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Hill demands FEMA quickly upgrade aging public warning system

October 1, 2009 Nextgov.com By Aliya Sternstein URL: <u>http://www.nextgov.com/nextgov/ng_20091001_6373.php</u>

House lawmakers demanded on Wednesday that the Federal Emergency Management Agency move quickly to upgrade the nation's Cold War-era public warning system so presidential alerts will reach Americans through modern communications, including cell phones.

Del. Eleanor Holmes Norton, D-D.C., chairwoman of the Subcommittee on Economic Development, Public Buildings and Emergency Management, asked Mark Goldstein, director of physical infrastructure at the Government Accountability Office, what if the president had to send out a message today, who would and who would not receive it?

"There's no assurance that the message would get very far," Goldstein alleged. "There's been limited testing of the system."

A lack of concrete goals and deadlines have delayed installation of a comprehensive system, called the Integrated Public Alert and Warning System (IPAWS), that will interface with Web-based and cellular devices, according to lawmakers and GAO.

The existing relay, called the Emergency Alert System, relies on radio and television broadcasts. The public is familiar with this system's periodic interruptions of radio programs and television shows with the message, "This is only a test"

"Management turnover, inadequate planning and a lack of stakeholder coordination have delayed implementation of IPAWS and left the nation dependent on an antiquated, unreliable national alert system," stated a GAO report that Goldstein authored. "FEMA's delays also appear to have made IPAWS implementation more difficult in the absence of federal leadership as states have forged ahead and invested in their own alert and warning systems."

Goldstein noted that FEMA rarely provides progress updates on reaching specific goals or deadlines. Work on the program began in 2004.

"If a big disaster hit today . . . it's doubtful that message would ever be received by those who need to hear it," said ranking member Mario Diaz-Balart, R-Fla.

He sought a commitment from Damon Penn, an assistant administrator of FEMA, who appeared at the hearing, to supply the committee with regular progress reports. In return, Penn proposed the agency submit quarterly reports and meet with committee members at their request.

Penn acknowledged the federal government has never conducted a nationwide test of the EAS, but he said one is in the planning stages. Other plans include a state-level test, most likely in Alaska, during January 2010.

"FEMA is on schedule to achieve our IPAWS vision in fiscal year 2012," with a system that includes standards for compatibility, built-in redundancy, the ability to disperse one message to Americans through multiple communications channels and expanded EAS coverage, he said.

Norton and Diaz-Balart have co-sponsored a bill, H.R. 2951, that would require a timeline and spending plan for modernizing the public alert system. The bill also would establish common protocols and standards for alert operations nationwide.

State and local governments are developing alert systems that are intended to connect to the IPAWS system. But a GAO survey found that a majority of states are moving ahead without regard to the federal government and many of the states' infrastructures are incompatible with the federal government's setup, Goldstein said.

"It's a potential Tower of Babel, in which the states and the federal government would not be able to get out a message effectively," he said. The federal government is building off a standard called the Common Alerting Protocol, a format for exchanging emergency notifications that allows a single message to circulate simultaneously through many different mediums.

Penn urged states that are building their own alert systems to make sure they buy equipment that is compliant with the protocol.

Goldstein called the lawmakers' proposed legislation helpful, adding one reason states have begun assembling systems is that the federal government has not provided direction.

Norton conceded that many of FEMA's current program personnel were not involved with the previous mismanagement. "We hope that with the new administration, the revolving door of staff, shifting program goals, lack of specific plans and timetables, no periodic reporting on progress and lack of performance measures will be a thing of the past," she said.

But Norton voiced concern that the modernization program is too dependent on contract employees. As of June 2009, the program office included 27 contractor staff, according to GAO. Five FEMA staff positions were filled out of the available 11 noncontract positions. Norton said this reliance on contractors could be a sign of deeper program flaws.

"There have been four project managers in two years, high turnover, many contractors and this has affected the program's development," Goldstein said.

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Czarnecki Elected to Emergency Alerting Industry Group

October 1, 2009 Radio Resource Media Group URL: <u>http://www.rrmediagroup.com/newsArticle.cfm?news_id=4795</u>

Edward Czarnecki, SpectraRep executive vice president, was elected to the Emergency Alert System (EAS)-Common Alerting Protocol (CAP) Industry Group (ECIG) board of directors by a vote of its members. The group is a broad coalition of equipment, software and service providers to the EAS.

