

Establishing New Best Response Standards through Positive Communication: A Look at Best Response Criteria 20 Years Later

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ABSTRACT

When Kuchin and Hereth published the best response criteria at the 1999 International Oil Spill Conference, there was finally a concrete measure of success for response to oil spills. This criterion has been used since then by leaders of spill response operations to assist them in ensuring that they are maximizing the effectiveness of the response to an oil spill. One of the trends noted in their work was that not all of the criteria were the same when measured against each other. In particular, Kuchin and Hereth highlighted that Incident Commanders (ICs)/emergency responders should have focused more heavily on public communication and stakeholder service and support. This still holds true today with the increased demand for 24/7 updates in the news and on social media. When the ICs/emergency responders do not devote a

significant amount of time communicating with the public and stakeholders through any and all available means, they are often not successful in a response. This paper addresses some of the overall changes to the response environment that affect Kuchin and Hereth's best response criteria, discusses the changes in the measures of success, and provides recommendations for ICs/emergency responders to consider during an incident response. The goal is to assist ICs/emergency responders in being successful during their incident responses in the future through setting a new best response standard.

INTRODUCTION

Kuchin and Hereth's published paper citing the best response criteria for the 1999 International Oil Spill Conference, created a concrete measure of success for response to oil spills. This criterion has been used since by leaders of spill response operations to assist in maximizing the effectiveness of oil spill responses.. Within the original best response criteria, it was found that not all factors should be given the same weight when compared against each other.

In particular, the Incident Commander (IC)/emergency responder should be more heavily focused on public communication and stakeholder service and support than they have been in the past. In addition, this criterion has not been reevaluated nor updated as an overall strategy for an all-risk all-hazard response nor modernized as response methodologies have changed. The intent is to increase the awareness of the significantly overlooked and drastically changing communication criteria in the response environment. Clearly the effectiveness of the public communications component can have a major impact on measures of success for an overall spill response operation..

20 YEARS OF BEST RESPONSE CHANGES

There are numerous changes that have taken place since the “best response” criteria was first published. Federal Policies have been enacted, including the National Response Framework (NRF), Homeland Security Act of 2002, and the post-Katrina Emergency Management Reform Act of 2006 (Post-Katrina Act). These policies have changed the organizational landscape by forcing federal agencies to improve their planning and coordination. As the federal government has had to change, the public has set higher expectations as well.

The expectation is still the same that the response will provide for safety of responders and the public. The typical first priority and objective for an IC/emergency responder is health and safety. This criteria has seen little change over the past 20 years. The measure of success is concrete; safety and health risks are mitigated for the public and responders.

The expectation for reducing overall environmental impact has also seen little change since the previous defining of best response criteria. Methods of cleanup have become more streamlined and the expectation of what is clean has increased some (Walker 2014), but overall, this is not a big change. The measure of success is concrete and a criterion is whether the problem is cleaned up. It now may require more time to clean it up, but it is cleaned up eventually. This confirms that this factor has seen little appreciable change.

The cost of the responses has become higher and response organizations have become larger and more robust which results in amplified effects on the economy (Lloyd, 2009). The local economic impact is also larger. The expectation, as noted above, for a cleaner environment has increased as well (Walker 2014). This means more time and money will be expended cleaning up the problem. The measure today is more costly as a result of increased population, technological advances, and political influences, but there is still a concrete measure of success.

There also has been an increase in size and complexity of response organizations. Unfortunately, this provides challenges to federal agencies with resource limitations. In years

past, response had only seen Federal, State and Involved Party represented in the Unified Command. In recent responses, increased involvement has been seen from local agencies and private sector organizations at various levels of the response organization, including the Unified Command. Even though response organizations have become larger, the critical success factors are still the same. The measure of success of how well the organization runs its response cannot be easily measured or evaluated, however recent indicators of a well run response has become the early and effective communication with individuals who are involved and hold an interest in the outcome of the response..

The variety and number of information sources have increased dramatically over the past 20 years while public concern for the environment and homeland threats have become more personal and complex. The public has very high expectations for federal agencies' communications with them. Because of these high expectations, U.S. government officials have likewise increased their expectations of performance success. Examples of threats include biological and other environmental threats, as well as electronic/web/computer threats. Support elements include providing increased support to the public for evacuation, health care, remediation, and infrastructure (Lloyd, 2009).

