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Guidelines for effective social media messages in crisis and disaster management

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European foreword

This CEN Workshop Agreement has been developed in accordance with the CEN-CENELEC Guide 29 "CEN/CENELEC Workshop Agreements – A rapid prototyping to standardization" and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2.

It was approved by a Workshop of representatives of interested parties on YYYY-MM-DD, the constitution of which was supported by CEN following the public call for participation made on 2022-02-11. However, this CEN Workshop Agreement does not necessarily include all relevant stakeholders. The final text of this CEN Workshop Agreement was provided to CEN for publication on YYYY-MM-DD. Results incorporated in this CWA received funding from the [European Union's Horizon 2020 research and innovation programme] [Euratom research and training programme 2014-2018] under grant agreement No [Number]. The following organizations and individuals developed and approved this CEN Workshop Agreement:

- name organization/individual 18
- name organization/individual

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Introduction

This CWA has been developed within the framework of the EU-funded research project STRATEGY (Facilitating EU pre-standardization process through streamlining and validating interoperability in systems and procedures involved in the crisis management cycle) (https://strategy-project.eu/) which seeks to promote pre-standardization of systems and procedures related to Crisis Management by streamlining, testing and validating standards, guidelines and recommendations; focusing on interoperability aspects according to the operational needs of practitioners. Each EU member country has unique processes and procedures for crisis management and disaster response. In the case of cross-border crises, these different approaches may cause confusion or conflict among first responders and civil protection bodies. By standardising procedures and interfaces, we accomplish to develop a common language across the EU, thus essential for facilitating cross-border collaboration, thereby helping to save lives and protect assets. STRATEGY project has systematically identified and prioritised gaps in standardisation in crisis and disaster management and has compared them to the needs of end-users and to available opportunities across a broad spectrum of crisis and disaster management activities. All items (CEN/WSs proposals and/or CEN/TSs work items) developed in the course of STRATEGY project, as subjects to standardization process, will be fully tested and validated in trials in the form of table-top exercises and a full-scale exercise. The proposed workshop has resulted from the STRATEGY project and will address different aspects related to the content and design of warning messages by using social-media channels to convey consistent and coherent information to the public.

With a growing number of the public using social media, there has been increasing interest in their use during crises and disasters. Therefore, emergency services within the EU and beyond have started incorporating social media in their communication plans to actively disseminate alerts and warnings not only via ICT interfaces, but also via social networking platforms (e.g., Twitter and Facebook). During an emergency people have the tendency to consult others and seek confirmation that emergencies are real. This is in line with the natural predisposition of people to believe a situation is normal for as long as possible, and so behave as usual for as long as possible. Thus, to increase the responsiveness and to motivate appropriate and timely public protective actions the alert messages should be issued in a clear, uniform, and consistent way. To avoid confusion, all delivery channels should disseminate the same information and be consistent in terms of design, where possible, so that users do not become more confused as they see different messages or information presented in different ways.

This workshop aims to to provide practical guidance on how to construct effective warning messages by considering the specific features of the social media channels, how to improve the public understanding of the warning messages and address the socio-cultural aspects. The workshop wants to improve the effectiveness of the style of the social media warnings messages without addressing the content that should be delivered by providing guidelines on "how" to craft clear, consistent, and specific alerting and notification warning messages using social media platforms. Moreover, this workshop aims to address new aspects related to the graphical presentation of the warning messages to complement the textual part and give guidance on how to ensure consistency when using a multichannel approach.

1 Scope

This document provides requirements and recommendations for the content, design and formulation of social media early warning messages and notifications in crisis and disaster management towards the public.

This document does not cover audio content.

NOTE 1 The content, form, format, quality, design and usage of audio content can be an important contributing factor to a social media early warning message. In particular, social media early warning issuing entities shall be aware of any existing regulations that might regulate the use of certain audio content.

This document is applicable to all stakeholders in crisis and disaster management that seek to disseminate social media early warning messages, notifications or information to the public.

This document is not applicable to the use of social media.

NOTE 2 For organisations performing a public warning function, [1]gives guidance on the use of social media in emergency management and on how organisations and the public can use, and interact through, social media before, during and after an incident as well as how social media can support the work of emergency services.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 30071-1:2019, Information technology - Development of user interface accessibility - Part 1: Code of practice for creating accessible ICT products and services

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 22300 and the following apply.

IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1

social media early warning message

message sent through social media for communicating information about an emergency and for alerting purpose

Note 1 to entry:

3.2

emergency

sudden, urgent, usually unexpected occurrence or event requiring immediate action

Note 1 to entry:

[SOURCE: [2], 3.1.87]

3.3

notification

message sent to indicate that an event has occurred

Note 1 to entry:

[SOURCE: [3], 3.20]

3.4

social media

online technologies and practices that people use to share opinions, insights, experiences and perspectives with each other, transforming traditional one-to-many interactions into many-to-many interactions

Note 1 to entry: Social Media platforms can loosely be separated into four different groups:

- End-to-End text-focused communication (e.g. WhatsApp, Signal, Threema, etc.)
- Public limited text-focused networks (e.g. Twitter, Mastodon, etc.)
- Public unlimited text-focused networks (e.g. Facebook, LinkedIn, etc.)
- Public image-focused networks (e.g. Instagram, Snapchat, etc.)
- Public video-focused networks (e.g. YouTube, TikTok, etc.)

Note 2 to entry: For more information on types of social media platforms, channels and related tools see ISO 22329.

[SOURCE: [1], 3.1]

3.5

target audience

group of persons receiving *social media early warning messges* (3.1) and *notifications* (3.3) in crisis and disaster management

Note 1 to entry:

3.6

diverse user

individuals with differing abilities and characteristics or accessibility needs

Note 1 to entry:

[SOURCE: ISO/IEC 30071-1:2019, 3.2.2]

3.7

vulnerable

individual or organisation who might be less able to anticipate, cope with, resist or recover from the impacts of an emergency, and that have specific needs that differ from the average population affected by an emergency

Note 1 to entry: Adapted from STRATEGY D1.2 Project Handbook and PROACTIVE project

3.8

heading

short sentence at the top of a message introducing and describing what the message is about

Note 1 to entry:

4 Requirements and recommendations for Social media early warning message

4.1 Content and message structure

4.1.1 General

The message structure should prioritise simple and essential information to facilitate people's ability to scan for and comprehend information and help them in finding the information they need. To improve the readability and effectiveness of the message, the following principles should be considered:

- organise the content in short paragraphs and order the information and instructions in a logical sequence for displaying them;
- order the information in a sequence that is meaningful for the users and put the most critical information at the beginning of the message;
- group information related to the same topic and arrange information by importance;
- keep the structure and the order of the message consistent within the message itself and across different media channels.

Social media early warning messages and related notifications should be simple, clear and easy to understand. They should communicate essential information about the emergency and its evolution and give instructions to the target group on how to behave. A social media early warning messge and a notification should include the following information [4][5]:

- heading/title of the warning;
- date/time of issue of the alert;
- the alerting authority who is issuing the warning;
- target audience/recipient of the warning message;

- the type of threat, its severity and how likely it is to occur. The [6] CAP code values indicated in the CAP alert protocol could represent a possible solution to keep the wording consistent. If not using CAP standard refer to the internal categorisation of severity and risks;
- a clear call-to-action/instructions describing the recommended actions to be taken by the people affected by the alert;
- an explanation of the expected impacts and consequences;
- where to get more information.

To ensure consistency, clarity and completeness of the messages disseminated simultaneously across different channels, the social media messages shall refer to the persistent unique URL of the CAP message.

NOTE 1 A stylesheet can be applied to the webpage where CAP messages are published to the public in order to make the messages more readable and easier to understand.

To be effective the content of the message shall be adapted to the format of the social media platform selected.

NOTE 2 For guidance on information content, see [7], 5.4.3.3. For guidance on how social media can be integrated into communication in emergency management, see [1].

4.1.2 Headings

A heading of a social media warning message should include (for examples see A):

- concise information;
- the type of emergency (e.g., storm, earthquake, flood, etc.);
- the severity of the emergency (e.g., extreme, severe, moderate, minor) for example "Severe Flood";
- the type of message issued (e.g., new warning, update, cancel) for example "Severe Flood Warning";
- response type (e.g., be prepared to evacuate, evacuate now, all clear) for example, "Severe Flood Warning – Be prepared to evacuate";
- date and time of the origination of the alert for example "Severe Flood Warning Be prepared to evacuate [10/10/2020 10:30am]";
- the expiration time of the alert whenever relevant;
- capital letters to make the message visible and catch the attention of the target audience;
- emoji, if carefully selected and used in order to avoid creating 'clutter' for users. Emoji representing warning, alarm or danger to supplement the clarity of the text. See also section 4.2;
- full forms of words instead of shortened forms and acronyms.

