



NGO SECTOR BLACK SKY GUIDEBOOK 1.0

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ABSTRACT

This NGO Sector Black Sky Guidebook reflects collective input from numerous partners, as well as operational industry technical personnel, as a recommended framework for planning resilience investments, restoration planning and cross-sector coordination needed for long duration, multi-region power outages. This peer-reviewed document is designed as a resource for the electric subsector, addressing critical Black Sky resilience needs for Preparation/Mitigation, Response, Restoration and Recovery measures.

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Role of the EPRO NGO Sector Black Sky Guidebook

This guidebook is designed to provide an evolving framework for recommended guidelines to manage risks of long duration, multi-region power outages associated with emerging “Black Sky” hazards.

This guidebook will be consistently updated and reviewed using the EPRO NGO Sector Steering Committee process through consultation with sector professionals and manager. This guidebook contains the latest consolidated school of thought on the unique challenges posed by wide area, long duration outages. It provides guidelines to help individual entities strengthen their own resilience measures, develop focused operational plans and assess external support needed to address these severe hazard scenarios.

Sector Background

The Non-Governmental Organizations Sector is comprised of many, diverse groups. The primary focus for this version will be on mass care organizations. The sector will primarily be addressed through the National Voluntary Organizations Active in Disaster (NVOAD). The groups under this umbrella have extensive experience in providing assistance to persons affected by disasters. These disasters range from small localized events to much larger disasters that have impacted multiple states or an entire region. Even these larger types of disasters allow movement of personnel from a non-impacted area into affected areas. However, a different approach and way of thinking will be necessary for a Black Sky event which impacts the entire nation or a great part of the nation. While NVOAD is not an operational body, it encompasses multiple organizations that do have operational entities.

Sector Black Sky Environment

The primary function of focus for the Non-Governmental Organizations Sector will be mass care. Follow on versions of this guidebook may add further functions of the NGO Sector. The primary impediments to the NGOs fulfilling their mass care function will be lack of communications, volunteers who are preoccupied with concerns about their families, availability non-perishable foods, water, fuel and back up generation for warming/cooling shelter facilities. This guidebook assumes that mass care will be conducted in a non-discriminatory manner to include children, older adults, people with disabilities or functional needs, as well as, household pets and companion animals.

Sector Model Overview

The model for the Non-Governmental Organizations (NGOs) Sector incorporates the reality of differing organizational structures across the sector. Some have a national, regional local organizational structure while others may only be regional or local. During a Black Sky event, national or regional elements may not be able to assist local elements.

Sector Black Sky Strategic Mission Statement

The Non-Governmental Organizations Sector’s primary mission will be to provide mass care (food, water, shelter) for the impacted population. Consideration must also be given to the medically fragile, who may be dependent on power for medical devices, etc. In a Black Sky event the size of the mission will be immensely challenging. Providing mass care to a large percentage of the population would be unlike any mass care events in history. Until communications can be established and a distribution system re-established the mission will need to be conducted with whatever resources are located within each local area of operation. This mass care will certainly include supporting individuals/families in sheltering in place

Sector Black Sky Strategic Mission Priorities Matrix

Phase	Priority	Mission
Mitigation		Determine gaps in needed resources and work to close the gaps
Preparedness		Ensure the mass care needs for a BS event are shared throughout the NGO Sector and needed resources (food, fuel, water, generation) are in place.
Response		Establish communications with needed response entities to ensure situational awareness, activate staff/volunteers and begin establishing mass care sites.
Recovery		Continue to support mass care sites and begin process to move out of mass care.

Black Sky Assumptions

For the NGO Sector several assumptions will be made as to the environment in a Black Sky event. These will differ depending on the causes of the event. If there are physical impacts there will be needs in those affected areas that will not exist in other impacted areas.

- In all causes there will be a great need for portable generation capabilities and the associated fuel needs.
- In all causes there will be a need for an emergency communications system.
- In all causes there will be a need for mass care support (food, water, medical care)
- Where physical impacts occur (earthquake or hurricane) traditional mass care including sheltering will be needed. Evacuations of the areas may be required.
- Situational awareness will be difficult to obtain but will be needed to ensure the best use of scarce resources.

Black Sky Decisions Overview

Several key decisions will need to be made throughout all phases of a Black Sky event. The decisions will have a major impact on the survival of many individuals. Having an idea of those decisions will help ensure mitigation measures are in place, preparedness is on-going, there is an efficient response and recovery is possible.

Black Sky Decisions Matrix

This is not an all-inclusive listing of all decisions to be made in an event but will focus on those that will be key.

Phase	Priority	Decision
Mitigation		What resources must be in place to impact the resiliency of the mass care system in the nation.
Preparedness		What training, exercises, plans and partnerships are needed?
Response		What resources need to be activated and where?

Sector Black Sky Situational Awareness Overview

In order to make needed decisions the NGO sector will need to know the extent of the event. Communications will be needed with Federal/State/Local EOCs, utilities and mass care partners.

