tohoku region proceeds in an integrated manner with restoration through interaction with regions outside the disaster-afflicted areas, is a good opportunity to establish the differentiation and the significance with regard to the distinctive features (assets) of the Tohoku region by utilizing its regional resources beyond simple restoration.
- The target therefore is to realize a society which creates wealth by itself and continues to develop economically through actions, to be taken by the region as a whole in the fields including primary and tourism industries, such as:
 - (i) discovering and acknowledging the potential values of the regional resources;
 - (ii) maintaining and increasing those values; and
 - (iii) promoting the values of the regional resources (in the form such as goods and services) to the market.

At the same time, by enhancing the attractions indigenous to the region as well as interacting actively with other regions and the market, *the business to create values together**, based on the continuous interactions with consumers and downstream industries, should be promoted.

(* the business to create values together: a business model in which the producers create values of new goods through mutual interactions with the consumers.)

- So as to achieve the target, a virtuous cycle should be established between the enhancement of the regional resources and the revitalization of the local economy by integrating various processes from production to commercialization.

<Perception of Current Status>

- (1) The rich regional resources in the Tohoku region

In the Tohoku region, there exist characteristic and abundant regional

resources. As for the natural environment, it has vast forest area, rich fishing grounds, long coastlines, and ample water sources. There are also many scenic spots that are rated highly as tourism resources such as natural parks which make use of the natural features. Visitors to the region enjoy winter sports, trekking, and hot springs.

Apart from the natural environment, districts of the Tohoku region with their prosperous agriculture, forestry, and fisheries industry in the background provide local dishes indigenous to the districts. There also exist a number of historically important intangible folk cultural assets, cultural scenery, and traditional crafts. Furthermore, manufacturing supported by high-quality labor has taken root into the Tohoku region.

(2) Possibility of utilizing the regional resources in the Tohoku region

In the Tohoku region, there are industries which have roots in the region and utilize the regional resources, such as agriculture, forestry and fisheries industry with rich characteristics, food manufacturing and tourism. Goods and services these industries provide have a possibility to become non-price competitive which possess the original attraction that cannot be substituted by other regions and overseas countries.

(3) Initiatives utilizing the regional resources

In various districts including those in the disaster-afflicted areas, initiatives such as indicated under *Target Images* section above have been undertaken to link the regional resources to continuous development of the region.

【Points to be noted】

(Discovering and acknowledging potential values of regional resources)

- Utilizing external perspectives
- Promoting research and development

(Maintaining and increasing the values of the regional resources)

- Existence of leaders to be the core of the regional initiatives
- Networking of human resources and organizations within and outside the region
- Undertaking collaborative initiatives by exploiting individual assets beyond regions and industries
- Branding of goods and services (highly adding value and improving quality,

etc.)

(Promoting the values of the regional resources (in the form such as goods and services) to the market)

- Utilization of the regional resources for various uses
- Maintaining entrepreneurial awareness and direct dialogue with the market

<Directions of Policies and Measures>

(1) Directions of the measures with a view to establishing “the business to create values together” and “a virtuous circle”

In order to promote “the business to create values together” and establish a virtuous circle between the enhancement of the regional resources and the revitalization of the local economy, it is necessary to promote the measures suitable to the regional circumstances, not only through ministerial policies by industry but also from the cross-sectional viewpoint of reconstruction.

The measures should aim at promoting not only the specific initiatives but also the initiatives undertaken by the region as a whole. In so doing, it is important to have the value added produced within the regions. For this, it is necessary to take into account not only the producers’ perspective but also the consumers’ needs and the mechanism for demand, supply and price.

The measures should not merely end up building facilities. They should have the wisdom of the region contribute. In implementing measures, it should be noted that there might exist possibilities that the people in the region do not recognize the value of the regional resources or do not possess the human and financial resources.

