ETC Guidance on the provision of Digital Communication Technologies in COVID-19 operations.

Updated – 9 April 2020

Digital communication technologies play a foundational role in humanitarian response. Given the experience of Emergency Telecommunications Cluster's (ETC) response for humanitarians, governments and affected population in varied conflicts and disasters,[1] this document presents some of the particular needs emerging due to COVID-19 and activities that ETC can undertake to support humanitarian operations affected by COVID-19.

SCOPE

This guidance document bases its assumptions on the COVID-19 pandemic affecting most people worldwide following three phases:

- Phase one: the spread of highly contagious virus leading to high number of cases in short period of time, and the need for timely communication with affected population;
- Phase two: inaccessibility to livelihoods and a halt of movements impacting humanitarians, and governments accessibility to respond;
- Phase three: first two phases resulting in magnifying risks of deeper social, economic, repercussions, in fragile, at risk and conflict countries; including but not limited to urban settings.[2]

At the time of writing, while phases one and two are unfolding, phase three is based on the assumption that this pandemic will cause damage to larger social services especially in least developed countries and/or to populations already affected by humanitarian crises. To align with the COVID-19 Global Humanitarian Response Plan (GHRP)[3], this guidance suggests ETC activities that can address operational needs and challenges for humanitarian operations going through phase one and two. The requirements for phase three remain out of scope of this document at this stage but shall be kept into considerations and in line with the local context when designing a humanitarian response plan.

Considering this particular context, provision of digital communication technologies for both first and second phase, shall be considered particularly to support the following requirements:

[1] The only health emergency ETC has responded to before COVID19 is Ebola Virus Outbreak response in 2014.

[2] Phase three is a worst-case scenario and included for planning purposes. For the planning purposes for this use case, economic meltdown examples from the Latin American region can be analyzed. Mainstream media, including *The New York Times*, are already predicting the economic ramifications of the pandemic as akin to the 1929 Great Depression (https://www.nytimes.com/2020/03/21/business/economy/coronavirus-recession.html, accessed 22 March 2020).

[3] Global HRP for COVID19 was launched on 25th Mar 2020 and can be found at https://www.unocha.org/sites/unocha/files/Global-Humanitarian-Response-Plan-COVID-19.pdf

- Linking affected and at-risk populations with health institutions;
- Supporting government bodies for effective response;
- Linking government health departments with humanitarian community;
- Supporting distance education initiatives;
- Supporting humanitarian community to continue remote working and continue operations.

While ETC services can support these scenarios, solutions may need to be adapted for the context of COVID-19 response.

DIGITAL SUPPORT AND SERVICES

1. Global Coordination and Response

With the scale and rapidly evolving nature of the crisis, ETC should map the available local resources including technical capacities and expertise from its network of partners.

Country offices and coordinators on ground, using their existing collaborations and relationship with the government stakeholders, remain front face to offer and deploy services for government, affected communities and humanitarians. The Global ETC team will leverage its global partnerships by setting up platforms and exploring provision of remote operational project management support to local teams using its network of partners.

2. Services for Communities and Risk Communication

Risk communication is an interactive exchange of information on real and perceived risks between both health organizations and affected populations to assist decision making amongst both groups. The ETC can support the implementation of COVID-19 Risk Communications strategies and following each country context in the form of:

1. FM Broadcaster Support: Increase reach of FM community radio and use FM radios to send key messages.
2. Common Feedback Mechanism (hotline): Toll free information center for government, health partners to communication with affected population.
3. Humanitarian Platforms: Sharing of information between various health partners and humanitarians' responders.
4. SMS broadcast.
5. Chatbots[4] to disseminate key information on numbers, location of hospitals, open markets etc

Such solutions looks at context driven SMS/ Interactive Voice Response (IVR) and social media-based platforms to set up feedback and communication systems, using commonly used platforms such as

[4] Similar initiative has been taken recently by UNDP, UNICEF and WHO: https://www.undp.org/content/undp/en/home/news-centre/news/2020/COVID19_WHO_UNICEF_UNDP_Partner_with_WhatsApp_to_Get_Real_Time_Health_Information_to_Billions_around_the_World.html

Facebook Messenger, Chatbots, Viber and WhatsApp.[5] Channeling credible information to support coordination efforts and the formulation of response protocols – including guidelines for risk communication – is an excellent way to reach affected populations.

For more details, refer to the ETC Technical brief on *Risk communication Services for COVID-19 Response*.

