

## APPENDIX J

### Incident Command System Recommendation

#### Public Safety National Coordination Committee Interoperability Subcommittee

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#### Recommendation to the NCC Steering Committee concerning the use of the Incident Command System (ICS)

The Incident Command System (ICS), also increasingly known as the Incident Management System (IMS) has been implemented throughout the U.S. and Canadian public safety communities at all levels of government, as well as increasingly among private-sector participants. ICS is an overall incident management program designed for universal application by any public safety entity or group of entities. The objective of this paper is to provide an overview of the basic ICS structure with a focus on communications operations specifically, and to provide recommendations for the implementation of ICS to manage priority access to the 700 MHz band public safety interoperability spectrum. More specific guidelines will need to be addressed as part of the Regional Planning Process.

#### I. Background

ICS is a comprehensive, modular system designed to provide a systematic, flexible approach to coordinating resources and response to incidents of any size, type, or duration. Although now a comprehensive series of management guidelines designed for a variety of incidents requiring public safety involvement, ICS has its origination in the area of wildfire suppression, prompted by a disastrous series of fires in Southern California in 1970. The U. S. Forest Service thereafter undertook a five-year development effort that led to the design of the Fire-Fighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE) system. ICS applications and users have proliferated since then. In 1980, the FIRESCOPE plan made the transition into a national program called the National Interagency Incident Management System (NIIMS)<sup>1</sup>. At that time ICS became the backbone of a wider-based system for all federal

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<sup>1</sup> The FIRESCOPE (NIIMS) ICS protocol and terminology became and effectively remain the baseline for all ICS programs. Virtually all ICS programs of any type or scope, and regardless of the size or function of the developing agency, incorporate NIIMS to some extent, and virtually all are consistent with NIIMS. Such programs either cite NIIMS directly, or else incorporate language taken directly from NIIMS. Specifically, the *Communications Unit*

agencies with wildland fire management responsibilities. Over the past 20 years ICS has been incorporated into the emergency management plans of numerous other public safety agencies, at all levels of government, throughout North America.

In its 1996 Final Report to the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration addressing public safety requirements before 2010, the Public Safety Wireless Advisory Committee (PSWAC) Interoperability Subcommittee developed its communications needs assessment under the context of ICS. Specifically, the PSWAC determined that ICS was an efficient method of incident command organization and therefore developed its communications recommendations with the expectation that ICS would be implemented by all public safety organizations.

## **II. Definitions**

The ICS system has been incorporated into a growing number of operational variants or combinations based upon the specific mission or regional focus of the participating entities (e.g. seismic activity, wildfires, large crowds or demonstrations). Such variants include, but are by no means limited to, those developed and/or currently employed by the California Office of Emergency Services (OES), The University of Michigan at Flint (UM-Flint), National Interagency Fire Center (NIFC), the National Wildfire Coordinating Group (NWCG), Federal Emergency Management Agency (FEMA), and Search and Rescue of British Columbia (SARBC). Accordingly, several different ICS training programs have been developed, such as those currently offered by the National Fire Academy (NFA), Emergency Management Institute (EMI) the Standardized Emergency Management System (SEMS), and the NIIMS. In developing these recommendations, ICS publications either contained in or referenced by the NFA training curriculum were employed as a “baseline” reference. However, in regard to the basic structure and terminology, all ICS/IMS programs, including the NFA curriculum, are essentially derived from the original FIRESCOPE model, and thus are substantially consistent.

For the purposes of developing these recommendations, with the exception of the specific communications protocols addressed herein, “ICS” will therefore be used to apply to a generic version of the ICS/IMS management structure, which is generally applicable to all agencies currently employing ICS without regard to specifics developed for a particular purpose, location or focus.

## **III. Overview**

The complexity of incident management, coupled with the growing need for multi-agency and multifunctional involvement on incidents, has increased the need for a single standard incident management system that can be used by all emergency response disciplines.

ICS serves as a management system designed to help mitigate incident risks by providing clear lines of authority, accurate information, strict accountability, planning, and cost-effective operations and logistical support for any incident. An ICS plan can focus on law enforcement, fire suppression, emergency medical services (EMS), or any combination thereof to whatever

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*Leader Position Manual, ICS-223-5, September 1, 1982, is the primary ICS communications document, and is incorporated by reference in the NIFC, NFA, EMI and other major ICS training curricula.*

degree is required. Either individual or multiple agencies can use ICS—and participating entities or assets can be added, augmented, scaled back or dropped entirely at any time prior to or during the incident—either within an individual jurisdiction, or across multiple jurisdictions or regions. This internal flexibility affords both immediate and long-term efficiencies.

