Secretariat of ISO/TC 59

Archive ref. TC 59/ N 1511
Date: 2020-03-02

Draft resolution 399: Registration of new TR project in ISO/TC 59/WG 4

Dear all,
Following the outbreak of the COVID-19 virus, the Standardization Administration of China (SAC) is proposing a new technical report for development in ISO/TC 59/WG 4.

The proposed new TR is titled *Buildings and civil engineering works — Building resilience strategies related to public health emergencies — Compilation of relevant information*.

The proposed document may also be of relevance to other ISO committees, such as ISO/TC 304 Healthcare organization management, ISO/TC 262 Risk management, ISO/TC 292 Security and resilience, ISO/TC 267 Facility management, ISO/TC 205 Building environment design, ISO/TC 268 Sustainable cities and communities, and ISO/TC 268/SC 1 Smart community infrastructures. The balloting period will be used to inform these committees about the proposed project for potential collaboration. They will also be invited to provide feedback on the proposal.

According to 3.3.1 in the ISO/IEC Directives, Part 1, a technical committee may decide, by a simple majority vote of P-members voting, to publish a technical report. A committee internal ballot has therefore been set up to ask your approval of the following draft resolution:

Resolution 399: *ISO/TC 59 approves the registration of a new project to the work programme of ISO/TC 59/WG 4 as follows:*
Title*:* Buildings and civil engineering works — Building resilience strategies related to public health emergencies — Compilation of relevant information
Deliverable*: Technical report*
Scope: *The document will collect and record building-related information from multiple public health emergencies around the world, including recording and investigation of typical cases, emergency measures and guidelines, reflections and research on improvement of the role of buildings and its facilities, standards and frameworks issued by national and local governments, etc. during and after the public health emergency.*

On this basis, the collected information will be uniformly classified and screened. Each selected information will be described in key form in a unified form. The document will also provide an overview of overall information collection.

To help readers understand the background, the document will briefly describe the basics of these public health emergencies, excluding in-depth descriptions of information such as etiology, epidemiological research, treatment measures, and social and economic impacts.

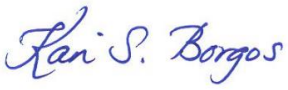
Project leaders*: LI Xiaofeng (China) and HE Jing (China)*
Estimated publication time*: December 2021*

The proposed project is described more in detail in the attached document.

You are kindly invited to cast your vote by **14 April**.

Please feel free to contact me should you have any questions about this item.

Best regards,



Kari S. Borgos
Committee Manager of ISO/TC 59

Draft proposal:

Buildings and civil engineering works — Building resilience strategies related to public health emergencies — Compilation of relevant information

1 Purpose / justification for developing the document (why is this document needed, what will it help achieve and who will benefit from such a document):

The COVID-19 epidemic that broke out in early 2020 brought a disaster to China and many other countries around the world. In addition, major epidemics have occurred many times worldwide in the past decade (WHO has issued 6 Public Health Emergency of International Concern (PHEIC)). Frequent outbreaks pose a threat that cannot be ignored to the health and well-being of the entire human race, as well as to society and economy. Due to this threat, the problem of insufficient ability to respond to public health emergencies exposed by many types of buildings needs to be given high attention as soon as possible.

For example, during COVID-19 epidemic in China, the local government is forced to close a considerable part of public and densely populated buildings due to high risk of cross-infection; some homes are also at risk of transmitting the virus through air ducts, drainage pipes, etc. (People have paid attention to the research report of the similar case — the Amoy Gardens in Hong Kong — during the SARS in 2003); as the existing medical facilities cannot support sudden increase of infectious patients, some public buildings such as stadiums and exhibition halls have been converted into temporary hospitals (Such as the Mobile Cabin Hospital in Wuhan), putting forward new requirements for the ability of such buildings to adapt to future changes in functions, and so on. Similar and other situations are possible in other countries.

At this time, maybe we can do something to fulfill the responsibilities of ISO——

Develop an ISO Technical Report (TR), which collects information on case records, incident investigations, emergency responses, reflections, researches, standards and other data related to buildings in different countries and regions around the world at and after the time of the COVID-19 epidemic. This will be a relevant and lively scientific record of this particular historical period. At the same time, relevant information on several important public health emergencies around the world in

recent years should also be collected. Then, these two parts of information will be classified and organized uniformly.