ECIG's mission is to promote the development, use and understanding of advanced EAS capabilities based on the CAP by broadcasters, government and other public-warning stakeholders. Czarnecki has been a key player in the development and deployment of the Federal Emergency Management Agency (FEMA) digital EAS program, including a range of partners and public broadcasters across the nation. He also led the deployment of the CAP-based Alert Missouri program, a statewide all-hazards emergency alert network.

In 2008, ECIG released its EAS-CAP profile recommendation, adopted substantially by FEMA in the development of its own CAP profile for FEMA's Integrated Public Alert and Warning System (IPAWS). CAP is an XML-based data format for exchanging public warnings and emergencies between alerting technologies. The ECIG EAS-CAP profile is intended to help harmonize and facilitate interoperability between next-generation EAS systems and new CAP-based alerting systems.

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AT&T to launch integrated cellular/satellite smartphone

September 30, 2009 *Urgent Communications* By Lynnette Luna URL: <u>http://urgentcomm.com/mobile_data/news/att-terrestar-smartphone-20090930/</u>

AT&T and satellite operator TerreStar Networks revealed more details about their partnership announced last December to bring integrated devices to market that combine cellular wireless and satellite connectivity as a backup service.

Chris Hill, vice president of product management with AT&T, said the company will be launching the TerreStar Genus dual-mode smartphone across its sales channels in the first quarter 2010, and first responders will be an initial focus.

The device, which resembles a BlackBerry and incorporates AT&T's 2G and 3G technologies along with satellite connectivity, will sell for around \$800. TerreStar has not yet announced a manufacturer for the device.

Hill said AT&T customers will buy a terrestrial mobile package and then add the satellite service for \$25 per month, paying 65 cents per minute for voice use and \$5 per megabyte of data usage. Hill said the pricing is 50% less than traditional satellite services on the market.

The device will run on the new Windows Mobile 6.5 operating system and will offer Wi-Fi, Bluetooth and GPS service. While the device has the inherent ability to seamlessly transfer between cellular and satellite connectivity, AT&T has opted to make the capability a hard transfer, so that the user knows the call is transferring from cellular billing to satellite billing. Customers then receive one integrated bill.

TerreStar long has promised to eliminate the clunky and expensive form factors that sported enormous antennas, thanks to its 17,000-pound, next-generation satellite, the TerreStar 1, which the company launched into orbit in July. Signals now can be received by antennas in smaller form factors, similar to those found in smartphones.

That capability is opening up a new market for AT&T to target the government, energy, utility, transportation, enterprise and maritime users who have need for mobile service outside of traditional cellular coverage areas in the United States, Puerto Rico, the U.S. Virgin Islands and territorial waters. Coverage is available to about 150 miles offshore.

"This will be an interesting option for state and federal agencies to look at this as an alternative to building out private networks in certain areas, such as state parks and border areas," Hill said. "They can incorporate this type of service as part of their infrastructure and provide a statewide interoperability network."

Hill said AT&T is interested in adding more satellite-enabled devices going forward, potentially offering truck-mounted hardware and differing rate plans based on usage scenarios and demand.

Chip-makers Qualcomm and Infineon are incorporating TerreStar's satellite capabilities in their next-generation of chips, enabling handset makers to develop EVDO, WCDMA and LTE phones that are satellite-capable, and possibly bringing more operators in the fold, noted Jeffrey Epstein, president of TerreStar.

"It brings the BOM (build of materials) down significantly when you have our frequency incorporated into chips," Epstein said.

###

Oregon builds statewide network September 29, 2009 Urgent Communications By Mary Rose Roberts URL: <u>http://urgentcomm.com/networks_and_systems/news/oregon-statewide-network-</u>20090929/ The Oregon Wireless Interoperability Network will be far-reaching when it comes to improving public-safety communications throughout the state, said Steve Noel, the statewide interoperability coordinator. The network, dubbed OWIN, eventually will replace 80% of the state's public-safety infrastructure with a 700 MHz microwave system.