ICS can be applied to a wide variety of emergency and non-emergency situations. Some examples of incidents and events that can use ICS include:

- Fires, HAZMAT, and multicasualty incidents
- Multijurisdiction and multi-agency disasters
- Wide-area search and rescue missions
- Planned events; e.g., celebrations, parades, concerts

The key element of ICS is that only one individual will be vested with a particular command and control action, and all command and control functions will ultimately be derived from one central authority.

ICS is organized around five major management activities. *Command* has overall responsibility at the incident or event. It determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy. *Operations* develops the tactical organization and directs all resources to carry out the Incident Action Plan. *Planning* develops the Incident Action Plan to accomplish the objectives. It also collects and evaluates information and maintains status of assigned resources and functions. *Logistics* provides resources and all other services needed to support the organization, to include the coordination and implementation of communications functions. *Finance/Administration* monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance. These five major management activities are the foundation upon which the ICS organization is based, and are applicable to any ICS program or incident regardless of size or type.

The person designated with overall management authority is the Incident Commander (IC). The IC may manage all or part of the five major activities directly, or may opt to delegate such functions as required along the same lines of authority. A basic ICS operating guideline is that the IC is responsible until specific authority is transferred or delegated to another person. Large incidents usually require each of these activities to be established as separate sections within the organization, with appropriate delegation of authority from the IC to specific subordinate positions. Each of the primary ICS sections may be further sub-divided within their original structure as needed, again, while maintaining a clear flow of authorization directly to and from the IC. The IC will thereby determine if the specific incident requires the use of all sections and the staffing and resources to be allocated to a particular section. Regardless of the number of additional subordinate “layers,” as with the IC, responsibility is passed to and held by the designated individual(s) until either transferred to a relief, delegated to a subordinate, or until the incident is concluded altogether.

Facilities will be established depending on the kind and complexity of the incident or event, with standard terminology applied to the principal ICS facilities. These include *Incident Command Post (ICP)*, which serves as the “hub” of all command and control functions, to include communications, and from which the IC normally oversees all incident operations. There is only

one ICP for each incident and every incident must have some form of an ICP. Other locations are established according to need: *Staging Areas* are locations at which resources are kept while awaiting incident assignment. Most large incidents will have a staging area, and some incidents may have several. The *Base* is a location at the incident at which primary service and support activities are performed. *Camps* are incident locations where resources may be kept to support incident operations. Camps differ from Staging Areas in that essential support operations are done at Camps, and resources at Camps are not always immediately available for use. The *Helibase* is a location in and around an incident area at which helicopters may be parked, maintained, fueled, and equipped for incident operations. *Helispots* are temporary locations where helicopters can land and load and off-load personnel, equipment, and supplies. Any number of additional or alternative sites (e.g. medical support, dining and sanitary facilities) may be designated in accordance with a predetermined ICS plan, or as determined by the IC.

Each incident will also have an oral or written Incident Action Plan. The purpose of the plan is to provide all incident supervisory personnel with direction for future actions. Action plans that include the measurable tactical operations to be achieved are always prepared around a time frame called an Operational Period.

Operational Periods can be of various lengths, but should be no longer than twenty-four hours. The planning for an operational period must be done far enough in advance to ensure those registered resources are available when the Operational Period begins.

#### **IV. ICS Communications Infrastructure**

Centrally managed, interoperable communications are essential for virtually every aspect of the ICS structure to function. Communications to be used at the incident site require advance planning, to include the development of frequency inventories, frequency sharing agreements, use of synthesized mobile / portable radio equipment, and the use of available local, state and federal communications equipment, all of which will be combined as part of the available ICS infrastructure. It is anticipated that the RPCs, with the advice and support of the State Interoperability Executive Committees (SIEC), will be pivotal in addressing these areas as part of an overall ICS communications plan.

Communications during ICS incidents of any size are managed through the use of an incident communications center and a communications plan established for the use of command as well as tactical and support resources assigned to the incident.

Many local governments, whether participating in ICS plans or not, have established Emergency Operations Centers (EOCs), which can be activated quickly to facilitate centralized command and control during incident response. When a local government EOC is activated, SEMS regulations require the establishment of communication and coordination between the IC and the department operations center of the EOC, or the EOC itself, and also between the EOC and any state or local jurisdiction(s) having authority within the incident's boundaries.

ICS field response organizations will normally communicate with the local government level (either department operating centers or EOCs) through dispatch centers. Dispatch centers will not have command authority over incidents, but will act as directed by the IC or other designated authority in accordance with agency or jurisdiction policy, or as specifically delineated within the applicable ICS plan. Because of the potential number and diversity of communications

systems involved, agency dispatch centers will often function in an intermediate role between IC, personnel in the field, and department operations centers or EOCs. Also, in some cases under heavy load conditions, agencies may elect to move into an “expanded dispatch” mode, which may involve the delegation of a higher level of authority at the agency dispatch facility.