Headings related to the same emergency should be visible and recognisable. According to the type of emergency, warning headings and hashtags (See 4.1.6) shall be kept consistent throughout the duration of the emergency.

4.1.3 Call to action and body of the social media early warning message

Social media platforms have different characters limits, thus, when planning to use one or more social media channels to issue a warning or a notification message, the content of the message should be adapted to the social media platform selected.

A social media early warning message with long-form content (e.g., up to 63,206 characters), should include (for examples see A):

- information on the community members and target groups addressed by the warning;
- information and updates on what is happening, reporting details about the emergency (e.g., weather situation, road access and conditions, etc.);
- information about the probability or confidence levels about the emergency warning;
- information on locations and geographical areas which may be affected by the hazard considering specifying the geographical coordinates;
- a call to action providing clear instructions and advice about what to do according to the severity and the type of hazard and special needs of the receivers. The instructions should contain clear objectives (e.g., Prepare to leave/evacuate, Leave/evacuate now, Move/stay indoors, etc.) [4]. Moreover, the terms used to indicate the severity likelihood may differ depending on the type of emergency or the organisation responsible for issuing the warnings. Please refer to clause 4.1.2 for further details;
- links and details on where to get more information: telephone number or website address where people can get more information about the emergency, information about who to contact regarding developments relevant to the emergency;
- short paragraph titles such as [INFORMATION] and [INSTRUCTION] to break up the text of the message and organise its content.

NOTE Information on how to formulate specific messages and instructions can be found in the [8] "Public Awareness and Public Education for Disaster Risk Reduction" guidelines developed by IFRC.

A message shared using social media platforms with short character limits (e.g., up to 280 characters), should include (for examples see A):

- aheading reporting information on type of hazard, severity and the geographical area affected by the emergency (e.g., Severe Flood warning, Evacuation warning for xxx, Evacuation order to xxx, etc.);
- information on the community members and target groups addressed by the warning;
- a call to action describing very concisely the instructions to follow;
- links where to find more information.

When preparing a social media early warning message, according to the lists above the order of the information in the lists should be customised according to the type of emergency and type of message to be issued.

When communicating with social media, graphics and maps should be used to reinforce the content of the warning message, foster the spread of the message and assist the comprehension and interpretation of a warning. Please refer to clause 4.2 for further details.

4.1.4 Tone and language (tailor messages for different communities and target groups)

Warning messages should be designed and tailored to the needs of people at risk (e.g., considering diverse cultural, social, gender and linguistic backgrounds) including both those who are familiar and unfamiliar with the hazard.

The tone and language should:

- use clear and plain language, avoid using technical language and make every word count;
- choose words that people are familiar with. Unfamiliar words make content harder to read and understand;
- avoid using acronyms;
- identify in advance those groups of the population at risk that do not understand the language used for risk and crisis communications, in order to reach them anyway;
- translate the message in the major languages spoken by the people in the threaten area to ensure that they are informed and have access to warnings and emergency-related information;
- establish contact with community service providers related to the target groups at risk, to obtain advice on how to communicate effectively with them and to maximize the communication and dissemination through their channels (e.g., social media, dedicated apps, and websites);
- support graphically the meaning of what is being conveyed with text and audio in different languages to ensure comprehension by all vulnerable audiences;
- validate automatically translated text or pre-formatted text with a mother tongue to avoid errors.

4.1.5 Accessibility

Warnings messages should be constructed to be accessible to a diverse public. People with disability have individual communication needs. To make the message accessible to a wider audience relevant information should be provided in a range of different formats such as graphics, video and audio visual.

