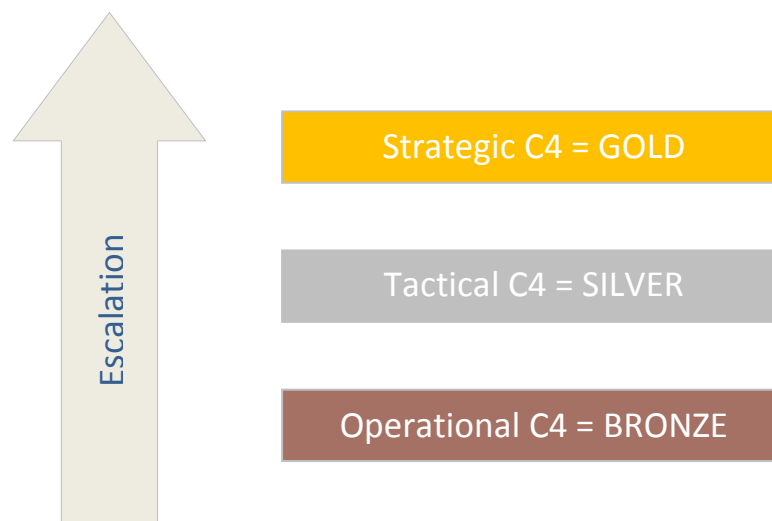




Information Article - Part 1

DISASTER / CRISIS / EMERGENCY / INCIDENT RESPONSE LEVELS & TYPES of COMMAND, CONTROL, CO-ORDINATION & COMMUNICATION SYSTEM



Relevance:

Airline, Airport & Similar Emergency / Crisis / Incident Response Operations

*Understanding the **NATIONAL** Command, Control, Co-ordination & Communication (**C4**) System in use for emergency / crisis / incident response - within **UK, Ireland, UAE and Oman** (+ possibly a small number of other countries - where same may also be in use)*

Note 1 - the **United States equivalent** of the above (i.e. the '**National Incident Management System - NIMS**') is also very briefly referred to, starting page **17**. (Included for info and context purposes only)

Note 2 - variations of one or other of the two C4 systems referred to above will typically be applied in many other countries - but are beyond the scope of this information article

Note 3 - some countries (usually **but not exclusively** those termed as 'developing' or 'least developed' by the United Nations etc.) will have no effective (NATIONAL) crisis response C4 system in place whatsoever / at all

Note 4 - for a quick 'bird's eye view' (oversight summary / intro) of the 'Gold / Silver / Bronze' system -take a look at the info found at the end of the below link:

<https://red-goat.com/gold-silver-bronze/>











MAJOR CRISIS / INCIDENT RESPONSE- LEVELS OF COMMAND (GOLD, SILVER & BRONZE)

Introduction

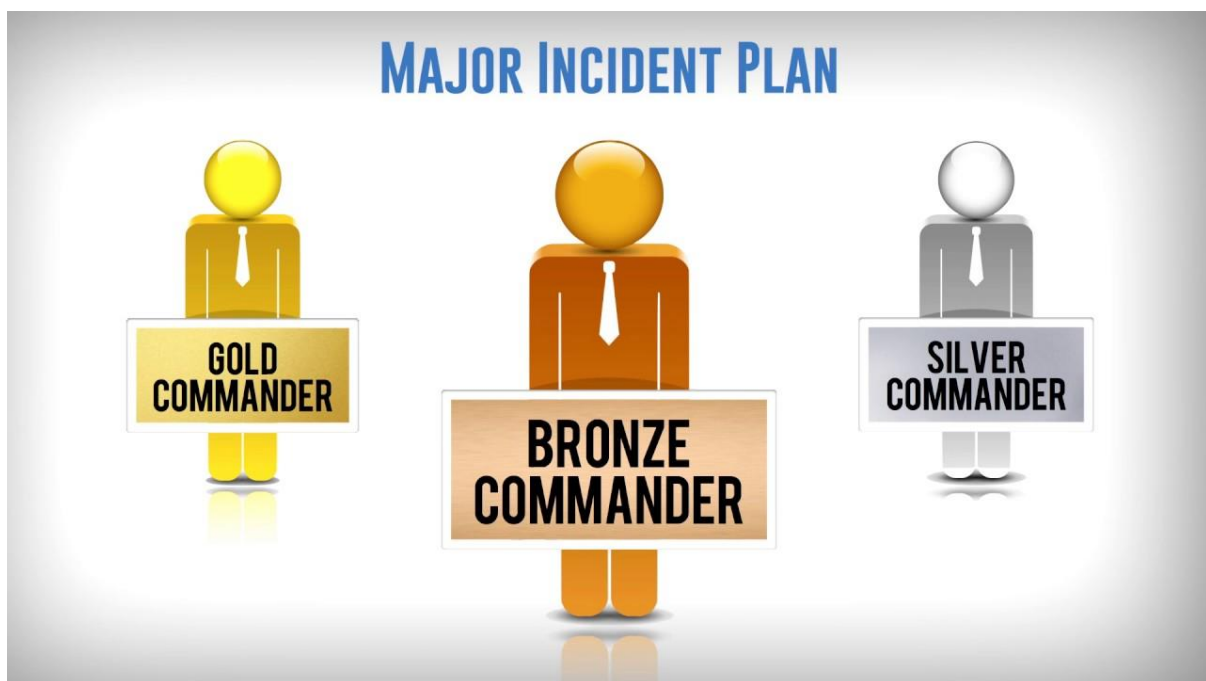
Fundamental to successful **command, control, co-ordination & communication** (C4) operations **re a major crisis / incident response** will be effective liaison and communication between all responding agencies - particularly (but not exclusively) the 'primary' emergency services i.e. Police, Fire & Rescue and Ambulance