Priority Information Requirements Matrix

Information	Source	Priority	Confidence Level
Estimated scope & impact of electrical outages & damages	Electric energy providers at all levels	1	high
Estimated scope & impact of communications outages & damages	Communications service providers at all levels	1	high
Estimated scope & impact to water and wastewater utilities	Water & wastewater service providers	1	high
Estimated scope of mass care (food, water, generation, fuel) needs	Federal/State/Local EOCs	1	high

Sector Initial Actions

The NGO sector will need to establish communications with multiple sectors. Situational awareness will most likely be partial when initial actions need to be taken. The initial actions to be taken will need to be communicated to those responsible for putting the actions into effect.

Sector Initial Actions Matrix

Priority	Initial Action	Desired/Required Outcome
1	Establish communications with Federal/State/Local EOCs	Share awareness and coordinated actions
1	Establish communications with staff/volunteers	Staffing for sites as needed
1	Activate contracts for additional generation and fuel	Continued power for use by the sector
1	Access on hand resources and activate contracts for additional supplies	Ensure resources are available to establish mass care if needed

Internal Sector Requirements

NGO Sector has many requirements to successfully meet initial Black Sky resilience standards, across all phases of an event. The matrix below is an initial effort to define a standard.

Internal Sector Requirements Matrix

Phase	Priority	Requirement
Mitigation		A full assessment of available resources and an awareness of what will be needed to enable the sector to acquire those not currently in stockpile.
Preparedness		Assess training requirements, develop plans and test plans
Response		Stockpiles of food/water/generators/fuel for mass care operations
Recovery		Sustained staffing as well as restocking of food/water/fuels.

External and Cross Sector Dependencies Overview

No sector can operate in a vacuum during a Black Sky event. The NGO sector will need to work closely with Federal/State/Local governments, along with most other sectors.

External and Cross Sector Requirements Matrix

Requirement Area	Priority	Requirement
Manpower		Staffing for mass care operations

Transportation		Ability to move needed supplies for mass care.
Backup Power		Mass care sites will need power to enable on-going operations
Security		Security for scarce resources (food/water/fuel) at mass care sites and for the transportation of those needed supplies.
Communications (Physical)		The sector will need to communicate in order to coordinate with other sectors and internally to ensure trained staff is available.
Water		Mass care sites will need to be able to distribute water for those unable to obtain their own.
Food		Mass care sites will need to be able to distribute food for those unable to obtain on their own.

Sector Specialized Resource Requirements Overview

There are some resource requirements unique to the NGO sector mission; however, most are shared needs for all sectors.

Sector Commodity Specific List Matrix

Phase	Commodity	Estimated Quantity	Potential Source
Response	Portable Kitchens	TBD	NAMB, Red Cross, SA

Sector Black Sky Communications Overview

The NGO Sector will need to communicate internally and externally cross sector.

Sector Communications Matrix

Phase	Communications Requirement	Coordinated Cross Sector Element
Response	Voice/data	Internal to staff/volunteers
Response	Voice/data	External to Federal/State/Local EOC's, Utilities and Private Sector

Sector Black Sky Assessment Tool (s) Overview

The NGO sector would need to assess several areas in the mass care arena when faced with a Black Sky event. This would include be developing a typing system for resources; for example classifying portable kitchens by feeding capability.

Sector Black Sky Planning Requirements

The NGO sector has a good record of responding to disasters and conducting after action reviews of those responses. To improve the resilience posture of the sector and for mass care in general, there needs to be a method to share lessons observed and best practices. These need to be assessed to determine how to make necessary changes or secure essential resources. Work between all partners will be needed in order to develop the matrix below.

Sector Best Practices Matrix

Area of Operations	Recommendation	Expected Improvement
Response	Develop alternative means of achieving missions for potable water and food. Delivering water filters rather than bottled water, as well as, delivering cooking devices and easily cooked and maintained food stuffs.	Less need for transportation and logistics. This approach worked well in Puerto Rico.

Integrated and Shared Planning Actions

Describe and list areas where joint or integrated planning actions should be addressed. These will include: “real time” coordination frameworks, processes and tools that will be essential to enable corporate, utility, government and NGO leaders to navigate a successful path back to national continuity, using advance-prepared tooling and capabilities.

The NGO, Federal, State, and Local sectors have joint responsibility and functions for mass care and will need to take integrated planning actions together.

Planning and Coordination Actions Matrix

Response Area	Shared Planning Requirement/Real Time Interface Check Points	Cross-Sector(s) ID
Preparedness	Mass Care planning	F/S/L/NGO/P/E/W

Sector Black Sky Resilience Considerations Overview

Black Sky events are defined as being high consequence/ low probability. Building resilience in a Black Sky event will require an understanding by the funders of the importance of this type of preparedness. During active disaster years the NGOs often have trouble securing the needed funding to complete their missions. Outside assistance will likely be needed to also prepare for the low probability but extremely high consequences of a Black Sky event.

Resilience Initiatives Matrix

Tooling and capabilities prepared in advance: We need a cross sector workgroup to develop integrated plans for mass care at all levels. A part of the planning effort would include the development of an assessment tool to enable the sectors to prioritize resilience investments.