Dispatch centers may be departmental or may be centralized within the jurisdiction. Some jurisdictions have the capability to go from departmental dispatching to centralized dispatching when the local government EOC is activated. The jurisdiction’s dispatching arrangements and communication capability along with local policy will affect how operations are linked to the local government level.

In many jurisdictions, the ICS field response organizations will be primarily linked via the dispatch center(s) to the department operations center (DOC) of the agency that has jurisdiction over the incident. In these cases, DOCs have agency level authority over the assigned IC. The DOC is responsible for coordinating with the local government EOC. Alternatively, in some jurisdictions, ICS field response organizations may have direct communications with and/or receive policy direction from the local government EOC when it is activated. Whether this occurs, along with other possible operational variations consistent with the overall ICS management scheme, will depend on the size and policy of the jurisdiction, and the lines of communications that are available.

## **V. Plain Language Usage**

It should be emphasized that, under ICS communications guidelines, plain language is to be used at all times.

## **VI. ICS Communications Management**

As noted above, ICS Communications are organized as a component of the Logistics branch. The Communications Unit Leader, as detailed in the Communications Unit Leader Position Manual (ICS 223–5, originally developed by FIREScope) is therefore under the direction of the Service Branch Director or Logistics Section Chief, who in turn report directly to the IC. The Communications Unit Leader is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the incident communications center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.

The Communications Unit Leader’s specific responsibilities include, but are not necessarily limited to:

- Obtain a briefing from the Service Branch OIC or Logistics OIC
- Determine Communications unit personnel needs
- Advise on communication capabilities and limitations
- Prepare and implement the Incident Radio Communications Plan
- Ensure that the Incident Communications Center and Message Center are established as necessary
- Set up LMR/CMR, telephone and public address systems as necessary

- Establish appropriate communications distribution and maintenance locations within or adjacent to the ICP, at the base(s) or in remote locations (e.g. camps, helispots)
- Ensure communications systems are installed, tested, and repaired as necessary
- Ensure an equipment accountability system is established and maintained
- Ensure personal portable radio equipment is distributed per the Incident Control Radio Plan with consideration to battery replacement or recharging
- Provide technical information as required concerning:
  - Adequacy of communications systems currently in operation
  - Geographic limitation on communications systems
  - Equipment capabilities
  - Amount and type of equipment available
  - Anticipated problems and shortfalls concerning the use of communications equipment
- Supervise all Communication Unit activities
- Maintain records relating to the communications equipment as appropriate, to include channel settings on programmable radios
- Receive equipment from relieved or released units and reassign as necessary
- Maintain the Communications Unit Log

As with every other aspect of ICS, the Communications Unit Leader is allowed a considerable amount of discretion regarding the set-up and utilization of the specific communications network and individual elements within it. However, on some basis, the Communications Unit Leader, either directly or through the Head Dispatcher (if multiple dispatchers are used), or Incident Dispatcher (if a single dispatcher is used), will directly manage the use and prioritization of communications channels. This individual's specific duties include, but are not necessarily limited to:

- Obtain a briefing from the Communications Unit Leader
- Determine
  - Location of assignment
  - Communications procedures
  - Frequencies in use
  - Nets established or to be established
  - Equipment status
  - Capabilities, limitation and restrictions
  - Location of repeaters
  - Message center problems
- Ensure adequate communications center staffing levels as appropriate
- Obtain and review the Incident Action Plan to determine the incident organization and Communications Plan

- Set up the Communications Center, check out and test equipment
- Request servicing or replacement of any inoperative or marginal equipment
- Set up message center location as required
- Receive and transmit messages within and external to the incident
- Maintain files or Status Changes and General Messages
- Maintain a record of unusual incident occurrences affecting or potentially affecting communications
- Provide a briefing to relief on
  - Current activities
  - Equipment status
  - Any unusual communications situations
- Turn in appropriate documents to Communications Unit Leader
- Stand down / demobilize the Communications Center in accordance with the ICS Incident Demobilization Plan
- Maintain radio traffic logs

In addition to, or as a component of, the previously described positions, the Emergency Communications Coordinator (ECC) is responsible for emergency warnings and communications. Dispatcher(s) shall perform this function at the direction of the IC or the Communications Unit Leader, if applicable. The primary responsibilities of the ECC include:

- Activating the on site warning and instructional systems as directed by the IC
- Establishing communication links between the ICP and public news and information agencies
- Establishing a message control system for logging messages received by and dispatched from the IC and/or the ICP
- Maintaining primary and backup communications systems between the IC, the ICP, various responding personnel, departments on site and the local emergency management agencies, as directed by the IC or appropriate authority
- Receiving and disseminating information to appropriate individuals

As a component of directly overseeing the operation of the communications network, the Communications Unit Leader directly, or through the ECC, Lead or Incident Dispatcher(s), or some other position within the Communications Unit specifically delegated as such will be tasked with monitoring, assigning, and prioritizing the use of all radio communications channels, to include interoperability channels, in accordance with the Priority Access Levels discussed below. As with every other ICS position, the person tasked with channel management (“Channel Manager”) would have sole discretionary authority delegated through as many steps as necessary, but deriving directly from the IC.