There is an increase in the complexity of communications as well. The burgeoning number of blogs and social media sites and the establishment of numerous 24-hour news stations have added to the substantial coverage from major television networks and printed sources. This communication influx floods the public with news and information. People expect immediate and complete information and can hardly wait for a story to develop before forming opinions. This new trend has put additional stress on the response organization to provide faster and more complete information to the public. Many people may not understand the response, but have an emotional attachment and expectation for factual information concerning a response. Generally

speaking, 20 years ago, if there was a complaint from a concerned citizen, it could be simply addressed or placated to some extent. Today, everyone has a more influential voice due to social media and opinions created through 24-hour news stations. If a concern from a citizen is not addressed, the individual will continue to voice their concern through any means necessary via social media or the press. This has caused substantially more stress on the response organization, than in the past.

There have been significant changes in expectations for public communications over the past 20 years. The 24-hour news media, as well as social media, require significantly more effort and time from the IC/emergency responder and incident management team. Walker (2014) notes “Public perceptions have a loud voice through social media.” Because public communication requirements are more significant now, the critical success factors to have positive media coverage and positive public perception measures of success can no longer be used to measure success. The incidents can no longer meet the high expectations of the public. The measures of success are more subjective and based on public perception of the response. For example Walker (2014) noted that “The Selendang Ayu (Alaska 2004: 340,000 gallons of bunker fuel), Cosco Busan (San Francisco 2007, 58,020 gallons of heavy fuel oil), and Hebei-Spirit (Korea, 2007, 3,337,582 gallons of light crude oil) were regarded as disasters with human dimension impacts.” This means the IC/emergency responder is now, more than ever before, expected to almost continuously engage with the public. While the IC/emergency responder is increasingly expected to make this engagement and use the public perception as a measure, this cannot be the only factor for measuring response effectiveness. Relationships are a key factor to all responses especially due to the influence they have on the response at hand. Depending on the strength or compatibility, better relationships will lead to:

- A more effective response;

- Reduction in communication gaps;
- Relationship building, and;
- Increased confidence in response actions.

REVISED BEST RESPONSE MODEL

As responders, we need to be willing to accept negative media and criticism. Every response involves a perception differential. A perception differential is the discernible positive and negative perceptions of those affected by an incident and the subsequent response actions. These perceptions can come from numerous paths of communication: social media, responder outreach, television/radio, etc. While the goal of the IC/emergency responder should be to ensure the positive perceptions outweigh the negative, a certain level of acceptance should exist for all organizations, supervisors, and responders.

A new model for achieving best response is noted below in Table 1. The differences from the original U.S. Coast Guard *Incident Management Handbook* (2014) are lined out and new items noted in italics. Each of these new success factors are explained further below.

Table 1: Guidance for Achieving “Best Response”	
Key Business Drivers	Critical Success Factors
Internal	
Response Organization	<ul style="list-style-type: none"> • Implement an effective and efficient ICS organization • Mobilize and effectively use response resources • <i>Accurate and timely information provided to supervisor</i> • <i>Positive perception differential for supervisor</i>
Human Health and Safety	<ul style="list-style-type: none"> • No public injuries or hazardous exposures • No worker injuries or hazardous exposures • Health and safety concerns reported
Natural Environment	<ul style="list-style-type: none"> • Source of discharge secured • Product contained • Sensitive areas protected • Resource damage minimized
Economy	<ul style="list-style-type: none"> • Economic impact minimized
External	
Public Communications	<ul style="list-style-type: none"> • Positive media coverage • Positive public perception

	<ul style="list-style-type: none"> ● Accurate and timely information provided to the public ● <i>Accurate and timely information provided to the public media and public (includes social media)</i> ● <i>Positive perception differential for media coverage</i> ● <i>Positive perception differential for public perception</i>
Stakeholder Service and Support	<ul style="list-style-type: none"> ● Minimize impact ● Stakeholders well informed ● Positive meetings ● <i>Accurate and timely information provided to Stakeholders</i> ● <i>Positive perception differential for stakeholders</i> ● Prompt handling of claims

INTERNAL RELATIONSHIPS

Every IC/emergency responder has a boss or supervisor – someone they report to who is often called the “Agency Executive.” The senior supervisor provides oversight to the IC/emergency responder who must keep informed of their activities. The IC/emergency responder’s goal is to maintain their supervisor’s (and their chain of command’s) confidence in them throughout the response. This means many things for the supervisor and responder.