(2) Matters to be covered by the measures

(Discovering and acknowledging the potential values of the regional resources)

- Enhancing awareness of utilizing the regional resources and introducing external perspectives
 - Disseminating and diffusing successful samples; Presenting the leading runner among them
 - Formulating a specialist group which supports discovery and dissemination of the regional resources (local divers)
 - Exchanging with external human resources by providing field experiences and receiving specialists

- Promoting innovation
 - New development and sophistication of production methods and processing technology, etc.
 - Improvement of industry with a focus on collaboration with the higher education organizations and the research and development organizations

(Maintaining and increasing the values of the regional resources)

- Promoting the utilization of human resources
 - Securing leaders and their right-hand persons
 - Inviting new employees in agriculture, etc.
 - Developing human resources with entrepreneurship in mind
 - Improving environments so that the elderly people and the physically weak people can take active parts (introducing instruments which reduces physical burdens on them, etc.)
 - Internship programs for university students at the reconstruction site
 - Securing places in which external human resources live
- Support for networking
 - Promoting efforts to link up the disaster-afflicted areas, their supporters and the private companies located within and outside the areas
 - Establishing a council, which plays a central role in the initiatives undertaken by the region as a whole such as cooperation among business operators
 - Diffusing and passing down to the younger generation quantified and generalized expertise and special skills
- Supporting business operators undertaking advanced initiatives
 - Reducing risks at business start-up (loans, subsidies)
 - Regenerating infrastructure such as production facilities which play a central role in the supply chain; providing incentives to promote accumulation of Sokeizai manufacturers
 - Reducing production costs by facilitating large-scale farming by way of combining farmland into larger plots and accumulating farmland to farmers in conjunction with decontamination and regeneration of farmland
 - Adding high values by upgrading hygiene management of marine products and branding agricultural products
 - Protecting regional brands such as trademarks

(Promoting the values of the regional resources (in the form such as goods and services) to the markets)

- Supporting cultivation of market in collaboration with different industries based on needs of the market, including the overseas market
- Developing facilitators who connect consumers and business operators
- Promoting goods and services based on the evidence of their good quality
[Establishing a power brand]
 - Publicizing information on quality and ingredients; Establishing authentication mechanism
 - Managing production process
 - Eradicating reputational damage from harmful rumors by risk communication
- Supporting initiatives by utilizing IT
 - Providing goods and services to new customers by utilizing the Internet
 - A system to support development of new business partners by utilizing website engineering
- Dissemination to other regions of Japan and the world with the disaster as an opportunity
 - Increasing the number of visitors by promoting study tours, school trips, and reconstruction support tours to the disaster-afflicted areas to learn the process of disaster prevention, disaster mitigation and reconstruction, as well as tours to experience the natural environment, agriculture, and fisheries
 - Promoting initiatives on a geopark
 - A gateway function for small and medium- sized enterprises to do business worldwide
 - Upgrading airports, ports and harbors to respond to globalization
 - Establishing an international research hub at the world's top level

III. Response to Common Tasks towards the Creation of “New Tohoku”

- With a view to making use of the wisdom and the lessons learnt from the Great East Japan Earthquake and the subsequent nuclear power plant accident, undertaking the reconstruction process of the disaster-afflicted areas in accordance with the 5 target images described in Chapter II as a model to overcome the challenges that Japan has today will lead to the creation of “New Tohoku.”
- As we see the current status of the disaster-afflicted areas:
 - There are many areas which had faced issues such as declining in and aging of population even before the disaster. In addition, many residents have evacuated from the area, and therefore the shortage of human resources has become a major issue there.
 - Specifically, the shortage of human resources and lack of resources (networks and funds) are noteworthy. Despite the successful cases involving inviting to the areas new entrepreneurs such as private companies and NPOs, as well as regenerating business operators affected by the disaster, there is still a need to respond to the issues such as the shortage of human resources and lack of funds in the disaster-affected areas especially on the coast.
- It is therefore necessary to give concrete consideration to 2 types of the reconstruction platforms for the public-private partnerships, which supplement the shortages and link places within and outside the disaster-afflicted areas as well as the public and private sectors. It is also necessary to try to give shape to the measures which accelerate the development of such platforms.

