Country briefing on national ICT architectures in Vietnam natural disaster – resilient infrastructures

Content

- Data transfer rain, water level, weather forecast
- Data transfer irrigation reservoirs, hydropower reservoirs
- Data transfer earthquakes, tsunamis
- Application GIS for building map disaster management
- Developing other information infrastructures
- Information dissemination between central, localities and communities
- Difficulties and challenges

Natural disaster in Vietnam

<table>
<thead>
<tr>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood, inundation</td>
<td>Hail</td>
<td>Earthquake</td>
</tr>
<tr>
<td>Storm</td>
<td>Landslide</td>
<td>Industrial accident</td>
</tr>
<tr>
<td>Flashflood</td>
<td>Forest fire</td>
<td>Flood</td>
</tr>
<tr>
<td>Worker death</td>
<td>Safety violation</td>
<td>Drought</td>
</tr>
</tbody>
</table>

Confidential
Information rain, water level
- Transmitted by phone, Fax, FTP server
- Information of rain data: name of province, position, time (4 time daily: 1, 7, 13 and 19)
- Information of water level: name of position, river, time, value

The information of rain and water level display in LED system
- Information of rain displayed on the LED in COC: name of province, position, time, value
- Information of water level displayed on the LED in COC: name of position, river, time, value comparison with alarm water level, the trend

Information of weather forecast
- Transmitted by phone, Fax, Website, SMS
- Information about storm includes: position, direction of movement, level, time
- Information about flood includes: position, name of province, name of river, level water, time, forecast

The agency provides information
- Vietnam Electricity (E VN)
- Water Resources Directory (MLIT in Japan)

Method of transmitting information
- Phone, Fax, FTP sever, EMS, Website, Email

Agencies receiving information
- Standing office of Central CCFSC

The directory information is transmitted

Data transfer irrigation reservoirs, hydropower reservoirs
Vietnam Electricity send information of hydropower to CCFSC following way of Internet and Phone.

Data transfer irrigation reservoirs, hydropower reservoirs

Confidential 12

Information about reservoirs displayed on the LED includes: name, time, water level, inflow, outflow of discharge.

Data transfer irrigation reservoirs, hydropower reservoirs

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Water level measurement system

This system setup in 10 big reservoirs and measurement data automatically transmitted to the relevant agencies with rain gauge and hydological gauge system.

Data transfer irrigation reservoirs, hydropower reservoirs

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Monitoring camera

Monitoring camera recorded in big reservoirs and displayed in COC.
Data transfer irrigation reservoirs, hydropower reservoirs

Displayed in COC

14/05/2012 02:37:12 Xem video thí dụ gian thủy điện

The agency provides information

Method of transmitting information

Location, level, forecast ...

The directory information is transmitted

Institute of Geophysics (JMA in Japan)

Phone, Fax, SMS

Agencies receiving information

Standing office of CCFSC

The agency

Tsunami warning system

Project of Tsunami Warning System in high-risk areas

10 pilot tsunami warning in Da Nang city already setup

Application GIS for mapping disaster risk

Mapping for disaster risk management in 12 provinces at Central
Application GIS for mapping disaster risk

- Poverty map
- Existing NDM infrastructure and facilities
- Natural hazards map
- New proposal NDM infrastructure and facilities

Developing other information infrastructures

- Database for disaster management

7. Information transmission system between the central Government and localities

- Post Office
- Fax
- Telephone
- Internet, Web, email
- Online meeting

Website: http://www.ccfsc.gov.vn

Email

Confidential
Information dissemination systems to communities

Agencies information transmission

Television
Radio
Loudspeakers (in centers residential)
Internet Web

Communities And Citizens

Difficulties and challenges

- Disaster risk more vulnerable, unpredictable, frequency
- Institution improvement
- Urbanization and industrialization
- Capacity building in local government
- Community based on disaster risk management - CBDRM
- Funds for disaster management

Thank you for your kind of attention!

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