Social media messages designed to be inclusive and accessible should include the following recommendations:

- always check how assistive tools like screen readers will read the text of the message;
- not overuse capital letters that can be difficult to read and misinterpreted by screen readers;
- use emojis not to replace words but to complement the text;

- limit the usage of emoji to the most important and essential ones because they are read aloud by assistive technologies. Before using an emoji it should be tested how the screen reader translates it to text;
- provide descriptive captions and alternative text captions when using images in order to allow people with vision disability, who uses assistive technology like screen reader or text-to-speech program, to access digital content. Several social media platforms provide automatic alternative text. However, texts are not always reliable, and it is always better to add a custom and tailor description;
- include information that are provided in images also in the text to improve redundancy of information;
- include video captions for people with hearing impairments. Captions also enhance the viewing experience for people watching in their non-native language, or viewers in sound-off environments;
- provide a narrative description of key visual and non-verbal elements in a video to allow people
 with vision impairment and blindness to access the content on similar media;
- when using hashtag composed by more than one word, each word shall be written with the first letter capitalized. This will help the reading of the hashtag avoiding misunderstanding, and also it will make the hashtag readable by assistive technologies for visually impaired people.

NOTE For more general guidelines for accessibility of web content refer to the Web Content [9] Accessibility Guidelines (WCAG) from W3C.

4.1.6 Hashtags

Hashtags are a feature common in social media platform that can be used during a crisis to help the public at recognize specific messages related to that emergency.

Social media messages that include hashtags should follow these recommendations:

- hashtags should be specific and localised. Defined specific and localised hashtags should be used consistently in social media messages. The specific localised hashtag should define the type of emergency and a geographical reference to identify the impact area of the emergency;
 - NOTE Localized hashtags have more probability to reach interested audience with actionable information [10].
- where emergencies have proper names, such as storms which have predefined names, the name should be used as part of the hashtag;
- a unique hashtag covering the same emergency should be used to not duplicate and disperse information;
- once a hashtag has been launched it shall be maintained to reduce possible noise and misuse;
- use and promote the official localised hashtag so as to direct the public to authoritative sources. They may advertise the use of the hashtag also in other channels.

4.2 Graphic design

4.2.1 General

Visual content is used across all social media platforms. It increases the reach of social media early warning messages and might ease the understanding of the content of the message.

Graphic design shall be prepared before the emergence of a crisis or disaster. Templates or mockups for the graphics shall be prepared to function as a framework or model. These frameworks shall include the logo of the organisation responsible for issuing a warning.

Graphics should be disseminated with an alternative text for screenreaders, where feasible. The colour green should be avoided in all communication, see Annex B. Different levels of risk or severity of a disaster shall be indicated by the colours yellow and red.

4.2.2 Visual consistency

To maximize the target audience, social media early warning message graphics might be sent on multiple social media platforms in parallel. Users might see the graphics on different platforms. Thus, organisations responsible for issuing social media early warnings shall ensure that the graphics broadcasted are consistent across different platforms. Conflicting awarenesses or actions of the recipients shall be avoided by leaving no room for misinterpretations.

All social networks allow the dissemination of graphics in still or in motion pictures. Infographics, pictures or maps shall be produced in a coherent, consistent and clearly branded way, following the general advice of 4.2.1.

In line with 4.2.1, graphics shall be the same across the different networks, where feasible. On motion picture driven platforms like YouTube or TikTok the same, still, graphics shall be used at the beginning and end of each social media early warning message.

Social media early warning messages shall link to a more detailed information homepage hosted by the responsible organisation. Such links shall not lead to a different Social Media platform, but to an open access and barrier-free homepage. Any icons or images used in any form of social media communication shall be self-explanatory.

Only a small set of self-evident icons should be used throughout all communications as an aid to consistency. An example of such a set of icons is shown in B.

4.2.3 Usage of colours

Colours play a crucial role in social media early warning messages. Red or yellow do signal the audience that they are at risk, to a varying degree. These colours shall be used for social media early warning messages of varying severity or urgency. Green should not be used, as it might be misinterpreted as the complete absence of any risk.

In line with [11], 4.2., black text on yellow background and white text on red background shall be used for social media early warning messages.

Red shall only be used in instances where immediate action is required from the recipient. Yellow shall be used in instances where preparatory action is required.

Additional colours that might be used are white text on black or blue background or black text on gray background. Black shall only be used to signal fatal danger. It can be used in combination with red, if an immediate action might mitigate the danger. Blue shall be used for informational content that is not a call to action and linked to a severity or risk level. Gray shall be used in instances where information is missing.

An examplatory use of the colours and references to the standardized colour codes can be found in B.

4.2.4 Usage of graphics

Graphics play an important role in broadcasting a social media early warning message, as it might be understood quicker and more intuitively than purely text-based message. Graphics might also be misleading and misinterpreted. Thus, they should be selected and used carefully.