1. Developing a platform for human resource dispatch for reconstruction

- In order to respond to the shortage of human resources for reconstruction, existing initiatives for human resource dispatch should be further utilized such as the dispatch of public officers of local governments to those in the

disaster-afflicted areas. As for the experts in various fields for whom a number of demands are expected in future, the human dispatch for reconstruction from the private companies and NPOs as well as the acceptance of internship from the universities should be undertaken. It is an important task to promote the initiatives of human resources dispatch for reconstruction among wide-ranging entities.

- From this point of view, it is necessary to promote the dissemination of the existing initiatives of human resource dispatch for reconstruction conducted by the Ministry of Internal Affairs and Communications as well as the Reconstruction Agency and the collaboration among such initiatives.
- It is also necessary to develop a mechanism to smoothly and effectively promote dispatch of experts from wide-ranging entities, by using as reference the Fellowship Program of Entrepreneurial Training for Innovative Communities (ETIC).

2. Developing a platform to promote private investment in new entrepreneurs and reconstruction

- To have various businesses resume in the disaster-afflicted areas,
 - (i) it is necessary to promote the purchase of credit by the Rehabilitation Support Organization for Companies Damaged by the Great East Japan Earthquake and industrial reconstruction organizations to reduce excessive debt burdens due to the damage caused by the disaster; and
 - (ii) it is also necessary to revitalize the provision of funds for new entrepreneurs and reestablishment of business.
- While there are cases in which the Development Bank of Japan, local banks, and financial instruments business operators have already responded to the above demands for funds, it is an important task to accelerate the reconstruction process through inviting entrepreneurs to the wider range of fields and promoting provision of funding.
- For the above, in addition to pushing forward existing initiatives, it is necessary to consider the institutional design and support measures to promote participation, not only from the disaster-afflicted areas but also from all over Japan, in business to further promote the reconstruction of the Tohoku region.

3. Expansion of support measures for public-private

partnerships, linking up of agents and regions, and development of networks, etc.

- While various agents have engaged in regional and town development activities for reconstruction and resuming various projects and business activities, they are too busy in their own activities to collaborate with other agents in other areas who are facing the similar challenges.
- In order to revitalize each initiative of the activity in the disaster-afflicted areas and expand its range in future, it is necessary to share the expertise of excellent examples of initiatives in the disaster-afflicted areas. It is also necessary to improve the environment for themselves to be able to voluntarily and spontaneously undertake smooth and active collaboration among residents, organizations of regional bond such as neighborhood councils and neighborhood associations, shopping mall associations, societies of commerce and industry, NPOs, universities, private business operators, business groups and the administration, through exchange of information such as expertise, human resources and experiences, exchange of opinions and exchange of human resources.
- For this end, a network should be developed, through which exchange of information on expertise, human resources and experiences of the agents who participate in reconstruction, exchange of human resources and exchange of opinions can be undertaken.
- As for universities in particular, their knowledge, research capability and educational function should continue to be utilized in the fields of support for children's growth, establishment of a cooperation system for ICT-oriented medical care and nursing, promotion of a model project concerning a new energy system, development of communities for disaster-prevention and mitigation, creation of the business to create values together, and enhancement of manufacturing capability, etc.
- Basically, the people affected by the disaster should be the main agents in undertaking town development for reconstruction. Community development councils and those who support the councils such as NPOs and various experts should play a major role in doing so. Ultimately, what is very important is the role and management capability of local governments which superintend the plans for town development.
- However, while having not experienced works for the building certification and the development permit and having not received the training for town

development, local governments in the disaster-afflicted areas have been pressed by routine work.

- It is therefore necessary to conduct training to share systematic knowledge on reconstruction and aim at sustainable reconstruction from medium- and long-term perspectives, so that the officials of the local governments in charge of the management of reconstruction as well as the various agents who undertake related works (such as community development councils, business operators commissioned by the local governments and supportive NPOs) can conduct works smoothly and promptly.
- Two years and three months have passed since the disaster. At this point, in order to continue to share awareness for reconstruction and accelerate it in the disaster-afflicted areas, it is necessary to widely provide as much information of reconstruction as possible and to provide opportunities for as many people as possible to participate actively in reconstruction.
- To this end, consideration should be given to establishing a network to support reconstruction in collaboration with information and communication technology operators.

