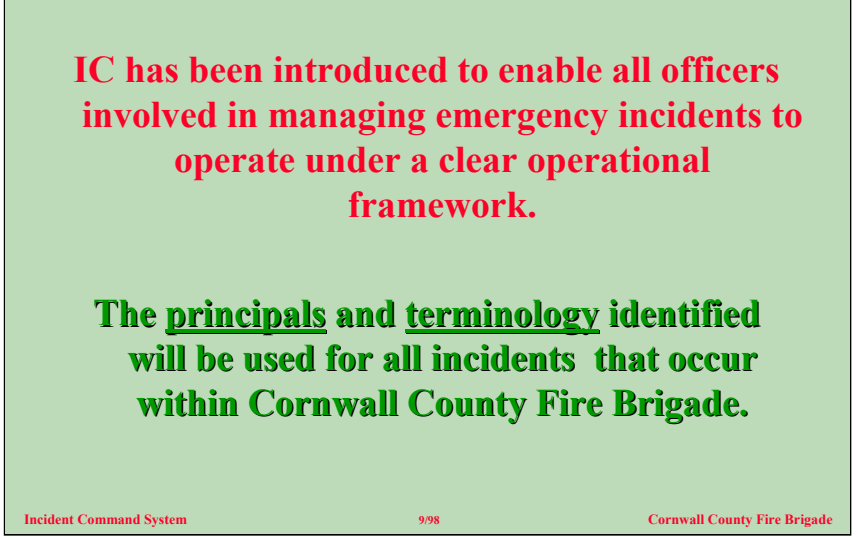

**This presentation should be used in conjunction with the Fire Service Manual - Volume 2 - Fire Service Operations - Incident Command.**

The adoption of a standard system for the command of fires and emergency incidents for the Fire Service reflects the need to ensure a safe system of work at all operational emergency incidents. Such a system also provides a consistent and transparent framework for training in command against which performance can be assessed.

This current concept of Incident Command was originally conceived by West Yorkshire Fire Service and is a 'role model' for the British Fire Service.




The safety of firefighters at operational incidents and during realistic training is a critical area of responsibility for Fire Service commanders and managers.

The Incident Command System has been devised to give officers managing emergency incidents a clear operating framework. The objective is to provide officers with a model structure that can be expanded as an incident becomes larger and more demanding.

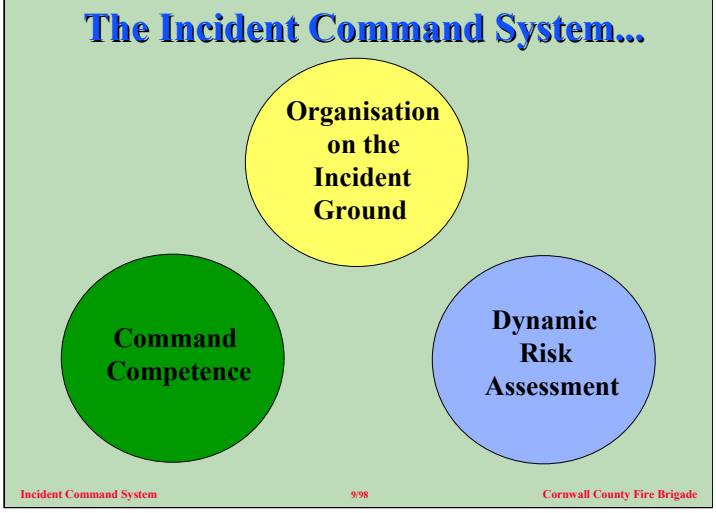
Senior ranks assuming command of an incident have the job of facilitating the satisfactory conclusion of that incident, by providing resources, logistical support, specialist support, inter-service liaison and overall leadership. Greater responsibility and clearer lines of command and communications, from crews to sectors, and the incident commander, will enable junior and middle ranks to fully exercise their authority and experience.

The Incident Command System is a framework procedure, onto which further guidance will be built.

Operational personnel at all levels will require a working knowledge and understanding of the Incident Command System, which will be central to future developments of operational policy.

The Brigade will adopt the basic principles for all incidents.

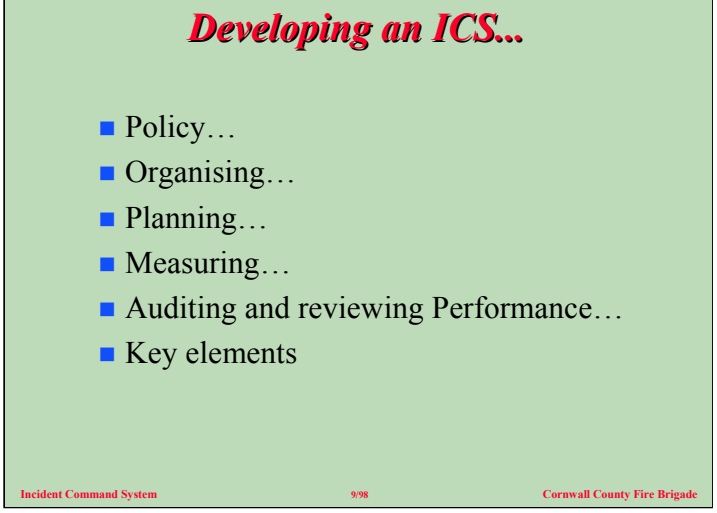
Next..ICS




The development of an Incident Command System should be seen as part of a brigade's overall organisational system for managing risk. The approach advocated by the Health & Safety Executive in HSG65 to the design of the organisational structures and processes for managing safely and successfully, provide a useful framework for this.

The following slides indicate the principals of a 'safe system' of work integrating organisation, command competence and risk assessment.

Next…Developing an ICS




POLICY

A Brigade should have a clear and coherent policy that sets out the approach to delivering effective Incident Command.

ORGANISING

The arrangements by which the Incident Command System is delivered and supported should be defined clearly.

PLANNING

There should be a planned approach to the development and implementation of the Incident Command function, the aim of which should be to minimise and mitigate risks.

MEASURING

There should be agreed and documented standards of performance in Incident Command and a system in place to measure performance and identify areas for improvement, e.g.., incident debriefing.

AUDITING AND REVIEWING PERFORMANCE

A system should be adopted which enables the brigade to undertake reviews of Incident Command performance to ensure that all relevant experience can be captured and lessons learned.

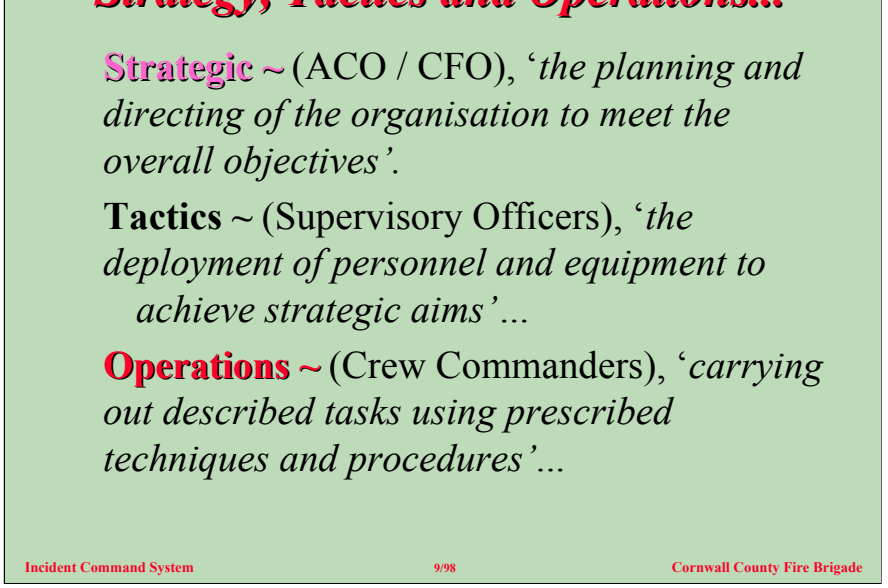
KEY ELEMENTS OF INCIDENT COMMAND

Successful Incident Command requires certain key features as follows…

NEXT..Key elements


Successful incident command requires certain key elements as as shown and are defined as follows follows…

NEXT…The Incident Commander




Three stages of command currently exist, and will remain.

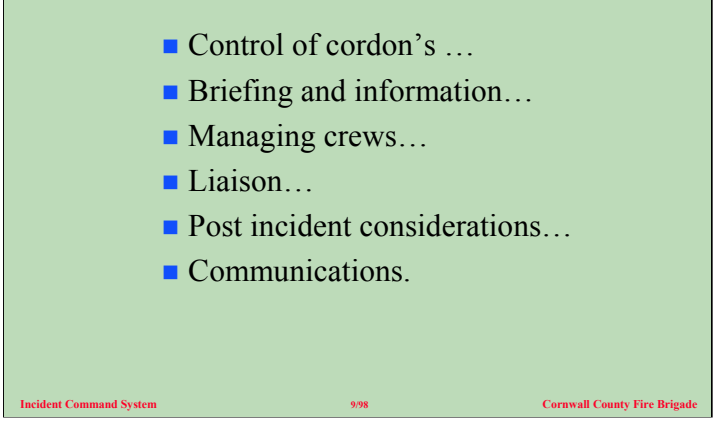
**Strategy** is the planning and directing of the organisation in order to meet its overall objectives.

The strategic level of responsibility includes the formulation of systems to manage the risks of certain incident types in seeking to achieve these objectives. Such systems should be considered best practice for safe and effective work on the incident ground.

**Tactics** can be summarised as the deployment of personnel and equipment on the incident ground to achieve the strategic aims of the Incident Commander.

**Operations** can be best described as tasks that are carried out on the incident ground, using prescribed techniques and procedures in accordance with the tactical plan.

Next..Resources and control...




**Inner cordons** to control the immediate scene of operations.

At *major incidents* the Fire Brigade will retain a degree of responsibility for the safety of all personnel in the inner cordon. Special provision should be considered for non-Fire Brigade personnel (e.g.., doctors) who need to operate in the area.

**Outer cordon** prevent access by the public into an area used by the Fire Service, and other services usually be controlled by the Police.

**Briefing** of crews is essential. The extent of the briefing will depend largely on the nature and extent of the incident; the pre-briefing for small fires that crews regularly deal with is likely to be relatively straightforward. On the other hand, at incidents where crews have little experience and where there is a high risk factor, the briefing will need to be more comprehensive.

On arrival crews should be kept together and, as far as possible, work as a team. Where the risk level requires it, the appointment of one or more safety officers should be considered.

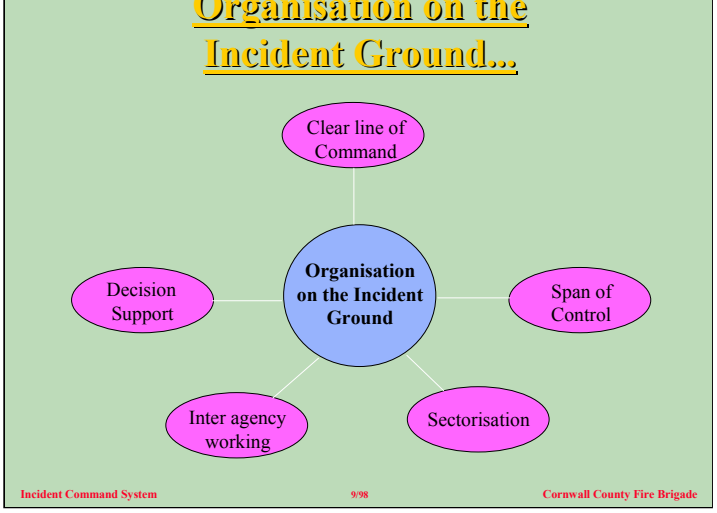
The need for support and counseling may need to begin on the incident ground.

The IC must secure and maintain effective liaison with the other agencies which can contribute to resolving an incident such as..

**Scene Preservation / Recording and Logging / Impounding Equipment / Identification of Key Personnel**

The Incident Commander must establish effective arrangements for communications.

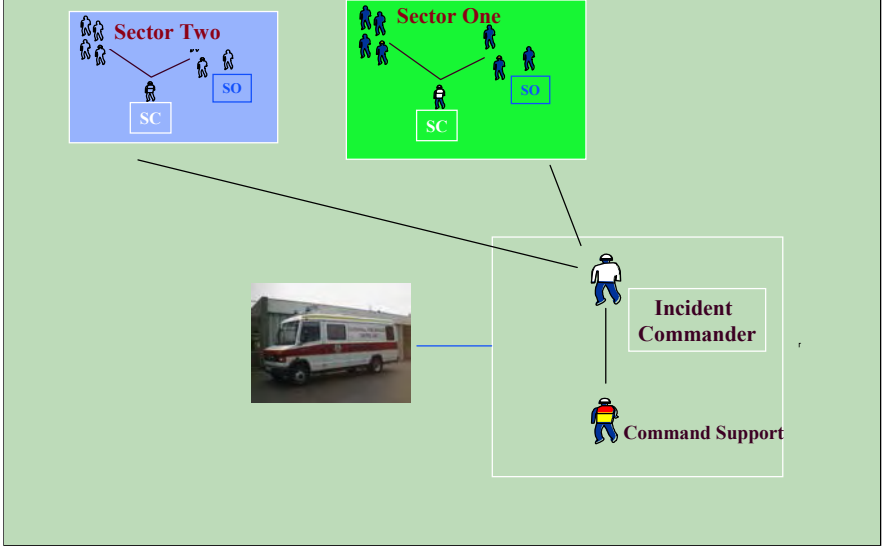
Next..Organisation..




The Incident Command System (ICS) is based on a framework which ensures manageable 'Spans of Control'. Other elements are built onto that framework. The provides the Incident Commander with the means to find a way through the complexity of the emergency situation and assists with the development of an effective and appropriate incident ground structure.

Terminology is important and it is necessary for everyone to use and understand a standard terminology.

Next..Clear line of command...




The system provides a framework for managing incidents based on a single, clearly defined, line of command which runs from the Incident Commander to every individual on the incident ground.

A clearly defined structure will ensure a high standard of safety is maintained, for example..

This incident may initially require a minimum of 18 to maintain clear demarcation and safety …

IC

SC (2)..double as EPM

SO (2)

CS

ECO (2)

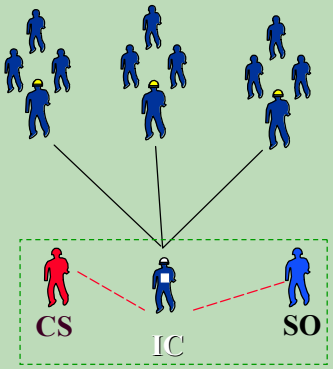
leaving 10 for BA etc.

Plus CSU team, which may require an additional crew to assist,

and any ‘Support’ roles e.g. water etc.

Next..span of control..

- **Here an IC is responsible for 3 crews and has detailed two firefighters to carryout specific tasks which involves regular contact i.e..... '*command support*' and *'safety'.***
- **'Good communications is essential.'**




Incident Command System 9/98 Cornwall County Fire Brigade

Span Of Control

This forms an integral part of the ICS. The system requires that the direct lines of communication/ areas of involvement of any officer be limited to enable the individual to deal effectively with those areas.

In a rapidly developing or complex incident the span of control may be as small as 2 - 3 lines. In a stable situation 6 - 7 lines may be acceptable.

**It is recommended, however, that all commanders limit their span of control to 4 - 5 lines of direct involvement.**

At small incidents where the attendance is restricted to **no more than 4 pumps** and the area of operations is easily manageable the Incident Commander may oversee all aspects of the incident directly e.g. barn fire, water relay etc..

He/ she may be in a suitable position to carry out the roles of safety and Command Support ( see under 'command team'). If in doubt .. obtain additional resources and formalise these key roles.

Next ..The Command Team...

# Part 1 -Summary

- Why??…
- Development…
- Keyelements…
- Organisation…
- Command chain…
- Span of control.