While several standards for the use of symbols in disaster management exist, these are not for public use and many of the symbols are non-intuitive for non-trained recipients. A few icons and symbols that are intuitively understood by the general public when used shall be selected, instead.

Wherever possible, the symbols from [12] shall be applied. They are widely known and understood by the general public. An alternative text should be added to the social media early warning message by the issuing organisation, where feasible.

Where [12] cannot be applied graphics shall be self-descriptive. Wherever the disaster or crisis situation is too complex to be depicted by icons, photographic images or motion pictures can be used.

To enhance the understanding of symbols by recipients, symbols shall be used regularly, including in times of absence of disaster or crisis. By the steady repetition of the use of a symbol, recipients get used to it and will understand it in times of crisis and disaster.

Pictures and images that are used in social media early warning messages shall be from the incident refered to and should not be graphic. Stock image or generic pictures should be avoided to avoid misinterpretations or misunderstandings. Pictures that are too shocking shall be avoided as they might generate panic.

Animated graphics, such as GIFs, shall be avoided.

Maps can be used to geolocate early warnings more precisely. If maps are used, they shall be self-explanatory. They shall have a standardised orientation and not contain more information than required. Areas highlighed on the map shall be highlighted only with the colours red and yellow, as detailed in 4.2.3. Any descriptive information on the map shall make use of the colour codings for informatory content (see 4.2.3).

Annex A

Social media early warning messages examples

A.1 General

This annex contains examples of social media early warning messages created using this document. The examples show how the document can be implemented. The messages have been developed for the Table-Top Exercise held within the STRATEGY EU project. The scenario used to create and discuss the examples is included in the annex to better understand the context of the examples. The examples regard both Facebook and Twitter messages.

A.2 Scenario - Wildfire in the municipality of Ommen

It's a summer day during the last week of July. The day of the event is very warm and there are strong winds coming from the southeast. In the whole country the holiday is started. The beautiful summer weather has made many people decide to spend days at the recreation parks and campsites. In the municipality Ommen and the surrounding area many campsites are overcrowded during this time of the holiday season. After a long period of drought, the forests and nature reserves in Ommen and the surrounding area are very dry. Both the police and the fire brigade have been instructed, based on the experiences of previous years, to be extra alert to the occurrence of fires in nature. The population has been warned for days by radio and TV spots, especially not to make open fires in the nature reserves.

Around 10.00 am a first call to the control room of the emergency services (112) report a small forest fire on the Beerzerweg nearby holiday park Beerze Bulten, Kampweg 1 in Beerze. The holiday park lies in the middle of a wooden area, and it is fully booked. This means that all 550 camping places and 60 summerhouses are occupied. The estimated number of tourists (especially German and French) is around 1,850.

In view of the drought of the past period, the fire brigade of Ommen immediately starts scales up with reinforcements and deploy special forest fire vehicles and Handcrew Overijssel. The first police invigilators who arrive on the scene determine that it is a very large forest fire and ask for reinforcements. The fire is accompanied by a lot of smoke development. A large black/grey column of smoke is moving towards the North West. Given that the risk of a big forest fire is likely to happen, the first responders decide immediately to start the evacuation process at the holiday park Beerze Bulten

Given that the wind blows from southeast there is also a risk for another Parks:

- Recreation Park Wilrod, Marsdijk 3a, 7736 PL Beerze (50 summerhouses with mostly private owners.)
- Holiday park Huttopia De Roos, Beerzerweg 10, 7736 PJ Beerze-Ommen(1300 tourists),
- Holiday park Ommerland, Besthemerberg 1, 7731 PB Ommen (2000 tourists) and futher away

- Camping De Kleine Wolf, Coevorderweg 24 in Stegeren (2000 tourists) and
- Camping De Hongerige Wolf, De Hongerige Wolf 1a in Stegeren (1000 tourists).

It is not clear yet if it is necessary to evacuate more campsites.

On all the camping sites there are Dutch and foreign tourists from mostly Germany and France. In the same camping area there is also a group of elderly people who are not self-reliant who need to be moved to another place. In the nature reserve Beerzerveld and the forests are hikers and cyclists active. They need to know what and where the hazard is or is coming from and how to get safely home.