## **VII. The ICS Communications Plan**

The ICS Incident Radio Communications Plan is intended to provide documentation of all pertinent information concerning all radio frequency assignment, in one centralized and accessible location, for each operational period. The plan is a summary of information obtained from the Radio Requirements Worksheet (ICS Form 216), and the Radio Frequency Assignment Worksheet (ICS Form 217). Information from the Radio Communications Plan on Frequency Assignment is normally placed on the appropriate Assignment List (ICS Form 204). At a minimum, the Incident Radio Communications Plan must delineate the Basic Radio Channel Utilization System/Cache, Channel(s) utilized, function, frequency, and assignment. Detailed instructions regarding preparing the above forms may be found in ICS 223–5 discussed previously.

## **VIII. Calling Channel Monitoring**

It is implicit in the development of an ICS plan that all participating entities will monitor the calling channels for the 700 MHz interoperability spectrum on a 24–hour basis as already recommended by the NCC for incorporation into the FCC Rules for the 700 MHz band as per the National Public Safety Planning Advisory Committee (NPSPAC) guidelines.

## **IX. Priority Access Levels**

The NCC has recommended the FCC mandate priority access for users in critical situations only. During incidents where Priority Access has been initiated, the Channel Manager would assign channels through the calling channel based on priority. The NCC suggested the following priorities from highest to lowest:

Level 1—Disaster and extreme emergency operations for mutual aid and interagency communications

Level 2—Emergency or urgent operations involving imminent danger to life or property

Level 3—Special event control, generally preplanned (including task force operations)

Level 4—Single agency secondary communications (default priority)

In such cases where a higher priority party would require access to the channel, the Channel Manager would be authorized to restrict access to lower–priority users, or to direct any lower priority party already using the channel to cease communications to the extent necessary until such time as that party could be reassigned subsequent to the clearing of a channel by a higher priority user. Such restrictions could be imposed at any time, and for any duration required, until the incident is concluded and the control of the interoperable spectrum is returned to the Regional Planning Committee (RPC) or other non–emergency channel management authority.

## **X. Regional ICS Planning**

One of the major features of ICS is its inherent flexibility to meet the needs of any size or number of organizations, and any type of incident. It is expected that each RPC, with the support

of its SIEC, will assist in the development and implementation of a specific ICS plan or plans for that region in accordance with these guidelines and within the scope of the functions already recommended by the NCC for these entities.

## **XI. Conclusions**

1. ICS is a sound concept that has a proven track record of success over more than 30 years of development throughout North America.
2. ICS allows users to effectively manage and combat incidents by providing a simple and consistent organizational plan that is full scalable and applicable to any size or type of emergency or non-emergency incident requiring the support of public safety entities.
3. ICS is already available in a variety of regionally or functionally oriented training curriculums, and can be adapted to existing emergency management infrastructure.
4. ICS is inherently simple, and can be learned by both operational and management personnel, and implemented quickly.
5. Because of its flexibility, ICS would be effective for any public safety agency regardless of size or mission.
6. ICS can provide significant benefit when used by public safety agencies to manage priority access to the interoperability spectrum, or as a component of a new or existing Incident Radio Communications Plan.
7. In accordance with ICS guidelines, the position of Channel Manager or equivalent authority needs to be established as an individual position, or otherwise incorporated as a specifically delegated component of the Communications Unit Leader, ECC, Head/Incident Dispatcher, or other clearly defined position.

## **XII. Recommendations**

1. It is this Subcommittee's recommendation that the NCC advise the FCC to mandate the use of standard ICS nomenclature (e.g. as adopted by FEMA and others) in the use of the ICS System.
2. It is this Subcommittee's recommendation that the NCC advise the FCC to mandate the use of the standard ICS structure (e.g. as adopted by FEMA and others) in the use of the ICS System.
3. It is this Subcommittee's recommendation that the NCC advise the FCC that plain language be used at all times for ICS communications.
4. It is this Subcommittee's recommendation that the NCC advise the FCC that the Communications Unit Leader position be required when an incident is multi-jurisdictional or requires more than one working channel (i.e. in addition to the calling channel).
5. It is this Subcommittee's recommendation that the NCC advise the FCC that the use of priority access protocols be required for all ICS communications plans.