

# **IT in Disaster Relief & Rescue - Concept of Hitachi -**

**December, 2012**

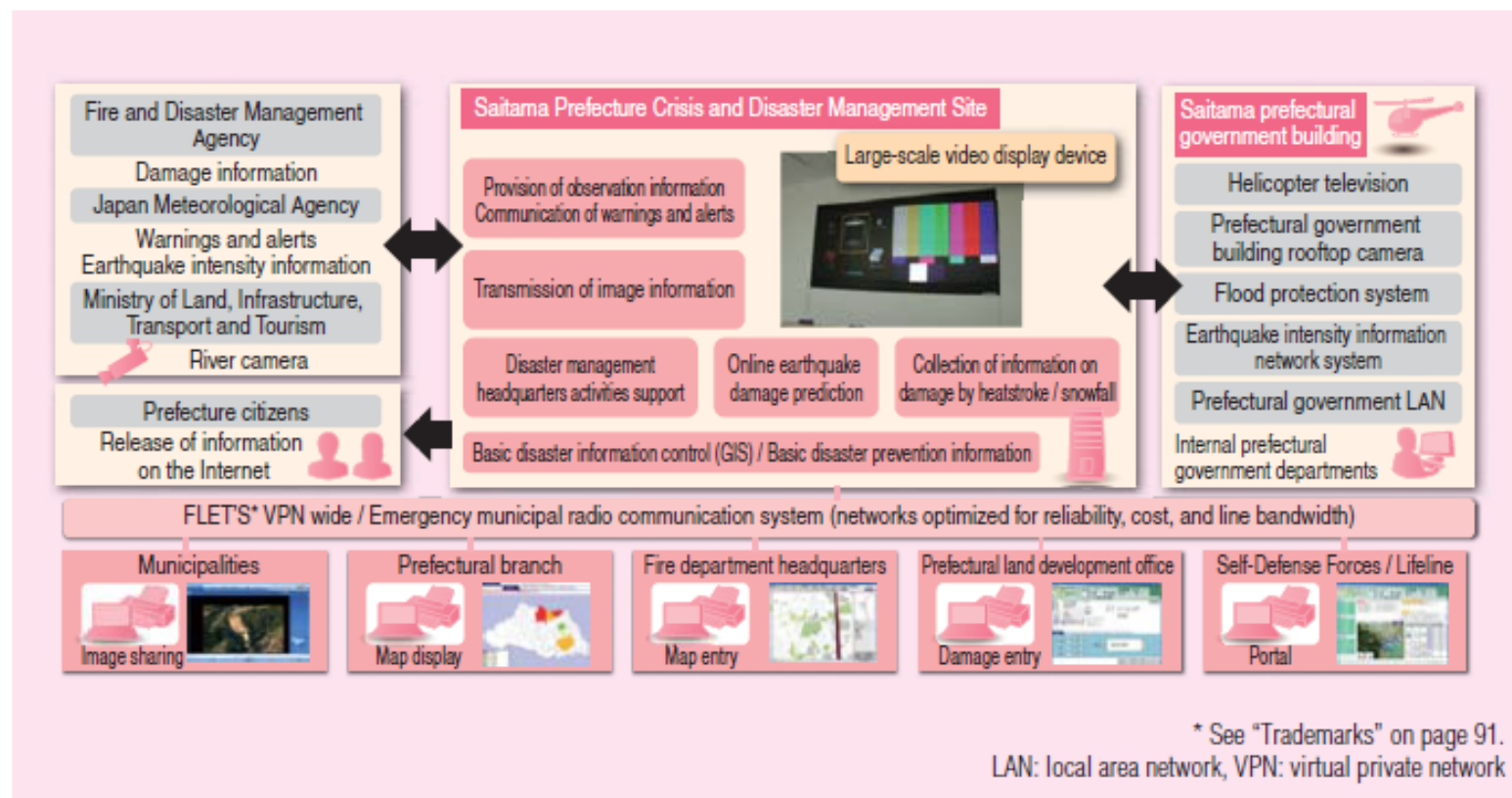
**Hitachi, Ltd.**

**Hitachi Solutions, Ltd.**

Please refer to ([http://www.hitachi.com/rev/archive/2012/\\_icsFiles/afieldfile/2012/08/08/r2012\\_technology05\\_si.pdf](http://www.hitachi.com/rev/archive/2012/_icsFiles/afieldfile/2012/08/08/r2012_technology05_si.pdf)) for original article

