# Minamisoma Robot Promotion Vision Overview



The most important item in Minamisoma's agenda is to overcome and accelerate recovery from the Great East Japan Earthquake and subsequent Fukushima 1st nuclear power plant disaster that occurred in March 2011. Along with seeing the robotics industry as one of the new industries that could be developed in the Hamadori region and using sites like the Robot Test Field whose installation was decided upon in April 2016, the town is accelerating initiatives to make the Minamisoma City promotion general planning vision of "Minamisoma, a town of radiance and tranquility made by everyone" into a reality. For this purpose, the city recently formulated the "Robot Promotion Vision" in order to create "Robot Town Minamisoma," a shared picture this city strives for that is created by all the people of Minamisoma.

### 1. Robot Promotion Based on National Strategy (Innovation Coast Framework, etc.)

In June 2014, Japan mentioned the robotics industry as one of the new industries that could possibly be developed in the Hamadori area in the written report "Fukushima/ International Research and Industrial Cities (Innovation Coast)."

In February 2015, Japan formulated the "New Strategy of Robots," indicating courses of action such as making Japan a main site of the world's robot innovation. Then in June of 2016, the "Japan Revival Strategy 2016 — Turning Towards the 4th Industrial Revolution—" was decided by the cabinet to map out the implementation of the 4th industrial revolution using high-technology like the Internet of Things, big data, artificial intelligence, and robots. The writing specified the acceleration of initiatives using new technology such as drones and self-driving cars going forward.

## 2. National, Prefectural, and Private Company Initiatives Based on National Strategy

# 3. Other Municipalities' Initiatives Toward Robot Promotion

In December 2014, the <u>"Innovation Coast Framework Promotion Assembly" was formed</u> in order to unite national, prefectural, and municipal efforts toward the actualization of the Innovation Coast Framework. Examinations into the restoration of the Hamadori area were accelerated at that time.

Beginning in August 2015, the national, prefectural, and local Hamadori governments established <u>Fukushima Hamadori robot demonstration zones</u>, promoting efforts to use open spaces like bridge, dams, and rivers for robot verification tests. (31 businesses have been active in these spots for 86 days as of April 2017.)

It was decided in April 2016 to construct the Robot Test Field in Minamisoma and Namie. There, facilities and equipment will be provided for conducting demonstration experiments and hands-on training in the following fields:

1. distributing goods using drones

2. infrastructure inspection using drones and underwater robots

3. disaster response using drones and land robots

The tools and facilities necessary for product improvement through basic performance tests and verification experiments will be installed at international industry-academicgovernment collaborative research facilities. (Set to be open sequentially starting in F.Y. 2018)

In terms of the efforts of private companies, the development of companies and groups related to robots such as NEDO, Japan Unmanned System Traffic & Radio Management Consortium (JUTM) and Robot Revolution & Industrial IoT Initiative, will be stimulated.

(The world's first test flight of long-distance package delivery by a completely automated rotary wing drone was carried out in Minamisoma in January 2017.) In the 2nd annual public dialogue toward future investment in <u>November 2015</u>, <u>Prime Minister Abe</u> stated, <u>"We will try to make it possible for autopilot traveling services and automatic driving on expressways at the 2020 Olympics and Paralympics. For that purpose, we will establish systems and infrastructure needed for demonstrations by 2017."</u>

Minamisoma expects automated technology to be tied to reductions in traffic accidents as well as labor saving in areas with a shortage of workers. Analysis has begun for <u>efforts tied to demonstration experiments for autopilot buses running between JR Odaka Station and Odaka Technical High School</u> in Odaka Ward, where the evacuation order was lifted in July 2016.

Efforts related to robot promotion are being made proactively in other municipalities. It is important to coordinate and cooperate with these municipalities.

## 4. Minamisoma's Initiatives and Direction Going Forward Toward Robot Promotion

Minamisoma is promoting efforts toward the creation of robotics-related industries as a part of measures for new economic growth and job creation following the Great East Japan Earthquake. Furthermore, local businesses responded to those efforts by <u>founding the "Minamisoma Robot Industry Conference"</u> in <u>December 2011</u>, in which activity such as robot development, exhibitions, displays at events, etc., is being stimulated in cooperation with companies that are members in the conference.

After the establishment of facilities such as the Robot Test Field as central locations was decided in April 2016, Minamisoma is promoting measures related to symposiums, drone tournaments, races, etc., as well as strengthening the system (establishment of the Robot Industry Promotion Office and founding of the Robot Industry Promotion Advisor System in July 2016) in order to accelerate these efforts.

## The Version of Minamisoma We Should Aim For

#### 1. A town that produces a large number of great robotics personnel

Creating opportunities for local urban planning agencies to come into contact with people connected to robots, including city companies, students, children, chamber of commerce, etc.

#### 2. A town of technical innovation in robotics

Deepening personnel networking/company matching as well as coordination with national/prefectural policies to advance robotics, and applying national/prefectural/city support measures.

#### 3. A town with an accumulation of robotics industries

Dispatching robots to the world that were completely "Made in Hamadori Minamisoma," from designing to manufacturing to production authentication.

# 4. A town that produces a large number of robotics venture companies

Fermenting a culture of accepting new developments and taking on challenges while developing a support system for the establishment of creators and developers.

# 5. A source of Japan's competitive edge, a town that develops robotics education

Generating opportunities for ES/JHS students to come into contact with robots and other technologies.

Catalyzing education through coordination with research institutions from universities, etc., as well as official trips for courses from researchers, engineers, companies, etc.

# 6. A town where robots have fused into daily life, where robot demonstrations and attempts are the easiest to implement in the world

Implementing proactive initiatives in coordination with Fukushima Prefecture that will support enterprises engaged in efforts to create innovations, as well as introducing and using robots and advanced technology in every facility in the city.

#### 7. A town at the frontier of using robots in tourism and sports

Developing infrastructure as well as advancing international robotics competitions, drone race tournaments, etc., along with initiatives using animation and mascots.