IV. Tasks to Respond to for the Time Being

The issues touched upon in this Interim Compilation of Discussions are the tasks to be undertaken not only by the Reconstruction Agency but also by the Government as a whole, as well as the tasks which have been considered to date in the course of undertaking reconstruction of the disaster-afflicted areas.

However, as the damage caused this time is immense and the number of human resources who undertake reconstruction is largely insufficient due to the local governments themselves affected by the disaster, it is hard to say that those tasks are being well dealt with.

So as to strengthen these endeavors and accelerate further the reconstruction, the reconstruction demands should be accurately addressed by effectively optimizing the revised framework for reconstruction budget and in a manner which does not invite criticism for improper use.

With regard to the FY 2013 Special Account Budget for Reconstruction, the Reconstruction Agency should exercise its function as a control tower to implement it properly with a view to addressing the tasks of the disaster-afflicted areas as a whole. In order to fill the gaps among various systems, tasks to respond to for the time being should be addressed promptly by utilizing the Adjusting Cost for Reconstruction Promotion, without passing them to the next fiscal year. It is necessary to give shape to the target images described in this Interim Compilation of Discussions and achieve visual results of the measures.

As regards the initiatives which relate to overcoming the challenges Japan faces today, which can be disseminated as a model for the world, and which are even on the issues not necessarily connected to the recovery of the disaster-afflicted areas, it is important to conduct projects of social experiment and research and development, as a practice of Japan's growth strategy, innovation and regulatory reform, ahead of other regions of Japan, in conjunction with reconstruction projects in the disaster-afflicted areas, and in implementing the Government's measures in general.

We are of the view that the accumulation of these endeavors in the course of reconstruction in the disaster-afflicted areas would reveal a new model of reconstruction and contribute to the creation of "New Tohoku" as a land of creativity and potential.

【Concrete examples of tasks to respond to for the time being with the use of the Adjusting Cost for Reconstruction Promotion】

(A reliable society to promote the fit and healthy growth of children)

- Securing of spaces such as all-weather playgrounds with kinesiological consideration (playgrounds, school grounds and parks, etc.)
- Promotion of exchange between children and adults with a focus on sports
- Training of playleaders as “good adults” who bring out interest and creativity in children
- Cohort study to bring up children with healthy mind and body

(A vibrant super-aged society with ‘the elderly people as standards’)

- Introduction of a system of collaboration among various categories of 24-hour business such as medical treatment, care and nursing at home, and various information infrastructures which support the aforesaid system of collaboration (development of a network on medical and welfare information for those such as the health management of the elderly people using a smart sensor and the electronic medical records)
- Database compilation of information on a medical checkup and examination, and extraction of experience and expertise
- Promotion of “community business for employment with purpose of life”
- Establishment of various community spaces through the projects for reconstruction
- Establishment of public transportation systems by utilizing senior citizens
- Regeneration of communities in conjunction with providing disaster-related public housing and conducting projects focused on promoting group relocation for disaster mitigation

(A society with sustainable energy)

- Field tests of new energy systems in conjunction with town development (including the introduction of leading examples in Japan and foreign countries)
- Development of hubs and networks of clean technology industry clusters

(A leading society introducing robust and highly resilient social infrastructure)

- Establishing a system aiming at avoiding serious damage and recovering

promptly and swiftly in case of crises

- Platforms for the public-private partnerships and crisis response by using Information and Communication Technology (ICT)
- Development and diffusion of technology for long-life buildings
- Development of regional plans for disaster prevention and preparation of registers of the disaster-affected persons with a view to undertaking compact town development

(A society with the ability of wide appeal in utilizing regional resources)