# Cornwall County Fire Brigade


# Command and Control

## Part One

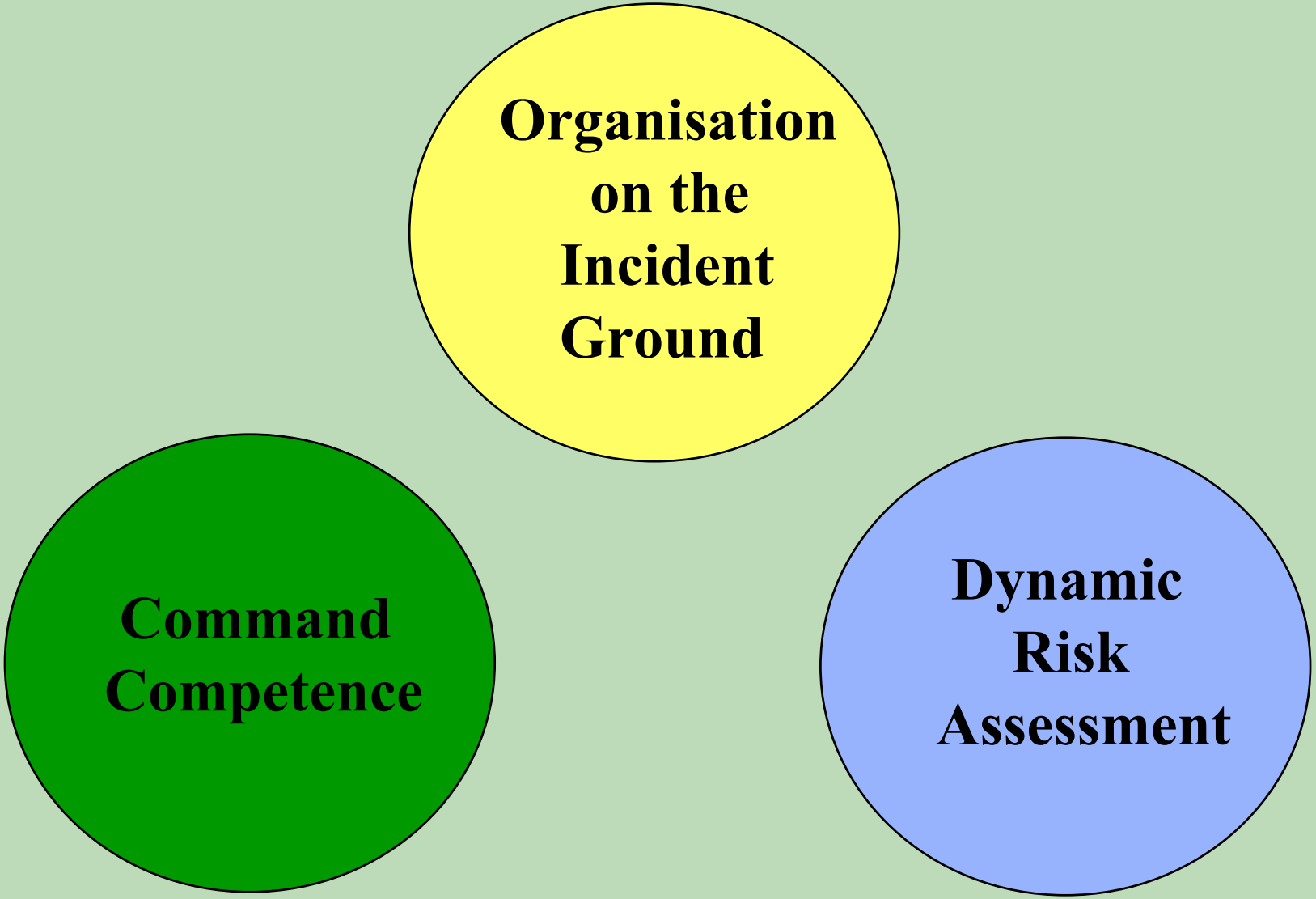
# The Theory of an Incident Command System (ICS)

# Introduction...

**IC has been introduced to enable all officers involved in managing emergency incidents to operate under a clear operational framework.**

**The principals and terminology identified will be used for all incidents that occur within Cornwall County Fire Brigade.**

# The Incident Command System...



# *Developing an ICS...*

- Policy…
- Organising…
- Planning…
- Measuring…
- Auditing and reviewing Performance…
- Key elements

# *The key elements of Incident Command*

- The Incident Commander (IC)…
- Strategy, Tactics and Operations…
- Resources and Control…
- Briefing and Information…
- Crew management…
- Post incident considerations…
- Communications.

# *Strategy, Tactics and Operations...*

**Strategic ~** (ACO / CFO), '*the planning and directing of the organisation to meet the overall objectives'.*

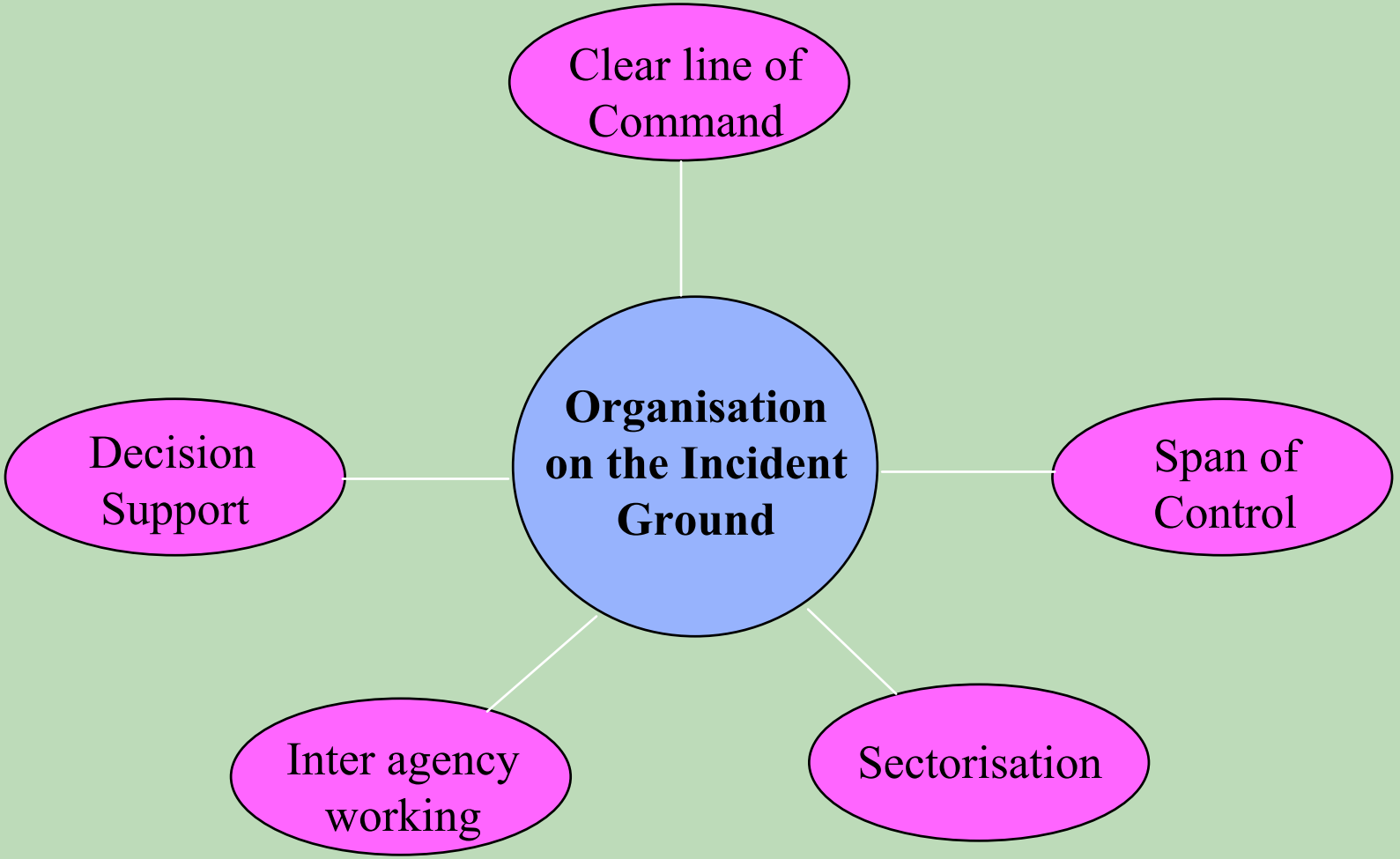
**Tactics ~** (Supervisory Officers), '*the deployment of personnel and equipment to achieve strategic aims'...*

**Operations ~** (Crew Commanders), '*carrying out described tasks using prescribed techniques and procedures'...*

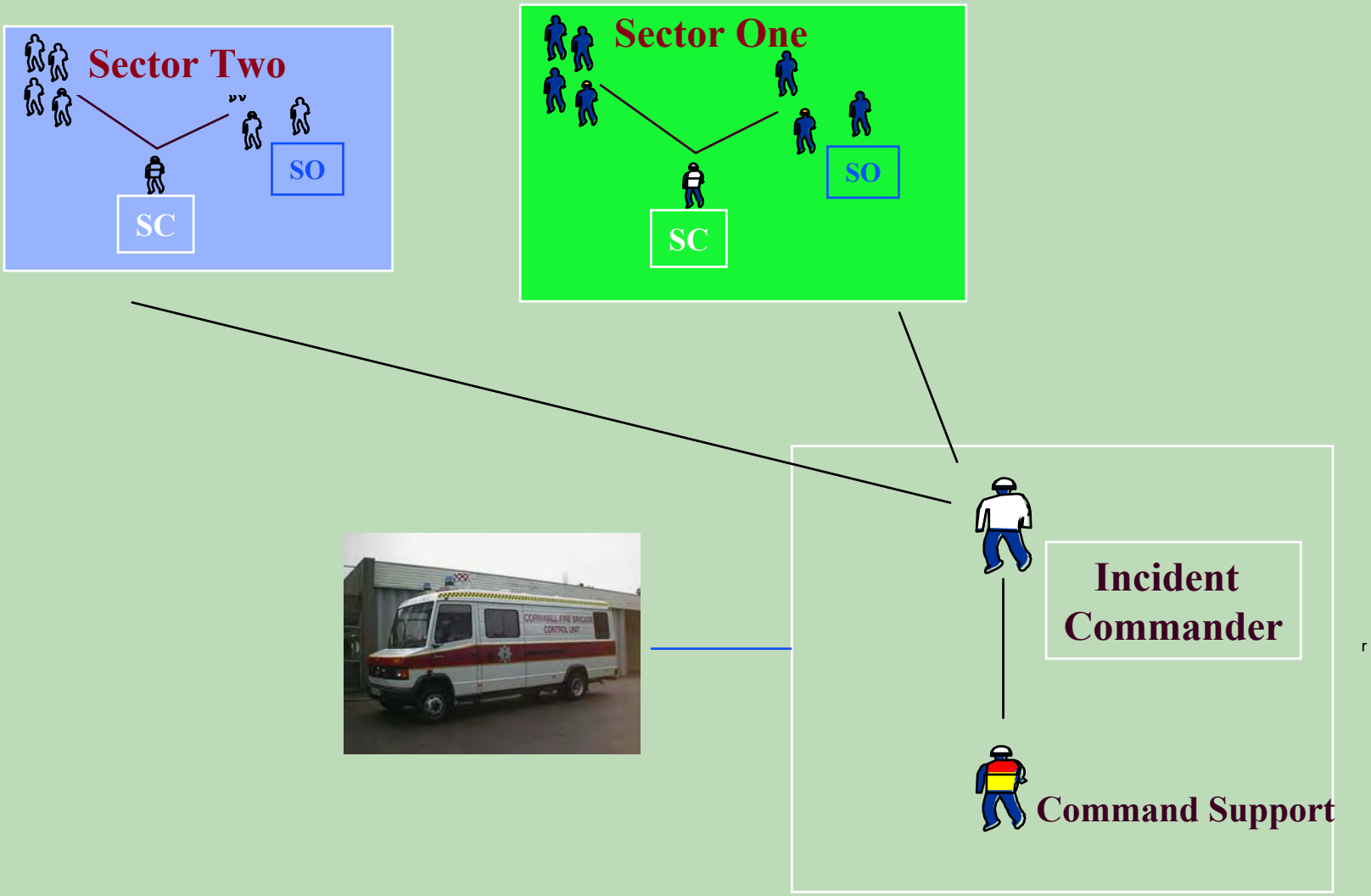
# *Resources and Control...*

- Control of cordon's …
- Briefing and information…
- Managing crews…
- Liaison…
- Post incident considerations…
- Communications.

# Organisation on the Incident Ground...



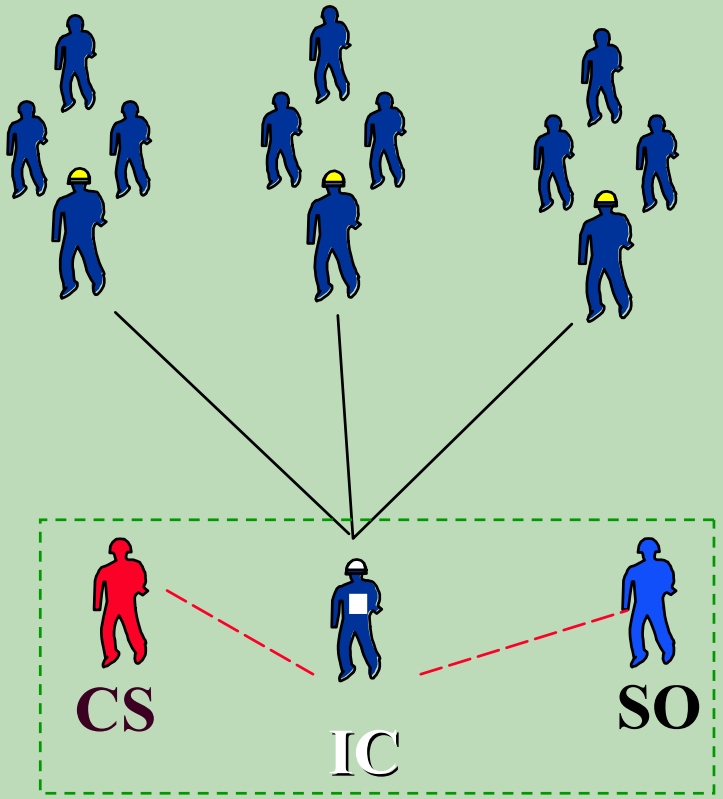
# *A clear line of command...*



# *Span of Control...*

- **Here an IC is responsible for 3 crews and has detailed two firefighters to carryout specific tasks which involves regular contact i.e..... '*command support*' and *'safety'.***

- **'Good communications is essential.'**



# Part 1 -Summary

- Why??…
- Development…
- Keyelements…
- Organisation…
- Command chain…
- Span of control.

Part 2

## *Key roles*
## *'The Command Team'*


Incident Command System 9/98 Cornwall County Fire Brigade

Incident Commanders cannot manage a complex and rapidly developing incident alone; effective and structured support is essential to successful operations.

A Command Team comprises the Incident Commander and key officers supporting that role. At the simplest level, this is the Incident Commander in charge of a one pump attendance, with Command Support often being the driver who is operating the radio.

At a more complex level, the Command Team includes the expanded command support function via a command support unit (CSU), Sector Commanders, Operational commander and safety officers.

The ICS clearly defines key and support (functional) roles.

Those 'key' personnel being required to assist in 'key' tactical decisions.

'Support Personnel' example will include FIT/welfare/water etc..

Next..identication of officers...

Tabards of the following colours:-

- Incident Commander - WHITE…
- Operational Commander - RED...
- Sector Commander - RED and YELLOW...
- Command Support - RED and WHITE chequer
- Safety Officer - BLUE and YELLOW…

Tabards will be worn for ALL incidents.