Initiative Title	Initiative Description/Cost	Expect Outcome
Mass Care Workgroup	Workgroup of NGOs, Federal and State Mass Care Experts/ Cost TBD (but enough to allow group to conduct several face-to-face meetings)	Coordinated approach to mass care resilience and develop an assessment tool

Sector Black Sky Regulatory Impacts and Issues Overview

Currently there are no identified regulatory needs for the NGO sector.

Sector Regulatory Matrix

Area of Operations	Issue	Recommended Solution/Resolution
	None known	

Sector Black Sky Essential Critical Infrastructure (MC) Overview

The NGO sector is dependent on most other sectors to achieve their mass care responsibilities. The critical infrastructure needs will be fuel, transportation, water, food and communications.

Sector Critical Infrastructure Matrix

Element	Function
fuel	Enable generation and transportation
transportation	Need for delivery of needed resources
Food and water	Life sustainment
Communications	Ability to communicate cross sector and with the public

Sector Black Sky Specialized Skill Training Requirements Overview

Describe the mission critical sector identified skills/positions that must be filled to accomplish resilience. Start with Assessment and move through, Response, Restoration and Recovery. This should not be a laundry list of all positions, but are the most critical positions and the associated training or certification requirement.

The NGO sector needs to do just-in-time-training which will require the development of training materials for several different functional areas for mass care.

Sector Specialized Skill Training Requirements Matrix

Phase	Position/Skill	Training/Certification Requirement
R,R,R	Logistics	TBD
R,R,R	Food Preparation	TBD
R,R,R	Shelter management	TBD

Annex A – Assessments

Sector Overall Resilience Assessment

Activity	Action
Develop or up-date COOP	Assess gaps
Develop assessment tool for mass care	Form mass care workgroup
Develop stand-by contracts for critical resources	Mass care workgroup identify and assist

Annex B – Regulatory Issues Detail Statements

Issue Statement 1

- Currently no identified regulatory issues for the NGO sector

Annex C – Communications Requirements

Communications Requirement 1

Because the NGO sector is so diverse there will be a large dependence on either landline or cell phones.

The new FirstNet wireless network for emergency responders adopted by the states may assist by providing broadband support and interconnectivity between NGOs and other public safety entities.

It is hoped that the BSX emergency communication system under development will provide the NGOs' cross-sector communications.

Annex D: Resilience Requirements by Layer

Area	Phase	Black Sky Generic	Black Sky Hazard Specific	Notes/ Status
Emergency Communication	All	Landline, voice and data communications systems	BSX communication system	
Cross-sector situational awareness, coordination and decision support requirements	Response	Federal, state, regional support for critical mass care operations		
Emergency Fuel	All	Fuel for food preparation, transportation and any needed shelter operations	Priority access by vendors	
Operational Fuel (e.g., natural gas) Requirements				
Operational Fuel (e.g., natural gas) Requirements				
Emergency Generators (Black Sky Hazard-Shielded, designed for long duration continuous operation)	Response and recovery	Generators capable to operate critical mass care operations	Generators with 60-day fuel supply or contract vendors	
Protective measures: Hardware, software, operational procedures				

Health / damage assessment diagnostics:				
Pre-deployed, automated self-powered remote reporting to central assessment controllers				
On-site diagnostics providing easy 1 st order damage assessment for an onsite, deployed restoration team				
Diagnostic tooling designed for manual use by a deployed restoration team				
Restoration / emergency tooling				
Black Sky Exercise and Training Requirements and Plans	All	Logistics, food preparation, shelter management	Logistics, food preparation, shelter management	

Annex E: Courses of Actions

NGO Sector

The following are the critical *Courses of Actions* for the NGO Sector:

Personnel

- *Support for personnel and families:* A prime consideration is staffing. Historically, 20% of the workforce will not report for duty because of concerns for their family's wellbeing; this level is likely to be higher for volunteers. Organizations must plan to support personnel and families by planning and securing contracts and resources to sustain staffing for the duration of the emergency.

Command and Control

- *Situational Awareness:* Key personnel need to have an appreciation for community and organizational challenges in order to devise response strategies.
- *Liaison with Governmental Leadership:* Leadership needs to establish and maintain communications with government to procure resources, prevent duplication of efforts and to secure mutual aid when needed.
- *Rules of Engagement and Enforcement Policy:* Due limited personnel available to respond to calls for service, policy decisions will have to be made on prioritization and levels of service.

Communications

- *Operations Capacity:* The operational capacity to use phone, radio, network and data systems will need to be addressed early in a Black Sky event. Patches and fixes will need to be done by vendors or inhouse technical staff.
- *Internal and External Communications:* The organization's Crisis Communication Plan needs to be put into operations and coordinated with the Joint Information Command with Emergency Management to inform the public of emergency status of the community. A schedule of internal situational briefings needs to be established.

Logistical Support

- *Critical Resources:* Fuel for vehicles and to resupply emergency generators will need to be secured on a priority basis. Contracts with prime vendors will need to be negotiated and secured prior to an emergency.