



MODULE

- Warning Message Generation (WMG)

SCOPE

The WMG was designed to provide a mechanism to **rapidly develop warning or alerting messages** in line with best practices.

These messages can be generated and sent to relevant audiences (such as employees, citizens and service users) to alert them to an incident, the **mitigation actions** being taken, the steps they should take to respond and where to find further information. The warning message generator is accessed through the ENGAGE platform.

PARTNERS



CENTRIC
United Kingdom

The Warning Message Generator was developed by the **Centre of Excellence in Terrorism, Resilience, Intelligence and Organised Crime Research (CENTRIC)**.

CENTRIC is a security-focused research centre located at Sheffield Hallam University, UK. CENTRIC specialises in applied research developing innovative solutions at the intersection of technology and security for challenges across the entire security domain.



Response



Crisis Management

Warning Message Generation

Language: English

Severity: Red

Message Type: alert

Category: trespasser on site (single person)

Red alert for trespasser on site (single person) active from now until further notice at the ground station. Employees should stay indoors. Security is investigating. Update expected at 16:00 Visit www.7shield.eu for more information. Contact us on 777.

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CONTRIBUTION

CENTRIC leads the social awareness and warning message generation task owing to its expertise in the **crisis and disaster response area**. CENTRIC played a major role in the 7th Framework Programme (FP7) ATHENA focused on the use of new communication media in crisis situations.

ATHENA led to development of the Security Communications and Analysis Network (SCAAN) which is a staff digital security solution utilized by several thousand United Nations staff every day. The research in 7SHIELD continues to inform our work on best practice and **optimal communication in crisis and time-critical scenarios**.

All the modules developed in the frame of 7SHIELD have been designed with the consultancy of identified external stakeholders, first responders and following the **requirements** provided by the partners working in the space sector acting as Pilots, who provided the Critical Infrastructures for **testing and demonstration**.

PURPOSE

7SHIELD identified the need to quickly communicate with stakeholders in the event of an incident. The Warning Message Generator (WMG) provides a mechanism to rapidly produce a **standardised warning message** that builds upon best practices from the crisis communication, public alerting and social media literature.

Each individual message, as a minimum, comprises of an incident severity, category and type along with an instruction to the specific audience. Optionally, further information related to timescales, organizational responses/actions, sources of further information and a more detailed event description can also be included. This message can then be shared through the relevant organizational services.

STAKEHOLDERS

Any organisation that needs to communicate information in a standardized or pre-approved format for short-form messages can benefit from the system. The module facilitates the generation of messages in an optimal format containing all the necessary information for the audience. The message templates are built using pre-filled content that can be adapted to **any organisations' communication needs**. The messages can be transformed into multiple preset languages to **support multilingual operations**.

CONTACTS

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METHODOLOGY

This task combined **best practices in warning message communication** with an analysis of **social media communication** of the pilot sites and **case studies** in communication in several incidents at critical infrastructure sites leading to the identification of the **Common Alerting Protocol** as a basis for warning message generation.

The WMG is developed as a simple form in a web-based application that allows the user to build up their message through the various pre-filled content blocks. The aim was to keep the system as simple as possible to ensure that vision of producing messages that were clear and consistent could be achieved. The underlying message templates and content blocks are fully customizable and could be deployed to adapt to any type of organization or incident.

FUTURE IMPROVEMENTS

At this stage the module solely focuses on the message generation aspect. There are several opportunities for future improvement/development. For the user additional **social integrations** could be included to facilitate the message sharing directly from within the warning message interface. For the administrator, the ability to easily update or adapt the templates could also be included while integrating **automated translations of any free-text fields** would also speed up any multilingual message generation.