In the area lie a few (farmer)houses and diversity of parks and camping. There are public roads in the area, but mostly small and with traffic breaks. Panic can have an average effect on the evacuation.

A.3 Examples of social media warning messages for the presented scenario

EXAMPLE 1 Warning message to alert population about the forest fire emergency started. The message text gives the main information about the fire situation, and then inform people about what to do in case they are nearby the fire.

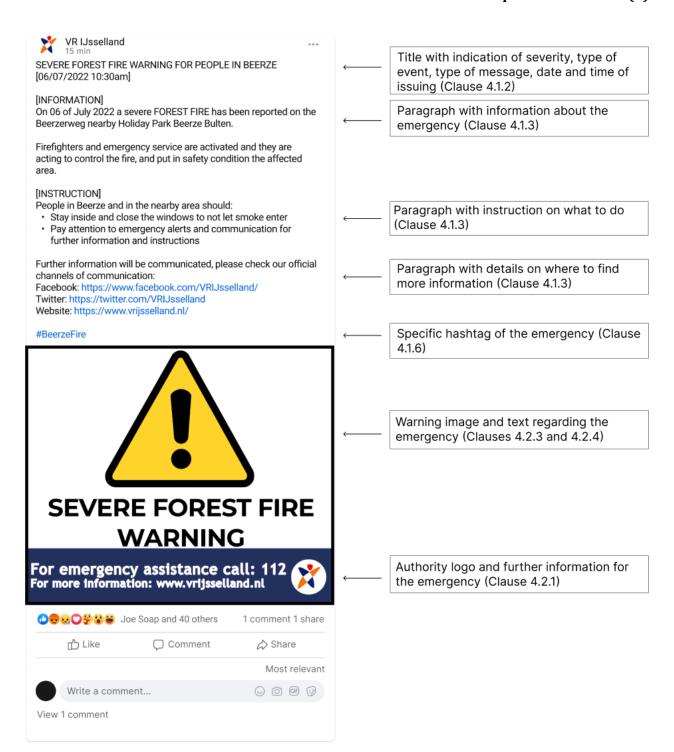


Figure 1 Example of Facebook warning message for forest fire

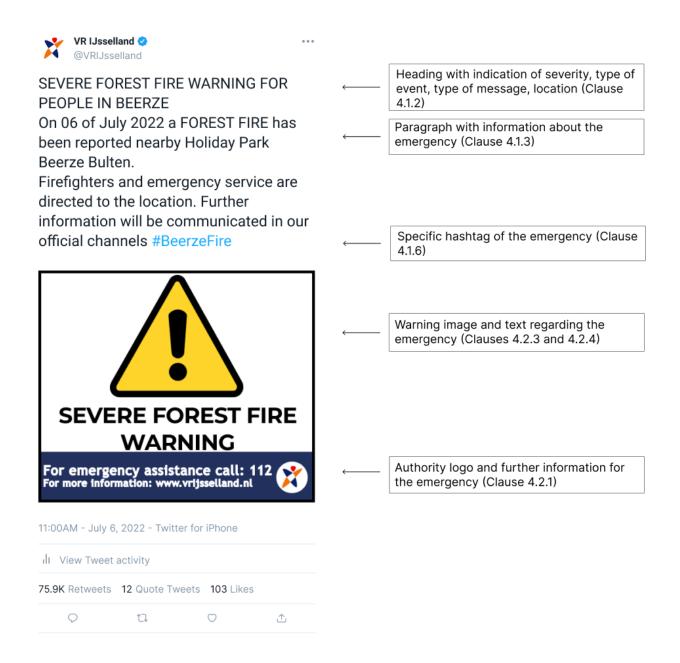
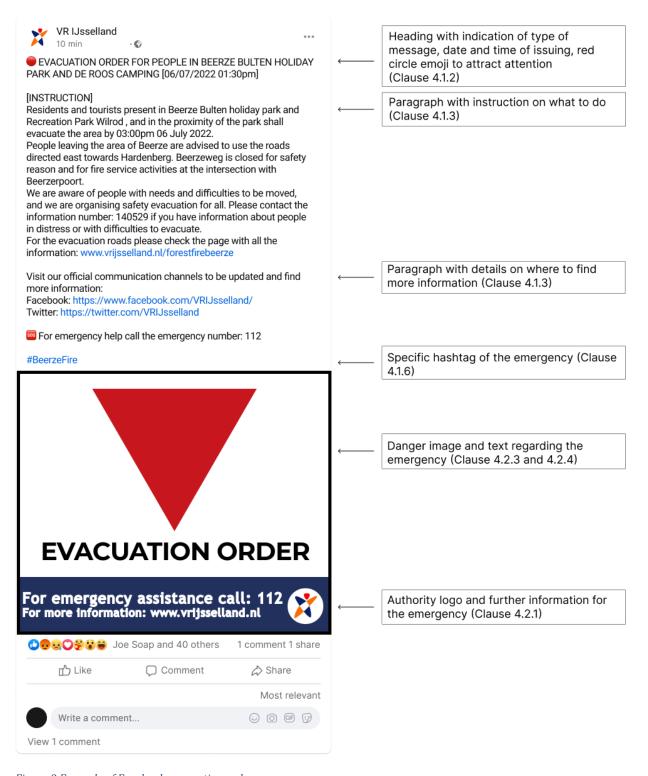