For the supervisor, it means providing the IC/emergency responder overarching expectations, goals or objectives and clarification of their authority, if needed. Some agencies use written letters of delegation or expectation to their supervisors and subordinates. Doing this in writing is always better because then there is no confusion. Expectations may include how the IC/emergency responder will interact with other entities like the state or local EOC, specifically for requesting resource support and how ICs/emergency responders will coordinate with Multi-Agency Coordination (MAC) groups.

For the IC/emergency responder, this requires knowledge of their supervisor’s expectations and if it is not understood they must ask for clarity of their role in the response. It also means having continual follow up with the supervisor with calls, briefings, and documentation of the response (IAPs, ICS-209s/Situation Reports, etc.) to maintain the supervisor’s confidence. This is “boss management.” Depending on the supervisor’s confidence

and comfort with the response, the time spent by the IC/emergency responder doing this necessitates a minimal or great deal of time. If the responder is having difficulty with public, media, and stakeholder confidence, it may lead to a lack of confidence from their supervisor. This can mean the responder must do “damage control” on all these fronts to improve overall confidence in themselves and the response. For the most part, a supervisor who is kept well informed will be more confident of the IC/emergency responder. Critical Information Requirements (CIRs) and Immediate Reporting Thresholds (IRTs) should be set to establish when members of the Incident Management Team (IMT) need to report to response supervisors. Examples of these CIRs and IRTs may be the death or serious injury of a responder or negative effects to a critical habitat. Additionally, supervisors may want to receive a report from their responders regarding established CIRs and IRTs.

The supervisor may also attempt to encourage the IC/emergency responder to take certain actions that may be in conflict with their experience or organizational policy. In this case, the IC/emergency responder must negotiate with the supervisor in an attempt to reach an appropriate agreement. Sometimes, the IC/emergency responder may go against the supervisor’s advice or direction leading to a conflict that must be resolved. ICs/Emergency responders tend to get relieved when they do not follow their supervisor’s advice or direction, even if it conflicts with their understanding of the “right thing” to do. When the IC/emergency responder has good rapport with the supervisor, the supervisor tends to listen better to the responders’ advice and issues/problems are resolved more favorably.

When there is a Unified Command (UC), each IC/emergency responder will report to a supervisor from their agency. Each supervisor may have unique expectations and reporting requirements they set for the response. This complicates the response, especially reporting timeframes and requirements, for all ICs/emergency responders. For a UC, it would be ideal to

set similar reporting timeframes. For example, members of the UC can note to their supervisors that the ICS-209 Incident Status Summary will be sent out each day at a certain time instead of the timeframes that their supervisor might have originally requested. Setting a certain time for information flow ensures a consistent message from the UC to all concerned parties.

The measure of trust from the supervisor is fewer calls and questions. If the IC/emergency responder is providing an appropriate level of contact, they will receive fewer calls and questions from their supervisor. This does not mean the supervisor can be ignored. Incident Commanders must still invest time in keeping their supervisor informed and instilling confidence. A well-informed supervisor who is confident in their IC/emergency responder is a measure of success.

STAKEHOLDER RELATIONSHIPS

Stakeholder relationships have seen significant changes in stakeholder service and support expectations over the past 20 years. The IC/emergency responder must maintain a significant role in addressing all of the stakeholder concerns, not just with politicians or key stakeholders. Many politicians in an election year will play to the media and public to gain attention. This often means negative press and negative stakeholder perceptions. Walker, Scholz and Ott (2014) note that:

Stakeholder engagement is a process which can benefit the response organization and those affected by pollution incidents and other emergencies, e.g., storms. Stakeholder engagement and risk communication methodologies are ways to help cultivate realistic expectations and develop consensus about response options, before, during and after an incident. Coordination and collaboration between the Incident Management Team (IMT) and affected communities can lead to shared objectives and improved information exchange.