This requires a recognised, easily understood and standardised C4 system, based (in UK, Ireland, UAE, Oman and possibly a small number of other countries as at 2019) on three inter-related C4 **levels** - which can be applied to / by **all** responding agencies nationally. These levels are termed:

STRATEGIC (**GOLD**)

TACTICAL (**SILVER**)

OPERATIONAL (**BRONZE**)



The above C4 system provides a framework for delivering the associated **STRATEGIC (GOLD)**, **TACTICAL (SILVER)** and **OPERATIONAL (BRONZE)** C4 responses required e.g. by allowing for standardised processes, terminology etc. to be established / used - thus facilitating information flow, ensuring that decisions are communicated effectively, efficiently and documented (thus forming part of the required 'audit trail') etc.





The Gold / Silver / Bronze (GSB) system is inherently flexible and, provided it and the essential differences between the three C4 levels used are clearly understood by all concerned, can be adapted to suit the circumstances of any particular crisis / incident response operation 'on the day' e.g. less significant crises might be handled at Silver and Bronze levels - or even Bronze level only

GSB is also capable of being adapted for appropriate operations **not** necessarily related to emergency / crisis / incident e.g. providing emergency services support at large, public functions - such as mass attendance sports and entertainment events - see below for an example:

British Transport Police (BTP) - Command Structure

We are co-ordinating the entire transport security operation for the Games



The policing operation for the 2012 London Olympic Games has a 'Gold' 'Silver' 'Bronze' command structure:

- * The 'Gold' commander is in overall command and sets the 'strategy'
- * The 'Silver' commander(s) puts the 'tactical' plans in place to deliver that strategy
- * The 'Bronze' commander(s) operationally 'delivers' on the 'Silver' commander's tactical plans

Extra resources

We have ensured full staffing in time for the Olympics and are bringing in additional BTP officers to London from around the country

In addition, other police forces in UK where there is no Olympic venue are providing us with extra officers to help out. This concept is known as 'mutual aid'

We anticipate that at peak times around 1,000 officers will be needed to police the event. We expect days 7 and 8 of the Games to be our busiest. Accordingly, we have restricted the number of staff taking holidays during the Olympic period. This includes police officers, police community support officers and other police staff





Command of any particular GSB system 'in action' (depending on actual circumstances 'on the day') is typically **ROLE** rather than rank specific i.e. the **most appropriate person** from the **most appropriate responding organisation** (with respect to the location, type and adverse impact degree of the crisis / incident concerned) will typically (but not always) be appointed to assume overall responsibility of * **'leading / co-ordinating / managing etc.'** the appropriate response - at **each** GSB level

* The associated term typically used in UK for 'leading etc.' (in the C4 context) is having **'primacy'**

Thus, appropriate (to any particular crisis etc. of concern) officers of senior rank / grade (with regards to subordinate staff undertaking operational GSB C4 roles) do not typically / automatically assume 'command etc.' on the basis of such rank, territorial responsibility etc. However, they do remain accountable for any information, advice etc. given to any of their staff undertaking such GSB C4 roles