(Armbands are available for the IC and CS when yellow high visibility jackets are required e.g. RTA)


Incident Command System 9/98 Cornwall County Fire Brigade

The IC surcoat will be a 'reversible' white / red and yellow tabard and will be carried on all major pumping appliances and by all wholetime Officers.

Red and Yellow denotes Sector Commanders

For RTA work standard yellow reflective jackets conforming to EN471 will be worn. An IC armband carried with the IC tabard will be worn to denote the key role.

The high viz. yellow will be displayed until danger from moving vehicles has passed. The IC must then don the tabard to identify his / her role.

Red tabards , carried on Command Support vehicles, will be worn by the Operational Commander..

Blue and yellow tabards for safety officers will be carried on every major appliance.

Red and white chequer armbands are carried on all major appliances and tabards are held on CSU's for command support

All jackets / tabards will be fitted with the appropriate insert pockets

Next …The IC...

who takes command...

- must ensure Risk Assessment and special hazards are adequately addressed…
- is the 'Tactical' decision maker…
- will instigate reconnaissance and containment...
- must NOT become directly involved with operations...
- may sectorise the incident...




The Incident Commander is responsible for the overall management of the incident and will focus on command and control, deployment of resources, tactical planning, and the health and safety of crews.

The IC should not become directly involved in operations, so doing can lead to lack of overall command.

Any Officer who choses to attend an incident, but does not form part of the 'command' or 'functional' teams will be deemed as an 'observer' and must be identified by a yellow hi viz tabard marked 'observer'.

On occasion a more senior officer may choose to attend an incident as an observer. That officer will, under the Fire Services Act, have overall responsibility for the incident, but need not assume the role of Incident Commander. The senior officer may opt to act as an advisor to the Incident Commander, reviewing tactical plans, assessing resource management and giving guidance as appropriate, but that officer will work directly with the Incident Commander and will not interrupt the chain of command.

Naturally, a senior officer may choose to assume the role of Incident Commander should it be considered appropriate.

In order to manage the span of control effectively at larger incidents it will be necessary for the Incident Commander to delegate responsibility and devolve authority for some operations.

## Incident Commander...

- **An Incident Commander - Remains in command until**
  - **A more senior officer takes over (*supervisory level)*...**
  - **Relieved by another officer of same rank...**
  - **Relieved by another officer of lower rank (incident is downgraded)**
  - ***Identified by the 'white' tabard.***


Incident Command System 9/98 Cornwall County Fire Brigade

The Incident Commander ( IC ) is the senior officer mobilised to any incident, whether this is a single appliance pre-determined attendance or a multi-pump make-up. This title replaces the "officer in charge" designation at incidents.

The IC is responsible for the overall management of the incident and will focus on command and control, deployment of resources, tactical planning, and the health and safety of crews.

It will be necessary for the IC to delegate effectively and not become directly involved in operations.

The IC of the first attendance will remain in command until such times as a more senior officer takes over.

Any change of command, up or down, must be thorough and a Senior Officer who decides to take command must advise the IC **''I am taking over command''** and Fire Control must be notified.

If it is clear that an officer of that rank is no longer required the other officer may hand down command of the incident again following full handing over procedure.

Where an officer wishes to attend an incident other than being mobilised by Fire Control they may do so, but will identify themself as an observer to Fire Control and the IC.

Where such an officer is the most senior officer at an incident, that officer will not be required to take command providing he plays no part in the command structure. The officer must assume command if the circumstances warrant it.

## *Incident Commander [continued]*

- identify the method of approach, dependent on the relevant 'tactical' mode i.e.... **Defensive - Transitional - Offensive** and confirm with Fire Control every 20 minutes...
- include reference to Tactical Mode on initial and all subsequent briefings to Crew and Sector Commanders…
- consider nominating other 'key' personnel.



The IC must immediately via the process of 'dynamic risk assessment' (DRA) , identify the required 'tactical mode' and confirm his / her assessment with Fire Control. This must be repeated every 20 mins, failure to do so will instigate a prompt from Control.

When crews are briefed they must also be advised of the relevant tactical mode.

At all incidents the Incident Commander will ensure that an individual is nominated as Command Support…*see later slide*…and other command roles may also be introduced…

Next..Sector Commander..

## *'Command Support' [CS]...*

**Will be introduced at all incidents as soon as reasonably practicable.**

**At 4 pumps or over this role will be carried out by an Officer nominated to the Command Support Vehicle(CSV)…**

**He/she will….**

- **Support the IC - e.g.... messages, support officers, etc.....…**
- **Communicate with Fire Control...**
- **Marshaling…**
- **Provide plans…**
- **Assist with liaison.**
- **Record key events via Fire Control or using the Incident record form held in the 'Command Wallet' .**


Click here to return to MOG

Incident Command System 9/98 Cornwall County Fire Brigade

Introduced to assist the Incident Commander in the management of the incident…

**4 Pumps and Below -**

The IC should nominate a competent person as Command Support who will operate from the designated Contact Point, which is to be identified at every incident, e.g.. blue lights. The IC may undertake this role if circumstances permit .

Command Support will initially provide and maintain radio communications between Fire Control and the I C, and: -

To act as first contact point for all attending appliances and officers and to maintain a written record on the command record form i.e.... key issues that are NOT communicated to Fire Control

To operate the main-scheme radio link to Fire Control and to log all main-scheme radio communications.

To assist the I C in liaison with other agencies.

To direct attending appliances to an operational location or holding area as instructed by the I C, and to record the status of all resources attending or en-route.

To maintain a record of the operations in progress in the form of an incident ground plan.

To record sector identifications and officers duties as the assignments are made.

**This Command Record is primarily an instant *aide memoir* for the IC which does not require recourse to Fire Control which may be otherwise engaged.**

**4 Pumps +….**

A Command Support Unit (CSU) will be mobilised and will be responsible for all areas of support to the I C.

**The IC will be in charge of the CSU ensuring correct location…nominating a Command Support Officer to assist as required.**

A 'Support' crew' may be mobilised to attend with the CSU and nominated by the IC to assist the CSU crew set up as required, before being released for other duties.

A Command Wallet will be carried on every major pumping appliance containing the following:

- Risk assessment flowcharts...
- Incident record forms…
- Incident plan forms...
- Risk information -generic / site specific I.e. TIP's…
- 'Command' and 'Functional' task cards…
- Command Support 'aide memoir'...
- Pens / pencils …
- Tabards for Command Team



A red and white 'Command Wallet' will be carried as indicated

The Command Wallet will be set up and maintained by the nominated Command Support officer. This will be the initial contact point for all on-coming appliances and Officers.

Nominal role boards and tallies will be held within the wallet until the arrival of the CSU. The wallet will be then transferred to the CSU to enable the unit to prepare for operation

Not all TIP's will be stored within the Command wallet, but the plan being used by the IC should be transferred here to assist with incident information collation and dissemination.

next..Safety Officer...

- **Must have a constant awareness of the environment and the changes which take place...**
- **Continually monitor and update IC / SC's …**
- **Take any necessary urgent action to avoid injuries...**
- **Actions must be recorded..**
- **Identified by blue and yellow tabard.**


Click here to return to MOG

Incident Command System 9/98 Cornwall County Fire Brigade

Summary Of The Safety Function

Safety is everybody's responsibility...

Following assessment,the IC should appoint a competent person as *safety officer* .

. Those responsible should consider the following:-

- Identify safety concerns
- Initiate corrective action
- Ensure correct safe systems of work
- Ensure all personnel are wearing appropriate and correct levels of personal protection equipment
- Observe the environment
- Monitor personnel for signs of fatigue

Sector Commanders or nominated Safety Officer should update the IC as necessary.

Next..Sectorisation

- Responsible for:
  - all tactical operations at their face(s) of the building, and
  - exposures to nearby or adjoining buildings at risk due to radiated heat, flame impingement, etc.....
  - *Identified by 'red'/ yellow tabard (with appropriate 'Sector Commander' insert for 'functional' roles)*



Incident Command System 9/98 Cornwall County Fire Brigade

It may be necessary for the Incident Commander to identify suitable areas of operations as sectors of responsibility and to identify each sector. A **Sector Commander** will be appointed, who will report only to the Incident Commander.

Internal sectorisation is a matter that must be considered by both the Incident Commander and Sector Commanders. Crews from different sectors will frequently meet within a building, and operations, such as use of aerial monitors can impinge on the safety and methods of crews who have entered from a different sector. These are matters that must be satisfactorily resolved between officers in the light of particular circumstances.

Sector Commanders will be responsible for any exposure to their sector of a major fire. Exposures will normally consist of nearby or adjoining buildings at risk of ignition due to radiated heat, flame impingement etc.. If operations in the area of an exposure demand significant resources, the Incident Commander may choose to assign a separate sector to that operation.

Where a Sector and Sector Commander has been identified then the direction and guidance of crews within that Sector should normally be from that **Sector Commander** only.

The SC needs to be fully in control of the sector and only personnel who have been identified to the SC should be working within that 'cordon' or sector

The Sector Commander should know at all times which crew commanders are working under his direction. Should a roll call become necessary, Sector Commanders must be able, through the crew commanders, to quickly ascertain whether any member of a crew in his Sector is missing.

Next…Operations Commander


Sectorisation should be considered when the demands on an incident make it imperative that responsibility and authority is delegated in order to ensure appropriate command and safety monitoring of all activities.

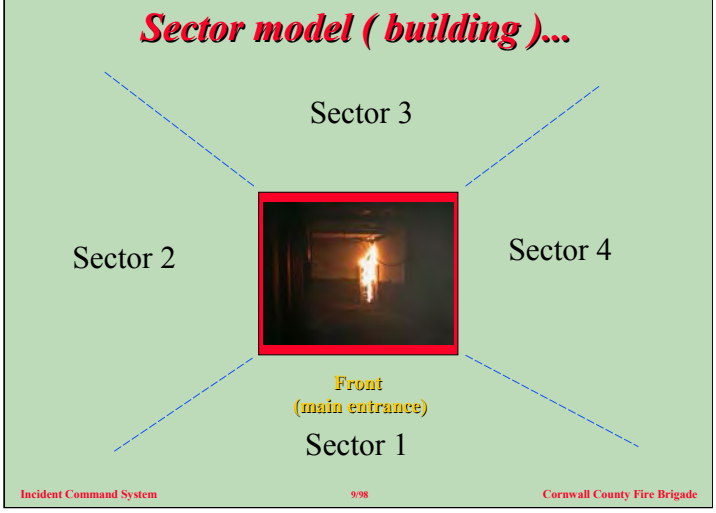
It must be emphasized that Sector Commanders should stay in the sector. A Sector Commander of an *operational* sector reports only to the Incident Commander. (or the Operations Commander if one is in place).

Sector Commanders of *functional* sectors report to Command Support.

A sector includes not only the face of the building in the sector, but also the exposure risk at the other side of the street, or the exposed parts of an adjoining building.

When command of an incident changes it must be done formally. In the same way there must be a proper recognition of the appointment of a Sector Commander. The Sector Commander must be formally briefed on his duties by the Incident Commander, and on the status of operations in progress by the outgoing Sector Commander when taking over a sector.

Next..sector model...




The above denotes a standard sector model- it should be noted that in fact sector one and three may be the first sectors introduced which can cause confusion through lack of communication due to the numbering.

The further sub division of sectors must be introduced by the IC as he / she sees fit and clearly identified to all personnel on the incident ground

All personnel should be aware that Police Fire Arms Tactical Units use a colour coding sectorising system and should a joint incident occur all officers must be fully conversant with each others ‘model’..

Next…examples...

- Possibly appointed at large, complex or interagency incident...
- Normally the previous IC who is fully conversant with all aspects of the incident...
- Forms the 'key' link between the IC and SC's..
- Identified by red tabard.


Incident Command System 9/98 Cornwall County Fire Brigade

Operations Commander

In order to maintain the span of control for the Incident Commander, particularly at a large, complex or Inter Agency Incident, it may be appropriate to appoint position of **Operations Commander.**

This Officer would normally be the 'current' Incident Commander, who is fully conversant with all aspects of the Incident.

The Operations Commander is a member of the Command Team. As such, the role is at the 'Silver' or Tactical level assisting the Incident Commander who is the Fire Service 'Silver'.

The Operations Commander's role should be purely focused on being the direct link to the IC by directing and supporting the Sector Commanders, co-ordinating their requests and requirements and monitoring safety and risk assessment.

next…Command Support...

- Those Officers nominated to ‘specialist roles’ i.e.. welfare, water, decontamination etc...
- Identified by red and yellow Sector Commander tabards with appropriate insert




Self explanatory.

Next…The impact of health and safety...

# Part 2 - Summary..

- The ‘Command Team’…
- Tabards…
- Command Wallet…
- ‘Functional’ Command roles
- Sectorisation.

# Incident Command System
# Part 2

## *Key roles*
## *'The Command Team'*

# Identification of 'Command Team'...

Tabards of the following colours:-

- Incident Commander - WHITE…
- Operational Commander - RED...
- Sector Commander - RED and YELLOW...
- Command Support - RED and WHITE chequer
- Safety Officer - BLUE and YELLOW…

Tabards will be worn for ALL incidents.

(Armbands are available for the IC and CS when yellow high visibility jackets are required e.g. RTA)

# *The Incident Commander...*

is the first 'Crew Commander' to take charge, or any subsequent Officer who takes command...

- must ensure Risk Assessment and special hazards are adequately addressed…
- is the 'Tactical' decision maker…
- will instigate reconnaissance and containment...
- must NOT become directly involved with operations...
- may sectorise the incident...

# Incident Commander...

- **An Incident Commander - Remains in command until**
  - » **A more senior officer takes over (*supervisory level)*...**
  - » **Relieved by another officer of same rank...**
  - » **Relieved by another officer of lower rank (incident is downgraded)**
  - » ***Identified by the 'white' tabard.***

# *Incident Commander [continued]*

- identify the method of approach, dependent on the relevant 'tactical' mode i.e.... **Defensive - Transitional - Offensive** and confirm with Fire Control every 20 minutes...
- include reference to Tactical Mode on initial and all subsequent briefings to Crew and Sector Commanders…
- consider nominating other 'key' personnel.

# *'Command Support' [CS]...*

**Will be introduced at all incidents as soon as reasonably practicable.**

**At 4 pumps or over this role will be carried out by an Officer nominated to the Command Support Vehicle(CSV)…**

**He/she will….**

**Support the IC - e.g.... messages, support officers, etc.....…**

**Communicate with Fire Control...**

**Marshaling…**

**Provide plans…**

**Assist with liaison.**

**Record key events via Fire Control or using the Incident record form held in the 'Command Wallet'**

**.**


Click here to return to MOG

# *'Command Wallet'*

A Command Wallet will be carried on every major pumping appliance containing the following:

- Risk assessment flowcharts...
- Incident record forms…
- Incident plan forms...
- Risk information -generic / site specific I.e. TIP's…
- 'Command' and 'Functional' task cards…
- Command Support 'aide memoir'...
- Pens / pencils …
- Tabards for Command Team

# *Safety Officer [SO]*

- **Must have a constant awareness of the environment and the changes which take place...**
- **Continually monitor and update IC / SC's …**
- **Take any necessary urgent action to avoid injuries...**
- **Actions must be recorded..**
- **Identified by blue and yellow tabard.**


Click here to return to MOG

# *Sector Commander [SC]...*

- Responsible for:
  - all tactical operations at their face(s) of the building, and
  - exposures to nearby or adjoining buildings at risk due to radiated heat, flame impingement, etc.....
  - *Identified by '**red**'/ yellow tabard (with appropriate 'Sector Commander' insert for 'functional' roles)*


# *Sectorisation of Incidents...*

- Location of Sector Commander…
- Exposures...
- Assuming and handing-over Command of Sectors…
- Sectorising - face / end / floor of building - group of vehicles in RTA - firefighting front on a large gorse fire - functional commands...