This means the IC/emergency responder is increasingly expected to engage with stakeholders and help shape stakeholder perceptions. Although this is another subjective measure, it can be used as a measure of effectiveness of the response until more concrete measures are created.

During an incident, there are three general types of stakeholders. These stakeholders are:

- Primary stakeholders are those who are directly affected, either positively or negatively, by an organization's actions.
- Secondary stakeholders are indirectly affected by an organization's actions, and;
- Key stakeholders have significant influence upon or importance within an organization (PMI, 2013).

The simplest way to lower the perception differential during an incident is to effectively classify stakeholders into these three categories. Understanding where stakeholders fall on the below Stakeholder Classification Matrix (Figure 1), can quickly diminish the negative perceptions of an incident by identifying and actively engaging the stakeholders who have the greatest interest and influence (PMI, 2013).

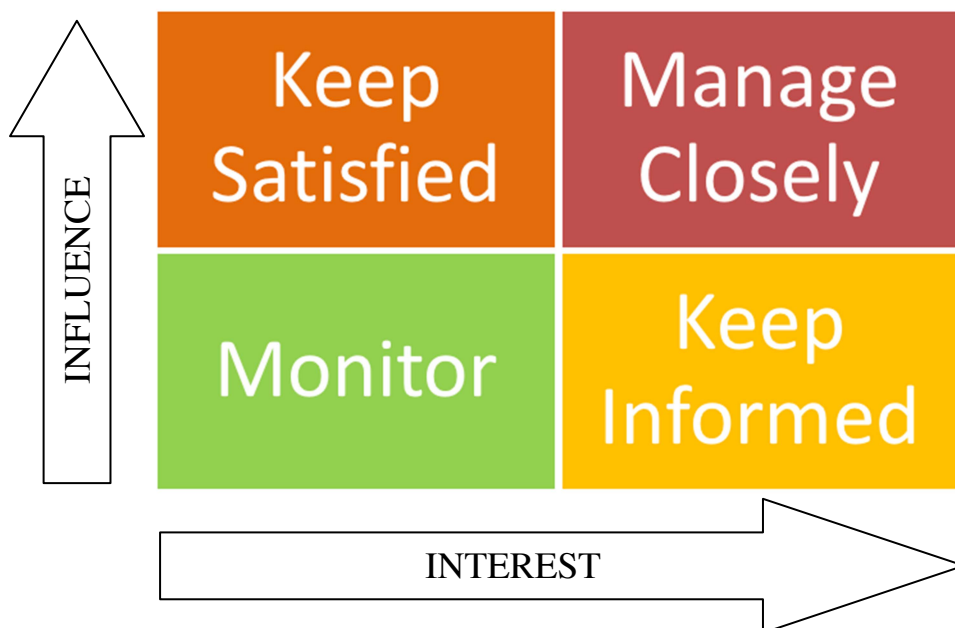


Figure 1: Influence/Interest Matrix (PMI, 2013)

Participation and inclusion are the easiest ways to develop relationships with stakeholders for future incidents which can solidify team cohesion and increase whole community response preparedness. One of the most effective techniques is through establishing coordination teams consisting of members from key stakeholder organizations, local governments, and ICs/emergency response agencies. This team becomes the practiced and experienced decision-making authority through joint exercises, policy development and effective communication.

The critical success factor is currently “positive meetings.” Positive meetings require good leaders and participants. A good leader should have a firm grasp on the purpose of each meeting and make sure that all participants understand this purpose. The leader and team keep the discussion on track and work with participants to carry out the business of the meeting in the time allotted ensuring everyone is involved appropriately in discussions (NCJRS, 1999). A Positive meeting is a subjective metric and based on stakeholder/team perceptions.

If it becomes difficult to garner membership from key stakeholders, an alternative is the effective use of the Liaison Officer and Assistant Liaison Officers. Proper utilization of organization staff in these positions ensures stakeholder and responder concerns are addressed, while keeping routine lines of communication open. Ultimately, the end state is the attempted development of a foundation for a positive working relationship for incidents and responses in the area of responsibility. How these relationships are built and maintained is up to the individuals involved and any movement towards pre-incident, relationship development creates a positive foundation for more effective whole-community response.

