A revised incident management platform for Fire and Emergency New Zealand [FENZ]

Background

For some time now, Fire and Emergency New Zealand [FENZ], and its predecessor, the New Zealand Fire Service, have contemplated updating their incident management systems and support arrangements.   A significant driver for this has been the findings and recommendations from reviews of several multi-agency complex or long duration incidents.   The broad findings related to the system used, or the degree the system was used; the competency of those in senior command positions; the working relationships with other agencies; and the means of communicating within the incident structure or to the public, and in some cases, to political interests.   In particular there have been findings related to …..

- whether or not all agencies are aligned to the same incident command system
- whether or not there is a full understanding of the principles and fundamentals of the system used
- where, and how well the functions of control, command and co-ordination were undertaken
- whether or not the system terminology was used consistently
- whether or not agencies have a pre-planned and pre-exercised approach to emergency management to ensure they knowingly work together in a collective and cohesive way; and
- whether or not agencies have the facilities needed to support the system working effectively.

Perhaps unsurprisingly, these findings are not dissimilar to the findings of significant incidents in other countries, especially Australia and North America.   However, the road various countries and agencies have taken to solutions have been quite different, and too often have been steered down a path that is not appropriately or correctly aligned to the issues identified.

FENZ could fall into similar traps without a wider understanding of the history and the broader issues that surround establishing a universal system that all agencies buy into.   Matters include:

- the history of incident command development over the past 30 years
- the issues agencies beyond the traditional emergency services face
- the significant issues and costs agencies face in initial system training, and then in retaining appropriate levels of competence
- acknowledging comprehensive emergency management preparedness and capability is far wider than just having a system
- understanding that both organisational capacity and organisational capability have pretty much equal status
- acknowledging both organisational capacity and capability are bigger issues than most organisations anticipate
- overcoming the fact that some agencies are happy with what they use, or are very very reluctant to change, especially to a system that has its roots in first responder agencies
- notwithstanding the point immediately above, understanding the complexity of keeping agencies who may only use the system once every 5-10 years being as prepared as those agencies that use the system every day; and

- accepting the research that identifies that the incident management functions for complex, long duration, multi-agency events are best managed by pre-formed incident management teams, with members selected because of competence, rather than rank or seniority or the agency they come from – this is a big obstacle for agencies with deep cultural links to hierarchies and as a consequence, a history of managing with a hierarchal or seniority approach rather than a competency based approach.

History

After large scale wildfires in the US, particularly California, in the late 60's, where interagency working arrangements were found to be very wanting, discussion began on an incident management system that could be used across the fire agencies.   This system was named the Incident Command System and was the beginning of the universally known system abbreviated to ICS.   It is worrying to note that some of the findings from the fires in California back in the 1960/70's are still to a greater or lesser degree, the same issues we have in New Zealand in 2021!   For example, they found the weaknesses in incident management were often due to ….

- a lack of accountability, including unclear chain of command and supervision
- poor communication due to both inefficient uses of available communications systems and conflicting codes and terminology
- lack of an orderly, systematic planning process
- no effective pre-defined way to integrate inter-agency requirements into the management structure and planning process
- "freelancing" by individuals within the first responder teams without direction from a team leader (IC)
- those with specialised skills operating independently of first responders; and
- a lack of common terminology.

Notwithstanding the desire to overcome these issues, acceptance of an ICS was not without its problems, with opposition being labelled by some as:

- its a fires only system
- its a fire services system
- its a Californian system
- its only suitable for major events; and
- Police and government agencies saying it wasn't suitable for them.

Further, some existing agencies had their own emergency incident structures and facilities, but most were unique to each agency, and they were not able to scale up, especially when large scale mutual aid became necessary. Initial work to overcome this concentrated on the inter-agency components, with no input into incident ground systems, however, work on this aspect progressively evolved. Eventually ICS became the model for all incident types and sizes, and for most agencies.

Post the World Trade Centre incident and Cyclone Katrina there was a call for a national system.   As a consequence, ICS was integrated into a system named as the National Incident Management System [NIMS].   In the US, it was mandated that all local, state and federal agencies were to use NIMS, especially if they contemplated access to Federal funds post an incident.