# *Sector model ( building )...*

Sector 3

Sector 2

Sector 4

**Front**
**(main entrance)**

Sector 1

# *Operations Commander [OC]*

- Possibly appointed at large, complex or interagency incident...
- Normally the previous IC who is fully conversant with all aspects of the incident...
- Forms the ‘key’ link between the IC and SC’s..
- Identified by red tabard.

# *Functional (Support) roles...*

- Those Officers nominated to ‘specialist roles’ i.e.. welfare, water, decontamination etc...
- Identified by red and yellow Sector Commander tabards with appropriate insert

# Part 2 - Summary..

- The ‘Command Team’…
- Tabards…
- Command Wallet…
- ‘Functional’ Command roles
- Sectorisation.

# Incident Command System
# Part 3

## Command Levels and Tactical Modes

# Initial Command...

**The Command Point**:

Established at all incidents…

Normally pumping appliance…

Blue flashing beacons…

Used by Command Support.

Incident Command System 9/98 Cornwall County Fire Brigade

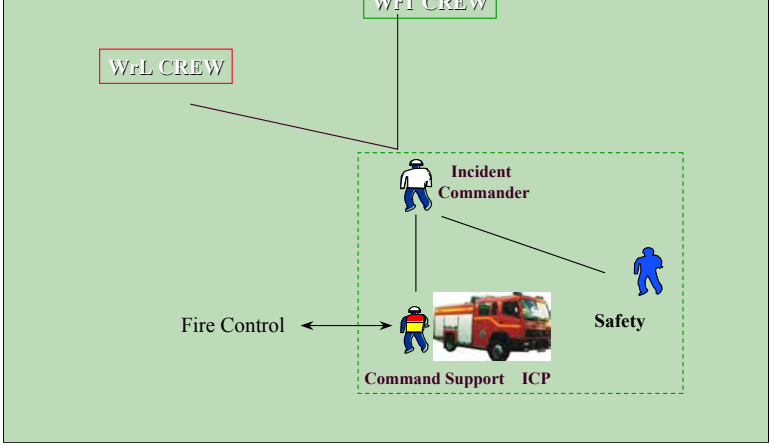
A pumping appliance, normally the second in attendance that is not actively involved will be identified as the ‘initial command point’.

This vehicle should be the only one displaying blue beacons unless other vehicles require them for safety reasons.

The IC and CS will operate from this vehicle and the command support wallet will also be maintained here. All oncoming crews must report , with nominal roles to the command point.

The command point vehicle must identify itself to Fire Control and all messages sent must refer to the callsign and “Command Support Vehicle” e.g ..”From 611Command Support Vehicle….”etc

On the arrival of a dedicated Command Support Unit (CSU), all information will be transferred when the CSU is ready for operations. Fire Control must be notified accordingly




Example of two pump incident - principles previously explained.

This incident may require initially a minimum of 9…..

IC

*CS

*SO .. minimum of 1

Pump operator

ECO

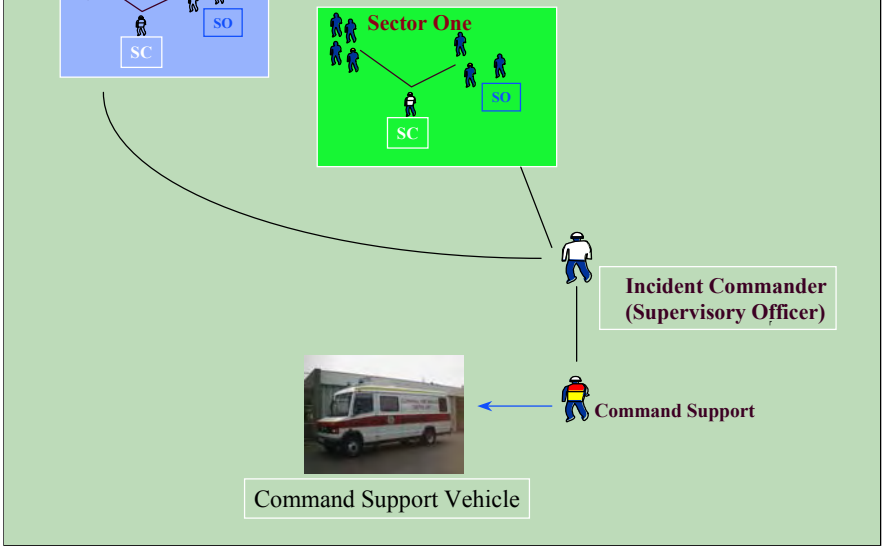
BA team (4)

* These roles may be introduced on completion of initial deployment e.g. hose etc.. ,or until resources permit carried out by the 'IC' or a competent person nominated by the IC.

Next…four pump incident...

# 'Main' Command...

- 'The next step up'…
- All calls attracting PDA's of more than 3 pumps ( other than AFA's)…
- At the request of the IC...
- Dedicated Command Support Vehicle…
- 'Command' and 'Functional' roles introduced...




This incident may initially require a minimum of 18…

IC

SC (2)..double as EPM

SO (2)

CS

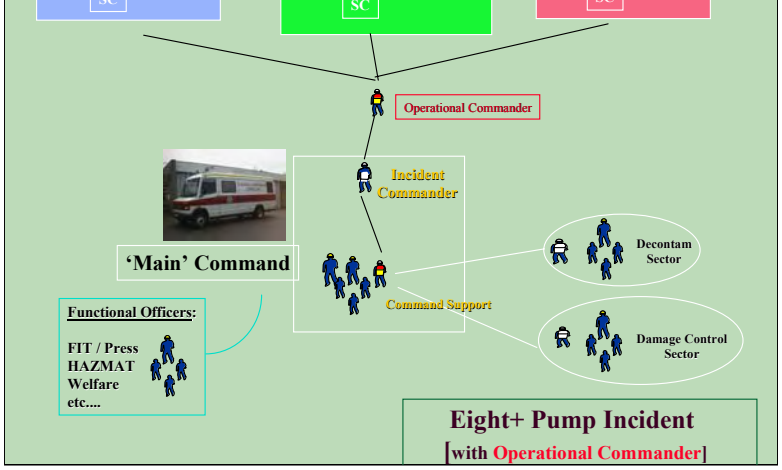
ECO (2)

leaving 10 for BA etc..

Plus CSU team, which may require an additional crew to assist,

and any ‘Support’ roles e.g.. water etc..

Next..8 pump incident...




This incident may initially require a minimum of 19…

IC

OC

CS

SC (3)

SO (3)

ECO (6)

CSU team (4)

next..functional roles...

- On assuming command - carry out a RISK ASSESSMENT...
- Safety monitored by self or by a nominated and fully briefed safety officer...
- Sector Commanders to monitor safety personally or to nominate a safety officer for their sector ...
- Balance to be maintained between safety of personnel and operational commitment.


Incident Command System 9/98 Cornwall County Fire Brigade

One of the immediate considerations must be the safety of all personnel. This can be established by assessing the hazards that are present, and the possible risks to the health and safety of those at the scene.

Following a **risk assessment** the IC may decide that he/she can monitor safety personally. No further assessment may then be necessary.

Should the IC feel that it is necessary to nominate a safety officer to assist in the supervision of safety, that officer must be fully briefed in terms of role and the area of responsibility.

If the command structure develops beyond the initial attendance, sectorisation may occur. As sectors are designated, the IC will delegate the supervisory role to Sector Commanders. They will be responsible for the health and safety of all personnel within their sector.

Sector Commanders may feel that they can supervise safety within their own sectors. No further action may then be necessary. Alternatively, after consideration, the Sector Commander may feel it necessary to nominate a safety officer. This officer will be responsible to the Sector Commander.

A balance must always be maintained between the safety of personnel and the operational commitment. The I C / Sector Commander must take a reasonable and practical approach.

## Responsibilities Of Personnel At Incidents

This is sometimes referred to as the "Safe Person" concept. All personnel on the incident ground **MUST** wear the personal protection that has been provided. Full firefighting kit is a minimum. The IC, having considered the health and safety of all personnel under his command, and having taken all reasonable and practicable steps to minimise risks may only vary this standard.

All personnel must be familiar with operational procedures.

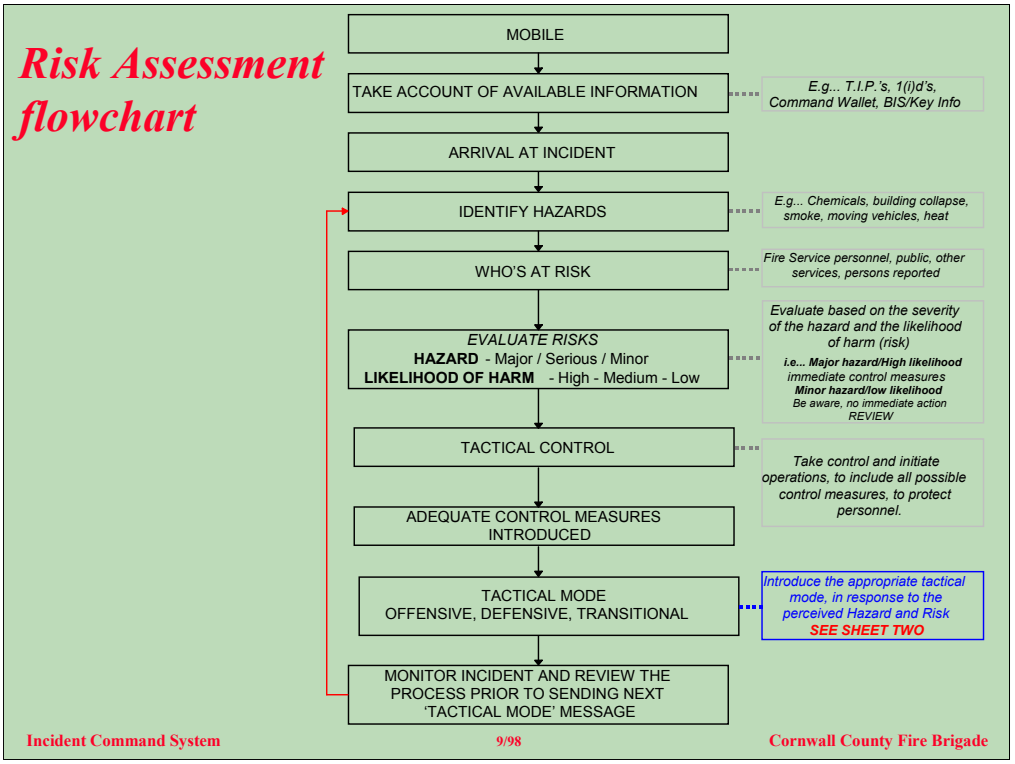
Personnel must be aware of the ever-changing environment at the scene of operations and the consequences of exposure to hazardous substances.

## Safe Systems Of Work

Operational procedures and standard drills are designed to develop safe operating systems (safe systems of work). Incident/Sector Commanders must ensure that recognised systems of work are being used to minimise the risk of injury.

Where possible, operational crews should work together in teams. Preferably the teams should be made up of people who are familiar with each other, and have trained together.

Next…Risk assessment flowchart…….




Hazard identification and risk assessment are routine to most operational personnel and this flowchart, following a short period of consideration, will assist the IC in his/her tactical approach to the incident.

Definition:

**Hazard** - something which has the potential to cause harm.

**Risk** - the likelihood of harm arising from the hazard.

The IC will carry out a risk assessment on arrival at an incident, the result of which will determine the firefighting Tactical Mode to be employed. The principal elements of that assessment are termed "the operational risk assessment process" and include the following areas:-

To look for and identify hazards (hazard spotting).

To decide who might be harmed and how.

To evaluate the **risks** arising from the **hazards**.

To decide what precautions are necessary.

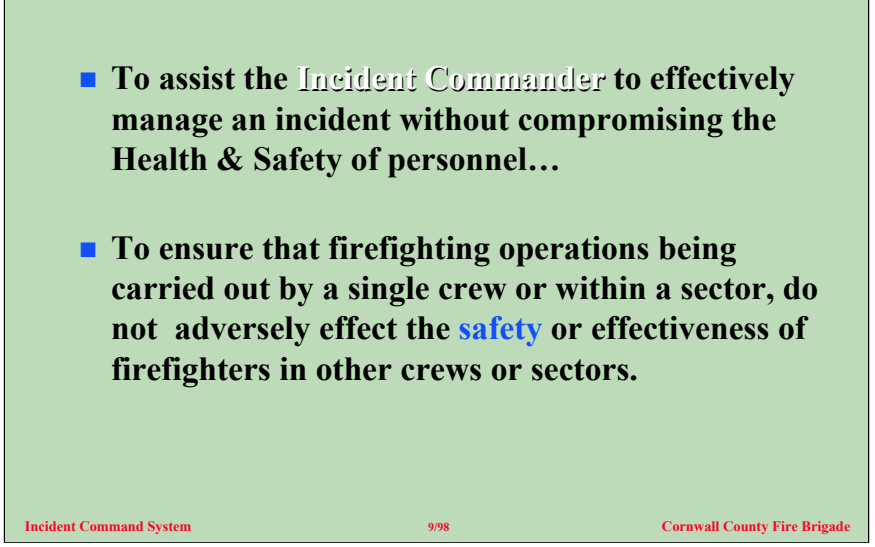
(The above elements are represented in more detail in the flowchart).

Next..The Tactical Modes...


The Tactical Mode procedure assists the Incident Commander to manage an incident effectively without compromising the health & safety of personnel by ensuring that operations being carried out by a single crew or sector do not have adverse effects on the safety of others.

The three Tactical Modes which forms part of the operational risk assessment process are as shown above.

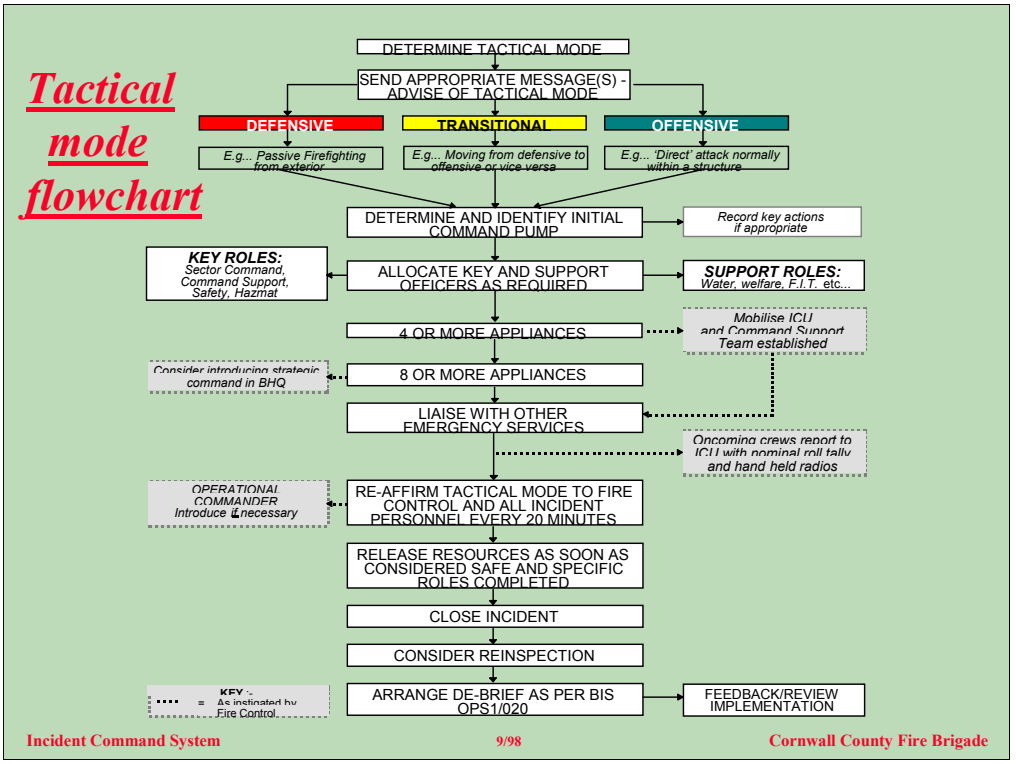
Next…Objective….