- Promotion of *the business to create values together through regional cooperation* by supporting voluntary initiatives of the whole region such as enhancing the attractions indigenous to the region as well as interacting actively with other regions and the market
- Support for dissemination to other regions and the world of tourism resources indigenous to the region
- Support for the formulation of a specialist group which supports discovery and dissemination of the regional resources and the activity of the group in the region
- Market development by disseminating merits and deliciousness of regional brands and natural farming products based on the evidence such as quality of components and figure
- Promotion of study tours, school trips and reconstruction support tours to the disaster-afflicted areas to learn about the process of disaster prevention, disaster mitigation and reconstruction, as well as tours to experience the natural environment, agriculture and fisheries

(Common tasks towards the creation of “New Tohoku”)

- Development of a platform for human resource dispatch for reconstruction
- Development of a platform to promote private investment in new entrepreneurs and reconstruction
- Support for development of a system to support the aforesaid, human resource development, and reconstruction projects on the initiative of residents, business operators and various groups in the disaster-afflicted areas

Closing Remarks

Recognizing that speedy undertaking of the process is important in relation to the reconstruction and creation of “New Tohoku,” we have summarized the results of deliberations to date in this Interim Compilation of Discussions. With regard to the issues which need to be urgently addressed, the Adjusting Cost for Reconstruction Promotion should be utilized, within this fiscal year, to give shape to the solutions and apply the successful examples of initiatives to other issues of similar nature as horizontal expansion, and the Grant for Reconstruction should also be made use of to accelerate reconstruction. In the Tohoku region, the Tohoku Medical Megabank Plan and the Broader Approach (BA) activities regarding the research and development of advanced nuclear fusion have been undertaken, and recently there are actions to invite the International Linear Collider to the Tohoku region. It is important for the Reconstruction Agency and other Ministries to closely collaborate with each other to focus on the promotion in the Tohoku region of the implementation of system reform and advanced projects with respect to those such as the strategy on economic growth, innovation of science and technology and regulatory reform.

It is indispensable for the Reconstruction Agency to strengthen further its function as a control tower in order to create “New Tohoku.”

There are many tasks yet to be considered. Having completed this Interim Compilation of Discussions, we at the Reconstruction Promotion Committee shall continue considerations with a focus on the disaster-afflicted areas.

List of Members of Reconstruction Promotion Committee

Chairman	Motoshige Ito	Professor, Graduate School of Economics, Faculty of Economics, the University of Tokyo President, the National Institute for Research Advancement (NIRA)
Vice-chairman	Reiko Akiike	Partner & Managing Director, the Boston Consulting Group
Members	Hiroko Akiyama	Professor, Institute of Gerontology, the University of Tokyo
	Akira Iwabuchi	Vice-President/ Trustee, Iwate University Head of Organization of Revitalization for Sanriku-region
	Kentaro Ohyama	President, IRIS Ohyama Inc. Chairman, Sendai Association of Corporate Executives
	Shintaro Kikuchi	Medical Doctor Manager of “Koriyama City’s Project for Child Care after the Great East Japan Earthquake”
	Yuhei Sato	Governor, Fukushima Prefecture
	Takeshi Shirane	President, Toyota Motor East Japan, Inc.
	Kuniya Daini	President, Japan Football Association
	Takuya Tasso	Governor, Iwate Prefecture
	Keiko Tamura	(Cooperating) Professor, Risk Management Office/

Research Institute for Natural Hazards and Disaster
Recovery, Niigata University

Toshihiko Nakata Professor, Graduate School of Engineering, Tohoku
University

Ryuichiro Matsubara Professor, Graduate School of Arts and
Science, the University of Tokyo

Jun Matsumoto President and Representative Director, Michinori
Holdings, Inc.