OWIN was created after a mandate from the state legislature to consolidate the state's four existing major radio networks and create a statewide system of systems for missioncritical, public-safety communications. Noel said this was because the existing radio systems for the Oregon State Police, the Oregon Department of Transportation, the Oregon Department of Corrections and the Oregon Department of Forestry are in need of repair. In addition, radio systems operated by public-safety agencies in jurisdictions around the state are often incompatible, and most of the technology is outdated.

"The OWIN project will upgrade the existing systems with an interoperability layer so emergency responders from different agencies and jurisdictions can talk to each other directly and immediately," Noel said.

Noel said the OWIN project attempts to leverage state public-safety interoperability communications grants by building a joint microwave infrastructure. Sharing infrastructure spreads infrastructure buildout costs across several agencies, so "we can share the towers, share the buildings and the microwave network," he said.

Thus far, OWIN has completed for 680 miles of microwave pathways linking 28 separate sites and 54 microwave radio installations. When Phase I of OWIN is complete, engineered sites will cover the 18 counties of western Oregon — where 80% of the state's population lives and works. Noel said OWIN engineering staff has tested of the 700 MHz communication frequencies across the network to find out if it would be a viable solution for the state.

"We thought we'd have to go with a VHF system cause of the terrain in Oregon is challenging," Noel said. "We found out through the testing models that 700 MHz would probably work although we may have to add a few more sites. Tests were expensive, but they'll save a lot of money in the long-term."

Noel said the network build-out depends heavily on developing partnerships with state, regional and local public-safety agencies. Collaboration and partnerships were crucial to getting the project off the ground, he said.

"Creating partnerships has been a real challenge because we are working with local and federal governments, as well as other state agencies, and to try to put a system together and cover everybody's desires and needs. ... That is somewhat difficult," Noel said. "But it's also has been a huge benefit to our project because the more people we get involved the more people support [the project]."

Baltimore Co. begins \$57 million public safety radio network overhaul September 28, 2009 Civsourceonline.com By Jeffery Smith URL: <u>http://civsourceonline.com/2009/09/28/baltimore-co-begins-57-million-public-</u> safety-radio-network-overhaul/

Baltimore County is upgrading their outdated public safety radio transmission network. And last week, Governor Martin O'Malley and County Executive Jim Smith hailed the construction of a new radio tower as the first step towards the \$57 million project completion.

"This three-year project will further improve our first responders' ability to communicate with each other, with relevant County agencies as well as with our partners at the state and throughout the region," Smith said in a statement.

The new interoperable network will upgrade the existing analog network to digital, improving the ability to use encryption and secure transmission and increasing the radio network's coverage area. Baltimore County Police and Fire Department use over 6,000 two-way radios, which will either be replaced, or be outfitted with enhanced software that accepts digital transmissions benefit from the enhanced network and they will work in conjunction with the Department of Public Works by folding the DPW channel frequency into the new public safety network.

The program will also work in tandem with the state of Maryland's efforts to build a statewide communications system for first responders, Gov. O'Malley said.

"Today's announcement marks an important milestone in our goal to implement an advanced statewide interoperable communications system – a top priority in securing our homeland for the people of our State," Gov. O'Malley said. The two governments will be able to share transmitters and state land for the project, ensuring radio connectivity between all safety organizations, Gov. O'Malley continued.

The Maryland State Communications Interoperability Program was initiated by Gov. O'Malley last year through an Executive Order that establishes a statewide communications interoperability plan. The program will enable emergency first responders, public safety officials and all law enforcement agencies to communicate reliably, rapidly and instantaneously. According to state officials, construction of the system will take place in phases over the next five to eight years.

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VIPER Software Earns Governor's Efficiency Award

September 25, 2009

Appomattox News By Staff Reports URL: <u>http://www.appomattoxnews.com/2009/viper-software-earns-governors-efficiency-award.html</u>

The Virginia Interoperability Picture for Emergency Response, or VIPER, earned the governor's "IT as Efficiency Driver" award during the Commonwealth of Virginia Innovative Technology Symposium. The award recognizes the innovative use of technology to promote efficiency in government.