The safety of personnel at an emergency incident is one of the principal concerns of the Incident Commander (IC). The adoption of the **Tactical Mode** procedure should further assist the IC to effectively manage an incident without compromising the health and safety of personnel.

The purpose is simple: it is to ensure that firefighting operations being carried out by a single crew, or sector, do not have adverse effects on the safety or effectiveness of firefighters in other crews or sectors. For example, it will ensure that BA wearers inside a building are not subjected to an aerial monitor being opened up above them, or to the impact of a large jet through a window from another sector without warning.

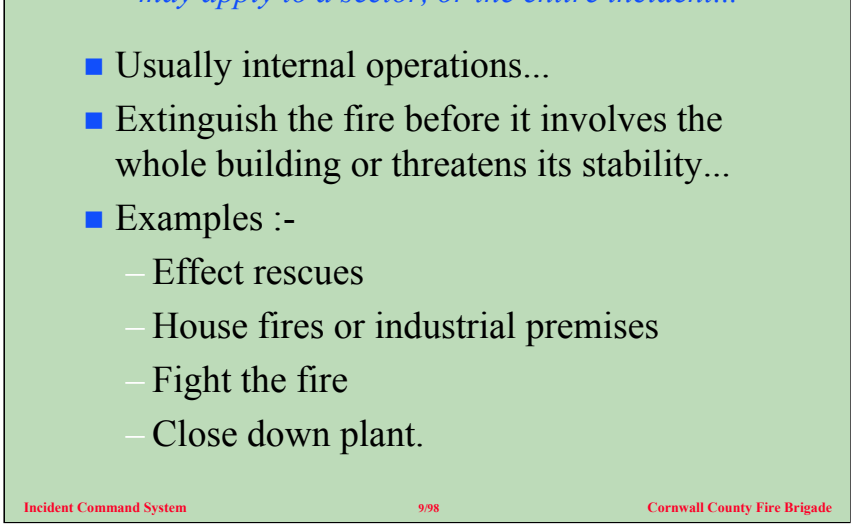
Next..Tactical Mode flowchart...




The flowchart, which will also be located in the Command Wallet provides advice to 'ICs' on key tasks.

Additional tasks (shown shaded) may be key to operations, but would be instigated normally via Fire Control.

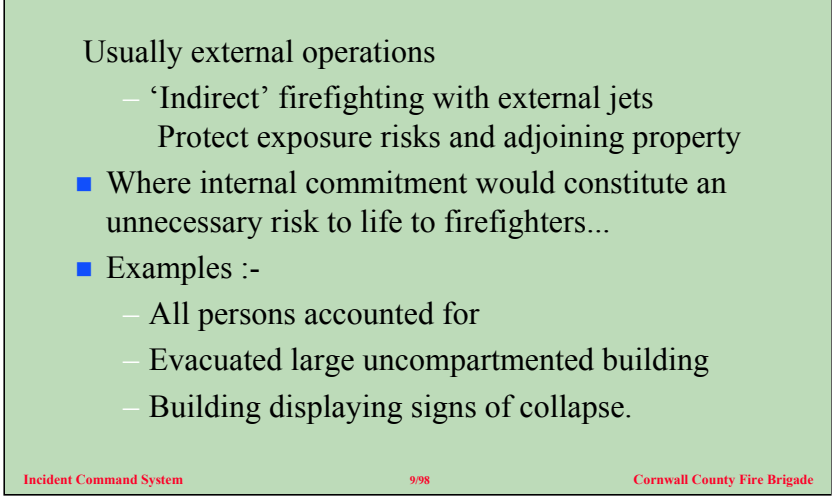
Next …..Offensive mode




**Offensive** - This mode may apply to a sector, and/or the entire incident

This is where the operation is being fought internally, with the objective of extinguishing the fire before it involves the whole building or threatens its stability. **Offensive Mode** is the normal mode of operation used at, for example, house fires and industrial premises to fight the fire, effect rescues, or close down plant, etc...

Next……..Defensive mode..

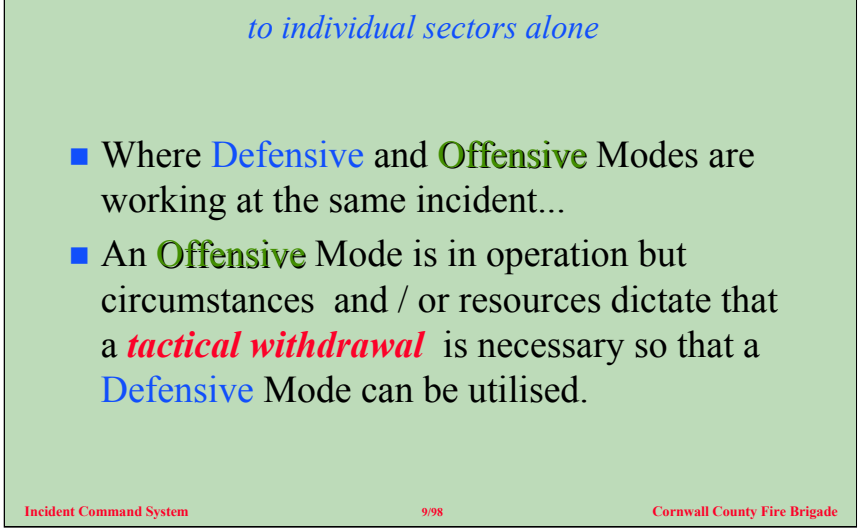



**Defensive -** This mode may apply to a sector or the entire incident.

This mode may be thought of as "external" and must be applied where committing firefighters internally would constitute an unnecessary risk to life.

For example: at a fire which has fully involved an evacuated large uncompartmented building, or in a building that is displaying signs of collapse. In these circumstances the IC would adopt the **Defensive Mode**, fight the fire with external and aerial jets, and protect exposure risks and adjoining property.

Next…Transitional mode..




**Transitional -** This mode may not apply to a sector, but only to the incident.

This mode is used where there is to be a shift in the mode of operations planned by the IC or where a combination of both Offensive and Defensive modes are in operation within the same incident, albeit within different sectors of the Incident.

Examples of when a "Transitional Mode" would be adopted are:

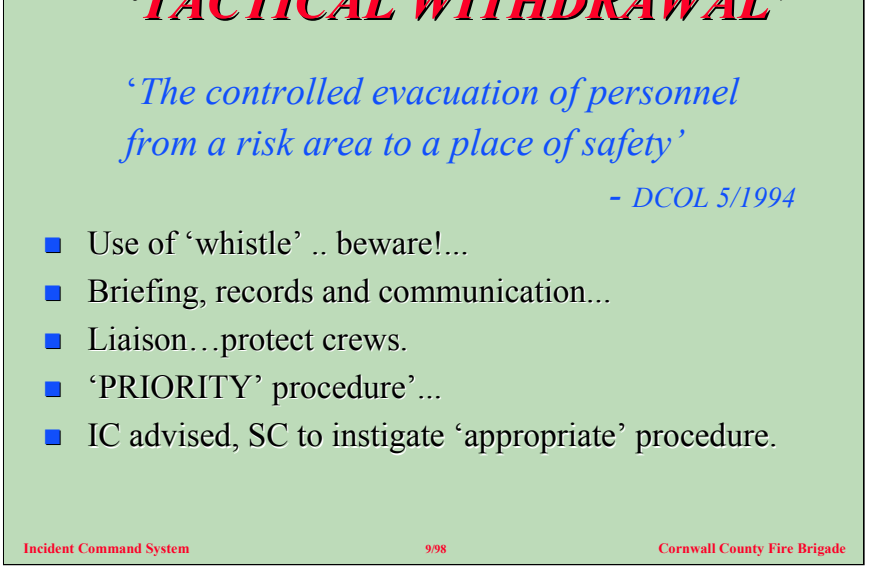
Where a building fire being fought externally with sectors in Defensive Mode, has an annex that can be saved, safely, by using an Offensive Mode i.e.: by fighting the fire inside the annex. Here there would be, say, three sectors in Defensive Mode and one in Offensive: the incident would be Transitional.

**OR**…….there a Defensive approach is being utilised only as an interim measure, until further resources arrive which will enable the Offensive Mode to be established and an attack on the fire to commence.

**OR**…….Where an Offensive Mode is in operation but the building is in danger of becoming unstable, resources are being deployed in preparation to switch to Defensive Mode if this becomes necessary, e.g.: hose lines being laid ready to supply aerial monitors

**OR**…….Where an Offensive approach is in operation but circumstances dictate that an evacuation and withdrawal of equipment is necessary in order that a Defensive Mode can be utilised.

Next…Tactical withdrawal




The Tactical Withdrawal is identified in DCOL 5/1994 and is a phased evacuation carried out to ensure safety of all crews… it relies heavily on pre entry briefing and good communications both with Command Team members and crews, inside and outside.

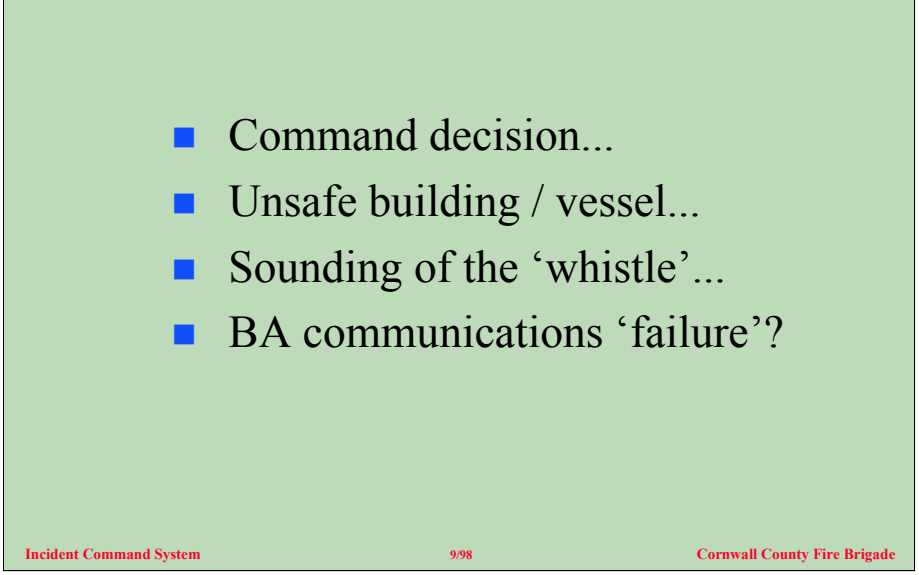
It takes time and great control. Crews may need to protect their own egress i.e.. returning with jets etc... Strict controls on radio are required for this to succeed .

IC / SC's need to be fully aware of where the crews are committed and wherever possible have reference to plan drawings to assist.

Additional crews may need to be temporally committed to protect the egress of those crews exiting the 'danger' area.

The term "**Priority - Priority - Priority"**' will be used via incident ground communications (hand held radio's..not Brigade main scheme) to obtain immediate attention and prefix a tactical withdrawal.

Next..instigating evacuation...

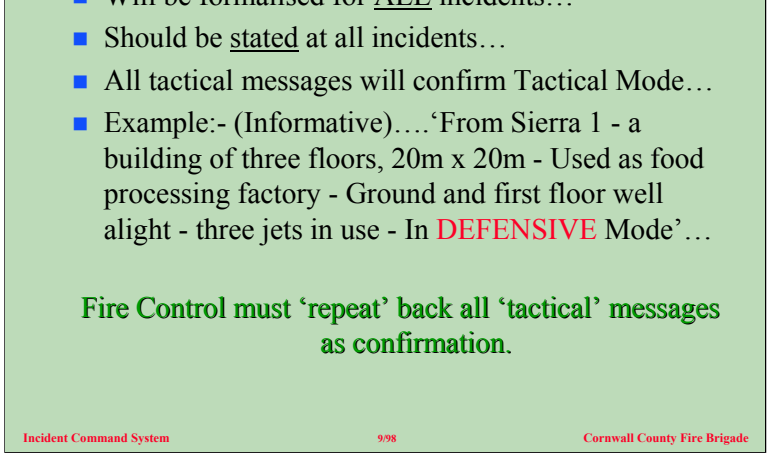



A BA radio communications failure may or may NOT instigate an evacuation.

Screening will cause interruptions in communications. The ECO needs to have a good knowledge of how the team(s) under his / her control are operating. This will dictate the decision on evacuation…other than obvious signs.

**If in doubt…pull them out and tell somebody!**

Next…the application of tactical mode..




The Application Of Tactical Mode

The Tactical Mode must be formalised at all incidents, however, it is accepted that for smaller incidents, e.g. known AFA and where there is a limited attendance e.g... one pump , this is probably unnecessary as the IC is able to deal with the crews directly and communicate the Tactical Mode on an informal basis.

As the incident grows and the IC's span of control increases, it is essential that there is some means for making all personnel aware of the tactics on the incident ground. This is particularly the case when the incident has been sectorised, the IC must, in these circumstances, formally adopt a Tactical Mode and communicate it to the Sector Commanders (SC's).

**Adopting a Tactical Mode when Sectors are in use:**

When the incident has been divided into sectors, the Tactical Mode will **always** be formally determined.

The IC will retain responsibility for the Tactical Mode at all times.

If it is necessary for the IC to initiate change of the Tactical Mode, SC's must be made aware of this, to be able to effectively implement the change, and to ensure that personnel under their command are aware of the prevailing Tactical Mode.

On receipt of a 'tactical message' Fire Control will repeat back the details as a confirmation that the information has been correctly received and recorded. Tactical messages must be brief, clear and concise.

Next – changing modes


When the incident has been divided into sectors the Incident Commander will retain responsibility for the Tactical Mode at all times.

There will be occasions when Sector Commanders wish to change the Tactical Mode in their sector, e.g.., for safety reasons. They must take the necessary 'safety' action and immediately advise the Incident Commander.

The permission of the IC must be obtained if a Sector Commander wishes to change from 'Defensive' to 'Offensive'.

Good communication between all personnel is essential. The 'cascading' of key tactical information from Command to operations and vice versa must be maintained.

Next..determining tactical mode...

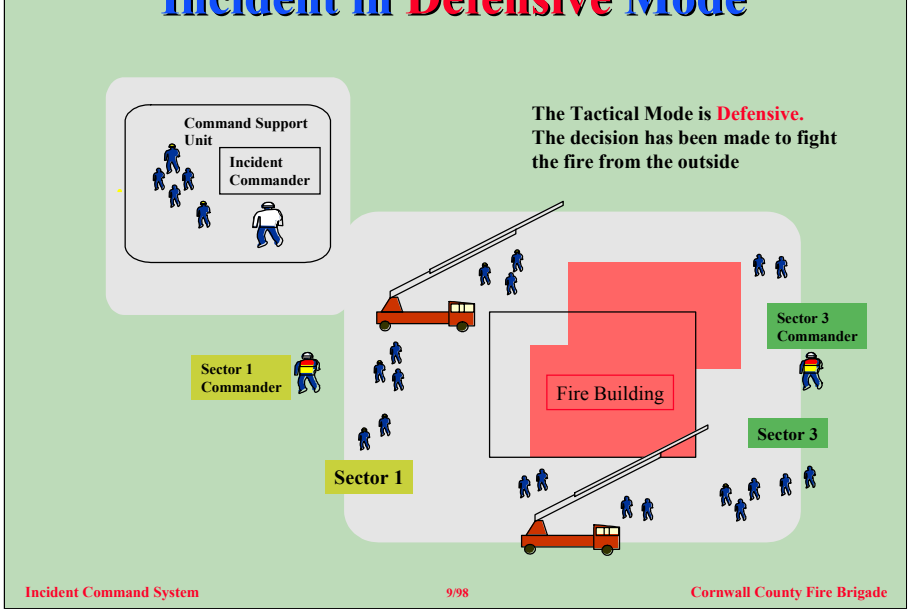

**Incident Commander** to make an assessment of the incident and decide the appropriate Tactical Mode, keep Brigade Control advised at least every twenty minutes. Consider and confirm the Tactical Mode on initial and all subsequent briefings to Sector and Crew Commanders.