For most major crisis / incident circumstances, GSB staffing is likely to be sourced as follows:

- The most senior staff / top management (plus support) from participating / responding organisations will typically man and operate the GOLD function (if activated) together
- Middle management (or equivalent) staff (plus support) from participating / responding organisations will typically man and operate SILVER together - and.....
- More junior managers and / or equivalent level staff (plus support) - together with 'responder / worker / hands-on' level staff (all from participating / responding organisations) will typically man and operate Bronze. The 'whole' is typically commanded / managed / lead by a person entitled **'On-scene Commander'** or equivalent term

Note that it is 'usual' for major types of (different) responder for any particular crisis / incident to **each** set up and operate their own **bronze** (operational) base, typically co-located at or close to the crisis / incident location itself (actual circumstances 'on the day' so permitting)

Each such bronze / operational base (usually located in a suitable and appropriately marked / coloured vehicle) typically sends a suitable representative to the (usually) nearby location from which the **'on-scene commander'** is operating (perhaps from a specially modified vehicle similar to those shown on pages 2, 3 and 4 of this info article). The latter are usually distinctively marked and labelled e.g. 'incident command unit'; 'forward command post'; 'forward control point'; 'mobile incident command centre' etc.

Whilst the 'on-scene commander' can be appointed from any responding agency, the role will typically be assigned to the police - BUT there are exceptions (e.g. a major aircraft accident wholly contained within an airport boundary - where it is likely [but not always the case] that the senior **airport** fire and rescue officer present will assume the role of the operational 'on-scene commander')





Whilst it is common to find several different **bronze** response units operating together at or very near to the crisis / incident site itself, **silver** (tactical) control is typically a **single** unit located in a (one) nominated, fixed location (i.e. not usually in a vehicle) some distance (possibly measured in low numbers of kilometres) from the crisis / incident site itself e.g. in a local police station or fire and rescue station or specially prepared facility / vehicle etc.

Whilst there might typically be only the one silver control facility in use - it is, of course, manned by all appropriate responder types required (police, fire, ambulance, local government, military etc.). The most appropriate responding service will typically (but not always) provide the **overall** Silver Commander

Rarely (depending on actual crisis / incident circumstances 'on the day') there might be the necessity for a second silver control centre (or more) to be activated - typically for a crisis deemed to be 'widespread' and / or complex

The general comments made in the last three paragraphs above apply equally (in the appropriate context of concern) to **gold** (strategic) C4 operations

A Little More Detail

At the start of a no notice crisis / incident the operational (**Bronze**) level will typically be activated and deployed first, for each required responding organisation (depending on actual circumstances 'on the day') e.g. Police; Fire & Rescue; Medical / Ambulance; Military; Search & Rescue; Local Government etc.

Escalation (increasing seriousness of a crisis / incident) and / or greater situational awareness requirements may additionally require the gradual or immediate implementation of a tactical (**Silver**) level and, finally, a strategic (**Gold**) level - should this be necessary. In extremis, all levels can be activated concurrently

Ultimately, it might be necessary for regional and national **government** to also become involved at a notional level **above** Gold (sometimes [but not 'officially'] termed '**Platinum** Command')

It is thus essential that everyone involved in such crisis / incident response clearly understands what they are required to do and why, how to do it, when, where and with whom - using common terminology and standard operating procedures etc. throughout

This is particularly important where a multi-agency response is required, as (otherwise) confusion and uncertainty might lead to a situation where commanders (at all levels) are unable to make and / or communicate decisions, information etc. in the most effective, efficient and timely manner desired

It is also important to ensure that GSB command **structures** are subject to regular maintenance, review and audit / compliance measures - and are also flexible enough to be adapted to changes in the nature of any threat / risk / requirement / environment / escalation etc. - without e.g. jeopardising clear lines of communication, accountabilities etc.

There is thus a requirement that appropriate and associated GSB related processes, procedures, protocols / agreements etc. are (on a continual cycle) **jointly** researched / investigated, approved, documented, co-ordinated, introduced, trained, exercised, maintained, reviewed, audited etc.





