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Sent: Mon 10/07/2017 11:43:34 AM (UTC+01:00)
Subject: DMM policy review
[Briefing note - DMM Policy Review.docx](#)

Hi Steve,

As requested, please find attached a briefing note for you in relation to the scheduled DMM policy review. I've been liaising closely with Rachel (NOG Implementation lead) who would greatly encourage the DMM review to reflect NOG. There are additional ramifications in terms of scenario development to be held on MDTs which are produced by NOG in the format of the decision control process. This element alone is likely to outweigh the challenges of implementation of the DCP and make it's consideration worthwhile.

I'll pop a hard copy on your desk as well.

Kind regards,
Sabrina

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Subject

Decision Making Model Policy Review

Brief for

Director of Safety and Assurance

Author

DAC Cohen-Hatton

Background

1. The National Operational Guidance for Incident Command went live with a National implementation date of 1st January 2016, as agreed by the National Fire Chief's Council National Operations Committee. A key change in the revised Guidance was a move from a process focus to a people focus. A thorough literature review (which included rule 43 letters, critical and major incident reports) ensured the revised Guidance took account of lessons learned in recent times, which identified a critical need for a focus on situational awareness and decision making.

Research and Findings

2. Two pieces of research were conducted that informed and tested the changes to the Guidance. The aim was to improve firefighter and public safety by increasing the understanding of the processes that drive operational decision making. The research conducted on mainly level 1, 2 and 3 incident commanders found:
 - The DMM did not account for the processes by which most command decisions are made.
 - Most command decisions were reflexive and intuitive, rather than reflective and analytical.
 - Situational awareness levels were relatively low.
 - Operational experience changed the way decisions were made.
3. The findings were integrated into a revision of the Decision Making Model, named the 'Decision Control Process' (see Appendix I). This was further tested in CFA/NFCC sponsored National Decision Trials, where it's practical applicability was testing in direct comparison with the DMM. The scientifically validated benefits of the revision include:
 - Representation of both intuitive (80% of fire-ground decisions) and analytical (20% of fire-ground decisions), providing a sounder policy basis for post-incident scrutiny.
 - A greater ability to link actions to over-all plans when the DCP was used in direct comparison to the DMM
 - Significantly greater levels of situational awareness when the DCP was used in direct comparison to the DMM

4. This robust and evidence-led approach to the changes to the DMM had a vigorous scientific basis, which received international recognition from the scientific community.

Benefits

5. Aside from the scientifically validated individual benefits to commanders outlined above, fully implementing the Decision Control Process (DCP) would have the following organisational benefits:-

National Alignment

6. Fully implementing the DCP would ensure that LFB is fully aligned with the national position on command decision making. This will also make it easier for LFB to fully integrate NOG. One example of this is the scenarios produced by NOG. These are designed as a quick reference guide/aide memoire for incident commanders and use the DCP as the underpinning model. If LFB does not implement the DCP, the scenarios would all need to be amended to align to the DMM which would have a considerable resource requirement and would see London as out of alignment with neighbouring FRSs.
7. Aid intra-operability with neighbouring fire and rescue services, all of whom have fully implemented the DCP.

Inter-Operability

8. The DCP has been designed to complement other operational models, including the Joint Emergency Services Interoperability Programme (JESIP) joint decision model.
9. The DCP has been incorporated within the JDM and the revised JESIP Doctrine.

Anticipated Inspection

10. NFCC training lead has been clear that the NFCC expectation is that all FRS will fully align policy positions with National Operational Guidance.
11. NFCC Operational Effectiveness WG expectation is that NOG compliance will form the basis of anticipated inspections.

Equality Impact Assessment

12. The effects of the DCP were not tested specifically on individuals with dyslexia. However, psychology experts from Cardiff University have advised that the decision controls, once understood, are likely to better support command decision making in those with dyslexia (see commentary provided in paragraph 22).

Risk Aversion and Operational Discretion

13. The DCP should reduce excessive concerns over accountability by focusing on an operational goal, which has been noted to reduce decision inertia/risk-aversion.
14. The DCP improves situational awareness, thereby reducing uncertainty – a key condition under which risk aversion/decision inertia is observed.
15. These areas, together, support the appropriate use of operational discretion where the operational decision is not one that is pre-prescribed in policy.

