How has modern technology improved emergency response capabilities

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Proposal -- How has Modern Technology improved Emergency Response Capabilities? Vulnerability of America is more prominent to weather events. Catastrophic impact of natural disasters has attained severe magnitude. The cause of such disasters is changing social and demographic trends, creating the need to depend on technology. Conversion of landscape has triggered the possibilities of tornadoes on suburban areas (FAQs: NOAA, 2012).

In disaster management, technology plays a leading role in providing complete on-the-spot knowledge, guidance, and exhibiting forecast confidence through the National Weather System's (NWS) numerical forecast systems for the future. The software development is focused to develop methods to generate high resolution fused data studies to create three-dimensional product view among other features for correct forecasting to generate accurate weather alerts, which is just one of the various features of the software development (NWS, 2012).

Future is full of new possibilities in the fields of technology for emergency communication in the time of disasters. Technology advancements also offer new challenges to apply new innovations in the current Department of Homeland Security (DHS) programs. The ongoing communications programs need to be revised for assimilating future additions of modern technology. Cyber Security & Communications (CS&C) has always played a leading part in the overall security of the nation's 18 important infrastructure divisions under Homeland Security President Directive-7 (HSPD-7). CS&C is behind all the government communications programs related to priority services such as GETS, which is a White House initiated emergency telecommunications service, offering communications support to all government and non-

government missions (DHS News, 2012).

How will this Technology impact or improve Future Emergency Response Operations?

Abstract

Emergency management in the context of interstate collaboration can better help in making a quick response over catastrophic disasters. Such an agreement, named the Emergency Management Assistance Compact (EMAC) is based on mutual help in collaboration with other states, facilitating states to take collective action against natural and human disasters, mostly before the availability of federal disaster assistance. Emergency management can be well understood by discussing EMACs call to Hurricanes Katrina and Rita to attend to the critical requirement for evaluation of emergency management at the local level. A studious evaluation of news reports, government papers, and reports from related organizations needs to be conducted to reach at some conclusion on the extent and way of EMACs execution and its conduct at the time of response functions. Training forms a critical part among responders, lack of which can affect the level of desired communication and cooperation and the efficiency and robustness of response functions (Kapucu et al., 2009).

Efficient communication during catastrophic emergencies can lead toward Interoperability and effective Information flow. For better public safety communications, policymakers need to evolve a new architecture for the use of information and communications technologies and design a framework for leading organizations to progress to a next generation system. It requires a change in culture to not only welcome new technologies, but develop a new

design for technology leaders at the grass root level of administration to help in decision making in a cordial environment, taking the long-term perspective. New technologies can help in making feasible the public safety communications and inter-state relations strategy is critical in the application of such technologies (Weiser, 2007).

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