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財団法人　日本規格協会
ワークショップ実行委員会及びワークショップ作業グループ事務局

Results of ISO/TC 223/WG3/TG Meeting

Contents

1. Public Warning System

- Scope

  Public warning shall be the message broadcasted by organizations dealing with societal security tasks to ensure safety and security of the public and the vital functions of society.

  Public warning shall consist of alert and notification.

- Public Warning System

  Public warning system shall be established in order to prepare and issue public warning.

  Public warning system shall have a clearly defined decision process with clear responsibilities and the contingency plan.

  Public warning system shall have policy, programs, and plans for its operation.

  Public warning system shall visualize the business flows for responders to understand their jobs.

  Public warning as a way of communication shall include a feed back channel.

- Objective

  Public warning system shall have continuous efforts to raise and maintain public awareness about the process of public warning.

  Public warning system shall provide timely, effective, accurate, and consistent information

- Principles

  All stakeholders shall be considered to include public authorities, private organizations, and other sectors such as mass media.

  Public warning system shall be based on the results of academic research.

  Public warning system shall consider the needs of vulnerable populations, and cultural sensitivity such as language and customs.

  Public warning shall readily capture public attention under any circumstance.

  Public warning shall be a dynamic process in accordance with ISO 22320.

- Risk based

  The hazard identification, risk assessment and impact analysis for overall program shall be used to help identify persons who may be affected.

● Design Features

- High Reliability

  Public Warning System shall be reliable not to have false alarm.

  Appropriate corrective measures shall be taken promptly in case of false alarm

- Timing

  Public warning system shall be designed to secure timely message transmission to people at risk.

- Redundancy

  Public warning system shall use all available means and technologies systematically and redundantly to ensure the highest quality of information.

- Design Security

- Integration

  Strive to bring systems together

- Compatibility

- Pre-established Network

- Interoperability

- Human Resource

  Decision making process for issuing public warning shall be constructed in each organization.

● PDCA(Plan-Do-Check-Action)

- Evaluation

  It shall be established feedback channel on performance of Public Warning System.

  Additional evaluations shall be based on post incident analysis, and reports, lessons learned and performance evaluations.

  The organization shall evaluate plans, procedures and capabilities through periodic review, testing and exercises.

  Exercises shall be designed to test individual elements, interrelated elements, or

the entire system."
Level of warning shall be evaluated periodically.
Public warning system shall be tested periodically.

- Continuous Improvement

The organization shall be open to new ideas and continual improvement.
The organization shall be committed to continuous improvement.
The warning system shall be evaluated on:
- functional safety
- security
- level of completeness
- timing
- specificity"

2. Authorities

● Roles of Responsibility

- Education

Authorities shall inform and educate public about the warning system.
Authorities shall educate the public on the risks they might face.
Procedures for creating public awareness shall be established and maintained.
The organization shall develop, implement and maintain or provide competency based training and education based curriculum to support the system."
The objective of training shall be to create awareness and enhance skills required to develop implement, maintain, and execute the system."
Consideration shall be given to the authority issuing the message, and to other relevant organizations."

- Information

Authorities must maintain event-based updated information which is sensitive to population vulnerabilities.
Authorities shall have a webpage/number from which the public can get more information.
Authorities shall give information to the people at risk where the accident is happening.

- Hazard Detection

  The decision making process for sending alert message shall be identified among related authorities/agencies.

  Decision shall be communicated at first to hazard dissemination agency.

  Authorities shall show their criteria about public warning.

  Special monitoring team shall be established at advisory level.

  Decision shall be made by a person from organization related to hazard.

- Warning Dissemination

  Authorities shall identify the lead responding agency which is responsible for sending warning messages.

  A central authority with the necessary power to represent multiple agencies

  Evacuation order shall be given by local government where the potential hazard is located.

- Coordination

  Authorities shall work together including public, private, business & voluntary organizations.

  Good cooperation and coordination among hazard-detectors and warning-disseminators shall be established.

  Hazard detection authorities shall pass information to message dissemination authorities without delay.

- Evaluation Review

  Authorities shall be encouraged Authorities shall be encouraged to share good practice, to identify and learn lessons for better planning, training and exercises.

- Pre-established Scheme

  The decision to issue a public warning shall be based on pre-established criteria.

  The responsibilities in decision making shall be defined in written form.

  The Authority shall define the specific risks and related warning objectives and warning procedure.

  The responsible authority shall define levels of warning with reference to specific risk evaluation.