Perhaps the best way to achieve the above requirement might be by preparation and use of **jointly agreed mutual aid emergency support agreements** and **associated standard operating procedures** etc. - within the GSB context

Furthermore, (and to re-iterate) all involved should be adequately trained (made appropriately competent) and exercised / tested - both on an initial and recurrent basis. This should be accomplished both unilaterally and jointly - as required. Associated records should be maintained and retained

As already mentioned (due the **GSB** system being **role** driven) the choice of which responding unit is responsible for 'primacy / taking the lead' at each level - should typically be related to actual crisis / incident circumstances 'on the day' e.g. for a major fire response in a built-up (highly populated) area of a city:

- The fire and rescue service will typically assume local primacy on site re directly associated fire and rescue operations
- The police will typically assume local primacy e.g. for traffic and 'crowd' control, general evacuation measures (if required), criminal matters etc. - in the local area concerned
- Responding medical / ambulance services will typically assume local primacy on site in terms of delivery of triage, emergency medical services / treatment and associated transportation to hospitals, arranging for the removal of the dead etc.
- Responding local government (social) services will typically take care of humanitarian type issues e.g. emergency accommodation, sustenance etc. for victims who have lost their homes; providing support to families of crisis / incident victims etc. - especially (for the latter) those injured and / or deceased
- Appropriate crisis communications experts will deal with the media etc.

However, just **one** such authority will typically assume **overall**, local area Bronze C4 in a situation such as that described immediately above - and in **most** (but not all) circumstances, this will be assigned to / conducted by the **POLICE**

Where the severity of the fire's adverse impacts might require activation of Silver C4, it is again the police who are likely to exercise ultimate C4 at this level - and similar if Gold activation is required

Conversely, in a situation related e.g. to a catastrophic aircraft accident **wholly contained within the boundaries of an airport**, it is likely that:

- The most senior **airport** fire and rescue person present at the accident location typically (but not always) assumes the role of '**on-scene (Bronze) commander**'. All other bronze commanders present / arriving - report to and / or send a representative to said 'on-scene' Bronze Commander's (fire and rescue etc.) command vehicle / facility location





- Silver control will be exercised by all appropriate silver level responders - typically (but not always) from a specially equipped **airport** fixed based facility - often known as the 'xxxxx airport **emergency operations centre**' (EOC)

Such responders are typically provided from both airport and off-airport based agencies

The person in overall charge is typically (but not always e.g. as in UK where perhaps an appointed officer from the **off-airport** emergency services etc. [as relevant] might assume command upon arrival) a senior and appropriately experienced **airport** manager, sometimes known by the title '**overall commander**'

- Depending on accident circumstances 'on the day', there might be a 'grey area' with regards to Gold control. For example, in some circumstances Silver control can also undertake the appropriate strategy usually / otherwise formulated by Gold. In other circumstances it will be necessary to activate, man and operate a specific Gold control facility

Whilst the latter facility might logically be thought to be 'on-airport', political circumstances and sensitivities often dictate that the location be off-airport - typically at a designated facility nominated by the **off-airport** police





STRATEGIC - Gold - Overall C4

The purpose of the **Strategic** (GOLD) Command level is to provide overall C4 of an incident or emergency etc. within the context of local, regional and national perspectives - as required / appropriate

This Strategic C4 level will establish a framework policy within which subordinate Tactical (Silver) C4 level(s) will operate

Strategic (Gold) Command will very generally:

- Establish a **framework** for the **overall** management of the major incident(s) of concern
- Determine **strategic** aims and objectives with that framework and **review** them regularly
- Ensure that information from first 2 bullet points above is **communicated** (and **updated** as required) to all concerned
- Ensure **clear lines of communication** are established / maintained with (to/from) appropriate **tactical** (Silver) commanders
- Provide **Health & Safety** advice at **strategic** level (typically for use by Silver Commanders)
- Undertake **liaison / co-ordination** with **strategic** (Gold) managers in **other** agencies involved (including government agencies [at all levels]) - as appropriate
- Ensure provision of **long-term resourcing and expertise** so as to maintain / improve / restore etc. C4 resilience
- **Prioritise** the varying 'demands' of tactical (Silver) commanders - as required
- **Allocate resources and expertise** to meet tactical commanders' requirements
- Formulate, implement and oversee an **integrated crisis communications** policy and strategy
- Oversee **overall financial control** of the incident etc.
- **Plan beyond the immediate response** e.g. rehabilitation of affected community, area etc.
- **Avoid details, decisions etc. more properly and effectively managed at the lower C4 levels**
- Prepare and implement an appropriate '**exit strategy**' - when and as required