Figure 2 Example of Twitter forest fire warning message

EXAMPLE 2 In this message the aim is to alert the population about the evacuation order that has been issued and that must be enforced. People should know in simple terms (Clause 4.1.3) what to do in this case, and how they must act for their safety.



 $Figure\ 3\ Example\ of\ Facebook\ evacuation\ order\ message$

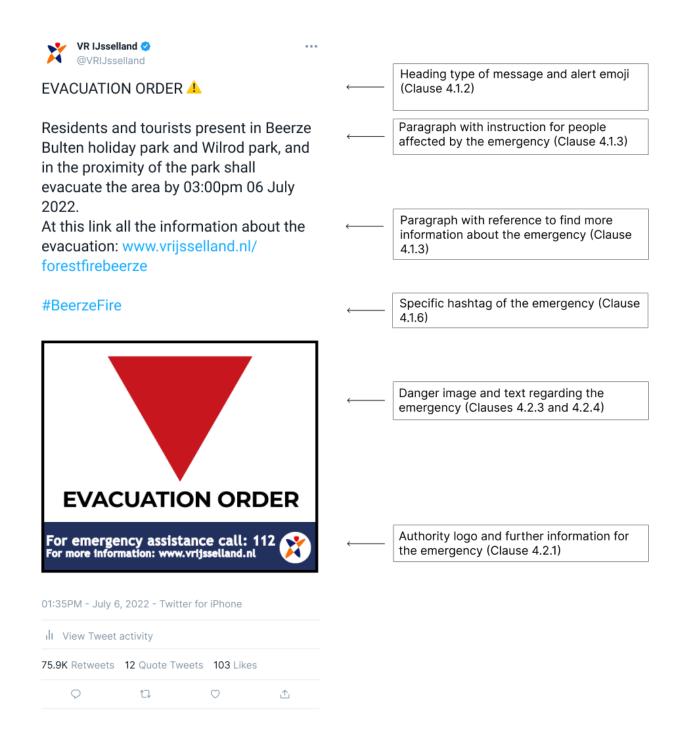


Figure 4 Twitter evacuation order message

EXAMPLE 3 This is a general update message to inform population about the development of the situation, giving to the public also links to find more detailed information.



Figure 5 Example of Facebook update message

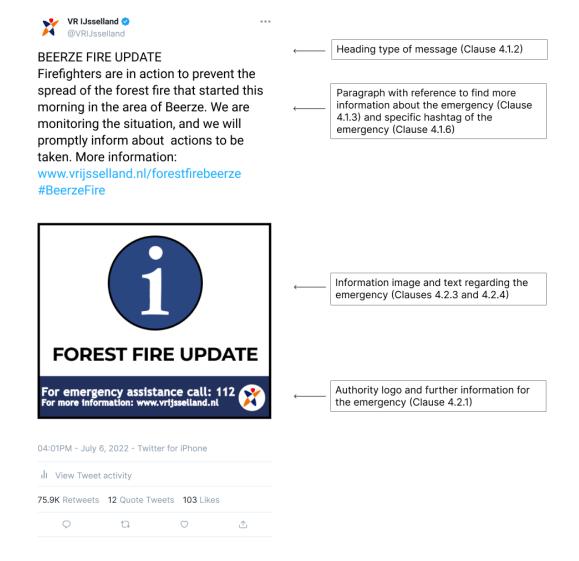


Figure 6 Twitter update message

Annex B

Simple Symbology

To enhance consistency and ensure that the recipients of messages understand the type of message sent without further delay, a symbology and color coding shall be used for all social media messages. Often, such symbols and color codings already are standardized for the organisation or on a national or international level. Thus, this Annex jus presents one possible of example of such a symbology, which in itself is based on ISO standards.

