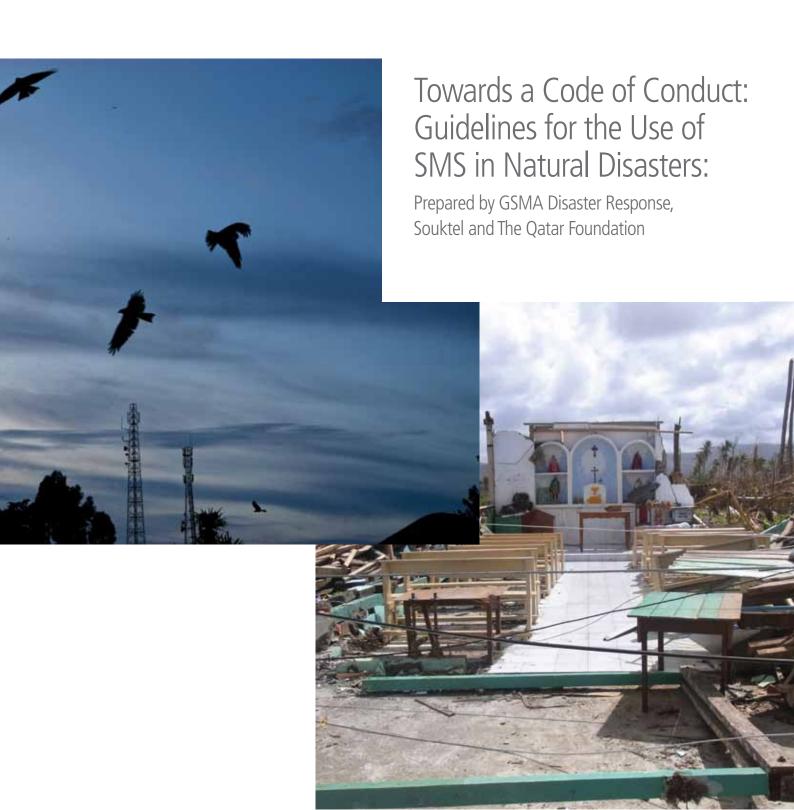


When you restore the mobile network, you rebuild the human network

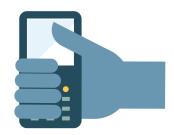


CONTENTS



INTRODUCTION

This joint effort draws on the wealth of existing expertise across numerous organizations and previous research to codify a series of best conduct practices for the use of SMS in disaster response. This guideline document is a collaborative work in progress and therefore neither fully comprehensive nor entirely complete. The need for a public SMS Code of Conduct is pressing so we hope experts in this space will continue to lend their expertise on the subject and thereby move these guidelines into a working, living code of conduct. This effort focuses exclusively on "natural" disasters and thus currently excludes reference to political crises and complex humanitarian emergencies. In addition, the code of conduct is specifically limited to Short Messaging Service (SMS) information and communication technology. The intended audiences for this code of conduct are those organizations seeking to use SMS for disaster response and those telecommunication companies that are in a position to provide technical support. To this end, the draft code of conduct also seeks to bring an improved sense of coordination and understanding between telecommunications companies and humanitarian actors.

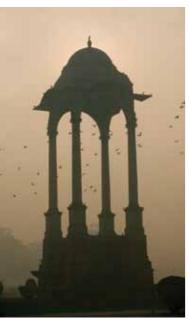




WHY USE SMS IN DISASTER RESPONSE?

In the 2005 World Disaster Report published by the International Committee of the Red Cross (ICRC), access to information was described as being as important as access to food, water, shelter and medication. As demonstrated before, during and since the 2010 Haiti earthquake, the use of SMS can provide timely information to disaster affected communities while also being used to rapidly collect information from these communities to improve aid delivery and accountability. While there are important opportunities, there are also some limitations vis-à-vis the use of SMS for disaster response. Managing expectations and processing potentially large volumes of text messages remain a challenge, for example.