Other than in exceptional circumstances, Strategic C4 (Gold Command) will typically be situated at some significant distance from the actual incident location - e.g. in the main headquarters location of the organisation having primacy (lead responsibility / jurisdiction) for the incident response (e.g. in UK and Ireland this is likely to be in the main city / major town headquarters of the local police force having primacy; e.g. in UAE this is likely to be located in the 'National Emergency, Crisis & Disaster Management Authority' facility - * NCEMA - located in Abu Dhabi e.g. in Oman this is likely to be located in the Police HQ building located close to Muscat airport)

* Note - if NCEMA is unable to assume GOLD responsibilities, for whatever reason, general police HQ (of the appropriate UAE Emirate) is likely to assume same instead

Circumstances on the day so permitting, not all Gold responding agencies need be physically represented at Gold Command location e.g. where audio / video / virtual conferencing is available instead





TACTICAL - Silver - Local Area C4

Tactical (SILVER) C4 level exists to manage an incident within a defined geographic area and / or defined area of operations. The person in charge of the tactical **lead** (most appropriate or otherwise designated by GOLD) responding organisation will undertake the role of overall Tactical (Silver) Commander - & will typically (but not always) assume C4 across all other **tactical** levels of response

Where the incident requires specialist skills or knowledge (e.g. Fire & Rescue; Public Health), it is appropriate that a properly trained, accredited and experienced Tactical Commander assumes the lead for tactical C4 ops

Where appropriate the Tactical Commander should implement a supporting tactical 'staff' e.g. by appointing a deputy, a staff officer(s) (e.g. for logistics; resources; planning; briefing & de-briefing; security / intelligence / information [including evidence gathering]; media; welfare; finance / budget / expenditure etc. roles), a log-keeper / administrator etc.

Specific tasks should be determined and assigned to the (subordinate) operational (Bronze) 'On-scene Commander(s)'

On-going joint assessments and briefings (chaired by the overall Tactical [Silver] Commander) should be held periodically to ensure a coordinated and considered tactical response to new developments, escalation, changes to operational requirements etc. The results should be documented and promulgated / distributed in the most appropriate manner available

Generally speaking, if there is an identifiable and contained crisis / incident scene, Tactical (Silver) Command will typically be situated in an appropriate facility relatively near the location of said scene e.g. typically within a few kilometres or less

For small scale incidents a 'Forward Command Post' may be suitable to perform this role (e.g. SILVER and BRONZE Commands possibly combined)

Where there is no identifiable or contained crisis / incident scene - or the incident covers a geographically large area, Tactical (Silver) Command will be located at a suitable location(s) nominated by the 'lead' GOLD agency

Tactical (Silver) Command will additionally (typically) be responsible for the oversight of (the list is **not** exhaustive):

- **Tactical** implementation of strategy set by strategic (Gold) level
- Establishing appropriate C4 locations, e.g. **Silver Command**, **Forward Command Post** etc.
- Providing and notifying safe and suitable **Rendezvous Points** (RVP)
- Ensuring tactical operations **incident log** is commenced & maintained
- **Planning / co-ordinating etc. how** (in general terms only), **when and by which agency any specific tactical / operational task will be undertaken**
- **Tactical** inter-agency liaison to ensure a cohesive & co-ordinated response at the scene
- **Allocating tasks** to own tactical staff + 'operational' (Bronze) Commanders
- Determining the **priority** in allocating resources





- **Assessing & managing prevailing threats / risks** e.g.
 - Striking an overall balance between tasks and associated threats / risks
 - Taking appropriate risk reduction measures
- Giving due regard to the **health and safety requirements** of staff and 'the public'
- Holding **Tactical Co-ordinating Group meetings**, ensuring accurate minutes are taken, circulated and carried out / followed through by all appropriate (subordinate) agencies
- The **co-ordination of welfare and humanitarian type issues** for personnel present at the scene, including organising refreshments and relief; peer support etc.
- etc.

OPERATIONAL - **Bronze** - On-site C4

The Operational or Bronze level of C4 takes charge of specific tasks or areas as designated by the tactical (Silver) commander - **and is responsible for the implementation of the tactics set down by the latter i.e. directly implementing and controlling the appropriate operational response and resources - typically at the incident site itself**





..... and another way of looking at GOLD, SILVER and BRONZE follows below - this time related to aircraft accidents (or similar) **at or near / involving airports** (courtesy of extracts from UK Civil Aviation Authority Publication - 'CAP 168 - Licensing of Aerodromes')

Command, Control, Co-ordination and Communication (C4)

The importance of an agreed C4 framework should not be underestimated. Such framework should enable each responding agency to tailor its own response and interface with the plans of other agencies - without unduly disrupting its own procedures and response effort