PUBLIC AND MEDIA RELATIONSHIPS

Very few, if any, emergency managers would not agree that, over the past 20 years, nothing has changed as much as communications systems and devices. Following this trend, the increase in the use of social media by the general public has had significant impacts on actions taken by ICs/emergency responders and organizations. In 2010, a Pew research project found that 87 percent of Americans are online, and of that number, 73 percent use social media. However, as is always the case with new technologies, organizations, human factors, and procedures lag far behind the technology (Smith, 2010). Given the rapid nature of the social networking revolution and related technologies, the existing National Incident Management System (NIMS) framework, including policies and procedures, must be reviewed and expanded to incorporate these robust information sharing resources.

Social Media and the Incident Command Structure (ICS)

Homeland Security Presidential Directives 8 mandated the creation and use of the NIMS and the Incident Command Structure (ICS). Federal, state, and local emergency response officials must adopt and implement NIMS into their emergency response procedures to remain compliant with federal law and eligible for federal grant funding. The Disaster Emergency Communications Division establishes, maintains, and coordinates effective disaster emergency communications services and information systems critical to the Federal Emergency Management Agency's (FEMA) role in coordinating the Federal Government's response, continuity efforts, and restoration of essential services before, during, and after an incident or planned event. Social media provides a number of important benefits for public safety (DHS, 2011).

Social Networking Sites

Agencies can use social networking sites as additional sources for the dissemination of emergency public information. Individuals can follow an agency's profile and sign up to receive notifications even when they are not logged into the site.

Application of technologies for social media and public safety have been demonstrated in recent incidents such as M/V Cosco Busan and Deepwater Horizon Oil Spill. These two incidents illustrated the ebb and flow of public safety agencies' and the public's use of social media throughout the course of a disaster response. Social collaboration media, such as Twitter, Facebook, YouTube, Flickr, etc., including Short Message Service (SMS) and numerous websites, have been used by the public and agencies for a variety of purposes. These include employee accountability, information sharing, situational awareness, improved decision making, individual "reconnection", donation solicitation, and volunteer management. Understanding the use and impact of the current and future suite of social media tools could mean the difference between a response's success and failure.

Strategies for Incorporating Social Media into Incident Management

Social media tools provide a means for reaching the public, but what happens when the tools are mismanaged during an incident? Agencies could find themselves using "defensive Tweeting" or trying to reestablish control of their social media message to the general public.

In an article in the *Journal of Emergency Management* titled "Social Media Use in Emergency Management," Dr. Clayton Wukich analyzed 200 research articles, government documents, and news reports to identify potential strategies and tactics for use in emergency management (Wukich, 2015). Wukich suggests three core strategies for incorporating social media into emergency management:

- Disseminating information - Directing information from the government to the public has been the traditional use of social media and accounts for a large portion of the research on

social media. This is a logical progression from our experience with media relations where the government serves as a single point of information.

- Accruing situational awareness - The holy grail of emergency management has been the creation of a common operating picture to support decision making. Aggregated information from open source data can help move us closer to this goal.
- Engaging citizens in the co-production of knowledge and public services - The difference between traditional information dissemination and social media is the opportunity to create dialog. Social media offers the opportunity to receive feedback that allows us to adjust our operational strategies, to more effectively manage rumors, and to use crowd-sourcing to solve problems collectively (Wukich, 2015).

Strategies and Benefits of Social Media Control

A mismanaged social media event can quickly be turned around by messaging first, messaging often, and messaging last. A skilled social media team under the incident public information officer (PIO) should be developed and employed to scan social media sites using mapping tools in an effort to redirect public opinion through positive statements. Additionally, this team can provide comments on discussion blogs which have proven to be critical in relaying information and redirecting the public to the incident website and notification page. The social media statements made by this specialized team can assist in stimulating the following benefits to the response, while building a stronger relationship with the public:

- Engaging in sustained conversation with the community, preparing them to become more resilient in disasters and other emergencies before they occur. This communication will help to increase the visibility of response actions and likelihood of public engagement with responders, providing insight into public perceptions through response channels.