VIPER, developed by the Virginia Department of Emergency Management, is a webbased tool that enables emergency responders to assess visually statewide emergency response operations in real time. It also automatically offers users instant access to essential local information through traditional Geographic Information Systems layers. For example, if a locality experiences a rapidly escalating traffic incident, VIPER will provide information about nearby hospitals; in the case of a hazardous materials spill, VIPER will offer data about area schools; during a flood, VIPER will alert users to lowlying areas that could be affected.

"With VIPER we can see at a glance how different incidents relate to each other, and it gives us crucial data with the click of a mouse," said Michael Cline, state coordinator for VDEM. "The amount of time VIPER saves will help us save lives."

VIPER is used 24 hours a day, seven days a week in the Virginia Emergency Operations Center and is available to public safety partners at the local, state and federal levels. VDEM developed this interoperable system so that agencies and localities can share information with the VEOC regardless of the systems they use, and the agency is giving the code to partner organizations at no cost to them. Other than staff time, this project has not cost any additional funding from the Commonwealth.

VIPER already has aided the state's response efforts during the April 2008 tornado outbreak, the 2009 presidential inauguration and severe winter weather in March. VIPER also is helping the Commonwealth track the spread of the H1N1 flu virus.

Not only does VIPER offer layers of GIS information in real time, it also incorporates external electronic information, such as live traffic camera feeds, social networking sites and geocoded photographs.

VIPER helped the U.S. Department of Homeland Security, Federal Emergency Management Agency, the U.S. Secret Service and VDEM to monitor the 56th Presidential Inauguration, and Tampa, Fla., officials used VIPER to monitor Super Bowl XLIII. In addition, several state agencies have begun to incorporate elements of VIPER into their operations, including the Alabama Emergency Management Agency, Florida Division of Emergency Management, Mississippi Fusion Center, North Carolina State Police, the South Carolina Emergency Management Division, Texas Border Control, and local government agencies in Beverly Hills, Calif., and Clarke County, Nev. DHS is using VIPER as a model for its pilot project VIRTUAL USA.

Watch the video below to learn more about VIPER, and visit VIPER at their YouTube Web site at <u>http://www.youtube.com/user/vdemviper</u>.

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Activated: Phase I of Nebraska's Statewide Radio Network

September 24, 2009 Government Technology URL: http://www.govtech.com/dc/727145

Nebraska Gov. Dave Heineman yesterday launched the first phase of the Nebraska Wireless Interoperable Network (N-WIN), that will provide interoperable communication to Nebraska first responders in the coming year. Four phases -- to be completed by the end of 2010 -- will provide expanded communication capabilities for state agencies. The network uses radio towers and upgraded communications equipment at the Nebraska State Patrol's Troop E dispatch center, along with radios installed in first-responder vehicles. The statewide radio network is being developed through a partnership between state government and the Nebraska Public Power District (NPPD) and is being built by Motorola. While the state was working to develop a way for first responders and state officials to communicate, NPPD was considering options for upgrading its radio network used by utility crews. Rather than build two separate radio systems, state and NPPD officials entered into an agreement to share the costs of developing the state radio network. The state network will also serve as a backbone connecting Nebraska's eight regional communications networks and provide statewide interoperability in an emergency. The regional networks are operated under cooperative agreements at the local and county level and have been activated in recent years, starting in 2006. Statewide interoperability will include enhanced communication for local and county law enforcement, fire and rescue personnel, NPPD utility crews, county emergency managers, and state public safety agencies, in addition to U.S. Department of Interior offices in Nebraska and some emergency personnel in South Dakota and Wyoming.

###

Lawmakers weigh next move on public-safety spectrum

September 24, 2009 *Congress Daily* By David Hatch URL: <u>http://www.nextgov.com/nextgov/ng_20090924_2932.php?oref=topnews</u>

Eight years after the Sept. 11 terrorist attacks exposed an urgent need for an interoperable nationwide communications network for police, fire and rescue squads, Congress and the FCC are headed back to the drawing board.

Their objective is a wireless broadband system that would enable first responders to communicate across jurisdictions and facilitate swift downloads of video and other critical information during emergencies.

A year ago, the FCC failed to attract a winning bidder willing to finance construction of the network in exchange for commercial use of the spectrum. As a result, the frequencies the FCC couldn't sell, known as the D-block, remained fallow through the transition to the Obama administration.