This exemplatory simple symbology will be restricted to three different core messages that are meant to be sent by the symbol: That the message that goes along with it is just an information, a warning or that an immediate action is required from the recipient.



In line with ISO 7000 [13](Symbol reference No. 2760), information shall be presented with the respective symbol pictured above. The circle and the letter "i" in the symbol shall have the colour black, while the background shall be blue. The specific colour codes shall be in line with Annex B of ISO 22324 [11].

If the organisation issuing the social media early warning does make use of other symbols or seeks to include more information within the message, it is strongly recommended that at least the two main visual features, namely the circular frame and the colour blue, are kept for all purely informative information.



In line with ISO 7000 [13], warning messages ("caution") shall be presented with the respective symbol pictured above. The equilateral triangle with radiused outer corners shall have a yellow background and a black border. The exclamation mark shall be black. The colours used in the symbol are specific safety colours that shall confirm with ISO 3864-1 [14] and ISO 3864-4 [15].

If the organisation issuing the social media early warning does make use of other symbols or seeks to include more information within the message, it is strongly recommended that at least the two main visual features, namely the triangular frame and the yellow safety colour, are kept for warning messages.



In line with ISO 7000 [13], messages that require immediate action of the recipient ("danger") shall be presented with the respective symbol pictured above. The triangular frame and the exclamation mark in the symbol shall have the colour black, while the background shall be red. The colours used in the symbol are specific safety colours that shall confirm with ISO 3864-1 [14] and ISO 3864-4 [15].

If the organisation issuing the social media early warning does make use of other symbols or seeks to include more information within the message, it is strongly recommended that at least the two main visual features, namely the upside down triangular frame and the red safety colour, are kept for all messages that require immediate action of the recipient.

Bibliography

- [1] ISO 22329:2021, Security and resilience Emergency management Guidelines for the use of social media in emergencies
- [2] ISO 22300:2021, Security and resilience Vocabulary
- [3] ISO/IEC 17963:2013, Web Services for Management (WS-Management) Specification
- [4] Murphy, J., Dyson, J., Leck, A., Rundle, S., Maguire, S., Greer, D., & Dootson, P. (2018). Warning message construction: Choosing your words: Key considerations for writing effective warning messages (Australian Disaster Resilience Handbook Collection, Guideline 1).
- [5] Murphy, J., Rutland, K., Dyson, J., Leck, A., Rundle, S., Greer, D., & Dootson, P. (2018). Public information and warnings (Australian Disaster Resilience Handbook Collection, Handbook 16).
- [6] ITU-T X.1303 bis (03/2014):2014, Common alerting protocol (CAP 1.2)
- [7] ISO 22322:2015, Societal security Emergency management Guidelines for public warning
- [8] IFRC, "Public awareness and public education for disaster risk reduction: Action-oriented key messages for households and schools" (https://www.ifrc.org/document/public-awareness-and-public-education-disaster-risk-reduction-key-messages-2nd-edition)
- [9] W3C, W3C Accessibility Guidelines (WCAG) 2.0 (https://www.w3.org/WAI/standards-guidelines/wcag/)
- [10] Lin, Xialing, Patric R. Spence, Timothy L. Sellnow, e Kenneth A. Lachlan. «Crisis Communication, Learning and Responding: Best Practices in Social Media». Computers in Human Behavior 65 (dicembre 2016): 601–5. https://doi.org/10.1016/j.chb.2016.05.080.
- [11] ISO 22324:2015, Societal security Emergency management Guidelines for colour-coded alerts
- [12] ISO 7001:2007, Graphical symbols Public information symbols
- [13] ISO 7000:2019, Graphical symbols for use on equipment Registered symbols
- [14] ISO 3864-1:2011, Graphical symbols Safety colours and safety signs Part 1: Design principles for safety signs and safety markings
- [15] ISO 3864-4:2011, Graphical symbols Safety colours and safety signs Part 4: Colorimetric and photometric properties of safety sign materials