

COMPETITIVE TRAINING GRANTS PROGRAM - CONCEPT PAPER

Training Program Title: GGSN Regional Training Framework

Focus Area Addressed: Focus Area 3: Regional Collaboration

Organization: San Francisco Communications: 79 Rossi Ave. San Francisco CA, 94118

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Total Budget: \$450,000 over 24-30 months

Total Number to be Trained: 800-1200 trainees to be trained through instructor-led workshops with distributed web-based instructional aids in first three years, and 3000 additional through self paced learning.

Executive Summary: This proposed training framework will train management and policy level emergency services staff on information sharing principals and best practices for regional collaboration during disaster response and recovery. The training will be presented in a multi-day program of instructor-led coursework and facilitated discussion. Participants will identify the minimal amount of information that must be shared and disseminated by agencies and responders in the region to insure continuity of operations and to enable response and recovery tasks after a major disaster. They will learn which agencies in the region are responsible for what types of information and how to prepare relevant data in a format that is understood by all regional responders. This format will be NIMS compliant and will facilitate compliance with emerging FEMA data schema standards, such as NIEM and EDXL. Successful completion of this coursework will prepare agency personnel to more effectively comply with federal standards for information sharing.

The NIST Exercise Control System (ECS) will be used in conjunction with a graphical and map-based visualization system to run scenarios that will enable participants to gain hands-on experience of relevant information sharing during a crisis. This distributed visualization system will use the common data format, and can also serve as a practical mode of disseminating the data among the agencies during actual emergencies. Successful participation in this training program within a region will potentially increase the volume of readily accessible critical data within the region, contribute to more up-to-date regional plans, resource inventories, and agency contact lists, and contribute to enhanced situation awareness and better resource management during a crisis.

Section 2: Training Program Narrative

Purpose of Program: To train management and policy level emergency services staff in information sharing principals and methodologies for regional collaboration during disaster response and recovery.

Target Audience: EOC and DOC command staff personnel, particularly those responsible for Planning/Intel and Logistics/Resource management functions.

Mode of Training: Interactive, participatory discussion-based training courses, with training facilitator and web based instructional aids. Enhanced tabletop exercises with computer-based simulation and visualization aids to reinforce skills learned in courses.

Training Strategy and Course Content: In this multi-day program of coursework and facilitated discussion, participants will determine the minimal amount of information that must be shared and disseminated by agencies and responders in the region to insure continuity of operations and to enable response and recovery tasks after a major disaster. These discussions will be in the context of existing regional emergency coordination plans. Information to be shared includes critical facilities, important resources, and contact lists for important agencies and departments.

Participants will learn which agencies in the region are responsible for what types of information and how to prepare relevant data in a schema and format that is understood by all regional responders. This data schema will be fully compatible with FEMA's emergent data schema (NIEM and EDXL). The NIST Exercise Control System (NIST-ECS) will be used in conjunction with graphical and map-based visualizations to run scenarios that will enable participants to gain hands-on experience of how relevant information should be shared during a crisis. This distributed visualization system will utilize common data formats, and can serve as a

practical mode of disseminating the data among the agencies during actual emergencies.

Scope of Training: Within a region, this training course will be conducted within the context of the region's existing Regional Coordination plans and mutual aid agreements. It will include all relevant agencies and organizations within the area, including the private sector, as well as state, federal, and military participants. The program will be prototyped in the San Francisco Bay Area, and the resulting framework can be transferred to other regions in California and nationwide.

Impact of Training: This training program will promote greater awareness among a region's emergency response agencies as to what data is available and from whom during a crisis and its aftermath. It will help to ensure that this data is in a format readily accessible to all participants. The test and exercise phase of this training program will provide an opportunity for the region's agencies to dry-run and refine critical components of the region's existing coordination, response, and recovery plans, thus ensuring a more robust plan when an actual crisis occurs.