There is an agreed (UK) **national framework** for managing the local multi-agency responses to, and recovery from, emergencies. This national framework can be found on the UK government (Cabinet Office) website at:

<https://www.gov.uk/emergency-response-and-recovery>

This document (the one you are now reading) briefly summarises the three management tiers (levels) which comprise said national framework

Whether or not this framework should be fully implemented for an aircraft accident is generally determined by the severity and numbers of casualties. At the start of an incident for which there has been no warning, the Operational (**Bronze**) level will typically be activated first, with the other levels typically activating - depending on escalation of the incident and / or a greater awareness of the situation becoming available

An aerodrome should have a clear and coherent policy setting out the approach for delivering effective aircraft incident C4 - both internally + for liaison with external emergency services etc.

Bronze - the operational level

Bronze is the level at which the management of immediate 'hands-on' work is undertaken at the actual site(s) of the crisis / emergency

Personnel first on the scene take immediate steps to assess the nature and extent of the problem

Bronze commanders will concentrate their effort on the specific tasks within their areas of responsibility

- For example, the **on-airport** police will concentrate on establishing cordons, maintaining security and managing traffic. In most instances, said airport police (*reminder - this is for UK only*) will also coordinate the overall operational response at the scene to ensure a coherent and integrated multi-agency response
- For example, fire & rescue crews will carry out their SOP responsibilities - as will any airport medical centre staff
- For example, the aircraft operator involved (and or said operator's appointed local agent[s]) will provide passenger and crew information, dangerous goods information and commence facilitating humanitarian assistance type ops





A key function of a Bronze commander is to consider whether circumstances warrant a Silver (Tactical) level of management to be activated

Where (if) a Silver level of management is established, bronze commanders become responsible for implementing the Silver commander's tactical plan within the Bronze commander's geographical and / or functional area(s) of responsibility

Silver - the tactical level

The purpose of the Silver level is to ensure that the actions taken by Bronze agencies are co-ordinated, coherent and appropriately supported - in order to achieve maximum effectiveness and efficiency

'Silver Command' will usually comprise the most senior officers of each agency committed - **within the local area of operations** - and will typically assume tactical command of the 'situation', usually from an Incident Control Point (or similar term / facility) located relatively nearby or (where appropriate) adjacent / relatively adjacent to the 'scene'

Silver Command will typically address issues e.g. such as parameters for the setting up of an outer cordon and the location of key functions and / or facilities - such as a Uninjured Survivor Assembly Point, Casualty Clearing Station, Rendezvous Points, Media Liaison Point - etc.

In those cases where it becomes clear that the resources and / or expertise and / or co-ordination required are beyond the capacity of Silver (e.g. for 'catastrophic' type incidents and / or where there is more than one incident to respond to and / or where 'political' sensitivities so dictate etc.), it may be necessary to invoke the Gold level of management to take over **overall** C4 of an incident - including setting of the **strategic** direction to be followed

Gold - the strategic level

If it becomes necessary to implement multi-agency C4 at the Gold level, a Strategic Co-ordinating Group (SCG -commonly referred to as 'Gold Command' or simply 'Gold') would typically be formed, bringing together Gold commanders from the appropriate / relevant organisations - in order to establish the policy and strategic framework within which Silver will work / operate

Chairing Gold will typically fall to the police (in UK). However, depending on actual circumstances 'on the day' - it may be more appropriate for another agency to take the lead (for instance, the relevant **local [government] authority** may take the lead in the recovery phase)

Depending on the nature, extent and severity of an incident, either the regional tier (level) and / or central government may become involved. Gold will then (as an additional task) become the primary interface between the latter and e.g. Silver Command