Yoshihiro Murai Governor, Miyagi Prefecture

(15 members)

(Japanese alphabetical order, honorific titles omitted)

Reconstruction Promotion Committee

Progress of Discussions

[Committee Meetings]

The 8th Meeting: Tue. 26 March 2013

- Agenda: - On issues to be considered
- Comments on reconstruction from committee members

The 9th Meeting: Thu. 25 April 2013

- Agenda: - On “a Reliable society to promote the fit and healthy growth of children”
- Common tasks towards the creation of “New Tohoku”

The 10th Meeting: Thu. 16 May 2013

- Agenda: - On results of hearings with three prefectures on “New Tohoku”
- On “a Vibrant super-aged society with ‘the elderly people as standards’”
- On “a Society with the ability of wide appeal in utilizing regional resources”

The 11th Meeting: Tue. 28 May 2013

- On “a Society with sustainable energy (a Society with autonomous and decentralized energy)”
- On “a Leading society introducing robust and highly resilient social infrastructure (system)”

The 12th Meeting: Wed. 5 June 2013

- On an interim compilation of discussions
- On future proceedings

[Informal Meetings for Discussions]

On “a Reliable society to promote the fit and healthy growth of children”

Tue. 23 April 2013

- Presentation from a panel of experts

- Exchange of opinions

【Experts】 (members of the Reconstruction Promotion Committee and governmental officials attended are not listed below. The same applies hereinafter)

- Kazuhiko Nakamura Professor, Faculty of Education and Human Science,
Graduate School of Pedagogy, University of Yamanashi
- Hisako Watanabe Lecturer, Department of Pediatrics, School of Medicine,
Keio University
- Kimiko Kozawa President, Association for Children’s Environment
Representative Director, Learning and Ecological Activities
Foundation for Children
- Mitsuru Senda Chairman, Association for Children’s Environment
Chairman, Environment Design Institute
Honorary Professor, Tokyo Institute of Technology
- Makiko Okuyama Head of the Department of Psychological Medicine,
National Center for Child Health and Development
- Naoko Kawakami Former member of the Japan Women’s National Football
Team
“Yume Sensei (dream teacher)” at Egao no Kyoshitsu (class
for smiles)

【Absent expert】

- Yoshiteru Mutoh Director, Research Institute for Sport Science, Nippon
Sports Science University
Professor Emeritus and Advisor to President, the University
of Tokyo

On “a Society with the ability of wide appeal in utilizing regional resources”

Wed. 15 May 2013

- Report from participants on examples of initiatives

- Explanation of materials submitted by the Secretariat

- Exchange of opinions

【Experts】

- Shinichi Ishimura President, Ishimura Industry Co., Ltd.
- Kazue Saito Executive Managing Director, Saikichi Shoten Co., Ltd.
- Satoko Sasaki President, Cooperative Association for Onagawa Town
Lodging Village
- Koichi Suzuki Farmer
- Yukio Takahashi Secretary General, Council for Reconstruction
Housing in Kamihei Region
Counselor, Kamaishi Area Forest Owners' Cooperatives
- Tetsumi Hashimoto Managing Executive Officer, Development Bank of Japan
Inc.
- Mai Miyagawa Chief, Tourism Promotion Section, Division of Industrial
Development, Minami-Sanriku Town Office
- Koji Yamauchi Project Director, Entrepreneurial Training for Innovative
Communities

On “a Leading society introducing robust and highly resilient social infrastructure (system)”

Thu. 23 May 2013

- Presentation from a panel of experts

- Exchange of opinions

【Experts】

- Ichiro Iwaki Professor, Department of Civil Engineering, College of
Engineering, Nihon University
- Masatoshi Urashima Member of Working Committee, Council on
Competitiveness–Nippon
(Managing Executive Officer, Kajima Corporation)
- Takito Niida Head, Office of Support for Reconstruction from
Earthquake, Urban Renaissance Agency
- Koichiro Fuji Corporate Officer/ Head of Public Policy & Government
Affairs, Google Japan Inc.
- Masumi Makino Executive Officer/ Head of the President Office, Microsoft
Japan Co., Ltd.
- Yuji Mitsunobu Executive Officer/ Director of Public Sector, Microsoft

Japan Co., Ltd.