KEY CONSIDERATIONS FOR COOPERATING WITH AID IMPLEMENTERS – FOR MNO PARTNERS

- Aid implementers are specialists in crisis response but may not have expertise in telecommunications. As a result, many basic terms and concepts (technical or commercial) will be unfamiliar to these partners. Clear, concise communication and simple "user-friendly" language can help address this challenge and minimize misunderstanding.
- Many aid implementers have multiple offices, numerous teams, and varying organizational structures all within a single crisis zone. Establishing clear, consistent Points of Contact at each aid agency (and understanding the role/decision-making authority of these contacts) will help ensure efficient communication and service launch.
- Many aid implementers have detailed organizational processes for contracting, financial management, and content creation, As a result, service delivery partnerships may need approval at several levels, creating delays. Setting clear timing expectations at the start of any partnership can help mitigate this risk.
- Most aid implementers' main aim is to provide emergency help, at low (or no) cost to communities in crisis zones. As a result, these partners may be less interested in the delivery of commercial/value-added mobile services, particularly in the first weeks after a crisis event. Phasing in cost-based services over time or finding options for subsidising these services so that they remain low-cost is an ideal alternative.
- Aid implementers do not always coordinate their crisis relief efforts with each other, especially when crisis events evolve rapidly. As a result, multiple implementers may approach mobile network operators with similar requests for cooperation. Preparing in advance for this possibility and working to understand the various needs of each aid agency that requests services will help optimize partnership planning.



KEY CONSIDERATIONS FOR COOPERATING WITH MOBILE NETWORK OPERATORS-FOR HUMANITARIAN PARTNERS

Mobile network operators may be badly affected themselves by natural disasters, including infrastructural damage and loss of life. In the immediate aftermath of a disaster, resources will most likely be focused on restoring services in order to provide essential access to communications, and on accounting and providing for employees.

•••••••••

- Not all mobile operators structure their disaster preparedness and response programmes in the same way. Different departments are often involved in decision making, and there may or may not be a dedicated resource(s) who has specific expertise or authority in this area. Corporate Social Responsibility, Sustainability, Public Affairs, Technical, Business Continuity, Network Management and Executive teams may all be involved, and as such it is important to identify the correct point of contact for SMS service development and roll out.
- In the immediate aftermath of a natural disaster, mobile operators will be facing numerous pressures and obligations. As a result, requests for access to the network for SMS service provision should be coordinated among humanitarian actors wherever possible.
- The role of mobile communications in humanitarian response is rapidly evolving; as a result, the level of expertise and experience will vary based on operator and market.



KEY CONSIDERATIONS FOR COOPERATING WITH MOBILE NETWORK OPERATORS-FOR HUMANITARIAN PARTNERS (CONTINUED)

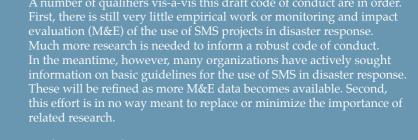
•••••••••••••••

- Mobile networks may experience technical challenges such as network congestion. As a result, service design should consider the attributes of the network and its management to avoid adding additional pressure onto the network.
- In many markets, mobile operators have strong relationships and brand presence with citizens and will be engaged with community-based programmes or support local NGOs or civil society groups. Consider how the service you are designing fits in with pre-existing services or programmes.
- Mobile operators have an obligation to protect the privacy of their subscribers, and are bound by prevailing regulatory and licensing realities. These should be considered at the earliest stages of service design.