  The various authorities shall decide on the level/type of incident for "Public Warning

alerting".
For technical incidents of industrial site, public warning messages shall be prepared in advance with the industry.

- Transparency
  Decision making process for issuing public warning shall be transparent by procedure.

- Timing
  Decision making by authorities shall be timely and prepared in process.
- Hazard & Threat Mapping
  Public warning message shall be issued based on Hazard Map.
  Hazard assessment shall be conducted to identify risk areas and to disseminate them to the people at risk.
  Hazard Map shall be prepared for natural disasters.
  Hazard Map shall reflect the trend of Meteorological aspects.
  Hazard Map shall be easily understandable.
  Hazard Map shall be clearly displayed at concerned area.
  Hazard Map shall be based on technological and scientific information.

3. Population at Risk

- Prior Education and Drills
  Public education and information program shall be an integral part of any alert and notification system.
  Population at risk shall be educated on public warning.
  People at risk shall respond/act according the procedure.
  Population at risk shall be encouraged to take part in regular drills/exercises so action becomes second nature.

- Knowing the Risk
  Public shall knows the risk they face.
  Population at risk shall feel confident, safe and well informed.
  People at risk shall understand the type & level of warning."

- Knowing the Appropriate Action

  People at risk shall know the appropriate safety action they should take.

  People at risk shall understand the evacuation procedure.

  People at risk shall understand the save place nearby.

- Community Resilience

  Population at risk shall be encouraged to take steps to protect themselves, family & friends & their property.

  Population at risk shall know their role in public warning system.

  Self-preparedness shall improve the self rescue capacity.

  People at risk shall act/respond according to recommended action at certain level of warning."

- Human Response Factors

  Public warning shall consider human response factors as related to alert and notification under emergency.

  Public warning shall take into account transient population especially foreigners.

- Special needs

  Special attention shall refer to the vulnerability of the population at risk.

  Messages shall be understandable for diverse populations including tourists.

4. Message

- Effective Communication

  Public warning message shall be sent repeatedly and frequently to peoples at risk because repetition fosters confirmation, confirmation fosters beliefs, and beliefs foster actions."

  Public warning message shall be conveyed in timely manner.

  Public warning message shall be issued by the reliable source with competent authority.

  Public warning message shall be delivered in a form of OPT-OUT service for the people at risk.

- Message

  Message shall be risk-based.

  Message shall be direct to give indication of impact e.g. If you use your phone you might overload the system."

  Message shall be

  1) clear
  2) specific
  3) accurate
  4) certain
  5) concise
  6) consistent

- Format

  Public warning message shall be prepared by several languages.

  Public warning message shall include the basic important elements and the detailed Public warning shall notify the people at risk including:

  1) what to do
  2) when to do it
  3) who should and should not do it
  4) consequences
  5) who's giving me message

- Action

  Public warning message shall include the cue which make people decide how to react.

  Public warning message shall give clear instruction on what action should be taken.

- Language

  Public warning message shall be expressed by the language commonly used.

  Public warning message shall be addressed in different languages.

  Public warning message shall be able to be sent independent of the communication channel.

- Alert

  Alert shall be some type of stimulation of the senses to gain attention, usually sound, light and colors.

Alert signs shall be defined and harmonized.
Alert forms shall be standardized.
Color scheme for danger level shall be standardized.
Sound of siren shall be standardized.

5. Communication Tools

- Multiple Channels

  Public warning message shall be transmitted using multiple channels because no single system is ever sufficient for all events.
  Notification shall be repeated many times using multiple communication channels.

- Selecting Communication Technology

  Communication tool shall reach as many people at risk as possible.
  Authorities shall take into account emerging technologies when they select tools.
  New technology shall be supplemented by communication tools based on old technology.

- Time Delay

  The timing of warning upon activation shall be with the shortest delay.

- Daily Use

  Communication tool shall be used for daily business not only in emergency.
  Communication tools shall make use of the communication means for a maximum public access.

- Free Access

  Public warning message shall be delivered to the people at risk for free

- Maintenance system

  Preparation and intensive inspection of warning tool shall be done before warning is issued.

- Resilience

  Communication tool used in public warning system shall be both analog and digital in nature.

Communication tool shall be able to get out messages even with power lose, on some channel.

Communication tool shall consider resilience of tool.

- Continuous Improvement

  Communication tools shall be monitored and evaluated for its effectiveness.

  There shall be key performance indicators identified/decided for the PWS.