"This is certainly the unfinished business from 9/11 and [Hurricane] Katrina, and it's an urgent matter," House Energy and Commerce Chairman Henry Waxman said during a hearing today of his panel's Communications Subcommittee.

Communications Subcommittee Chairman Rick Boucher, D-Va., outlined four main approaches:

Option One: Give the D-block to the public safety community, which would combine it with spectrum already under its control. Localities would lease the frequencies to commercial entities, using the revenue to build the new network. Boucher questioned whether sufficient money could be raised through such leases.

Option Two: Hold another auction of the D-block, but only for commercial purposes, and use the proceeds to help finance construction of an interoperable network utilizing frequencies operated by public safety groups. It is doubtful the auction would cover the build-out costs and unclear where the remaining money would come from, Boucher warned.

Option Three: Auction the D-block to a commercial carrier that would enter in a publicprivate partnership to create a new safety network. To ensure a successful auction, the FCC would need to address the concerns of commercial providers that led to the 2008 failure, Boucher said.

Option Four: Combine the 10 megahertz in the D-block with the 10 MHz controlled by the public-safety community, and auction off the entire amount for use under a public-private partnership.

Boucher said he is not convinced any of them would raise the estimated \$10 billion to \$40 billion needed to build the state-of-the-art network. "At the end of the day we're going to have to find some sort of general fund revenues to finance this," he suggested.

"The riskiest option going forward would be for the FCC to try another conditioned auction," insisted Communications Subcommittee ranking member Cliff Stearns, R-Fla., referring to regulatory requirements that dissuaded telecom carriers from participating in the original effort to sell the D-block.

The agency plans to develop viable options no later than February for another auction of the D-block. "I want to make sure that we get it right, I don't want to rush into a failed auction," FCC Chairman Julius Genachowski told the panel during an oversight hearing last week.

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Subcommittee broaches idea funding 700 MHz network

September 24, 2009 3 *Urgent Communications* By Donny Jackson URL: <u>http://urgentcomm.com/policy_and_law/news/subcommittee-700mhz-funding-20090924/</u>

A congressional subcommittee today identified funding as the primary challenge to making a nationwide broadband network for public safety a reality, with some elected officials suggesting that the federal government may need to provide money for the project.

During a hearing conducted by the U.S. House subcommittee on communications, technology and the Internet, representatives of the public-safety community and the commercial sector testified on the recent developments in the efforts to create a nationwide broadband network for first-responder agencies. More than a year ago, the FCC's public-private partnership plan failed when no commercial operator made a qualifying bid on the 700 MHz D Block with the understanding that it would have to negotiate a deal with the Public Safety Spectrum Trust (PSST), the licensee of the adjacent 10 MHz of public-safety broadband spectrum.

Since then, several proposals have been made to address the situation, including tweaking the public-private-partnership model, allocating the 10 MHz D Block to public safety, and auctioning the D Block and the PSST spectrum to commercial entities and using the proceeds to fund the public-safety network.

But subcommittee Chairman Rep. Rick Boucher (D-Va.) expressed doubt that any of the proposals are viable by themselves. As several elected officials and hearing panelists noted, the expected proceeds for any auction likely would be well shy of the amount of money needed to build a nationwide network, and simply granting additional spectrum to public safety would not help resolve the funding situation.

Boucher said he believes another source of revenue would be needed, noting that he's "looking at some kind of general-fund revenue [for the project] ... I don't know of another way."

Subcommittee ranking member Rep. Cliff Stearns (R-Fla.) echoed this sentiment.

"We've got to get the revenue from somewhere, and perhaps general revenue is where we should look," Stearns said during the hearing.

Rep. Henry Waxman (D-Calif.) said he believe the proposal adopted for a nationwide broadband network should ensure that the network is built quickly, provide service to all areas of the country and avoid distorting the commercial marketplace.

Regardless how the sticky issues of getting the broadband network built and funded is accomplished, subcommittee members — many of whom noted that it has been eight years since the terrorist attacks of 9/11 underscored the need for interoperable communications — expressed a sense of urgency that the network be built.