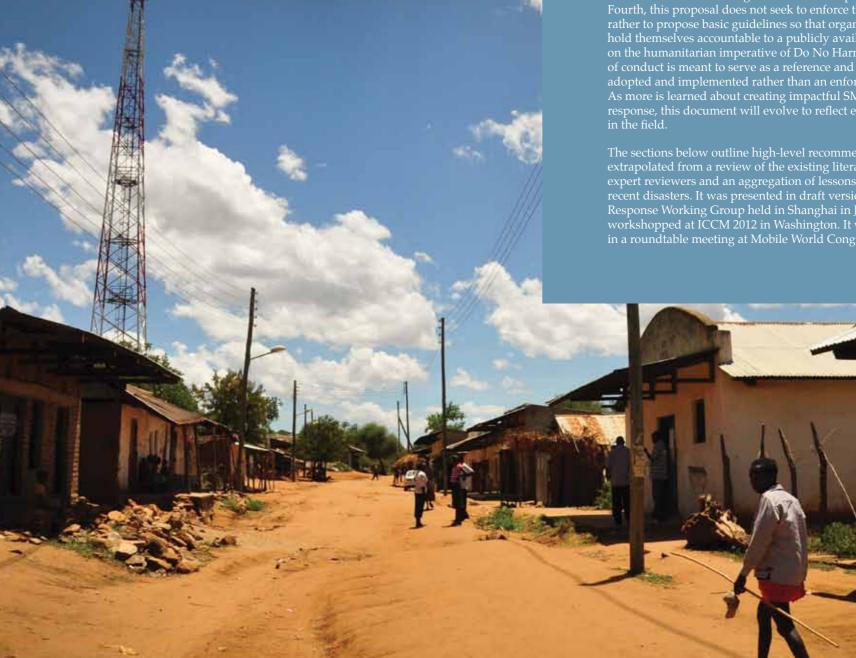




On the contrary, this code of conduct seeks to build on and complement the work of many excellent organizations and networks in this space such as Communicating with Disaster Affected Communities Network (CDAC-N), Information as Aid (Infoasaid), FrontlineSMS and the work of the UN Office for the Coordination of Humanitarian Affairs (UN OCHA). Third, SMS is not the only technology that can be used for disaster response, nor should it necessarily be used in isolation from other media and technologies like radio and public message boards. Fourth, this proposal does not seek to enforce this code of conduct but rather to propose basic guidelines so that organizations can seek to hold themselves accountable to a publicly available standard based on the humanitarian imperative of Do No Harm. In sum, this code of conduct is meant to serve as a reference and resource that can be adopted and implemented rather than an enforceable prescription. As more is learned about creating impactful SMS services for disaster response, this document will evolve to reflect established best practices in the field.

extrapolated from a review of the existing literature, feedback from expert reviewers and an aggregation of lessons and challenges from recent disasters. It was presented in draft version at the GSMA Disaster Response Working Group held in Shanghai in June 2012, and was workshopped at ICCM 2012 in Washington. It will also be discussed in a roundtable meeting at Mobile World Congress 2013.

BARAKA SHOP



1

APPROPRIATE

VEHICIE

FOR THE INFORMATION YOU ARE TRYING TO DISSEMINATE OR COLLECT.

ASSESS THE WIDER MEDIA

AND
COMMUNICATIONS
LANDSCAPE AND
LOCAL CONTEXT



2



DO NOT LAUNCH AN SMS SERVICE

UNLESS YOU HAVE THE ABILITY [AND CAPACITY/RESOURCES] TO ACT ON INCOMING INFORMATION E.G. SOMEONE ASKS FOR SOMETHING AND YOU CAN RESPOND WITH THE INFORMATION, SERVICE, OR SERVICE REFERRAL THAT THEY NEED



FAILURE TO DO SO RISKS
RAISING EXPECTATIONS
UNREASONABLY

POSSIBLY TO A DANGEROUS LEVEL
AND DIMINISHES THE CREDIBILITY
OF YOUR SERVICE

3



AND COORDINATED PARTNERSHIPS

ARE REQUIRED TO MAKE AN

SMS SERVICE SUCCESSFUL

YET THE CAPACITY AND INCENTIVES OF PARTNERS

(BOTH BETWEEN MOBILE OPERATORS AND HUMANITARIAN ORGANISATIONS, BETWEEN ORGANISATIONS, AND BETWEEN TARGETED COMMUNITIES AND SERVICE DELIVERERS)

MAY VARY

4

FOCUS ON VALUE AND SIMPLICITY OF RENEFICIARIES AND

USER-CENTRIC DESIGN

DESIGN WITH THE END-USER IN MIND



RATHER THAN SOLELY WITH A DESIRE TO

MINIMIZE WORK ON THE BACKEND

5

THE HUMANITARIAN PRINCIPLE OF "DO NO HARM" COMES FIRST



SMS-BASED SERVICES (AND SIMILAR COMMUNICATION PROJECTS)

SHOULD HAVE THIS AS THEIR FIRST AND PRIMARY GOAL FOR FURTHER INFORMATION ON THE FUNDAMENTAL PRINCIPLES GUIDING HUMANITARIAN WORK AND RESPONSE, PLEASE VISIT:

UN OCHA: HTTP://OCHANET.UNOCHA.ORG/P/DOCUMENTS/OOM HUMPRINCIPLE ENGLISH.PDI

INTERNATIONAL FEDERATION OF THE RED CROSS AND RED CRESCENT: HTTP://WWW.IFRC.ORG/EN/WHO-WE-ARE/VISION-AND-MISSION/THE-SEVEN-FUNDAMENTAL-PRINCIPLES/



MOBILE SERVICE ROLL-OUT PLANNING

1

IN DETERMINING WHETHER AN SMS PLATFORM IS APPROPRIATE FOR DISASTER RESPONSE ACTIVITIES,

. . .

