

# EMERGENCY TELECOMMUNICATIONS PREPAREDNESS CHECKLIST

## ABSTRACT

As disasters continue to increase in frequency and scope across the world, the World Food Programme-led Emergency Telecommunications Cluster (ETC) and the International Telecommunications Union Development Sector (ITU-D) have jointly developed a resource to enable emergency telecommunications preparedness for disaster management.

This Emergency Telecommunications Preparedness Checklist examines “readiness” in four key thematic areas:

- I. NATIONAL GOVERNMENT: ROLES, RESPONSIBILITIES & COORDINATION PROVISIONS
- II. EXTERNAL COORDINATION WITH KEY STAKEHOLDERS
- III. CAPACITY DEVELOPMENT: TRAININGS AND SIMULATION EXERCISES
- IV. INFRASTRUCTURE AND TECHNOLOGY: REQUIREMENTS, PLANNING AND MAINTENANCE

The finds will be useful for consideration in national emergency telecommunication preparedness plans and roadmaps, including the development of national emergency telecommunications plans.

The Checklist adopts a simple scoring approach (percentage calculation for each thematic area), to assess the status of progress in each thematic area – also beneficial for measuring and comparing progress in emergency telecoms “readiness” over time.

This Emergency Telecommunications Preparedness Checklist focuses on understanding national readiness to enable communications in a disaster scenario, together with identifying targeted areas which may require attention. While intended for use by national governments, it is also an open resource for the humanitarian community at large.



Whilst this Checklist focuses chiefly on preparedness, an important existing resource is the Emergency Communications Checklist, produced by ITU-D Question 5/2 in 2017, covering preparedness and response components, available in the Global Guidelines for National Emergency Telecommunication Plans at



[https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Documents/2019/NETP\\_Global\\_guideline.pdf](https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Documents/2019/NETP_Global_guideline.pdf)