Several other countries and agencies have since followed the lead of the USA in using ICS as the basis for their incident management systems, albeit with an array of different names.   The United Nations have recommended ICS as the international standard; the UK have the Gold, Silver, Bronze [and

Platinum] system; Canada has ICS Canada; in Brazil the fire department and civil defence agencies of Rio de Janeiro use ICS; Australia has AiiMS; the South African Forestry Service has ICS, and the original system developed for New Zealand [CIMS1], was framed around ICS.

Some experienced practitioners argue the Canadian system is the best system, having remained very true to the principles of ICS, supported by very good training resources.

System reviews

NIMS has been extensively reviewed post major incidents in the USA, none of which has resulted in any suggested change to the system. However, proper and effective use of the system has been criticised. Some very experienced users of ICS continue to be critical of it, but further scrutiny of the reasons behind their views reveal that despite an overarching national response plan in the USA, many agencies don't use it to its full potential, and there are still issues with the broad preparedness across agencies essential to make the system work effectively. The nett effect of this criticism is that the system cannot be totally functional if all of the agencies likely to use the system are not fully prepared to use it. This, therefore, is not a criticism of the actual system, but it does show that despite the efforts in the US since the 70's, and the legal mandate around the systems usage, there are still issues to be resolved around full agency participation, and hence full functionality.

AiiMS is regularly reviewed, but the reviews have been a little problematic in a couple of areas. Australia has suffered many tragedies in recent years, all with significant loss of life, and all with criticism of how the emergencies were handled. This has resulted in considerable pressure to be seen to be making changes. However, to bring about effective change, there needs to be rigour around identifying where the real issues lie. When the recommendations from incident reviews and Coroners are combined with the strong parochial views that exist in Australia, and the public and political pressure for change that inevitably follow these major events, there is potential for the wrong issue to be the focus. Subsequent versions of AiiMS have reacted to this pressure [rather than the real issue], with the result there is some evidence that indicates AiiMS is not as strongly ICS based as it once was, albeit the deviation is minor. It is very unlikely that the system had the flaws some thought it did, or that change to the actual system would automatically result in better outcomes in the future. It is far more likely that the real issue lies with the preparedness of States, individual agencies, and their key people; whether or not the key people are tested to check if their competency remains current [which obviously has a link to their effectiveness]; and whether or not the readiness and working arrangements across agencies [and States], are as robust as they need to be.

Furthermore, the A in AiiMS stands for Australasia, but despite political agreement for a uniform emergency management platform across the two countries, the system is very Australian focussed. Executive management of AFAC are aware of the above issues and have given assurance these issues can and should be resolved.

CIMS in New Zealand has been reviewed twice since its introduction, with significant change as a consequence of those reviews. The focus of both reviews was to change the system, addressing the less than desirable performance of some agencies. The issues were identified in the reviews of recent major events, but the resultant recommendations wrongly suggested it was a system matter as distinct from a lack of agency preparedness matter. There was no appetite to admit that their agency and or their people were not as ready or as competent as was required, so the emphasis of change was significantly mis-placed. It is worth noting, that MCDEM sponsored both of the past two reviews, however, they never developed any training resources or courses or supporting structures for the revised system. This resulted in limited or no training or training resources or training courses which

of course, compounded the real problem. If, and where agencies did try to overcome this not inconsiderable gap, any interpretation of the new system was at individual agency level rather than having a singular national perspective.   The nett effect of this situation is either no preparedness training or differing interpretations.

While there is some work on training resources and training courses going on as part of the latest review, it is at the basic end of what is really required, with the outcome it will be light years away from what is essential for New Zealand agencies to be collectively prepared for the next major emergency.

Even if CIMS3 was an appropriate document in terms of its intent, structure, and terminology, there is no overarching plan, or readiness planning document to ensure all agencies train with it, or assess and certify their staff are competent, and there is very definitely no planning or plans to ensure all agencies know how they integrate themselves into the management structure of a multi-agency incident, whether that be local, regional or national.

The New Zealand Fire Service cannot escape some criticism either.   Several incidents [ChCh earthquakes, the Kiakoura earthquake, the Tasman fires, the Port Hills fires etc. etc.] were all reviewed with very similar findings to those that were experienced in the 70's in California.

Approximately 5 years ago, the FENZ Command and Control Manual was rewritten to take into account some of these issues, but it fell short in a number of areas and was not released. Those issues include …..

- It followed the flaws of CIMS2
- It did not follow the key principles of ICS
- there was an over emphasis on "commander" titles for some roles
- it didn't anticipate the amalgamation of rural into the new organisation [FENZ], and so had many gaps in terms of its usefulness as a national document; and
- it wasn't supported by any documentation highlighting the necessary training regime, and the associated costing and capacity issues needed to ensure the intent of the new Manual became the organisations mandate for incident management.