ORGANISATIONS SHOULD CONSIDER THE BROADER LOCAL MEDIA ENVIRONMENT AND CONTEXT, MOBILE PHONE OWNERSHIP AND DISTRIBUTION (ESPECIALLY IN REGARDS TO ACCESS BASED ON GENDER AND AGE), LITERACY LEVELS AND THE COVERAGE AND RELIABILITY OF THE NETWORK.

SMS PLATFORMS
SHOULD IDEALLY
BE SET UP PRIOR TO
MAJOR DISASTERS

THESE SYSTEMS SHOULD BE HIGHLY ROBUST AND RELIABLE. BACKUP SYSTEMS SHOULD ALWAYS BE AVAILABLE SHOULD THE PRIMARY SYSTEM CRASH, MAKING IT OPTIMAL THAT PROFESSIONAL ORGANIZATIONS HOST THE SERVERS AND CRITICAL NETWORK CONNECTIONS [PREFERABLY IN SITES LOCATED OUTSIDE OF THE DISASTER ZONE].

A STREAMLINED
PROCESS FOR SHORT
CODE PROVISIONING
SHOULD BE ADOPTED TO
AVOID CONFUSION AND
DUPLICATION

SHORT CODE SHARING BY MULTIPLE
ORGANISATIONS SHOULD BE CONSIDERED
WHERE POSSIBLE, AND ACHIEVING THIS
REQUIRES THAT THESE ORGANISATIONS
PARTNER WITH EACH OTHER, PREFERABLY
THROUGH A COORDINATING BODY
(FOR SMS BROADCAST PURPOSES)
AT A SYSTEMIC LEVEL.

THE LATTER WOULD
ENSURE THAT TEXT
MESSAGES ARE NOT
DUPLICATIVE OR

AND THAT ANY PARALLEL SERVICES DO NOT INTERRUPT THE OPERATIONS OF THE OTHER. IT WOULD ALSO ENSURE THAT THE CAPACITY AND PROCESSES FOR RESPONSE TO INCOMING SMS MESSAGES HAS BEEN CONSIDERED BY ORGANISATIONS REQUESTING FEEDBACK. CHALLENGE INHERENT TO ACHIEVING THIS LIKELY REOUIRE FURTHER RESEARCH.

CONTRADICTORY

6



ALTHOUGH POTENTIALLY CHALLENGING TO ACHIEVE, MANY ACTORS AGREE THAT

A CENTRALISED
COORDINATING
BODY SHOULD
BE IDENTIFIED TO
STREAMLINE SMS
SERVICES IN AN
EMERGENCY

STRONG PARTNERSHIPS, PREPAREDNESS AND COMMUNICATION ACROSS AGENCIES AND ORGANISATIONS WILL BE ESSENTIAL TO ACHIEVING THIS RESULT.

3

EXISTING NATIONAL SMS SYSTEMS SHOULD NOT REDUPLICATED

[UNLESS THERE ARE COMPELLING REASONS TO DO SO].

INSTEAD, ORGANIZATIONS SHOULD WORK WITH LOCAL GOVERNMENT AS MUCH AS POSSIBLE. THIS MEANS SUPPORTING NATIONAL INSTITUTIONS AND PROCESSES WHEREVER POSSIBLE.

7

FOR MNOS

WHERE PRICING IS CONCERNED, MAKE EVERY EFFORT
TO OFFER TEXT-IN SERVICES AT ZERO COST TO LOCAL USERS — OR AT
LOCAL SMS RATES. DO NOT CHARGE PREMIUM SMS RATES FOR VITAL
INFORMATION UNLESS ALL OTHER PRICING OPTIONS ARE IMPOSSIBLE.
AT TIMES, MNO INFRASTRUCTURE MAY BE AFFECTED BY A DISASTER,
IMPACTING SERVICE PROVISION, AND STRAINING THEIR OPERATIONS.