**Sector Commanders** to continually monitor conditions, to immediately react to adverse changes, to consider if and when it is appropriate to change Tactical Mode, to consider appointing a Sector Safety Officer, to confirm the Tactical Mode to Incident and Crew Commanders every twenty minutes.

**Crew Commanders** to monitor conditions in the risk area, to react immediately to adverse changes, to continually brief crews in liaison with Sector Commander.

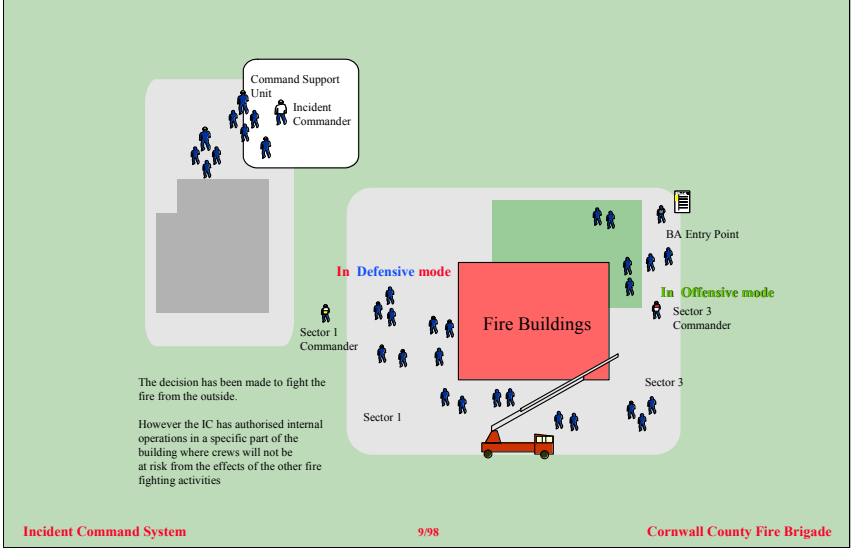
**Safety Officer** to survey Operational Sectors, to liaise with other Sector Safety Officers, to confirm the validity of the initial risk assessment and record as appropriate, to act as an extra set of eyes to the Sector Commander.

*Next...The following slides give example of Tactical Modes.*

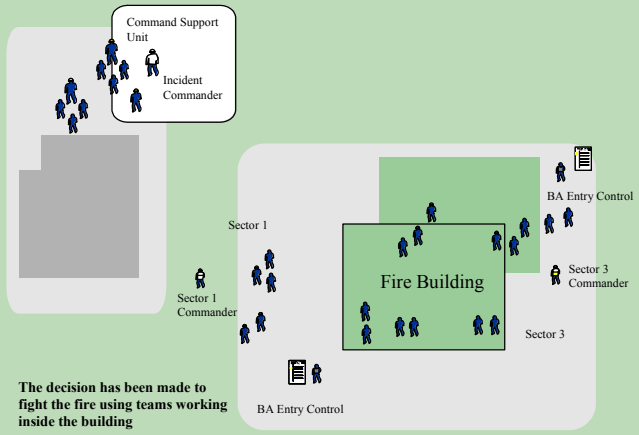



Self explanatory.

See Fire Service Manual- Volume 2 - Fire Service Operations - Incident Command. Appendix 1 - Page 49/50 for written examples of Tactical Modes.


Command Support Unit
Incident Commander
BA Entry Point
In Defensive mode
In Offensive mode
Fire Buildings
Sector 1 Commander
Sector 3 Commander
Sector 1
Sector 3
The decision has been made to fight the fire from the outside.
However the IC has authorised internal operations in a specific part of the building where crews will not be at risk from the effects of the other fire fighting activities
Incident Command System
9/98
Cornwall County Fire Brigade

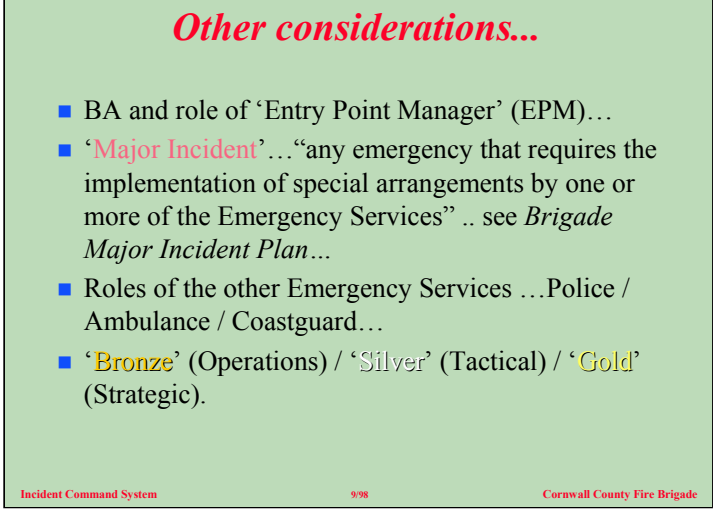
Example…..




**The decision has been made to fight the fire using teams working inside the building**



Next…other considerations..




**BA Control**

All personnel must be aware of the roles and responsibilities of BA Entry Control Officers (ECO) and maintain liaison, communication, briefing and debriefing.

**Major Incident**

The Brigade Major Incident Plan defines strategy and tactics. All personnel need to have an overview of this document.

**Roles of the other Emergency Services**

No single organisation has the sole responsibility for 'command' at a large or major incident. Each Service will be expected to liaise and consider joint Command and Control initiatives. The Police normally have overall co-ordinating role known as Police Primacy.

Interagency liaison is based around the same principles as ICS, i.e.., operations, tactical and strategic (otherwise known as Bronze, Silver and Gold).

Next….Part 2..Incident Communications...

# Incident Command System
# Part 3

## Command Levels and Tactical Modes

# Initial Command...

**The Command Point**:

Established at all incidents…

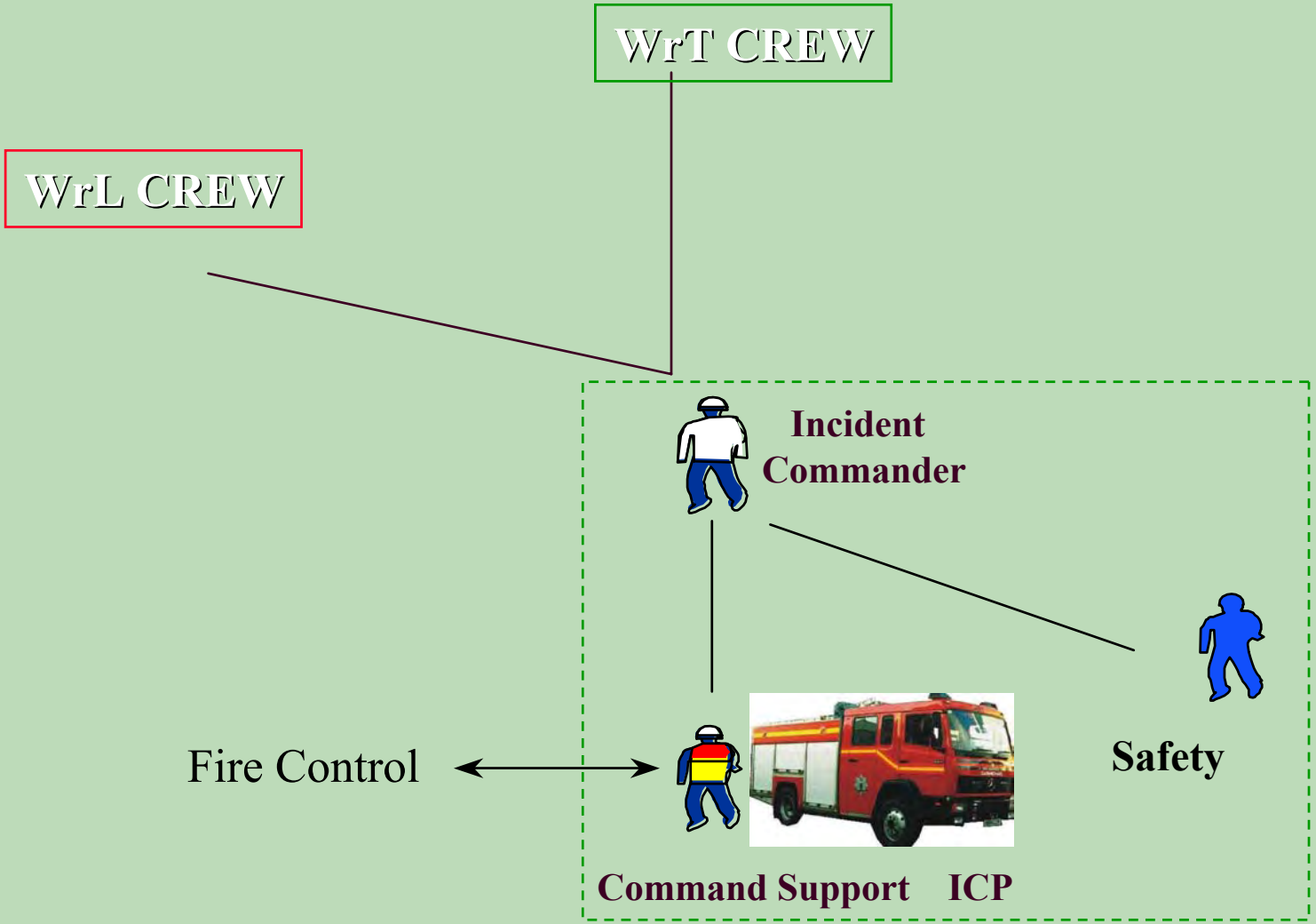
Normally pumping appliance…

Blue flashing beacons…

Used by Command Support.

# ‘Initial’ Command

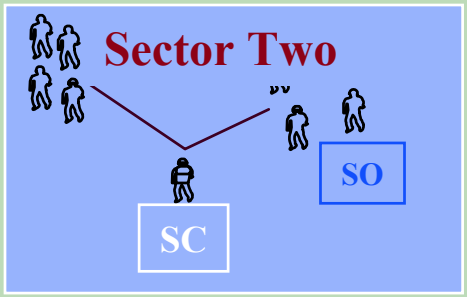
## Two Pump Incident

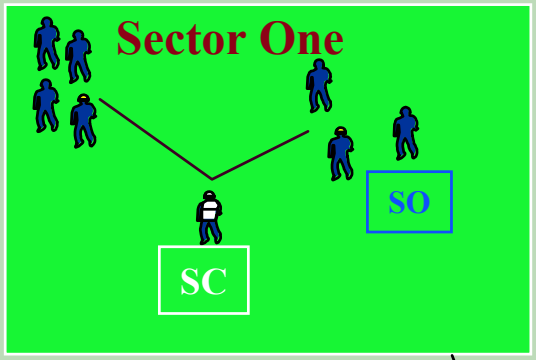


# ‘Main’ Command...

- ‘The next step up’…
- All calls attracting PDA’s of more than 3 pumps ( other than AFA’s)…
- At the request of the IC...
- Dedicated Command Support Vehicle…
- ‘Command’ and ‘Functional’ roles introduced...

# Four pump incident - ‘Main ‘ Command




**Incident Commander (Supervisory Officer)**

**Command Support**

Command Support Vehicle

Sector Two

SO

SC

Sector One

SO

SC

Sector Three

SO

SC

Operational Commander

‘Main’ Command

Incident Commander

Command Support

Decontam Sector

Damage Control Sector

**Functional Officers:**

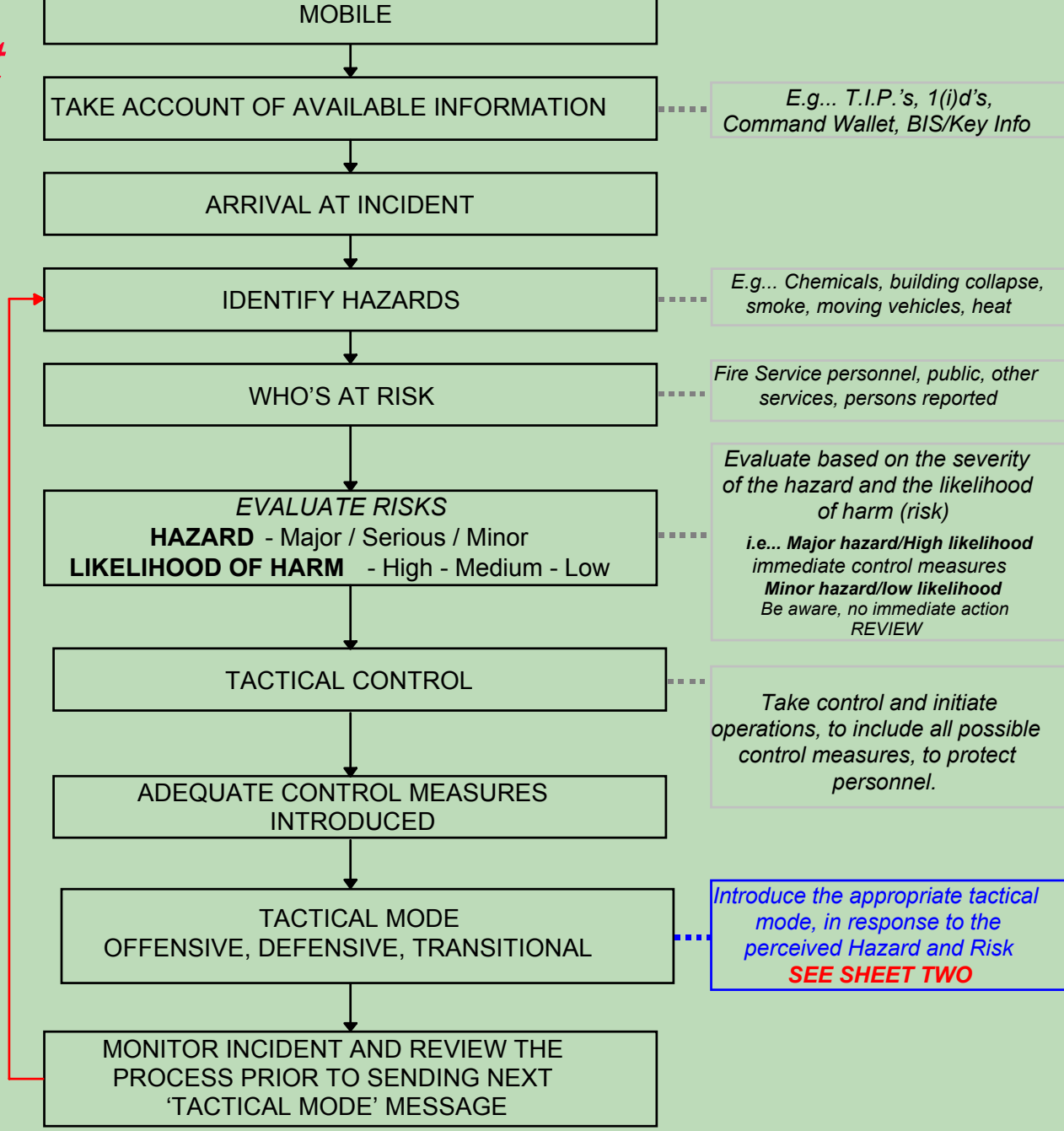
FIT / Press
HAZMAT
Welfare
etc....

