



# Shoichi TATENO Public Private Partnership Data Strategy and Business Development Weathernews Inc. (WNI)

# Weather and Climate Services for Climate Change Adaptation & Mitigation

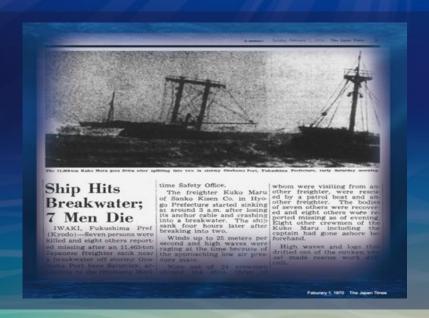
Zero Carbon City International Forum 2023 "Synergies of decarbonization and resilience"



## The Origin of WNI



# "I want to protect the lives of mariners." "I want to help in time of crisis."



January 1970, an explosive low-pressure system hit the port of Onahama, Japan, and lives of 15 crew on the vessel has lost.

"If there had been really useful weather information, maybe this accident could have been prevented."

Weathernews Inc. was established with a sense of responsibility and will of company founder Hiro Ishibashi in 1986.

Since then, our "Risk Communication service" have expanded to cover all types of business and our daily lives.

### Weathernews Inc. (WNI) in Brief



Global Operation Network Supporting 24 x 7, from 32 offices in 21 countries

Oklahoma
Operations Center







Copenhagen
Operations Center

Amsterdam
Operations Center

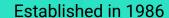
Athens
Operations Sub-Center



Tokyo Global
Operations Center

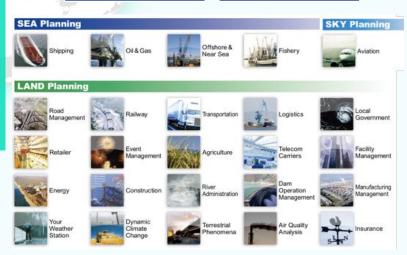
Yangon
Operations Center

Manila
Operations Center



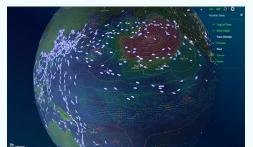
Sales in 44 areas of global market, with 1,100+ employees (including 200 Certified Forecasters & 250 IT Experts)
2,500+ BtoB customers in 50 countries
2,000,000+ BtoS "Supporters" 180,000 Weather Reports / Day





### Services for Climate Change





#### CO2 Reduction by Optimum Ship Routing (OSR)

WNI provides global ship routing services which optimize both engine speed and fuel consumption. Along with safety support services, WNI is challenging in monitoring and visualizing  $\mathrm{CO}_2$  reduction, and in fact, the Optimum Ship Routing service has contributed to the reduction of 2.8 million MT of  $\mathrm{CO}_2$  from June 2018 to May 2019.



#### ► Minimize Food Waste with Supply/Demand Forecast

WNI's demand and supply planning support service is also utilized in the distribution and retail markets. Especially for an issue of food waste, predicting future demand with weather/climate risk analysis can avoid excess production waste in the supply chain.



#### Accurate Forecast for extreme weather with users' supports

WNI has officially achieved "the most accurate weather forecast in Japan" in 2022. WNI has been creating weather forecasts with our mobile/internet users. The reports (photo images and weather conditions observed by their physical senses) is incorporated into our forecasts, and we provide detailed weather forecasts, such as for sudden and localized guerrilla thunderstorms, which are extremely hard to predict.

## **Public Private Engagement (PPE)**



# Legal Framework for Meteorological Services in Japan - Meteorological Service Act - (1952)

1993: Revised

#### **Enhancement of Public-Private Partnership**

- Establishment of an authorized organization for dissemination of meteorological data to the private sector
- Establishment of "certified meteorological forecasters" system
- Authorization of <u>Public Weather Forecast</u> by the Private Sector

	weathernews  Always WITH you!
Public Weather Platform	Your Weather Information Exchange Platform (interactive communication)
Weather Forecast Warning	Weather Forecast Solutions for Risks Warning Dissemination
Basic Observation	Original Obs. for Specific Services

### **PPE: Warning Dissemination in Japan**













Monitoring Detection



Early Warning

#### **Public Sector**

Private Sector plays a key role in organizing and disseminating the information on disaster and warning to end-users



**Business** 

**Data** 

**Private Sector** 

Lifeline Information

**Emergency** Call

Risk Communication

> Service & Support



Information Dissemination

Feedback



**Transportation Companies** 









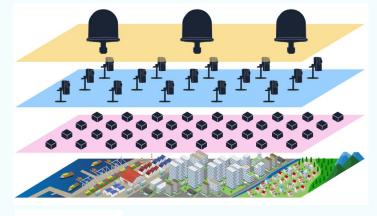
#### Observation Development Project in Thailand

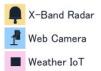




WNI invests and attempts to building an observation network with the same level of density as Japan in the designated area indicated in map.

WNI will plan to set a station in each grid (at least) with the combination of existing public and academic stations to deliver advanced weather information service of disaster mitigation.





17km x 17km Observation density 30km x 30km Camera Observation

#### PPP: EAGLE Radar for VCP (Voluntary Cooperation Programme of WMO)



Weathernews Inc. in cooperation with Vietnam Meteorological and Hydrological Administration (VNMHA), initiated the overseas deployment of high-frequency compact meteorological X-band radar - "EAGLE Radar," the first of which is to be installed in Hanoi, Viet Nam. Weathernews entered into an agreement on provision of a radar to the VNMHA in 2022.

Weathernews works together with VNMHA to install and commence the operation of an EAGLE radar in Hanoi through an international technical cooperation programme "VCP" of the World Meteorological Organization and in cooperation with Japan Meteorological Agency (JMA).



The EAGLE radar is a new meteorological radar that performs 3D observation of 50-km periphery in 30 seconds.



### **PPP: Joint Project for East Africa**



Weathernews is joining the "SIP" national program led by the Council for Science, Technology and Innovation (CSTI) of the Japanese Government and developing "AI Chatbot" system for disaster prevention with the collaboration of National Research Institute for Earth Science and Disaster Resilience (NIED), National Institute of Information and Communications Technology (NICT) communicating through the mobile app platform of LINE.







In collaboration with UNESCO, Weathernews attempts to contribute to disaster prevention in East Africa nations by collecting and providing information related to disasters through mutual communication with users by utilizing the mobile app platform, which is most used in Japan as well as other countries. This joint workshop has been organized with UNESCO and local governments.



Our dream is to be the Weather Information Platform
to reduce the weather and climate risk for
8 billion people living in the world.
We hope, combination of appropriate mechanism for PPE/PPP and utilization of cutting edge technologies
will enhance the contribution of Weather and Climate Enterprise for Climate Change Adaptation & Mitigation

# Thank you