8

FOR RESPONDERS

[IF DIRECT CONNECTIVITY WITH MNO GATEWAYS IS NOT POSSIBLE,]
UTILIZE NETWORK CONNECTIVITY PROVIDERS WHICH HAVE BEEN
AUTHORIZED TO PROVIDE SERVICES BY THE MNOS IN THE COUNTRY/
COUNTRIES OF SERVICE DELIVERY. JUST AS FEW NGOS HOST THEIR OWN
SERVERS TODAY, FOR REASONS OF SCALABILITY AND MONITORING, IT IS
NO LONGER AN OPTIMAL ARCHITECTURE FOR AN NGO TO HOST LOWLEVEL NETWORK CONNECTIONS.

9

FOR RESPONDERS

CONSIDER THAT MOBILE NETWORK OPERATORS ARE BOUND BY LICENSING, LEGAL AND REGULATORY REALITIES THAT WILL VARY BY COUNTRY, AND INFORM THE WAYS IN WHICH INFORMATION CAN BE SENT OVER THE MOBILE NETWORK WHICH MAY IMPACT SERVICE DESIGN. PREPARING FOR THIS TO LIMIT NEGATIVE IMPACT OR DELAY IN SERVICE ROLLOUT MAY BE ACHIEVED BY CONSIDERING LOCAL INFORMATION ECOLOGIES, CULTURAL CONTEXT AND THE TELECOMMUNICATIONS AND MEDIA LANDSCAPE TO ENSURE THAT THE SERVICE IS RELEVANT TO THE INTENDED AUDIENCE, AND COMPLIANT WITH PREVAILING PRIVACY AND POLICY REGULATIONS AS MUCH AS POSSIBLE. (FOR EXAMPLE, SEE TOOLS SUCH AS INFOASAID'S MEDIA AND TELECOMS GUIDES.

@HTTP://INFOASAID.ORG/MEDIA-AND-TELECOMS-LANDSCAPE-GUIDES AND GSMA'S MOBILE DEVELOPMENT INTELLIGENCE PLATFORM (MDI) @HTTP://MOBILEDEVELOPMENTINTELLIGENCE.COM/

4

ORGANIZATIONS SHOULD PLAN

REGULAR CONTACT WITH MOBILE NETWORK OPERATORS

TO AVOID SWAMPING THEM WITH AD HOC REQUESTS.



MNOs SHOULD APPOINT A

SINGLE POINT OF CONTACT

(POC) FOR HANDLING SHORT CODE AND CONNECTIVITY REQUESTS IN A DISASTER/CRISIS EVENT: WHEREVER POSSIBLE

RESPONDERS SHOULD
ALSO APPOINT A SINGLE
POC TO COORDINATE
COMMUNICATION WITH
MNOS, ESPECIALLY IN
CLUSTER-BASED RESPONSES.

POCS FOR BOTH PARTIES
SHOULD BE TRAINED
IN ADVANCE ON
CONNECTIVITY AND
SERVICE ROLL-OUT NEEDS.

TO MINIMIZE COORDINATION CHALLENGES DURING DISASTERS.

10

THE ABILITY TO MONITOR
AND EVALUATE THE IMPACT
AND APPROPRIATENESS OF
THE SERVICE SHOULD
BE CONSIDERED AND
OUTLINED IN THIS STAGE.

SMS SERVICE LAUNCH/DELIVERY



AT LAUNCH, IDENTIFY A TIME PERIOD IN WHICH YOUR SERVICE WILL BE USEFUL AND YOUR RESOURCES AVAILABLE.

WHERE POSSIBLE, IDENTIFY AN ESTIMATED END DATE FOR SERVICE DELIVERY, AND A SUSTAINABILITY PLAN FOR FOLLOW-ON INFORMATION PROVISION — EITHER TOLL-FREE OR AT A COST TO USERS.

FOR RESPONDERS

RECOGNISE THAT SENDING
SMS MESSAGES IN AND OF
THEMSELVES IS NOT SUFFICIENT,
AND THAT INFORMATION
DISSEMINATION STRATEGIES
RELYING ON SMS MAY NEED
TO BE ACCOMPANIED BY AN
ADDITIONAL CAMPAIGN TO
EXPLAIN ITS USEFULNESS OR
PROVIDE MORE COMPLETE
INFORMATION. THIS AGAIN
HIGHLIGHTS THE IMPORTANCE
OF MULTIMEDIA AND MULTI
-CHANNEL INTERVENTIONS.

5

FOR RESPONDERS

ALONG THESE LINES IT IS ALSO

CRITICAL THAT THE MESSAGING NOT RAISE FALSE EXPECTATIONS.