Measurable Outcomes: Potential measurable outcomes include:

- Increased volume of critical data within the region in a commonly understood format, which is readily accessible on CDs, DVDs, and on the web.
- More up-to-date regional plans, resource inventories, and agency contact lists
- Enhanced situation awareness and better resource management during a crisis

Section 3: Training Analysis, Design, and Development

Needs Assessment: Golden Gate Safety Network, a voluntary consortium of public safety agencies and related organizations, has been conducting an ongoing program of tabletop, command post, and field exercises, as well as support to public events such as street fairs, the All Star Game, and Fleet Week. After Action Reviews and ongoing analysis have provided a clear picture of the types of data that need to be shared by agencies in a mutual aid relationship. Through dialog with other regional emergency services organizations and review of current regional coordination plans, we will continue to refine this picture, as well as identify the most critical or most problematic aspects of information sharing in the region (e.g. typing, inconsistencies in format or in language, out-of-date or incomplete information, etc.).

Course Design and Development: Based on previous and ongoing efforts, a minimum set of data requirements will be established for Critical Facilities such as EOCs, Fire Stations, Police Stations, Medical Facilities, Shelter, Schools, Government Buildings, and Key Water and Power Facilities. Careful attention is being paid to the need for NIMS compliance and the preparation of data to conform to emerging national standards such as EDXL and NIEM. Web-based data preparation tools such as IRIS and others, will be provided for participants to use in identifying and “typing” resources.

Based on the above, a curriculum will be developed that covers data preparation and the development and conduct of exercise scenarios that utilize these emergency response data sets. Based on compatibility with the HSEEP Toolkit, exercise “injects” will be formed into MSELs that emphasize the TCL (Target Capabilities List) and the UTL (Universal Task List), and will be prepared with the guidance of the National Response Framework.

Section 4: Training Implementation and Evaluation

Implementation and National Distribution: The pilot program will be developed within the San Francisco Bay Area. The resulting schemas for shared information will be compliant with emerging standards such as NIEM and EDXL. The exercise development framework will be based on NIST-ECS, and will be designed in accordance with HSEEP standards. All software will be open-source and freely available to emergency services organizations. In addition, we will develop sample artifacts (scenarios and data schemas) that we will make available through existing distribution channels such as the Lessons Learned Information Sharing repository (LLIS.gov) and The Responder Knowledge Base (RKB.us). We will directly interact with other UASI and SUASI regions, as needed, and develop a “train the trainer” program to ensure the availability of local trainers who are familiar with their region’s emergency response plans and procedures, and with critical local agencies and organizations.

Evaluation: The goal of this training program is to train regional participants in best practices in data sharing, within the context of existing federal standards as set forth by NIMS and NRP. Performance metrics will be in accordance with NIMS compliance standards, and participants will be evaluated within an exercise context. Simulated disaster scenarios will be used to test their ability to find information relevant to specific response and recovery tasks, to manage relevant resources, and to request and enter data through the information sharing system.

Section 5: Applicant Expertise, Support, and Collaboration

San Francisco Communications was formed in 1980 as a privately held California Corporation. For the last 10 years we have been dedicated to public benefit projects with initial emphasis on the Golden Gate National Parks and the San Francisco Presidio.

Since 9/11, we have concentrated our efforts in public safety and have helped to form the Golden Gate Safety Network, an informal coalition of government safety agencies and involved private organizations based on our MOU. Funding has come from agency contributions, a major UASI grant, and substantial pro bono efforts. SFC has two employees and a large informal group of advisors from the GGSN membership.

SFC began the **MapLab Project** in 1999 to pursue collaborative projects in open geo systems. After 9/11 this work became focused on public safety and the establishment of a Common Operating Picture to enhance mutual aid for emergency response. As a founder of the GGSN, we have conducted or assisted in over 25 training exercises and planned events. The main emphasis of this work has been to develop a simple and inexpensive method for agencies to coordinate their communication regarding situation awareness and resource tracking.