From the collated information, readers will likely see,

——In the face of public health emergency, which aspects of various types of buildings do not respond well (negative)? And which aspects can play an affirmative role (positive) , such as helping to stop the spread of viruses (or other benefits)?

——What emergency responses have users of the building made? (Including whether these responses are effective and what are the successful experiences and the reasons of failure?)

——What emergency guidelines have been issued by local governments? (How effective are these guidelines?)

——What are the typical building cases that have caused spread of virus? What kind of analysis and judgment does the researcher conduct on their investigation?

——What timely reflections have users, architects, engineers, researchers, and other interested parties made, and what ideas have been proposed for future changes in buildings?

and many more.....

The collated information may be helpful and informative to the stakeholders, as they need to think and decide how to improve the resilience (including response, adaptation, conversion, learning etc.) of buildings (including new buildings and existing buildings) to the public health emergency. Stakeholders may include standard makers, decision makers, users, architects, engineers, construction industry, manufacturing, scientific researchers, innovative technology companies, etc.

As the content revolves around "public health emergency", the collated information may also provide references for technical committees other than ISO / TC59, such as ISO/TC 304 Healthcare organization management, ISO/TC 262 Risk management, ISO/TC 292 Security and resilience, ISO/TC 267 Facility management, ISO/TC 205 Building environment design, ISO/TC 268 Sustainable cities and communities with their ISO/TC 268/SC 1 Smart community infrastructures, etc.

As the public health emergency belongs to the "social event" of the 3 types of risks

(climate change, earthquake, social events) in the established framework of ISO/TC59/WG4 (Resilience of building and civil engineering works), the collated information will also provide reference for the future standards around Resilience of Buildings of WG4.

2 Scope of the document (what will it cover, what will it not cover)

2.1 Content scope

——The document will collect and record building-related information from multiple public health emergencies around the world, including recording and investigation of typical cases, emergency measures and guidelines, reflections and researches on improvement of the role of buildings and its facilities, standards and frameworks issued by national and local governments, etc. during and after the public health emergency.

——On this basis, the collected information will be uniformly classified and screened. Each selected information will be described in key form in a unified form. The document will also provide an overview of overall information collection.

——To help readers understand the background, the document will briefly describe the basics of these public health emergencies, excluding in-depth descriptions of information such as etiology, epidemiological research, treatment measures, and social and economic impacts.

2.2 Time range

——The time range of building-related information in the COVID-19 epidemic will be combined with the epidemic situation — that is, "about one year after the epidemic outbreaks".

——The time range of building-related information on other recent public health emergency is about the past 10 years.

3 Estimated publication time (how fast does the market need it vs. how fast can the document be developed)

3.1 How fast does the market need it?

In order to serve readers in a more timely manner, especially to help some positive decisions and actions they may take after the COVID-19 epidemic, the document

should be time-effective while ensuring scientificity. Ideally, it would be published within one year after the end of COVID-19 epidemic.

3.2 How fast can the document be developed?

Since the document will contain "scientific records" of relevant information on the COVID-19 epidemic during the particular period, the determination of its appropriate "development track" needs to be considered in conjunction with the cut-off date for information collection. The deadline for information collection can either be "about six months after the epidemic is basically over" or "about one year after the epidemic outbreaks". Since the end of the epidemic cannot be predicted yet, the latter is recommended.

From this we can draw up a plan for its development track:

——If the ballot goes well, the WG4 can officially start this work around Apr 2020 (the WG4 has already started some related work spontaneously), and all the collection and collation will be finished in February 2021 (which is "about one year after the epidemic outbreaks").

——Thereafter, it will go through DTR ballot (including modification time) and the text editing stage before publication for approximately 8 months or more.

In this way, the development track of the document may last for 19-20 months, and it is expected to be published in the second half or the end of 2021.

4 Formal proposer

SAC

5 Proposed project leader

LI xiaofeng, HE jing

6 Proposed topics for the document

Buildings and civil engineering works — Building resilience strategies related to public health emergencies — Compilation of relevant information