THE DISSEMINATION SHOULD USE MULTIPLE CHANNELS INCLUDING RADIO, NEWSPAPER, TELEVISION, AND BULLETIN BOARDS. THE MESSAGING ABOUT SHORT/LONG CODES SHOULD ALSO CLEARLY IDENTIFY WHO IS SENDING AND/OR RECEIVING THE MESSAGE, AND FOR HOW LONG THE SERVICE WILL BE IN PLACE. IN SUM, CLEARLY PUBLICIZE — OVER AND OVER — THE FUNCTION OF YOUR SERVICE, AND DO NOT SHIFT YOUR MISSION WITHOUT REASSESSING THE ENTIRE ECOSYSTEM AND NOTIFYING THE PUBLIC.

PERSONAL IDENTIFYING INFORMATION

SHOULD NOT BE MADE PUBLIC UNLESS PRIOR CONSENT IS PROVIDED BY THOSE TEXTING INTO AN SMS INFORMATION SERVICE.

THE RAW CONTEN

THE RAW CONTENT OF TEXT MESSAGES SHOULD REMAIN CONFIDENTIAL AND HOSTED ON A SECURE PLATFORM.

RETENTION OF PERSONAL DATA, PARTICULARLY MOBILE USERS' PHONE NUMBERS,

DISASTER AND SHOULD NOT BE TRANSFERRED TO THIRD PARTIES WITHOUT PRIOR CONSENT. RECOGNITION OF PREVAILING PRIVACY LAWS IN SPECIFIC COUNTRIES IS IMPORTANT, AS ARE REGULATIONS THAT STIPULATE THAT MOBILE NETWORK OPERATORS PROTECT THEIR CUSTOMER DATA.

ACHIEVING A MUTUALLY-UNDERSTOOD AGREEMENT

[BETWEEN USERS AND SERVICE PROVIDERS] WHERE IDENTIFYING
INFORMATION IS SHARED SHOULD ALWAYS BE DONE IN A WAY WHICH
PROTECTS THE INDIVIDUAL [SERVICE USER].

2

AT LAUNCH, EVEN
WITH LOOSE CONSORTIA,
IDENTIFY THE DECISION-MAKERS
FOR THE DELIVERY OF THE
SERVICE/CAMPAIGN AND
ESTABLISH PROTOCOLS FOR
MAKING THOSE DECISIONS.

THIS ROLE COULD BE UNDERTAKEN BY
THE POINT OF CONTACT CALLED FOR PART 1
TO STRENGTHEN COORDINATION.

6

FOR RESPONDERS

SMS INFORMATION SERVICES FOR DISASTER AFFECTED POPULATIONS NEED TO BE

"OPT-IN

SERVICES WHEREVER POSSIBLE.
ORGANIZATIONS SHOULD NOT CARRY OUT
REGULAR SMS BROADCASTS WITHOUT GIVING
RECIPIENTS THE ABILITY TO EASILY UNSUBSCRIBE
TO THE SERVICE SHOULD THEY WISH TO.

8

CONTENT OF TEXT MESSAGES THAT ARE SHARED WITH DISASTER RESPONDERS SHOULD BE VETTED AND VERIFIED AS MUCH AS POSSIBLE. THE ORGANIZATION THAT IS USING THE DATA GENERATED THROUGH THE CAMPAIGN BEARS ULTIMATE RESPONSIBILITY FOR ENSURING THE VALIDITY OF THE CONTENT. ANY CONTENT THAT HAS NOT BEEN VERIFIED SHOULD BE CLEARLY MARKED AS SUCH.



FOR RESPONDERS

INFORMATION COMMUNICATED TO DISASTER-AFFECTED POPULATIONS VIA SMS NEEDS TO BE RELEVANT, ACTIONABLE AND TIMELY. THIS MEANS THAT SMS MESSAGES SHOULD BE TARGETED BY GEOGRAPHY AND IF POSSIBLE BY GROUP. FOR EXAMPLE, DISPLACED INDIVIDUALS IN AN INTERNALLY DISPLACED PERSONS (IDP) CAMP SHOULD RECEIVE INFORMATION THAT IS RELEVANT TO THEIR SITUATION AND THEIR LOCATION.