- Gathering, analyzing, and quantifying real-time intelligence and information about an emergency from community members who use social media tools. By monitoring social media, agencies may be able to gather real-time information, including citizen observations from the field, requests for help, opinions, and rumors.
- Providing situational awareness about emergency events and partnership opportunities through public comments, pictures, and videos as the incident persists. Agencies can benefit by pulling from social media sources for amplifying, on-scene information. Conversely, drawing comments, pictures, and video from social media sources provides an unfiltered view of the public perception, which may not provide ground truth (Wukich, 2015).

Most importantly, the application of social media in alert and warning programs expand the public baseline of those who receive the alert, while opening the potential to receive verification of receipt and establish better distribution through word-of-mouth. Social media expands upon this ability to reach as much of their community as possible (Georgetown, 2011).

Positively approaching social media with clearly defined strategies enhances clarity for responders, stakeholders, and the public while still achieving response goals. A scattered approach, attempting to manage all possible social media outlets, is no longer necessary and ICs/emergency responders should instead focus efforts on specific outcomes and priorities. Together, responders, stakeholders, and the public can begin to identify best practices for whole-community response.

Incident Commander/Emergency Responder Feedback Loop

The most effective method of measuring success and evaluating your actions is through the function of a feedback loop. The IC/emergency responder's feedback loop should involve four steps, typically in the following order:

1. IC/emergency responder develops a response action;
2. IC/emergency responder initiates the response action;
3. Individual or organization develops perceptions on response action;
4. Individual or organization communicates timely feedback to the IC/emergency responder.

The feedback loop can occur at any time during the incident. While in most cases the feedback loop will occur during the response, ICs/emergency responders should be open to feedback before, during, and after an incident. If the response is suffering from communication gaps, ICs/emergency responders should be comfortable soliciting feedback from stakeholders, public, media, and supervisors. While feedback received can be positive, negative, or indifferent, the true key to the feedback loop is to build public confidence in response actions and open the lines of incident communication, which can be considered successes all their own.

CONCLUSION

Measuring success within the facets of emergency response and preparedness can prove to be most difficult due to the lack of “hard” numbers. As decision-making responders, there is an option to measure success factors and metrics with the understanding that those values are heavily influenced by individuals and entities, inside and outside, of the response. Ultimately, in today’s world of instantaneous communication, responders need to look at levels of confidence and continually ask the question: What level of confidence do others have in the actions taken and systems put in place to respond to an incident? Building metrics to answer this question can be accomplished understanding of perceptions and willingness to accept criticism.

Due to the nature of both social and conventional media, it is all too easy for these decision-making and action-taking personnel to focus on negative perceptions, especially from the public. ICs/emergency responders need to remember there will rarely be a 100 percent positively perceived response. The key to the acceptance of negative perceptions is wisdom

gained through the understanding of stakeholder and public opinions. In virtually every incident, there are those that are affected or suffer, as a result. Negative feelings and perceptions are unavoidable. A necessary skill for ICs/emergency responders is the ability to understand the perception differential, maintaining (or building upon) the positive perceptions and making efforts to move negative perceptions towards a more positive perception throughout the response. By using an IC/emergency responder feedback loop, a responder can better understand the concerns of their supervisor, stakeholders, public and media, in order to shift negative perceptions toward more positive perceptions (change perception differential), and therefore generate a more positive overall perception of a response.

Over the years since “best response” was originally defined, the least addressed facet has been the one that has seen the most change over time. While communication has never been a difficult concept, the advances made and the continual pressure for more information tends to complicate the natural processes. As IC/emergency responders, we must make a greater effort to bridge communication gaps, create better relationships, and accept the differing opinions of those affected by the incident and subsequent response efforts. At the most basic level for all incidents, supervisors, stakeholders, and the public and media are all important partners in response efforts. FEMA defines whole-community approach as “a foundation for increasing individual preparedness and engaging with members of the community as collaborative resources to enhance the resiliency and security of our Nation (FEMA, 2016). Given that the ultimate goal for all incidents is a whole-community response, “response stakeholders” need to take ownership for response efforts and actions through effective communication, strengthening relationships, and having confidence in each other. Effective communications with supervisors, stakeholders, and the public and media and working together through preparedness and response is truly the new standard of best response.

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