# Eight+ Pump Incident

# The impact of Health & Safety on Incident Command.

- On assuming command - carry out a RISK ASSESSMENT...
- Safety monitored by self or by a nominated and fully briefed safety officer...
- Sector Commanders to monitor safety personally or to nominate a safety officer for their sector ...
- Balance to be maintained between safety of personnel and operational commitment.

# Risk Assessment flowchart



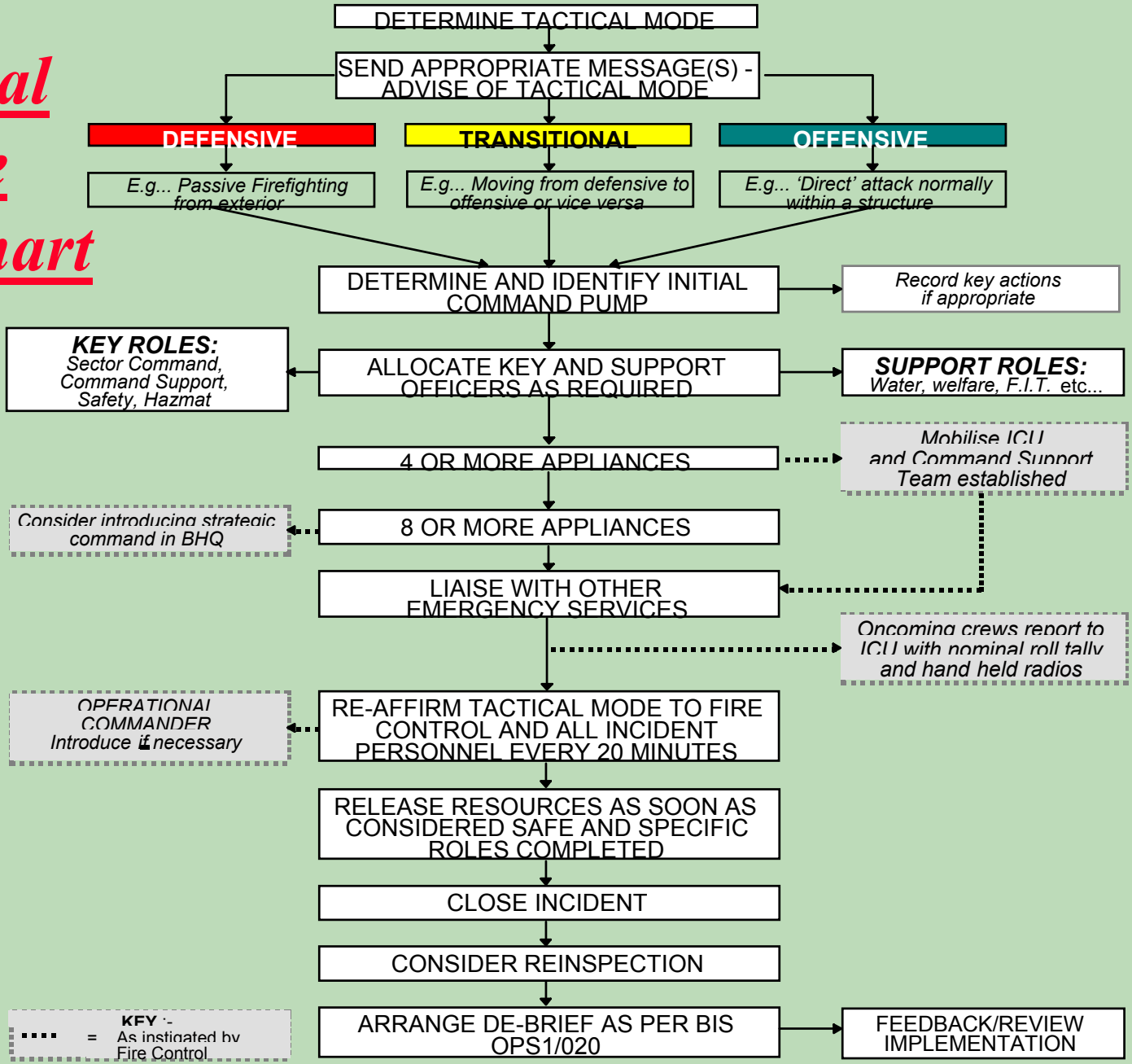
# The Tactical Mode.

# *Objective*

- **To assist the Incident Commander to effectively manage an incident without compromising the Health & Safety of personnel…**

- **To ensure that firefighting operations being carried out by a single crew or within a sector, do not adversely effect the safety or effectiveness of firefighters in other crews or sectors.**

# Tactical mode flowchart



# Offensive Mode

– *may apply to a sector, or the entire incident...*

- Usually internal operations...
- Extinguish the fire before it involves the whole building or threatens its stability...
- Examples :-
  - Effect rescues
  - House fires or industrial premises
  - Fight the fire
  - Close down plant.

# Defensive Mode

- *may apply to a sector or the entire incident*...

Usually external operations

- 'Indirect' firefighting with external jets
  Protect exposure risks and adjoining property

- Where internal commitment would constitute an unnecessary risk to life to firefighters...
- Examples :-
  - All persons accounted for
  - Evacuated large uncompartmented building
  - Building displaying signs of collapse.

# *Transitional Mode*

*- may only apply to the whole of the incident and not to individual sectors alone*

- Where Defensive and Offensive Modes are working at the same incident...
- An Offensive Mode is in operation but circumstances and / or resources dictate that a ***tactical withdrawal*** is necessary so that a Defensive Mode can be utilised.

# *'TACTICAL WITHDRAWAL'*

*'The controlled evacuation of personnel from a risk area to a place of safety'*

*- DCOL 5/1994*

- Use of 'whistle' .. beware!...
- Briefing, records and communication...
- Liaison…protect crews.
- 'PRIORITY' procedure'...
- IC advised, SC to instigate 'appropriate' procedure.

# *What may instigate an evacuation?...*

- Command decision...
- Unsafe building / vessel...
- Sounding of the ‘whistle’...
- BA communications ‘failure’?

# *The application of Tactical Mode...*

- Will be formalised for ALL incidents…
- Should be stated at all incidents…
- All tactical messages will confirm Tactical Mode…
- Example:- (Informative)….'From Sierra 1 - a building of three floors, 20m x 20m - Used as food processing factory - Ground and first floor well alight - three jets in use - In DEFENSIVE Mode'…

**Fire Control must 'repeat' back all 'tactical' messages as confirmation.**

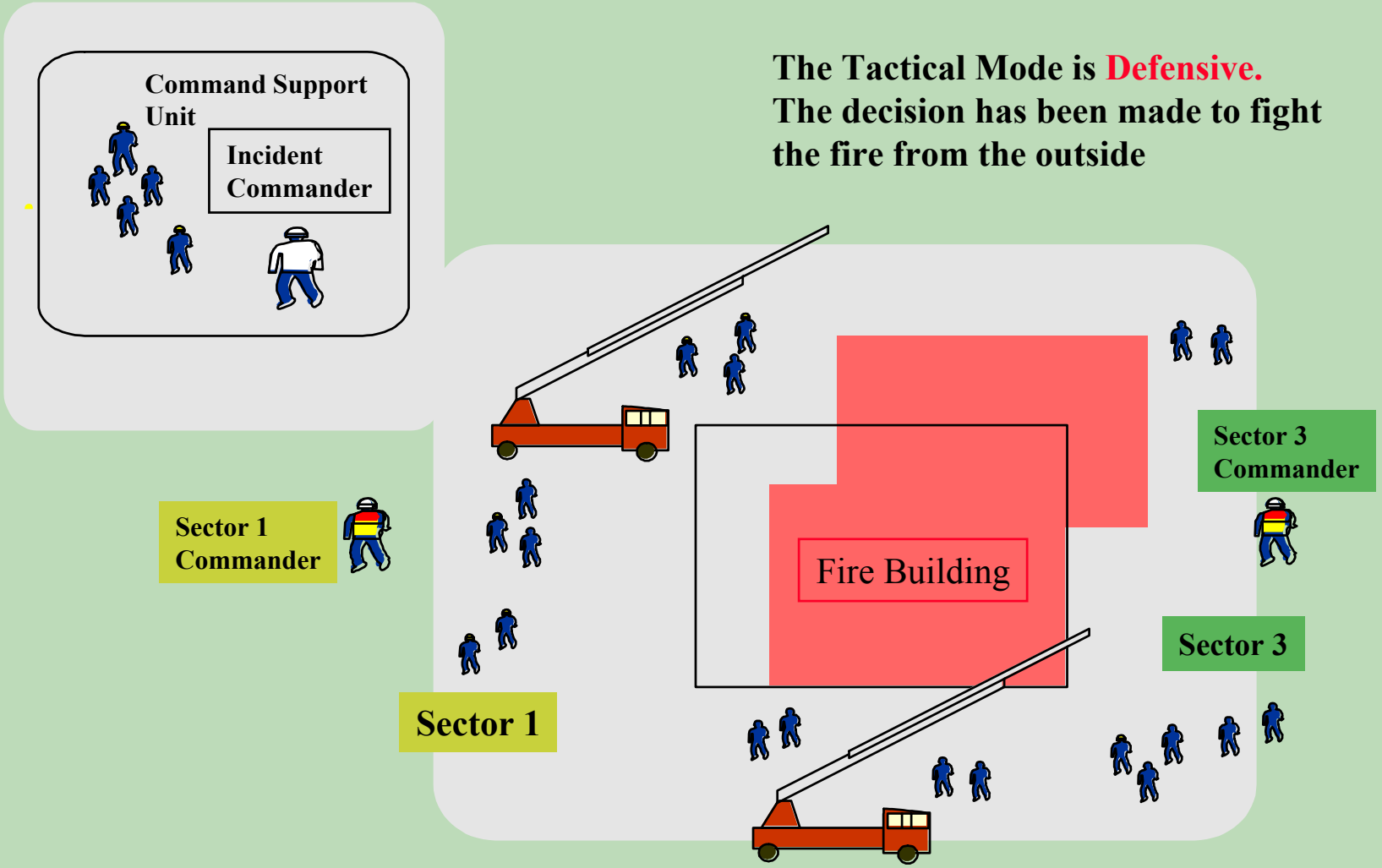
# *Adopting or changing mode when sectors are in use...*

- The IC retains responsibility…
- Liaison between SC's and IC…
- Safety reasons…
- Briefing and debriefing of crews...
- Communication…Communication!!!

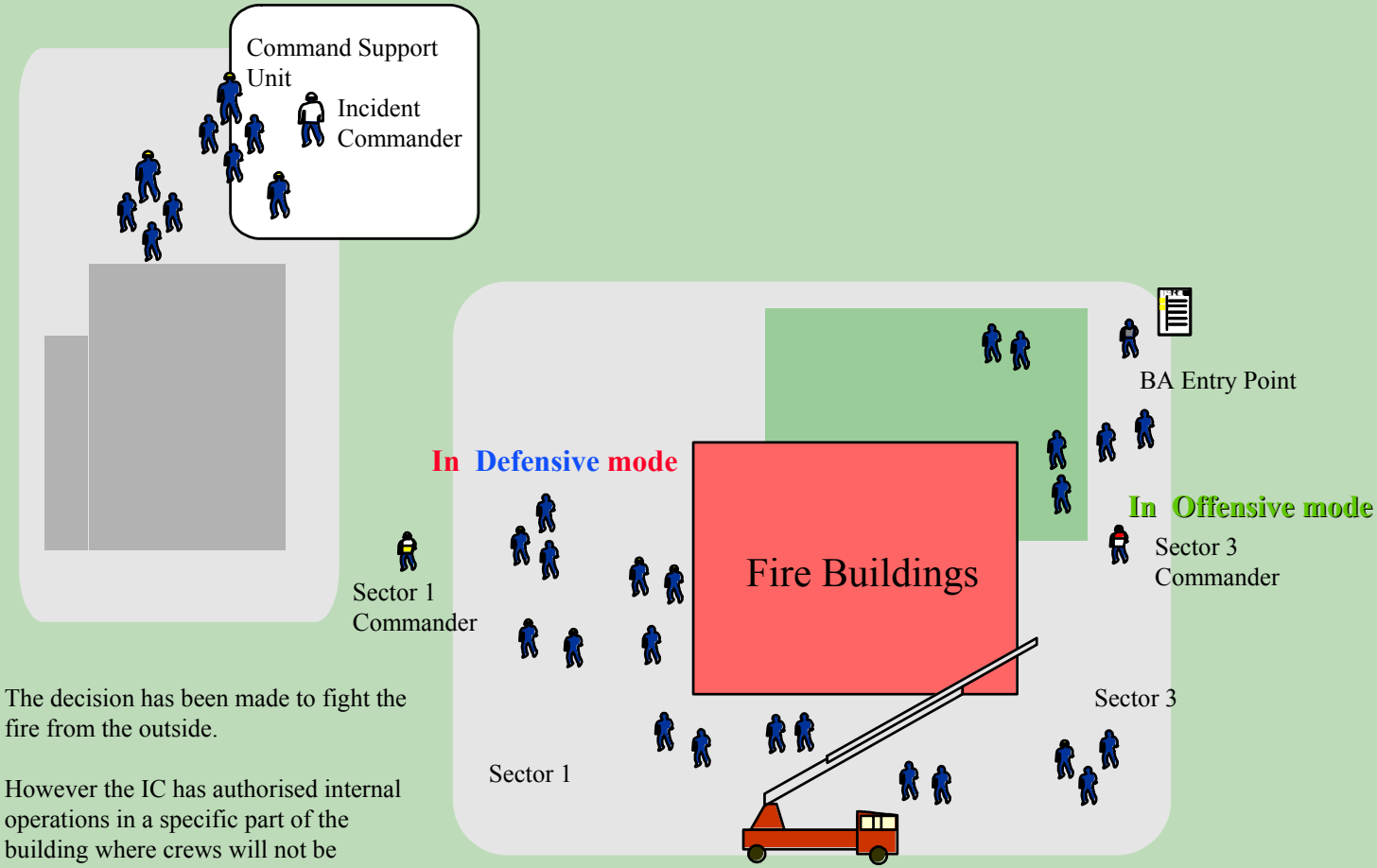
# *Responsibilities for determining Tactical mode...*

- Incident Commander…
- Sector Commander's…
- Crew Commander's…
- Safety Officer's.