The current situation

The following **general** matters are listed, not to apportion blame, but to identify the matters that FENZ must consider when deciding on a way forward ….

- there are several philosophical differences to incident management that make having one system difficult – FENZ, DOC and ambulance services locate incident control as close as possible to the incident, and for the vast majority of day to day incidents, that is at the incident ground – Police tend to do the same for their lower scale day to day events, but manage their larger scale or significant incidents from local, regional and centralised command and control centres – MCDEM and other centralised government agencies station their incident control teams at either EOC's or ECC's or the NCC
- another fundamental difference to incident control for some agencies is they have multiple layers of "control" for the one incident, and structure their activities around multiple incident action plans
- furthermore, there is not widespread understanding of what the various agency acronyms or terms like ICP, FCP, EOC, ECC, DCC, CCC, RCC, FENZ NCC, Government NCC, Watch Group and

ODESC actually mean; what function is carried out at or by each; and what their inter-relationships are

- not surprisingly, these deeply rooted philosophical differences to incident management make it impossible for all agencies to agree to one universal national system
- the nett effect is CIMS3 is sufficiently different to the knowledge and experience of the majority of FENZ operational personnel, and so different to the fundamentals of ICS, to not be useful for FENZ incident management purposes
- not only does CIMS3 fall well short of the current experience and knowledge of those involved with overseas deployments, especially for wildfires, it is not aligned to the incident management system used by the countries we are asked to support.

Clearly, having different incident management platforms across New Zealand's agencies has the potential for less than desirable effectiveness when working in multi-agency events. It is equally clear, that the agencies with the considerable skin in the game are not prepared to compromise their thinking. This is understandable, particularly for those who use the rudimentary parts an internationally recognised command and control system daily.

As was identified in the review of significant incidents elsewhere in the world, in almost every case, the issues identified were not with the system, but with the preparedness of the agencies involved. New Zealand is at risk of having the same issues given …..

- the sponsors of the rewrite of CIMS2 are not planning to develop a full suite of training resources; development programmes; or system aids [it is worth noting the same sponsors managed the introduction of CIMS2, where no training materials or resources or courses were ever developed]
- the same sponsors have no plans to develop competency assessment [or reassessment], programmes/courses for people involved with key incident management functions and roles
- the same sponsors have, to our current knowledge, no plans to develop an over-arching readiness plan or emergency management doctrine – such a plan or doctrine, would outline what is expected for and from all agencies in order to be in a high state of collective regional and national readiness 24/7, ensuring a seamless and cohesive approach to emergency management regardless of what the event type is, or when and where it occurs – what is of prime importance here is the collective readiness – it is a separate responsibility of agencies to individually ensure readiness for their mandated functions
- the development of a full suite of training resources; programmes/courses; and aides, plus the development of a competency assessment programme will come at considerable cost, especially if agencies develop their own
- having said that, there is a considerable risk to agencies developing their own resources – past experience shows there is potential for no development or limited development given the costs, but far more importantly, it is very likely agencies will develop their resources following their own interpretation of what the system is saying or requires, and or without collaboration with other agencies.

Having stated all of the above, all is not lost – far from it. But to bring the differing philosophies together, there is much FENZ can, and needs to do.

Next considerations and decisions for FENZ

Each of the following matters are considered pertinent to reaching a conclusion, and subsequently to making recommendations:

- CIMS3 in its current form is some distance away from being a suitable incident management system for FENZ
- the training resources; courses and aids developed to support CIMS3 will be well short of what is needed to provide FENZ personnel with the appropriate knowledge
- having no certification and recertification process developed for the key roles in CIMS3 runs the risk of individual personnel and FENZ being exposed to questions of competence
- FENZ needs an incident management platform that is suitable for all incident types and size, and one that has systems aligned with our international support partners
- FENZ needs a training regime compatible with the system chosen, with that regime able to provide the full suite of training resources; courses; and aids, and it needs to be supported by a system of certifying, and re-certifying the competence of personnel
- FENZ needs to have a plan that adequately addresses both the capability and capacity implications of resourcing long duration events at both an incident, and at co-ordination centres
- FENZ needs to address the capability; capacity and on-going cost implications of resourcing training courses and programmes, and certification and recertification systems
- FENZ personnel need to be completely conversant with the systems used by agencies other than FENZ, and be able to fully participate within their systems, especially where they differ from FENZ's
- FENZ needs to take as much advantage as is possible of its membership of AFAC, and where possible, maximise usage of the resources, systems and opportunities developed or afforded member agencies
- FENZ should consider an opportunity to take a strategic leadership position at the Emergency Management Response Group level [or whatever the correct name is], and push for an over-arching response plan or framework or Doctrine that sets the required pre-event standards for individual agencies in terms of preparedness – this should also set the pre-event standards required of collective preparedness for all agencies likely to be involved in major emergencies – given that not all agencies have signed up to CIMS, and some other agencies tend to use their own in-house systems to a greater or lesser degree eg. Defence, the Police and potentially FENZ, this framework or plan would recognise there are differences in the way agencies manage events, and there are a variety of agency protocols that both need to be understood and followed eg. how to request Defence resources – the plan would document how such variances, and the roles of NGO's and volunteer groups are brought together into one cohesive and effective structure and understanding – this arrangement would guide the management of all events, but it would be mandated for all regional or national emergencies involving more than one service or agency – it is essential to provide clarity on the legal mandates of agencies [and therefore incident management accountability], and on how the often competing nature of, or the lack of understanding around regional v's national interests is known, and practised well before an event.

Conclusions

All of the above culminates in the following broad conclusions:

- the current incident management system [CIMS3] is not accepted by some agencies, and is not a system that relies on internationally accepted best practice
- various New Zealand agencies have a different philosophical position with regard to how incidents are managed

- New Zealand does not have a comprehensive training arrangement for emergency management practitioners, nor does it have an over-arching mechanism to ensure collective agency readiness and/or a practised state of collaboration, and nor does it have a system where the competence of practitioners is formally certified and recertified; and
- there are expectations around New Zealand's readiness and competence to assist in international deployments.

Notes particularly relevant to the following recommendations

- if FENZ was to write it's own incident management system, it would be extremely cost effective and expedient timewise, to have it fully aligned with AiiMS, as this would give access to the full suite of existing training resources produced at no cost by AFAC [other than usage costs], plus the AFAC competency assessment model is 100% aligned to the roles and functions of AiiMS.
- it is known that AiiMS is not 100% aligned with ICS, however, AFAC had advised they will work with FENZ and develop a system that is, and it will ensure the next draft is suitable for all of Australasia, as distinct from mostly Australia.
- regardless of the system used, the effectiveness of incident management is completely dependent on the competence of the people involved, and the collective readiness of agencies to work together.

Recommendations

It is recommended that FENZ …

- develop or adopt an incident management system that aligns with ICS principles [as CIMS1 did], by either developing it's own, or by adopting AiiMS
- develop a command and control manual to support the system – this should not be a repeat of the incident management system, or of training resources, but should detail how FENZ puts it's incident management system in place eg. who has authority; how is that authority obtained; how is the incident controller determined; how the level of authority is determined; the relationship between ICP's and local, regional and national co-ordination centres; how assistance is sourced etc. etc.
- secure access to, or develop training resources, courses and incident command aides that fully align with it's own system or AiiMS
- make full utilisation of the already developed AFAC emergency management professionalisation scheme [EMPS], and enhance the effective use of that system by having FENZ formally registered by AFAC as an agency that can self-assess it's own personnel for L1 and L2 incidents
- sponsor the concept at Emergency Management Response Group of an "all of government / all agencies" over-arching document [doctrine], that details:
  - the legal mandate of agencies
  - the differences between the incident management systems used by various agencies
  - how those differences manifest themselves from an incident management perspective eg. managed close to the incident, or more remotely at co-ordination or command and control centres]
  - which incident management system is mandated to be used locally, regionally and nationally, based on who the lead agency is
  - clarification of terminology
  - communication/information flows – by who, to who and when

- o national communication systems / alerts - how and when they are used, and who authorises
- o notification systems, and contact details for senior executives of all agencies
- o security provisions for certain facilities
- o clarity on the roles, membership and activation of senior groups like Watch Group and ODESC
- o the expected preparedness of individual agencies
- o the expected collective preparedness of agencies
- o how that preparedness is planned for and tested annually
- o fallback arrangements should some facilities not be suitable or available; and
- o facility sharing expectations so as to avoid duplication costs.