3



FOR RESPONDERS

THE SHORT/LONG CODES SHOULD BE CLEAR AND SIMPLE, AND THERE

SHOULD BE CLEAR COORDINATION THROUGHOUT

• • •

TO ENSURE THAT THIS IS THE CASE. WHILE IT IS NOT NECESSARY THAT ONLY ONE SOURCE PROVIDE THE MESSAGING,

IT IS CRITICAL THAT THE DIFFERENT SOURCES DISSEMINATING THIS INFORMATION PROVIDE CONSISTENT MESSAGING ABOUT THE SHORT/LONG

• • •

CLEAR COMMUNICATION BETWEEN IDENTIFIED POINTS-OF-CONTACT IS ESSENTIAL IN ORDER TO ACTIVATE PRE-AGREED PROTOCOLS AND ENSURE CLARITY.

MOBILE SERVICE PHASE-OUT/HAND-OFF

1



IN CASES WHERE LONGER-TERM SERVICE
MANAGEMENT WILL BE HANDED OVER
TO LOCAL PARTNERS, ENSURE THAT THESE
LOCAL PARTNERS HAVE

SUFFICIENT TRAINING AND CAPACITY TO TAKE ON THIS RESPONSIBILITY.

ANONYMISED
DATA GATHERED
OVER THE
SERVICE DELIVERY
PERIOD COULD
BE RELEVANT
AND USEFUL
FOR INFORMING
FUTURE
RESPONSES, OR
OTHER AREAS FOR

CONSIDER HOW AND WHERE THIS INFORMATION IS STORED, PROTECTED AND WHETHER AND HOW IT MIGHT BE UTILISED IN THE FUTURE.

5

CONSIDER REFERRAL/ FOLLOW-ON RESOURCES

FOR AFFECTED COMMUNITIES IF THE SMS SERVICE IN QUESTION IS NO LONGER OPERATIONAL, ENSURE THAT BENEFICIARIES' EXPECTATIONS

REGARDING THE CONTINUATION OF SERVICE PROVISION OVER THE LONGER TERM

2

FOR MNOs

IN CASES WHERE LONGER-TERM SERVICE MANAGEMENT WILL BE HANDED OVER TO MNOS, ANY

CHANGES
IN SERVICE
CONTENT OR
PRICING MUST
BE CLEARLY
STATED TO
SERVICE USERS

3



CONSIDER THE RELEVANCE AND VALIDITY OF CONTENT OVER TIME:

• •

IF THE NATURE OF THE SERVICE SHIFTS WITH THE END OF THE IMMEDIATE CRISIS, CONTENT, PARTNERSHIPS AND VALUE/NEED OF THE SERVICE SHOULD BE REVIEWED.

6

META-KNOWLEDGE CAPTURE:

THE USE OF SMS IN DISASTER RESPONSE IS STILL IN ITS INFANCY. AS SUCH, DOCUMENTING "LESSONS LEARNED" FROM SERVICE DELIVERY, TO INFORM THE NEXT ROUND OF SERVICE PLANNING (FOR SUBSEQUENT CRISIS EVENTS), AND

KNOWLEDGE SHARING
BETWEEN STAKEHOLDERS
IS KEY TO IMPROVING THE
IMPACT OF THESE SERVICES

7

THE ABOVE RECOMMENDATIONS
ARE MEANT TO SERVE AS A

RESOURCE TO INFORM THE
DIFFERENT STAGES OF SMS
SERVICE DELIVERY IN NATURAL
DISASTERS, AND TO IDENTIFY KEY
CONSIDERATIONS
FOR PARTNERS.



AS ALL CRISIS SITUATIONS DIFFER, THESE RECOMMENDATIONS WILL NEED TO BE TAILORED TO REFLECT THE CONTEXT AND REALITIES OF SPECIFIC RESPONSES.

HOWEVER, FUNDAMENTAL TO ALL SITUATIONS IS THE NEED FOR

STRENGTHENED PARTNERSHIPS
AND COORDINATION BETWEEN AND
WITHIN THE MOBILE OPERATOR AND
HUMANITARIAN COMMUNITIES



TO ENSURE THAT SMS SERVICES ARE APPROPRIATE, EFFECTIVE AND IN THE INTERESTS OF DISASTER-AFFECTED POPULATIONS FOR WHOM THESE SERVICES ARE INTENDED.



When you restore the mobile network, you rebuild the human network

Kyla Reid Head of Disaster Response, GSMA Mobile for Development kreid@gsma.com



Jacob Korenblum CEO, Souktel jacob@souktel.com



Patrick Meier
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