# Incident in Defensive Mode



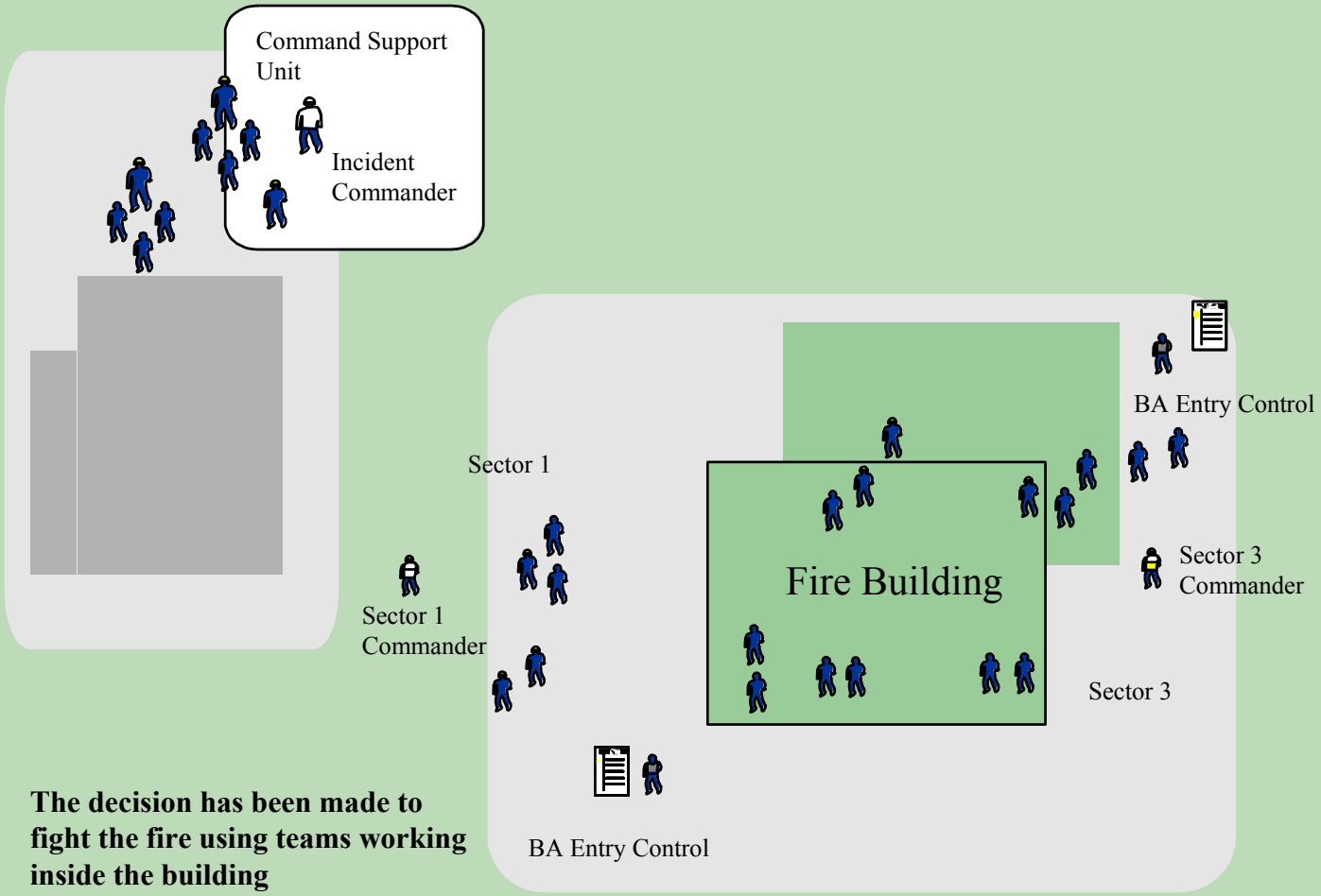
# Incident in Transitional Mode




The decision has been made to fight the fire from the outside.

However the IC has authorised internal operations in a specific part of the building where crews will not be at risk from the effects of the other fire fighting activities

# Incident in Offensive Mode




**The decision has been made to fight the fire using teams working inside the building**

# *Other considerations...*

- BA and role of 'Entry Point Manager' (EPM)…
- 'Major Incident'…"any emergency that requires the implementation of special arrangements by one or more of the Emergency Services" .. see *Brigade Major Incident Plan…*
- Roles of the other Emergency Services …Police / Ambulance / Coastguard…
- 'Bronze' (Operations) / 'Silver' (Tactical) / 'Gold' (Strategic).


# Command and Control

## Part Four

## Communications

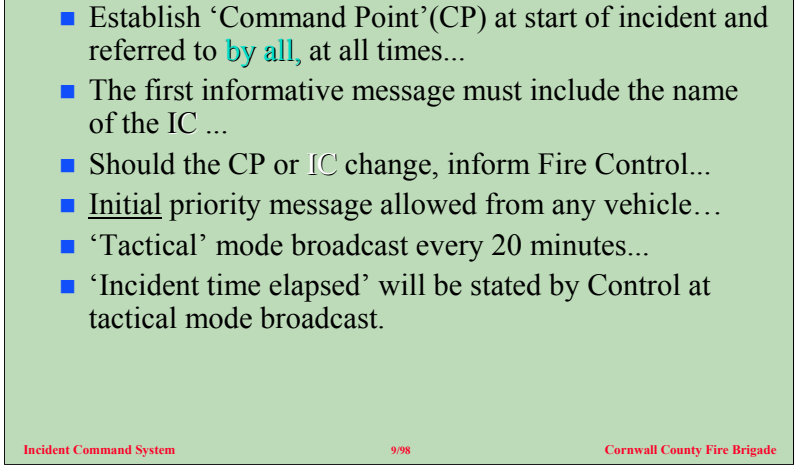
The following slides provide brief information on key communication issues.

Next…formal communications...


All tactical communications with Fire Control will include a confirmation of Tactical Mode for the information of oncoming appliances and officers.

The Tactical Mode will be confirmed every twenty minutes with Fire Control and all personnel on the Incident ground.

Next…communications..




When a Tactical Mode has been formally adopted, the IC must ensure that everyone on the incident ground is aware of it.

Confirmation of the prevailing Tactical Mode must be established between Sector and Crew Commanders throughout the incident.

Command Support shall broadcast the prevailing Tactical Mode at least every twenty minutes and should include this information in messages to Fire Control. Control in turn will relay 'incident time elapsed' to CS. This should be communicated around the incident ground.

It is the duty of the IC being relieved to give the arriving Officer:-

All relevant information concerning the incident.

The action being taken to deal with it.

Any other relevant details which will assist to bring the incident under control.

The arriving Officer will then clearly indicate he/she is taking over command of the incident and:-

Advise Fire Control via Command Support

Inform Sector Commanders of the change

The relieved Officer would normally be directed to the Sector containing the primary area of activity, or at a major incident become the Operations Commander.

When an officer is assigned as SC the officer will assume the sector name as fireground radio call sign e.g.:''Incident Command to **Sector Two Commander**''.

The identification of sector names and their use as callsigns extends to the support sectors, examples of the callsigns to be used for support sectors are: Water, Welfare etc..

Next..continued..

- ALL local incident ground communications will be from and to ***"Command"***...
- If the IC decides to appoint Sector Commanders then this information must be made known to all on scene personnel...
- All references are to "Post", e.g..... ***'Command to crew commander Polruan appliance'*** or ***'to Sector One Command',*** etc..... individual names are not to be used...
- All personnel **WILL** use ICS terminology.

Incident Command System 9/98 Cornwall County Fire Brigade

Fireground Radio Communications Within The Command Team

When the Command Support Unit (CSU ) is in operation the command team will include several people. The command team will continue to respond to the single call sign "Command".

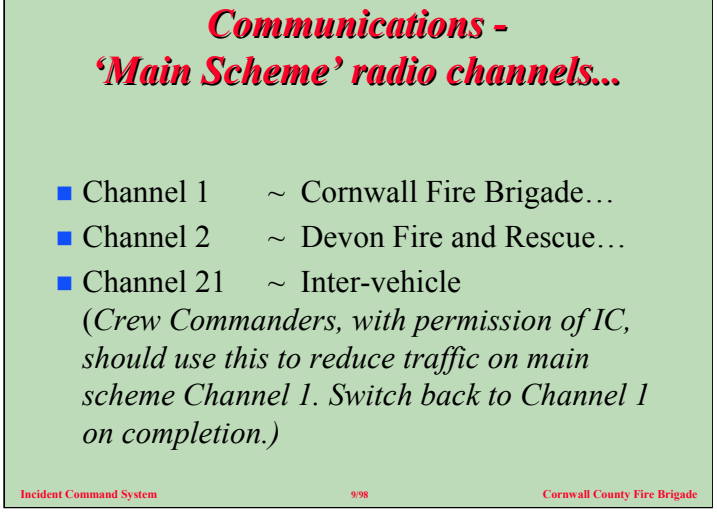
Radio communications within this team may be necessary from time to time and in this event the call signs "Incident Commander" and "Command Support" will be used. These call signs **will only be used by members of the command team.**

Management of radio communications within the team is at the discretion of the IC.

Remember that transmissions on fire brigade radio networks are not secure against unauthorised monitoring by members of the public and others. Therefore, messages of a confidential nature should not be transmitted by radio.

As radio messages may be overheard by members of the public and others, all messages and other transmissions should be confined strictly to the operational business in hand.

Next..main scheme radio channels..

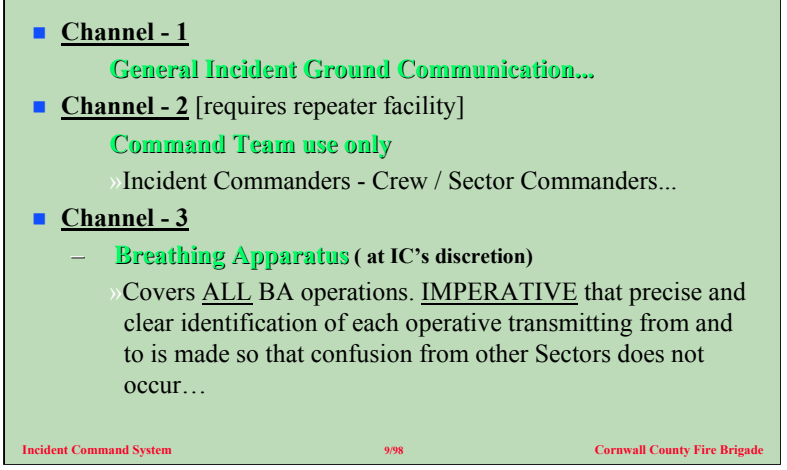



The Main Scheme channels are as indicated.

Channel 21 should be used when vehicles are in relative close proximity to avoid overloading Channel 1. This channel can be used in certain conditions up to a maximum distance of about five miles. On completion, revert back to Channel 1.

*Note: Crew Commanders should also be aware that if more than one appliance books mobile from home station to an incident handheld radios should be turned on and Channel 1 used as an aid to communication between vehicles / Crew Commanders, to again avoid overloading Channel 1 Main Scheme.*

Next…handheld channels..




Channel 1 will remain as general incident ground communications until repeater facility available and then Command Team officers will be instructed to change to Channel 2.

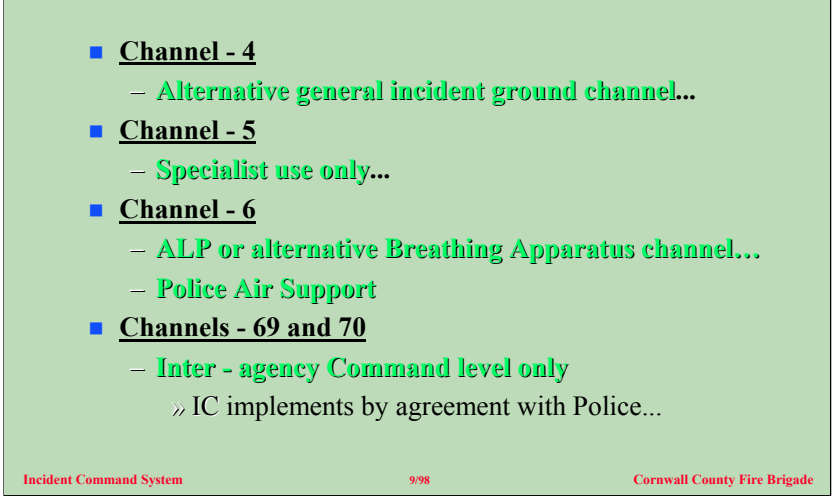
Channel 2 is for Command Team use only.If Command Team member require to talk to each other then 'talk through' permission must be obtained from Command Support e.g " Sector One Commander to Command - request talk through with Sector Three Commander"

Channel 3 is dedicated BA comms use at all times. BA comms must be used at all times BA is committed.

Note:

BA Entry Points will be designated the same 'ID' as the sector too which they are assigned e.g... 'Sector One Entry Control...'

**For brevity, speech must be formal and directed between 'roles' e.g "pump operator to branchNo1" and the use of individuals christian and surnames is not to be used.**




Self explanatory.

Channel should provide ‘ground to air’ channel for Police air support helo…call sign Quebec 99

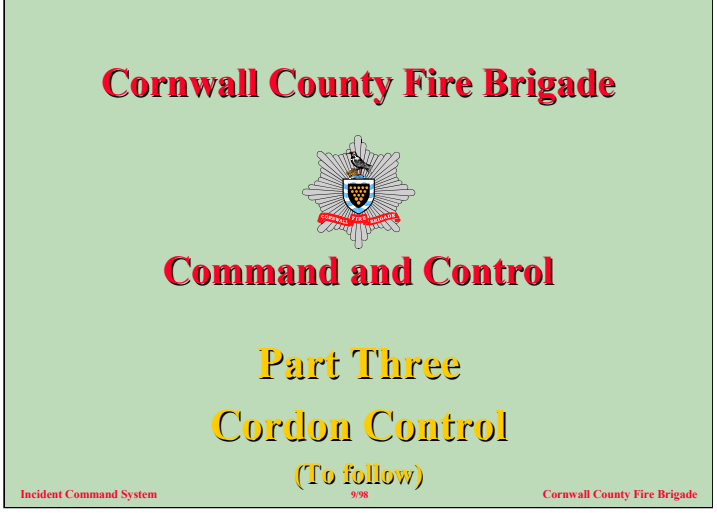
Where more than one BA Entry Point is in use, be aware of the need potentially to invoke separate channel for BA communications to avoid overload on Channel 3.

**Command Support is responsible for monitoring the messages on the general channels. They will record briefly messages that indicate the state of the incident in chronological order and update the IC accordingly.**


- Role of communications…
- Use of Channels…
- Terminology…
- Formal procedures.



Self explanatory.




.

The West Yorkshire method of cordon control and has not currently been adopted by CCFB and our in house policy is currently under review in consultation with the other key agencies and the Brigade major incident plan.

1st May 1999……

# Cornwall County Fire Brigade


## Command and Control

### Part Four

## Communications

# *Formal Communications...*

- **An integral part of Incident Command...**
- **ALL personnel including Fire Control, Command Support and fireground users should adhere to it.**
- **All ‘tactical’ communications with Fire Control will include a confirmation of the Tactical Mode.**

# COMMUNICATIONS

- Establish ‘Command Point’(CP) at start of incident and referred to by all, at all times...
- The first informative message must include the name of the IC ...
- Should the CP or IC change, inform Fire Control...
- Initial priority message allowed from any vehicle…
- ‘Tactical’ mode broadcast every 20 minutes...
- ‘Incident time elapsed’ will be stated by Control at tactical mode broadcast.

# *COMMUNICATIONS*

- ALL local incident ground communications will be from and to ***"Command"***...
- If the IC decides to appoint Sector Commanders then this information must be made known to all on scene personnel...
- All references are to "Post", e.g..... ***'Command to crew commander Polruan appliance'*** or ***'to Sector One Command'*****,** etc..... individual names are not to be used...
- All personnel **WILL** use ICS terminology.

# *Communications - 'Main Scheme' radio channels...*

- Channel 1 ~ Cornwall Fire Brigade…
- Channel 2 ~ Devon Fire and Rescue…
- Channel 21 ~ Inter-vehicle

(*Crew Commanders, with permission of IC, should use this to reduce traffic on main scheme Channel 1. Switch back to Channel 1 on completion.)*

# *COMMUNICATIONS*

## *Channel Allocation - UHF Handheld radio's...*

- **Channel - 1**

  **General Incident Ground Communication...**

- **Channel - 2** [requires repeater facility]

  **Command Team use only**

  »Incident Commanders - Crew / Sector Commanders...

- **Channel - 3**

  – **Breathing Apparatus ( at IC's discretion)**

  »Covers ALL BA operations. IMPERATIVE that precise and clear identification of each operative transmitting from and to is made so that confusion from other Sectors does not occur…

# *continued...*

- **Channel - 4**
  - **Alternative general incident ground channel...**
- **Channel - 5**
  - **Specialist use only...**
- **Channel - 6**
  - **ALP or alternative Breathing Apparatus channel…**
  - **Police Air Support**
- **Channels - 69 and 70**
  - **Inter - agency Command level only**
    - » IC implements by agreement with Police...

# Summary


- Role of communications…
- Use of Channels…
- Terminology…
- Formal procedures.

# Cornwall County Fire Brigade

# Command and Control

## Part Three

## Cordon Control

(To follow)