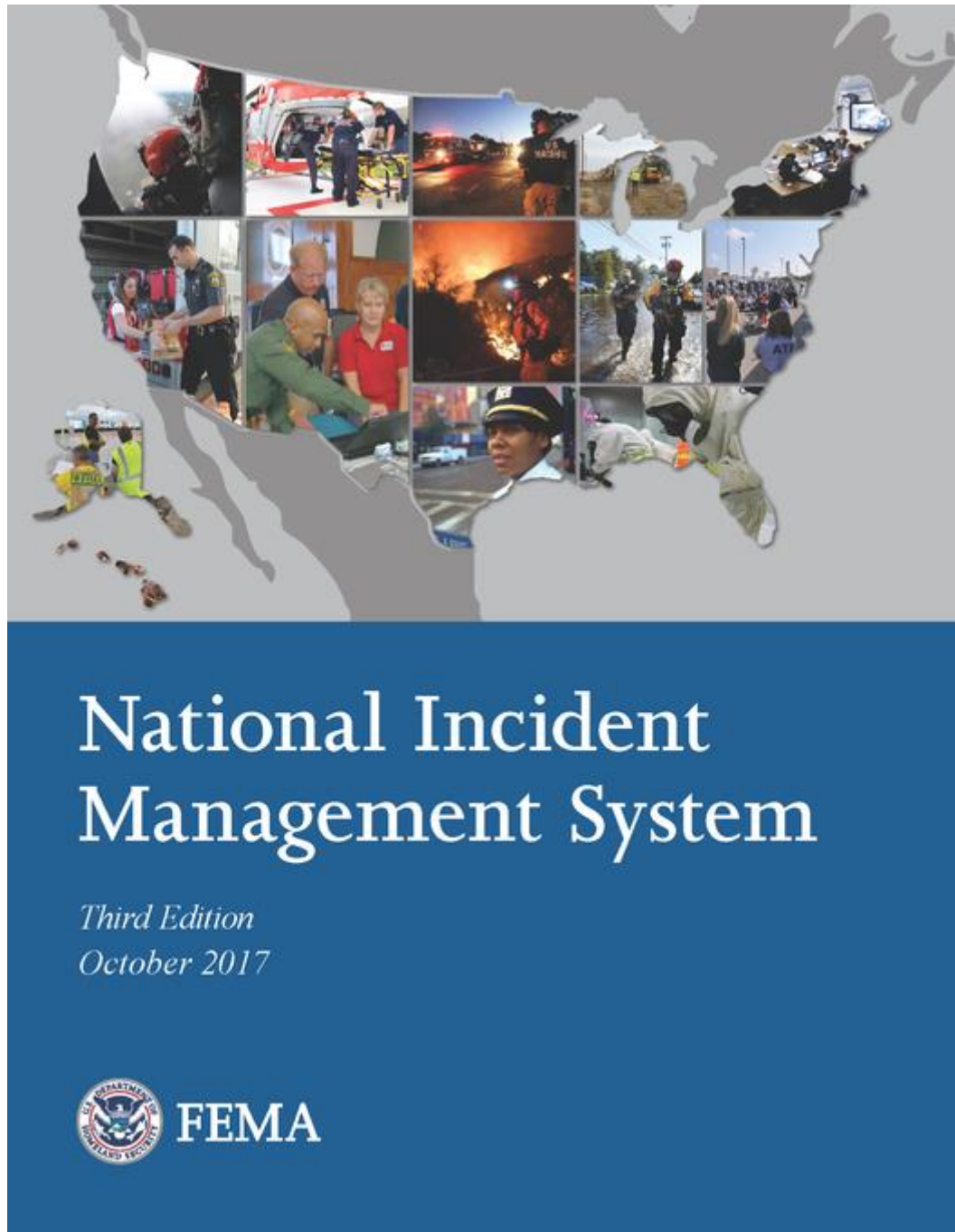


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Information Article - Part 2