【Absent experts】

- Fumihiko Imamura Professor, Deputy Director, Research Field on Tsunami Engineering, Hazard and Risk Evaluation Research Division, International Research Institute of Disaster Science, Tohoku University
- Yoshiteru Murosaki Vice President/ Director for Research & Investigation Center, Hyogo Earthquake Memorial 21st Century Research Institute

【Witness】

- Hideo Tokuyama Director General, Tohoku Regional Bureau, Ministry of Land, Infrastructure, Transport and Tourism

On “a Society with sustainable energy (a Society with autonomous and decentralized energy)”

Tue. 23 May 2013

- Presentation from a panel of experts
- Exchange of opinions

【Experts】

- Tetsuya Osaka Professor, Faculty of Science and Engineering, Waseda University
President, Institute for Nanoscience & Nanotechnology, Waseda University
- Kazushi Kuse VP, IBM Research & Development - Japan, IBM Japan
- Michihisa Koyama Professor, INAMORI Frontier Research Center, Kyusyu University
Professor, International Institute for Carbon-Neutral Energy Research, Kyusyu University
- Hiroshi Hosaka Professor, Graduate School of Frontier Sciences, the University of Tokyo
- Toshihide Yahiro Board Member, Hitachi Consulting Co., Ltd.
- Masahiko Watanabe Visiting Professor, Fukushima Future Center for Regional Revitalization, Fukushima University

On “a Vibrant super-aged society with ‘the elderly people as standards’”

Fri. 24 May 2013

- Presentation from a panel of experts
- Exchange of opinions

【Experts】

- Junichiro Okata President, Institute of Gerontology, the University of Tokyo/
Professor, Department of Urban Engineering, Graduate
School of Engineering, the University of Tokyo
- Tetsuo Tsuji Professor, Institute of Gerontology, the University of Tokyo
- Shinsuke Muto President, You Home Clinic
- Akira Morita Professor, Department of Political Studies, Faculty of Law,
Gakushuin University
Visiting Professor, Todai Policy Alternatives Research
Institute, the University of Tokyo
Chairman, Central Social Insurance Medical Council
- Hiroyuki Yoshimura Director General, Department of Reformation of Housing
Estates, Urban Renaissance Agency

[Field Surveys]

Fukushima Prefecture: Sat. 13 April 2013

- Koriyama City
 - Field survey (PEP Kids Koriyama)
- Kawauchi Village
 - Field surveys (Kawauchi Elementary School, Kawauchi Junior High School, Shimokawauchi emergency temporary housing, commercial hotel, convenience store, Kawauchi no Yu (Kawauchi hot spring), Kawauchi Factory of Kikuchi Seisakusho, Kawauchi highland vegetable plant, decontamination sites)
- Tomioka Town (within Areas in which the residents are not permitted to live)
 - Field surveys (areas around the barricades against Areas where it is expected that the residents have difficulties in returning for a long time, Tomioka Dai-ni Junior High School, Tomioka Town Hall, central shopping district, in front of Tomioka Station)

Miyagi Prefecture: Sat. 25 May 2013

- Minamisanriku Town
 - Field survey (Minamisanriku Sansan shopping district)
- Ishinomaki City
 - Field surveys (Ishinomaki Cafe, You Home Clinic Ishinomaki)
- HigashiMatsushima City
 - Field surveys (Nobiru district (JV office), solar park)
- Sendai City
 - Field surveys (Eastern Sendai district, Miyagi Medical and Welfare Information Network)

Iwate Prefecture: Sat. 1 – Sun. 2 June 2013

Sat. 1 June 2013

- Otsuchi Town
 - Field surveys (Reconstruction and Town Development Otsuchi Co., Ltd., Yell Support Center (Base to support elderly people in Sanmaido district))
- Kamaishi City
 - Field surveys (Unosumai district, community care type temporary housing in Heida district, Heida fishing port)

Sun. 2 June 2013

- Kamaishi City

- Field survey (Kamaishi Satellite Office of Iwate University)
 - Ofunato City
 - Field surveys (Kesen Medical Association, Ofunato Brewery of Suisen Brewing Co., Ltd.
 - Rikuzentakata City
 - Field surveys (Michi-no-eki (road station) “Takatamatsubara”, old city center, Yagisawa Shoten Co., Ltd.*)
- * Hearing from Yagisawa Shoten Co., Ltd. on their initiatives was conducted at their Ohara factory in Ichinoseki City.