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
01	Is there a designated government ministry/agency responsible for disaster management in the country?		
02	Does the lead disaster management ministry/agency coordinate with other relevant ministries across government for disaster management?		
03	Are there any ICT-specific legislations or mandates which enable the ICT ministry/agency and the national ICT regulator, to respond to certain aspects of preparedness and response?		
04	Is there a standard operating procedure in place, outlining the role and mandate of the ICT ministry/ agency and regulator, with regards to preparedness and response?		
05	Are there clearly defined points of contact established for disaster management in the respective agencies/ministries involved?		
06	Can key contacts (identified in question 5) be reached at any time of the day or night?		
07	Is there a national emergency telecoms cluster group established, representing key ICT contact persons?		
08	Does the core ICT contact group meet yearly to coordinate and/or conduct drills/exercises?		
09	Are roles, goals, and responsibilities coordinated across national to sub-national and community levels?		
10	Are there mechanisms that help emergency response agencies and policymakers to plan and implement interoperability solutions for data and voice communications including governance, standard operating procedures (SOPs), technology, training and exercises, and usage of interoperable communications?		
11	Are there methods/tools that jurisdictions that can be used to track progress in strengthening interoperable communications across the country?		
12	Is telecommunications/ICT prioritized, or addressed, as a critical function or priority within the country's disaster management framework?		
13	Does the communications ministry/agency or regulator coordinate with, and participate in, the activities of the national disaster management agency?		
14	Has a national-level ICT Working Group been established?		
15	Does the national ICT Working Group meet regularly?		
16	Has an up-to-date national ICT capacity assessment been done, which covers macro and micro assessments of country-level ICT infrastructure?		
17	Is there an updated available list of telecommunications, information technology (IT), payment technology, and payment switch providers?		
18	Are relevant tools available for rapid beneficiary registration and assistance delivery?		
19	Is a roster of national IT service providers available and accessible?		
20	Have network operators identified their internal "surge capacity", to be able to recover post-disaster?		
	<b>PERCENTAGE = (Sum of Yes responses)/20 X 100</b>		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
21	Is there a stakeholder engagement plan in place for disaster preparedness and response?		
22	Is there a regularly updated list of key points of contact for primary organizations working in disaster risk management (including government private sector, civil society, United Nations, and all key others)?		
23	Is the list of key point of contact shared with these entities (mentioned in question 22)?		
24	Are these multiple stakeholders (mentioned in question 22) coordinated with frequently for preparedness and response readiness activities and actions?		
25	Do key stakeholders have the ICT tools needed to communicate during non-disaster periods and emergency operations?		
26	Are citizens involved in disaster risk reduction and response initiatives?		
27	Are citizens informed about disaster response preparedness and plans?		
28	Are there any requirements or legislations governing stakeholder engagement, public outreach, or advisory committees?		
29	Have processes been established in advance for both the entry of experts and communications equipment in times of disaster, such as the ratification of the Tampere Convention?		
30	Is there a fast-track process for importation of telecoms equipment in times of emergency?		
31	Are persons with disabilities, specific needs, and other vulnerable groups, included in disaster preparedness activities?		
	<b>PERCENTAGE = (Sum of Yes responses)/11 X 100</b>		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
32	Is ICT-specific training or certification mandatory for officials who are involved in disaster risk management?		
33	Do such trainings [mentioned in question 32] take place regularly?		
34	Do ICT-specific trainings and exercises include different concerned key stakeholders, in addition to government participants?		
35	Are telecommunication drills conducted to ensure that the public is aware of disaster response plans, including the most efficient means of communications to help reduce network congestion, together with recognition and reaction to a warning signal [e.g., response to an early warning mechanism like a siren]?		
36	Has a personal communications plan for family check-ins and evacuations been prepared?		
37	Are communications/ICT exercises conducted, as part of more comprehensive national disaster exercises?		
38	Are communications/ICT exercises tailored to the types of frequently occurring disasters in the country?		
39	In communications/ICT exercises, are complex emergencies considered that could address multiple hazards in a “worst case scenario”?		
40	Do other government agencies or ministries oversee and/or participate in communications-related exercises or drills?		
41	Are different non-government stakeholder participants in disaster response or disaster communications exercises?		
42	Do all the ICT sector stakeholders participating in disaster exercises or drills have clearly defined roles and responsibilities?		
43	Are outage reporting requirements of carriers exercised?		
44	Do carriers follow a uniform reporting process, and know which contacts to report the outages [induced by disaster] to, and how?		
45	Is online ICT training, or are “read-aheads”, available for ICT stakeholders prior to exercises?		
46	Is feedback collected after exercises or drills to help improve procedures or performance for the future?		
47	Is an “after action” performed after an exercise or drill?		
	<b>PERCENTAGE = (Sum of Yes responses)/16 X 100</b>		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
48	Is a regular technology inventory or assessment undertaken?		
49	Does such an inventory or assessment [as mentioned in question 48] have a mapping of infrastructure and networks available [publicly]?		
50	Is redundancy and resiliency planning undertaken for telecom providers?		
51	Are there opportunities to support or encourage telecommunication operators in doing the redundancy and resiliency planning? This could include advisory efforts, opportunities to engage in drills and exercises, and after actions, information-sharing efforts.		
52	Are processes in place for the government to help expedite, facilitate, prioritize, or enable fuel delivery for communications network generators?		
53	Are there available and pre-positioned power sources for telecommunication networks?		
54	Are there guidelines in place for critical facilities to have back-up power supplies?		
55	Are regular technical trainings conducted for those personnel who will need to use and maintain/test emergency communications equipment, particularly that which is pre-positioned?		
56	Do first responders know where the pre-positioned equipment is located or where imported ICT equipment can be collected for use?		
57	Are local communities and local staff also considered for training in the use and maintenance of emergency telecommunication equipment?		
58	Have critical /priority telecommunication sites being identified for restoration?		
59	Are there mechanisms in place to prioritize critical telecommunication sites for restoration efforts?		
60	Are related reporting mechanisms in place?		
61	Has there been an assessment of ICT regulatory and/or policy barriers to entry or operation of needed equipment for disaster relief or restoration of networks?		
62	In the above-mentioned ICT assessment (question 61), have special measures been determined in case of an emergency, including identification of equipment for replacement, sources for rapidly sourcing equipment in times of need, determining redundant backup systems, and logistics capacity?		
63	Is connectivity information, including data sets, available for government or public use to aid in disaster response and risk reduction planning?		
64	Is information about business continuity plans exchanged between government and industry officials?		
65	Have emergency and network resilience/redundancy needs and requirements been considered in the national telecommunication development plan?		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
66	Are policies in place to ensure that data can be shared by operators with responders in a way that protects individual privacy, while enabling response?		
67	Are multiple channels (such as television, Radio, Short Message Service, messaging, etc.) employed to ensure information gets to those affected quickly and effectively?		
68	Is social media employed to share information regarding disaster risk reduction?		
69	Are regular/ongoing national and regional alerting exercises and system-testing taking place?		
70	Is public education undertaken to sensitize communities on early warning for early action?		
71	Are members of vulnerable populations consulted regarding their specific needs in disaster scenarios?		
72	Is there an early warning alerting system in place?		
73	Is the Common Alerting Protocol (CAP) employed for early warning purposes?		
74	Are information materials including websites or applications (“apps”) accessible for disaster preparedness?		
75	Are the above-mentioned “apps” (in question 74) promoted widely to the public?		
76	Are information materials being shared in advance on ways that users of communications can lessen network congestion in a disaster?		
77	Are ICT capacities of vulnerable populations being developed in disaster risk management?		
78	Are accessibility and usability of ICTs considered in forthcoming disaster preparedness projects?		
79	Are disaster readiness information materials provided targeting vulnerable populations?		
80	Are public awareness campaigns conducted on disaster risk reduction themes in multiple accessible formats in different prevalent languages?		
81	Following a disaster, are disaster response efforts reviewed to assess challenges for vulnerable groups, and determine follow up actions?		
	<b>PERCENTAGE = (Sum of Yes responses)/34 X 100</b>		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
82	Is there a designated focal point at the ministry/regulator to collect, analyse, and react to/report/release information regarding damage to networks?		
83	Is a mechanism in place to enable communications operators to provide the government information about the scale and scope of communications outages, and their progress on restoration in a way that enables governments to plan and act?		
84	Is the reporting system separate or “firewalled” from regulatory functions to enable more open reporting on outages?		
85	For those networks that are commercial or public, are there reporting requirements in place that would establish a harmonized process, format, and timeline carriers to submit evaluations?		
86	Will initial damage assessments be connected to award disaster recovery funding?		
87	Have interagency coordination and information sharing processes been established?		
88	Are there policies in place that consider communications network status, needs, conditions and requests, and that enable the maintenance and restoration of the following communications capabilities?		
89	Is standardized reporting on outages undertaken by the regulator at regular intervals, identifying the number of telecom sites that are up and/or down?		
90	Are telecoms recovery plans produced, to recover or continue the operation and use of telecoms infrastructure in the event of disaster?		
91	Do the above-mentioned telecoms recovery plans (in question 90) detail coverage areas and network carrying capacity – including provision of special services and network access for affected areas?		
92	As a business continuity management (BCM) measure post-disaster, are network recovery mitigation plans made available by network operators, and are accessible?		
	<b>PERCENTAGE = (Sum of Yes responses)/11 X 100</b>		

NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
93	Has the government identified relevant network operators and service providers, including domestic telecommunications providers and international satellite operators, who may be involved in providing emergency communications services?		
94	Is there a maintained list containing updated details for all relevant telecoms service provider recovery teams?		
95	Is there a system in place for offers of financial and human capacity assistance from foreign governments, humanitarian organizations, or private sector to be received and processed?		
96	Is the ICT ministry or regulator the contact for authorization of incoming equipment (such as frequency and type approvals), or to allocate requested frequencies?		
97	Has the government created frequency allocations, in conformance with the international table of allocations, for critical satellite communications frequency bands – including in the L, C, Ku, and Ka bands?		
98	Is there a mechanism to ensure timely coordination with local operators to avoid interference?		
99	Are emergency ICT resources prepositioned at priority locations?		
100	Does the government encourage or enable carriers to preposition emergency ICT resources?		
101	Is there a process in place for regular tests of the pre-positioned equipment to ensure its functionality?		
102	Is consideration/priority given to fuel supplies for power generators and restoration of telecommunication networks?		
103	Is coordination between national government-specific telecommunications teams and the central disaster management institutions undertaken?		
104	Is there a prioritization exercise undertaken to determine where emergency connectivity will first be established?		
	<b>PERCENTAGE = (Sum of Yes responses)/12 X 100</b>		



NO.	QUESTION	RESPONSE [YES/NO] Y=1; N=0	COMMENTS [QUALIFYING]
105	Is there a source of external expert advice and assistance for government agencies, with respect to restoring government communications networks and telecommunication infrastructures, including industry contacts?		
106	Does the government have mechanisms or emergency procedures in place to facilitate customs clearance or importation of equipment needed for restoration of critical networks, and/or to facilitate entry of any external expert personnel needed to restore and rebuild networks?		
107	In case of pre-positioned equipment, has a focal point (or points) been identified to ensure it is well-maintained, and the ICT equipment is ready-for-use in an emergency?		
108	Is there a process in place to routinely test networks designed for emergency communication?		
109	Are commercial or public network operators encouraged to have a business continuity plan (BCP) in place?		
110	Are telecommunications restoration plans frequently exercised and updated?		
111	Does the ICT ministry/agency or regulator have information related to network outages and restoration activity safeguarded, and classified appropriately, to mitigate security concerns?		
112	Does the ICT ministry/agency or regulator have a focal point for sharing communications outages and restoration information with other stakeholders?		
113	Has a forum for operators to share information and coordinate possible assistance been established by the ICT ministry/agency and/or regulator?		
114	Has a procedure been put in place to allow the government to share sensitive risk-related information with network operators (and vice versa)?		
115	Is there a procedure in place to assist operators with critical items, such as physical access and expedited fuel deliveries?		
116	Are there alternate sources of power located and prepared in case of emergency scenarios?		
	<b>PERCENTAGE = (Sum of Yes responses)/12 X 100</b>		