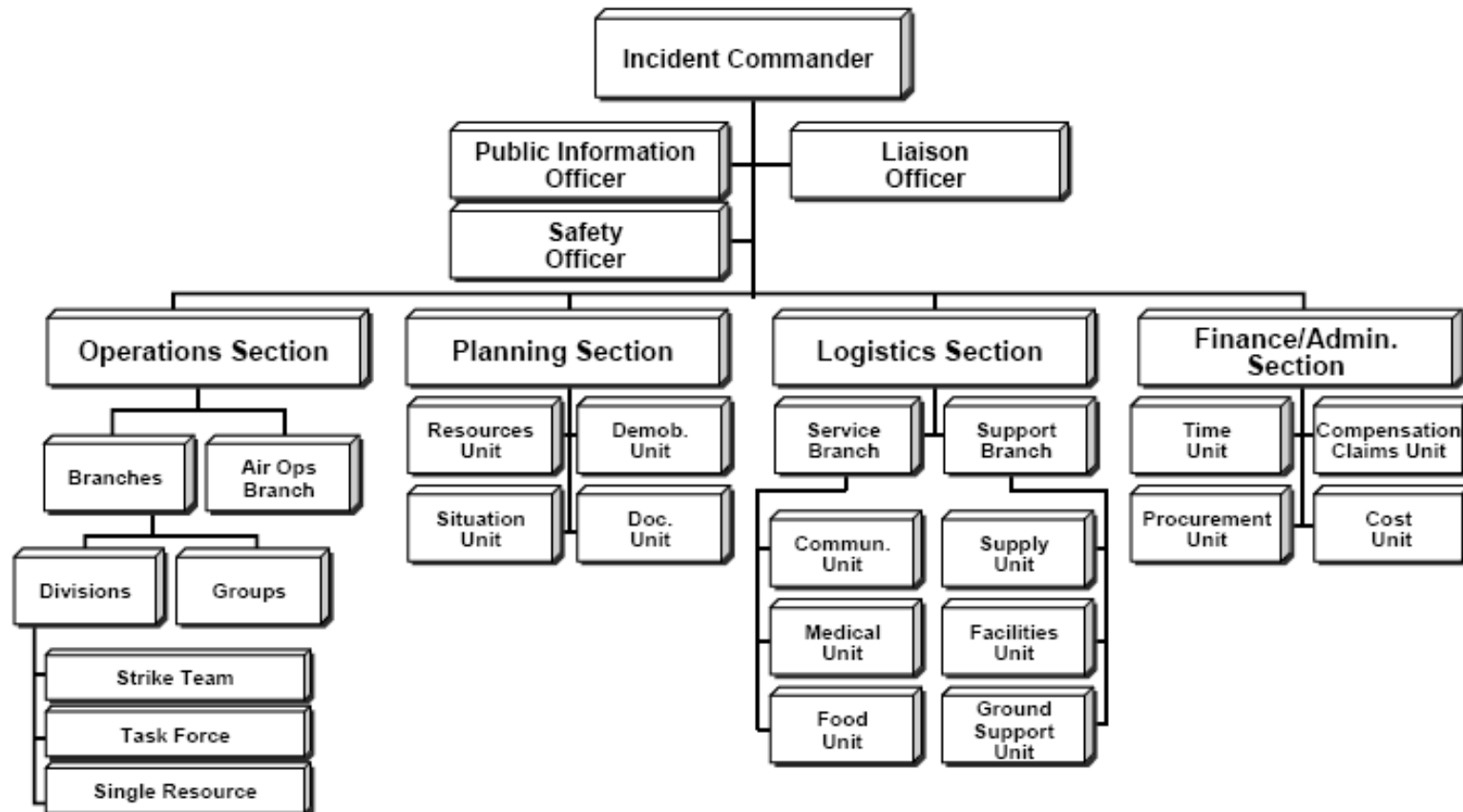


* FEMA © Acknowledged





USA - INCIDENT COMMAND SYSTEM (Part of 'NIMS')





Part 2 of this Information Article (you are reading it now) briefly refers to the approximate **equivalent** (of the UK's etc. Gold / Silver / Bronze system) - as used in the USA and (with modifications) some other countries

The front page of the associated document describing the USA system (known as the 'National Incident Management System - **NIMS**') is shown on page **17** of this info article

A vital (but not the only), subordinate element of NIMS is the 'Incident Command System - ICS'. An 'organisation tree' for the ICS is shown on page **18**

Nothing that the author of this info article (the document which you are reading now) could explain re NIMS could improve on what is **already** contained in the NIMS document referred to in the second para (from top) above (as might subsequently be amended in future. The one at the end of the below link is the 2017 version)

Accordingly, the interested reader will find said NIMS (2017 version) document at:

https://www.fema.gov/sites/default/files/2020-07/fema_nims_doctrine-2017.pdf

If the reader finds that the above link no longer works (or it is known / suspected that a later version [than 2017] exists etc.) - an internet search will probably lead you to what you are looking for

The interested reader might also want to additionally take a look at:

<https://www.fema.gov/emergency-managers/national-preparedness/system>





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Example of a **REAL** (Good Quality) **USA Type Emergency Response Plan**

Follow the below link to view a real, modern emergency response plan as related to a major airport in the USA

The latter is assessed as being a **very good** emergency response plan from a quality viewpoint and, whilst it necessarily complies with the national USA crisis command, control, co-ordination and communications (C4) system (NIMS / ICS) - should nevertheless be fairly easily adaptable (if so required) to other / different C4 systems (e.g. Gold / Silver / Bronze etc.) used in other countries

http://dot.alaska.gov/faiiap/pdfs/FAI_airportemergencyplan.pdf

