

**Annexure-A**

**Survey Questionnaire**

**“Regulatory Framework for Disaster Management Using Information Communication Technology”**

**Objective**

The magnitude, complexity, frequency and impact of disasters have been increasing and results in severe consequences in unprepared countries.

In order to manage effectively a disaster and emergency, you should have communication continuity, emergency plans, guidelines, framework and technological support.

Coping with a disaster and emergency includes national and international coordination, increasing the preparedness capacity, rapid response, supporting relief and rescue teams’ essential and vital tasks while uncontrolled situations continue to develop in the affected area. In addition, citizens, inside and outside the country, want to reach their loved ones.

The telecommunication can be a matter of life-and-death during or immediate aftermath of a disaster and emergency. The absolute priority is life-saving or reducing loss-of-life in emergency telecommunications during a disaster and emergency. As a result, the continuity of telecommunication is among the most critical issues.

Our objective is to prepare a framework that will guide the shareholders to prepare their detailed plans complying with the framework and utilize IT to help to manage the disaster and emergency.

**Expected Outcomes**

The results of the questionnaire will be analyzed and utilized to prepare the report “Regulatory Framework for Disaster Management Using Information Communication Technology” which will be finalized after the field mission to Pakistan on February 2016.

**Methodology**

The questionnaire (attached as Annexure-A) contains 32 specific questions including simple fact-checks, box-checking multiple-choice questions, scale assessment and open-ended questions. Your survey responses will be confidential. Any reports of the results from this survey will not identify individuals, nor will any individual responses to the survey be made public. However, the information collected from the survey will provide valuable information that will assist the ITU and each of all of its members in compiling the report. Please submit the completed responses to the Survey Questionnaire and return via email to Dr. Tamer Demir ([tamer@bcm.global](mailto:tamer@bcm.global) , tamerdemir@gmail.com) copying Mr. Sameer Sharma ([Sameer.sharma@itu.int](mailto:Sameer.sharma@itu.int)) by **5pm, 30 January 2016**.

**Contact Details**

**A.** Please provide the contact details of the official responsible for coordinating the responses and to whom we may direct queries or further correspondence in relation to your responses to this questionnaire.

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| **Mr/Ms/** | **Family Name** | | **First Name** |
|  |  | |  |
| **Country** |  | | |
| **Name of Administration/Organization** | |  | |
| **Position in the Organization** | |  | |
| **Type of Organization** | | Regulator  Government (department / agency)  Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| **Address** |  | | |
| **Telephone** |  | | |
| **Fax** |  | | |
| **Email** |  | | |

B. How long have you been working at your organization?      \_\_\_\_\_\_ years

How long have you been working in the field of telecommunications?      \_\_\_\_\_\_ years

or in government services/regulation?      \_\_\_\_\_\_ years

C. What is your main role?

     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part 1: General Questions

**1.1.** What does “Regulatory Framework for Disaster Management Using Information Communication Technology” mean to you?

A set of guidelines issued by the authority which should be implemented by the telecommunication operators before, during and after a disaster and emergency for the continuity of telecommunication services (business) like call, messaging and internet.

A set of basic plans which the telecommunication operators should align with and prepare their detailed business continuity plans

A set of rules that will guide the telecommunication operators to establish, implement, monitor, audit, and improve their business continuity management system.

A set of information technology examples that are designed to support a disaster and emergency management

A set of recommendations for the emergency telecommunication for a disaster and emergency

All of the above

**1.2.** What is the **current status** of the National Disaster Management Plan in your country?

Approved and effectively implemented throughout the Pakistan

Approved but not effectively implemented throughout the Pakistan

Draft in Process

Other (please specify) \_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.3. “National Disaster Management Act, 2010” states that “ensure communication systems are in order and disaster management drills are carried out periodically”. What is the current status to implement the “National Disaster Management Act, 2010” communication requirements?

Unready for the next disaster and emergency

I do not know the status

Ready for the next disaster and emergency

Strongly ready for the next disaster and emergency

Other (please specify) \_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1.4.** Is there a “National Telecommunication Continuity Plan” which is aligned with the “Pakistan National Disaster Management Act, 2010”

Yes

No

1.5. Which organization or agency in your country would take the overall responsibility for coordinating the establishment of a National Telecommunication Continuity Plan (“ensure communication systems are in order”) in Pakistan?

Minister of Information Technology

National Institute of Disaster Management

National Disaster Management Authority

Pakistan Telecommunication Authority

Other (please specify) \_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.6. “National Disaster Management Plan” states that “Establish a robust communication system and efficient transport and logistics mechanism to be used during emergency situations” between 2013-2017. What is the current status of this requirement?