3. Power, Connectivity and Bandwidth management

Dependence on power supply and internet connectivity is already being documented to have increased during COVID-19. During the first two phases, inaccessibility to the Internet could hamper access to information and have adverse psychosocial effects on populations around the world. Guidelines from WHO entitled Mental Health and Psychosocial Considerations During COVID-19 Outbreak recommend that people maintain their social circles by using technology. Yet, many of the populations including humanitarians may face power shortage or no access to electricity. This is especially crucial in phase two, when communities including humanitarian responders are locked down at homes or in their duty stations without consistent or reliable power supply or connectivity. The ETC can assist with provision of guidance, suggesting some minimum standards, for local procurement of solutions where electricity and/or connectivity is required but where international mobilization is not possible.[6]

The ETC could consider publishing guidelines on bandwidth management. Global protocols on the rationed use of the Internet for and in humanitarian operations is now urgent. The current pandemic is posing a major stress test on networks worldwide and cybersecurity.

4. Collection, Systemizing, and Processing of Data

The ETC can support with operational information collection, analysis and visualization for organizations or governments. This could include the remote analysis of data collected by digital technologies such as Unmanned Aerial Systems (UAS), where applicable. Various applications of drones in the COVID-19 response have been documented in Italy, France, China and elsewhere. Digital platforms can support health monitoring by helping to visualize the spread of the pandemic, clarify symptoms, trace contacts and contribute to contagion modeling. Work is already being done in the area of artificial intelligence to combat the spread of infectious diseases such as dengue by using multiple sources of publicly available data to predict the appearance and spread of disease algorithmically.[7]

[5] Similar initiative has been taken recently by UNDP, UNICEF and WHO: https://www.undp.org/content/undp/en/home/news-centre/news/2020/COVID19_WHO_UNICEF_UNDP_Partner_with_WhatsApp_to_Get_Real_Time_Health_Information_to_Billions_around_the_World.html

[6] During Ebola Response, The Liberian SMS-based initiative, mHero, was structured not only to connect frontline workers and governments, but also explicitly "aimed to strengthen the government's health information system to provide critical information to support health workers on the frontlines of the crisis.

[7] Barron D (2014) Is Artificial Intelligence Key to Dengue prevention. BreakDengue.org

Another helpful element would be to use a digital platform to map worldwide ETC capacity and expertise, making it easier for governments and organizations to request support based on specific requirements.

OPERATIONAL RISKS AND MITIGATION MEASURES

Following are some of the operational risks, which ETC and its partners need to be cognizant of, when planning the response:

- The Global ETC is structured to support national responses with a limited number of personnel. The Cluster would need to appeal to partners with deployable or already in-country personnel which would depend on their availability.
- The ETC needs to ensure operational continuity in existing countries where it is activated. These country responses could experience constraints due to personnel being unable to travel in-country, or choosing to return home to their families, or facing additional stress from being unable to leave a non-family duty station due to travel restrictions. A thorough contingency plan that identifies replacement staff for existing operations needs to be considered a top priority.
- Due to travel bans and inaccessibility, local ETC have established mechanisms for coordinating complementary and supplementary humanitarian support to national authorities in humanitarian response through the help of the Global ETC team. Regional or local focal points are continued to be nominated to streamline early cluster interventions and support.

ANNEX: EXAMPLES OF SERVICES/SOLUTIONS FOR IDENTIFIED REQUIREMENTS:

Scenarios	Suggestions for phase 1 and 2
Linking affected and at-risk populations with health institutions	- Running perception surveys through existing CFM, hotlines to inform decision making. - Using IVR/Chatbots/SMS based systems to link populations with relevant government and advisory and information. - Use of community radios, handheld devices, to interact with populations in hard to reach areas.
Supporting government bodies for effective response	- Upgrading and supporting remote working for the existing health helplines. - Supporting health practitioners to run data analysis and machine learning on decision making data. - Use of toll-free numbers. - Technical advice in setting SOPs to relay information periodically. - Providing feedback data to government and health responders to inform their decision making.
Linking government health departments with humanitarian community;	- Use of mobile application or platform to exchange information. - Remote deployment of standby partner to support under capacitated governments.
Supporting humanitarian community to continue remote working and continue operations.	- Support to provide connectivity and power in designated areas. - Supporting in country Inter-Cluster Coordination groups to conduct operations remotely.
Supporting distance education initiatives	- Linking with education partners including education Ministries to collect requirements in terms of connectivity and solutions for distance education programming. - Education through radio broadcast programming – especially in hard to reach, or areas without connectivity.