In March 2011, a large-scale video installation consisting of eight 67-inch large-scale multi-displays was delivered to Saitama Prefecture, Japan, which had established its Crisis and Disaster Management Site and was improving its response to disasters. In October of the same year, the Saitama Prefecture disaster information system, which had been in development for two years, began full-scale operation.

This system has 11 sub-functions, including communication of warnings and alerts to branches and municipalities in the prefecture, and collection of damage information using the geographic information system (WebGIS). Compared to previous systems, this system has been well-received by Saitama Prefecture for its additional functions, which include the provision of image information from river cameras, predictions of earthquake damage linked to earthquake bulletins, and



Saitama Prefecture disaster information system

collection of information on subjects such as damages by heatstroke and snowfall. The information collected by this system is displayed on the large-scale video device, which allows disaster management personnel to comprehend situations quickly and supports their disaster planning decisions.

**Hitachi Solutions Donates GeoPDF Files to Aid Japan Quake Reconstruction Efforts**  
*Data to Facilitate Damage Verification in Disaster Areas through Comparison of Maps and Post-Disaster Satellite Imagery*

TOKYO, April 18, 2011 — Hitachi Solutions, Ltd. today announced that it will donate GeoPDF files to the Japanese government, in order to support reconstruction efforts following the recent March 11 Great Eastern Japan Earthquake and tsunami. Hitachi Solutions will provide the GeoPDF files, which deliver geographical information systems data in PDF format to facilitate viewing and adding of information, to the Cabinet Office for distribution to local disaster headquarters and municipal governments in areas affected by the disaster. The use of GeoPDF files will facilitate the verification of housing damage to greatly simplify the administration of *Risai Shomeisho* (Disaster Victim Certificates) issued to property owners. The files can also be effectively used for reconstruction planning.

Hitachi Solutions is providing GeoPDF files that contain three layers of data: pre-disaster housing maps, estimated water submersion data, and post-disaster satellite imagery. Users can compare the layers to assess damage, and add data and photos to map points by using geographic coordinates. This process will greatly streamline the time it takes to verify damage, by enabling remote comparison of post-disaster satellite imagery with housing maps containing owner identification information. This will significantly reduce time compared to having to physically visit building sites to verify damage.

The use of geographic coordinates also facilitates on-site investigation where visual inspection must be carried out on the ground. In addition, users can add work progress data to GeoPDF files, by setting work schedules based on area damage estimated from satellite imagery.

Hitachi Solutions has enlisted the cooperation of Nikon-Trimble Co., Ltd. to provide Trimble GPS Pathfinder SB handheld receivers equipped with software for users to add, on site, information and photographs collected on the ground to GeoPDF files. Hitachi Solutions is also providing StarBoard interactive whiteboards to be set up at disaster headquarters, in order to facilitate information sharing and reconstruction planning.

The GeoPDF files were created with data from the following partners: Zenrin Co., Ltd. for the provision of housing map data (brand name Zmap-TOWN II); Pasco Corporation for the provision of estimated water submersion data; and DigitalGlobe, Inc. for the provision of satellite imagery.<sup>1</sup> The GeoPDF files were generated using Hitachi Solutions' GeoMation with TerraGo Publisher<sup>TM</sup> authoring software for GeoPDF files.

Moving forward, Hitachi Solutions will continue to support reconstruction efforts in Japan by accommodating the needs of municipalities as they broaden their scope of support. In addition, Hitachi Solutions is developing a cloud-based extension tool that will enable users to gather information from GeoPDF files using cloud computing, and the company has plans to donate it in the future.