I do not know the status

Not started

Still establishing robust comm. system, efficient transport, logistics mechanism

Completely established

If still establishing, which parts are missing? \_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1.7.** If still establishing “a robust communication system and efficient transport and logistics mechanism to be used during emergency situations”. Which of the below areas has made **the most progress** since the introduction of the National Disaster Management Plan (or in the past three years)?

Robust communication system

Efficient transportation

Logistics mechanism

I do not know

**1.8.** “National Disaster Management Plan” states that MoIT has an action called “Establish a robust communication system that can be used during emergency situations”. Write down the regulatory requirements issued until this time to telecommunication operators related with this requirement?

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**1.9.** Please state below **three** changes which made **positive impact** on the resilience capacity of the Pakistan telecommunication sector for the disaster and emergency situations between 2013-2015?

(1):\_\_\_\_\_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2):\_\_\_\_\_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3):\_\_\_\_\_     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1.9.a.** Please provide any specific examples or detailed explanations regarding the positive impact.

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**1.10.** Please state below **three** issues which made **slow or no progress** related with the resilience of the telecommunication services in a disaster and emergency between 2013-1015.

(1):\_\_\_\_     \_\_\_\_\_ (2):\_\_\_\_\_\_     \_\_\_\_\_ (3):\_\_\_\_\_     \_\_\_\_\_

**1.10.a.** Please provide any specific examples or detailed explanations regarding the challenges, difficulties or problems behind the slow or no progress

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**1.11.** Please indicate **the top three priority areas** of your organization/agency is currently focusing or plan to focus between 2015-2017.

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| --- | --- | --- | --- |
|  | **No 1. Priority** | **No. 2 Priority** | **No. 3 Priority** |
| **2015** |  |  |  |
| **2016** |  |  |  |
| **2027** |  |  |  |

**1.12.** In your view, select one or more of the below items that should be needed to establish emergency communication in a disaster and emergency area.

Mobile network operators

Satellite operators

Amateur radio operators

Energy supplying organizations

Organizations that provide transportation

Set of rules that define communication structure for the responsibles

**1.13.** Please provide any comments on the telecommunication continuity/resilience during a disaster and emergency that are **unique to your country** (e.g. challenges or advantages compared to other neighboring countries).

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**1.14.** Please indicate **three** specific issues in the order of priority which might require further **technical assistance of ITU** in establishing national emergency communication framework in coming years.

(1):\_\_\_\_     \_\_\_\_\_ (2):\_\_\_\_\_\_     \_\_\_\_\_ (3):\_\_\_\_\_     \_\_\_\_\_

**1.15.** In the “National Disaster Management Plan” it is written that “…to strengthen early warning dissemination system… the action is …Innovation of the communication system between PMD (Pakistan Meteorological Department) and NDMA (National Disaster Management Authority), and among DDMAs (District Disaster Management Authority) (NDMA-PDMA-DDMA) and a communication system utilizing cellular phone and radio broadcast networks”. Which regulatory requirements issued to cellular operators related with this requirement?

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**1.16.** According to your point of view, please rank the below 13 risk types from the worst impact (1) to the least impact (13) on the continuity of telecommunication services

\_\_      Earthquake

\_\_      Flood/Flash Flood

\_\_      Tsunami

\_\_      Drought

\_\_      Heavy Rain

\_\_      Extreme temperature decrease/increase

\_\_      Cyber security breach in telecommunication operators.

\_\_      Extreme weather condition

\_\_      Technological failure during a software upgrade

\_\_      Difficult to detect configuration mistake on the backbone routers

\_\_      Pandemic illness which effects operators employees

\_\_      Cyclone

\_\_      Nuclear fallout

**1.17.** According to your point of view, please rank the below 8 locations from the most prioritized (1) to the least prioritized (8) on the needs for communication during a disaster and emergency

\_\_      Disaster Information Resource Center (DIRC)

\_\_      National Emergency Operations Center (NEOC)

\_\_      District Emergency Operation Center (DEOC)

\_\_      Provincial Emergency Operation Center (PEOC)

\_\_      Hospitals with surgery services

\_\_      Gathering/Tent Locations

\_\_      Prime Minister

\_\_      Relief and rescue teams working at the disaster affected area

**1.18.** According to your point of view, please rank the usage of below telecommunication services that you will chose first, second and third in an emergency communication during a disaster and emergency*?*

\_\_      Voice (Call)

\_\_      Messaging (SMS)

\_\_      Internet

**1.19.** What is the usage of social media services like Facebook, Twitter, Whatsapp in Pakistan?

\_\_      None

\_\_      Low

\_\_      Medium

\_\_      High

\_\_      Very High

**1.19.a.** Which social media service usage is higher? If the usage is low, what are the reasons for that?

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**Part 2: Area-specific Questions**

***Regulatory Environment***

**2.1.** In Pakistan, is there an agreed definition of “emergency communication” from the perspective of policy, law and / or regulation?