In conjunction with the National Institute of Standards and Technology (NIST), GGSN has developed the Exercise Control System (ECS) to assist public safety agencies in the authoring and conduct of tabletop and field exercises. Agencies can assemble exercise scenarios that represent messaging activity during an incident. Injects are organized in a database for quick access and reuse. During an exercise, injects are presented to exercise controllers as a means to track scenario development. Work is underway to provide simulated response activities in real time to exercise participants.

Key Personnel

SFC MapLab will staff the project tasks through existing relationships with other free-lance consultants, many of whom have already worked on previous phases of this program. Cost effective billing rates have been established and agreed upon. Work scopes will be negotiated on a performance basis with professional reporting and task time accounting.

Collaborating Agencies and Organizations

Golden Gate Safety Network – The GGSN was formed in 2003 to informally coordinate the cooperative efforts of a large group of public safety agencies in exploring and developing approaches to more effective regional mutual aid.

California Office of Emergency Services – SFC MapLab has collaborated with the Coastal Region of CA-OES since early 2002. Previous grant funded work included the Law and Fire Assistant Chiefs as Program Directors. A CA-OES approved proposal is currently before the Regional SUASI for funding to support the major State Exercises in October and November.

National Law Enforcement and Corrections Technology Centers – NLECTC-West joined the GGSN in 2004 and has provided direct financial support and substantial in-house R&D in the areas of GPS tracking and Remote Imagery.

DMIS, IRIS, and HSEEP – SFC MapLab has been an active participant in DHS and FEMA sponsored initiatives to provide assistance to public safety agencies with free data tools.

OASIS Emergency Management Technical Committee – SFC MapLab has provided case study support in the area of EDXL-RM (Resource Management).

Section 6: Budget – GGSN Regional Training Framework

Estimated Budget: Year 1: \$250,000
Year 2: \$200,000
Total: \$450,000

YEAR 1		
<i>Personnel</i>		
	David Coggeshall	26,000
	Nina Zumel	104,000
	Exercise Planner (TBD)	84,400
	Programmer (TBD)	31,200
<i>Fringe</i>		0
Total Personnel		245,600
<i>Supplies</i>		500
<i>Equipment</i>		0
<i>Other Costs</i>		
	Rent	2,250
	Internet	150
	Travel	1,500
Total Non Personnel Costs		4,400
Year 1 Total		250,000
YEAR 2		
<i>Personnel</i>		
	David Coggeshall	25,000
	Nina Zumel	81,500
	Exercise Planner (TBD)	81,600
	Programmer	7,500
<i>Fringe</i>		0
Total Personnel		195,600
<i>Supplies</i>		500
<i>Equipment</i>		0
<i>Other Costs</i>		
	Rent	2250
	Internet	150
	Travel	1500
Total Non Personnel Costs		4,400
Year 2 Total		200,000

BUDGET JUSTIFICATION

Personnel

David Coggeshall: Responsibilities include curriculum development, technical management.

Year 1: 10% time @ \$125/hr. Year 2: 200 hours (approx. 9.6% time) @ \$125/hr

Nina Zumel: Responsibilities include project management, curriculum development

Year 1: 50% time @\$100/hr. Year 2: 815 hours (approx 39% time) @ \$100/hr

Exercise Planner (TBD): Responsibilities include curriculum development, exercise development and conduct, training conduct.

Year 1: 844 hours (approx 40% time) @ \$100/hr ;

Year 2: 816 hours (approx 39% time) @ \$100/hr ;

Developer (TBD): Responsibilities include further development on interfaces to NIST-ECS and other existing visualization systems

Year 1: 20% time @ \$75/hr; Year 2: 100 hours (approx 5% time) @ \$75/hr

Other Costs:

Rent estimated at 25% of \$750/month - e.g. expenses shared among 4 projects

Internet estimated at 25% of \$50/month

Travel allowance for 1 person, one trip out of region per year.