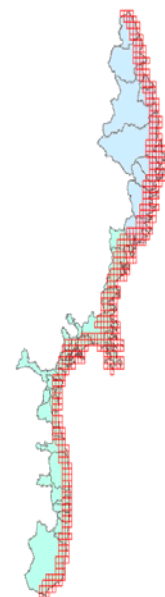
<sup>1</sup>Hitachi Solutions is the leading provider of satellite imagery in Japan and the Asia region.

## Schematic



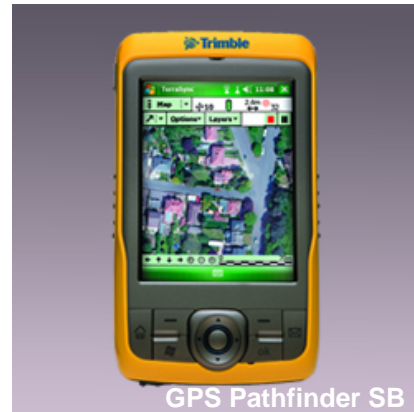
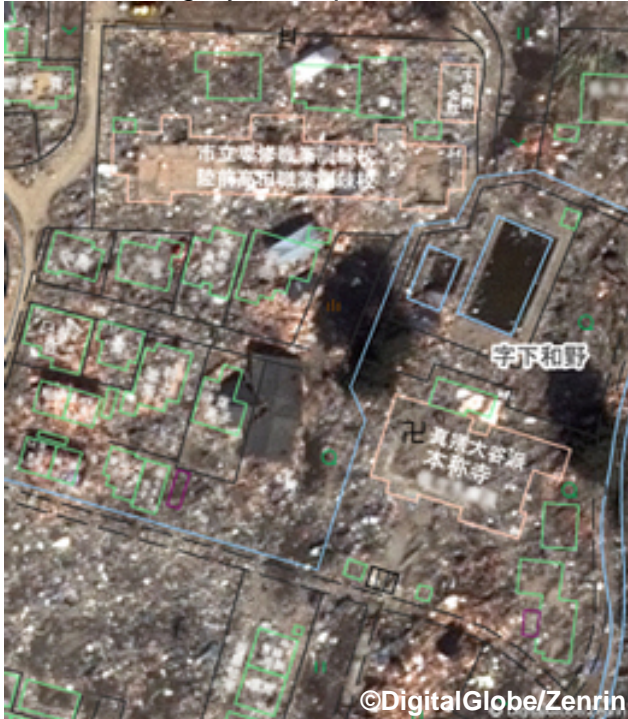
## Geographic Coverage: Range of Five Kilometers from the Coast of the Listed Towns

Prefectures
Districts (Ward, City, Town, Village)
Iwate (12 districts)
Cities: Kamaishi, Kuji, Miyako, Ofunato, Rikuzentakata
Towns: Hirono, Iwaizumi, Otsuchi, Yamada
Villages: Fudai, Noda, Tanohata
Miyagi (20 districts)
Sendai City (Wards): Miyagino, Taihaku, Wakabayashi
Other Cities: Higashi Matsushima, Ishinomaki, Iwanuma, Kakuda, Kesenuma, Natori, Shiogama, Tagajo
Towns: Matsushima, Minamisanriku, Misato, Onagawa, Osato, Rifu, Shichigahama, Watari, Yamamoto
Fukushima (10 districts)
Cities: Iwaki, Minamisoma, Soma
Towns: Futaba, Hirono, Namie, Naraha, Okuma, Shinchi, Tomioka





## Satellite Imagery Example and Trimble GPS Pathfinder SB Handheld Receiver



<sup>1</sup>Owner identification information has been omitted from the image at left for reasons of privacy.

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### About Hitachi Solutions, Ltd.

Hitachi Solutions, Ltd., headquartered in Tokyo, Japan, is a solutions provider with approximately 10,000 employees. Hitachi Solutions was formed in the merger of Hitachi Software Engineering Co., Ltd. and Hitachi Systems & Services, Ltd. on October 1, 2010. Hitachi Solutions provides value-driven services throughout the IT life cycle, from systems planning to systems integration, operation, and maintenance. For more information on Hitachi Solutions, please visit the company's website at <http://www.hitachi-solutions.com/>.