Rep. John Shimkus (R-III.) said public sentiment for such an effort has waned, as memories of the communication issues associated with 9/11 and Hurricane Katrina fade, but a repeat of those situations would not be tolerated.

"We can't sustain another failure in communication in a major disaster," Shimkus said. "Unless we get the D Block right, that's what we're going to have."

Rep. Jane Harman (D-Calif.) agreed.

"We need to get on with this," she said.

###

Leading the way

September 22, 2009 *The Sand Mountain Report* By Elizabeth Summers URL: <u>http://sandmountainreporter.com/story.lasso?ewcd=b2629ecc18dd3d31</u>

Boaz City School officials plan for the worst on a daily basis. Binders and books contain the school's emergency plans and detailed schematics of all five of the system's school buildings.

But all those books and papers may become things of the past thanks to the Virtual Alabama School Safety Program.

Virtual Alabama is a program put together through the Alabama and U.S. Departments of Homeland Security, Alabama Department of Criminal Justice, Auburn University in Montgomery and the Alabama Department of Education giving officials the ability to map important buildings and landmarks and store the information on a secure Web site. The information is, in turn, accessible by police, fire and Emergency Management Agency personnel if and when a natural disaster or emergency happens. Boaz school officials, police Chief Terry Davis, fire Chief Mike Sparks, school resource office Rusty Rowan and representatives from the Marshall County Sheriff's Office and Emergency Management Agency took part in a briefing Thursday to see the program in action at Boaz Middle School.

Boaz City Schools are the first in the state to take part in Virtual Alabama, said principal Alan Johnson.

"I think this is the first time we have had all these law enforcement and emergency personnel in the same building at one time," Johnson said. "It is an amazing program that I think will be very beneficial to our schools."

Boaz school officials volunteered to be the first schools in the program. Working with various agencies, Boaz officials walked Boaz Middle School, mapping the school building and locations of fire extinguishes, fire pull stations and chemical storage sites, layering them along with evacuation routes, disaster staging areas and tornado shelter sites.

The locations are placed on individual layers placed over photos of the school, the campus and the school's interior layout. All photos are provided by the Revenue Commissioner and satellite imagery.

The maps contain icons and photos, making it easy for emergency workers to identify trouble spots, dangerous areas or places where students should be readily found.

In case of an emergency, first responders can log onto the Virtual Alabama Web site, a secure site specifically for emergency and school personnel, from in-car computers or computers at a command center.

Officials can view as many or as few layers as needed, depending on the situation. As an example, one layer showed only fire fighting supplies, such as extinguishers, pull stations, hydrants and utility valves. Another layer showed triage areas, student medical aid staging sites and the location a medical helicopter could land safely.

"The Virtual Alabama maps 37 items of interest. We are to prepare for all man-made and natural disasters. This is all done through a Federal Department of Homeland Security grant. There is no dollar cost to the schools," said Matthew Duke, senior director of the Center for Government at Auburn University, Montgomery.

"This program promotes information sharing between schools and first responders. We want those interactions to occur before those officials and responders meet out front of the buildings in an emergency."

Boaz officials mapped the school in four days. On the fourth day, officials trained others in the program's operation allowing them to map Boaz's other four buildings.

"It is so easy to do," Duke said. "You will be able to log on and edit your buildings as you do renovations and build additions.

"It also utilizes security cameras in a way we have never been able to before. This technology breaks down the barriers we have faced in the past. If law enforcement officers or firemen arrive on scene, they can access that camera information and know exactly where to send in personnel. We have never had that capability before. All that came from (school shooting incidents) in other states. Time was wasted not knowing where the shooters were.

"This program is available to any governmental agency using it for governmental work. For example, Agricultural Commissioner Ron Sparks has mapped the location of every gas station in the state. When you are evacuating residents from the coast and moving them through the state, they will need to know where to get gas or where stations may be that haven't run out of fuel."

By year's end, Boaz officials hope to have all five schools and campuses mapped and input to Virtual Alabama.

Currently, one school in each of the 133 school districts is being mapped into the program. Once done, those trained in Virtual Alabama will train officials from all 1,500 schools in the state.

Officials are also working to create a virtual Gulf Coast, as an example, for use in hurricane or tsunami emergency rescue efforts.

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