Yes  No

**2.1.a.** If yes, give reference to the policy, law and/or regulation

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**2.2.** In Pakistan, is there an agreed definition of “emergency telecommunication services” from the perspective of policy, law and / or regulation?

Yes  No

**2.2.a.** If yes, what are the telephone numbers of the emergency telecommunication (e.g: Ambulance, Polis…) services and their short descriptions?

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**2.3.** In Pakistan, is there any regulation over the telecommunication operators for the continuity of telecommunication services?

Yes  No

**2.3.a.** If yes, give reference to the policy, law and/or regulation?

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**2.4.** In Pakistan, is there any past work that prioritized the locations according to communication needs in a disaster and emergency?

Yes  No

**2.4.a.** If yes, give reference to the prioritization projects or any prioritized locations?

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***Market Environment***

**3.1.** Please provide the **market share** (by the number of subscribers) of the **top six players** in the fixed/mobile/broadband telecommunication markets, as applicable:

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| --- | --- | --- | --- | --- | --- | --- |
|  | **Fixed** | | **Mobile** | | **Broadband / Internet** | |
|  | Name | Market Share (%) | Name | Market Share (%) | Name | Market Share (%) |
| **No 1.**  **(dominant)** |  |  |  |  |  |  |
| **No. 2** |  |  |  |  |  |  |
| **No. 3** |  |  |  |  |  |  |
| **No. 4** |  |  |  |  |  |  |
| **No. 5** |  |  |  |  |  |  |
| **No. 6** |  |  |  |  |  |  |

**3.2.** Please provide the top 3 mobile operators per each region according to number of users registered per region:

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| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **No. 1 Operator** | | **No. 2 Operator** | | **No. 3 Operator** | |
|  | Name | App. Users | Name | App. Users | Name | App. Users |
| **Balochistan** |  |  |  |  |  |  |
| **Sindh** |  |  |  |  |  |  |
| **Punjab** |  |  |  |  |  |  |
| **Islamabad** |  |  |  |  |  |  |
| **Federally Administered Tribal Areas** |  |  |  |  |  |  |
| **Khyber Pakhtunkhwa** |  |  |  |  |  |  |
| **Gilgit-Baltistan** |  |  |  |  |  |  |
| **Azad Jammu and Kashmir** |  |  |  |  |  |  |

**3.3.** Please provide any examples or explanations on your country’s effort to enhance resilience of telecommunication systems and continuity of telecommunication services?

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***Access, Availability, Affordability***

**4.1.** Write below the subscriber distribution according to access types?

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| --- | --- | --- | --- |
| **Access Type** | **Total Number Subscribed Users**  **(% to the total subscribers)** | **No.1 Operator** | **No.2 Operator** |
| **GSM** |  |  |  |
| **UMTS** |  |  |  |
| **LTE** |  |  |  |
| **Wireless Local Loop** |  |  |  |

**4.2.** What are the **main barriers** for regulating the operators to establish telecommunication (business) continuity management system in their organizations in Pakistan? (Select the ***most significant one***)

Geography

Funding

Lack of interest among the government organizations

Lack of interest of the private sector

Lack of high level management (CEO, CTO…) support

Others (Please specify)      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Universal Service Obligations***

**5.1.** What is the current status of the Universal Service Obligation (USO) in your country?

We do not have one

Under review, in preparation

Established, in progress

**5.2.** Does your country have a specific Universal Service Obligation Fund (USOF)?

Yes  No

**5.2.a** If yes, how is the USOF collected? In other words, what are the main funding sources?

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**5.2.b.** If exists, please indicate the three examples of USOF usage for the emergency communication preparedness.

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***Sector-Specific Applications***

**6.1.** Please tell us **any examples** of disaster management/alerting/information dissemination technology/software/servicein your country?

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**6.2.** Please describe any **difficulties or challenges** to create a new disaster management/alerting/information dissemination technology/software/servicein your country

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**- END -**