\*GeoPDF and TerraGo are trademarks or registered trademarks of TerraGo Technologies, Inc. in the US and other countries.

\*Zmap-TOWN is a registered trademark of Zenrin Co., Ltd.

\*GeoMation and StarBoard are registered trademarks of Hitachi Solutions.

\*Other company names and product names are the registered trademarks and/or trademarks of the respective companies.

## **Hitachi Solutions StarBoard Software to Be Deployed at Public Junior High Schools in Turkey**

*Software for interactive whiteboards will support the spread of ICT  
in classrooms nationwide to help enhance academic achievement*

TOKYO, April 25, 2012 — Hitachi Solutions, Ltd. today announced that StarBoard Software for interactive whiteboards will be deployed at public junior high schools across Turkey. The deployment covers 85,000 licenses to be deployed by August 2012.

Turkey has launched the Fatih Project, under which Ministry of National Education and Ministry of Transport, Maritime Affairs and Communications are endeavoring to provide equal opportunities for education and enhance the information infrastructure in the nation's schools. The project plans to deploy interactive whiteboards, tablet devices, Internet connectivity and printers in all classrooms (approx. 620,000) at about 40,000 public schools including kindergarten, elementary, junior high and senior high schools from 2011 to 2014.

Hitachi Solutions' StarBoard Software for interactive whiteboards was chosen to be used in Fatih Project for the 2012 deployment.. The software will be bundled with interactive whiteboards developed for the project by Vestel Dijital Uretim Sanayi A.S., a leading manufacturer of electronic equipment headquartered in Manisa, Turkey. The plan calls for 85,000 interactive whiteboards with StarBoard Software to be installed at junior high schools across Turkey. The use of information and communication technology (ICT) in classrooms will enable interactive communication to help increase student motivation and enhance their understanding and academic performance.

Hitachi Solutions offers StarBoard interactive whiteboard solutions in more than 70 countries worldwide, having so far shipped more than 200,000 whiteboards (as of March 31, 2012). StarBoard interactive whiteboards enable users to write freely on a projected image of a computer screen and control the computer from the whiteboard. In addition to delivering StarBoard Software for the Fatih Project, Hitachi Solutions will endeavor to expand sales of StarBoard Software to universities, private schools and preparatory schools in Turkey. Hitachi Solutions will also pursue business opportunities related to training and educational content, while encouraging the spread of ICT in educational settings worldwide.



Interactive whiteboard<sup>1</sup> equipped with StarBoard Software from Hitachi Solutions

<sup>1</sup>All-in-one solution with touchscreen LCD, blackboard, whiteboard and PC

## **Main features of StarBoard**

### **1. Touch operation with finger or pen**

Operate computers, and write or draw on the screen using a finger, stylus pen, or electronic pen.

### **2. Simultaneous input**

Multi-user feature opens up new possibilities for innovative use. Also provides gesture control, such as zoom in and out, eraser, and scroll.

### **3. Extensive content and tools for schools**

StarBoard Software includes extensive content and tools for schools, covering subjects like math, geography and science. Teachers can quickly prepare lessons and teaching materials using the software.

## **Endorsement from Turkish Embassy in Japan**

In conjunction with this announcement, Hitachi Solutions has received the following endorsement from the Turkish Embassy in Japan.

We would like to congratulate Hitachi to take part in the Fatih Project. This project is directly investing in the future of Turkey through improving the quality of education in the country. Since we have had strong bonds of friendship with Japan, it is our pleasure to see that a well-known Japanese company, namely Hitachi, is actively contributing into such an important undertaking.

## **About StarBoard**

<http://www.hitachisolutions-eu.com/>

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## **About Hitachi Solutions, Ltd.**

Hitachi Solutions, Ltd., headquartered in Tokyo, Japan, is a solutions provider with approximately 10,000 employees. Hitachi Solutions provides value-driven services throughout the IT life cycle, from systems planning to systems integration, operation, and maintenance. For more information on Hitachi Solutions, please visit the company's website at <http://www.hitachi-solutions.com>.

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.  
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