Implementation

16. The DMM policy is scheduled for review in November 2017, providing a timely opportunity to consider the implementation of the DCP.

17. The CMB report (CMB 141/15) recognised that one of the greatest organisational impacts of NOG alignment was the implementation of the DCP. Implementation requires changes to the existing policy and incident command training, requiring all operational staff to become familiar with the DCP.
18. A working group met and identified the managerial processes used by the DMM, outside of the operational arena. This was limited to the use of the DMM in PRCs. No other department uses the DMM for any business purpose. Therefore the impact of implementation is limited to Incident Command policy, Development & Training and Operations.
19. Implementation requires the following steps:
- A review of the DMM (policy 341) to include the DCP
 - Include a full Equality Impact Assessment on proposed policy amendments, to include input from dyslexia experts (from Cardiff University)
 - Gap analysis of all incident command training courses and revision where appropriate (all of which to include a full Equality Impact Assessment)
 - A review of Incident Command training courses where DMM is utilised
 - Development of a CBT package for the DCP for all operational incident commanders, with a requirement for a minimum of 80% ICs prior to go live
 - A communications plan for the introduction of the DCP, to include articles in Shout, Update and Ops News

Dyslexia Expert Comments

20. Professor R. Honey (School of Psychology, Cardiff University) was consulted over the impact of the DCP on decision making in commanders with dyslexia. He reported:
21. *"There is a strong relationship between dyslexia and problems with executive functioning in both children (e.g., Varvara et al., 2014) and adults (e.g., Brosnan et al., 2002; Smith-Spark et al., 2016). Executive functioning is a general term for the capacity to control, monitor and change behaviors when needed, and to plan future behavior when faced with novel tasks and situations. Executive functions are central to decision making in everyday life. The provision of additional support and scaffolding for decision processes should be of particular value to firefighters and incident commanders with dyslexia (as well as others who have atypical executive function). The provision of effective information about when to use decision controls should enable engagement with the modified decision-making guidance, which should in turn enhance decision making."*

Implementation of National Operational Guidance

22. As detailed above, one of the benefits of this review will be assisting the integration of this guidance into the LFB. The task of introducing NOG into the organisation given the size and structure of our current policy framework must not be underestimated. NOG includes strategic actions requiring services to make their own decisions about their own policies/procedures to support the control measures within the NOG framework, and facilitate the use of NOG in service in the way it is intended. Whilst local risk assessment and the subsequent production of local documentation is crucial, there is a risk that if all services do this in isolation 50 different versions of NOG could be produced. Therefore, the NOG Programme team are proposing the production of subject matter product packs.
23. Based on the strategic actions the model centres around, subject related product packs for each FRS to either develop and share nationally or adopt and tailor all or part of a product pack produced by another region or service from NOG's central repository. Using

standard templates developed by the NOGP team each product pack contains a range service specific policy/procedure notes (Operational Information Notes), training packages, equipment/technical notes (Equipment Manuals) and where appropriate a set of additional information documents. This is currently being trialled with the Environmental Protection guidance.

24. LFB are taking the lead for the development of the Incident Command product pack. It is proposed this is done in parallel with this policy review. This would enable LFB to make a tangible contribution to the national implementation of NOG, assisting other services with implementation in a collaborative manner. For this to be done effectively, and to demonstrate leadership it would be significantly advantageous for London to be fully compliant with all key aspects of NOG Incident Command.

Recommendation

25. It is recommended that the Incident Command Policy department progress work on the implementation of the Decision Control Process, through usual business as part of the scheduled DMM policy review.

Appendix I

Decision Control Process (DCP)

The Decision Control Process provides a method to support decision-making at an incident. This aims to take account of the natural decision processes a person might employ in an operational context. It seeks to support decision makers in a practical way to avoid unintended consequences arising from decision traps.

The Decision Control Process is scalable. It can be applied to basic decisions made on the incident ground for a task or problem. It can also scale up for use in planning the resolution of an entire incident. It complements Joint Emergency Services Interoperability Principles (JESIP) Joint Decision Model for multi-agency decision-making, particularly for assessing risk and developing a working strategy.

This process consists of four stages. These are:

- Situation
- Plan
- Decision controls
- Action



Figure 1: Decision control process

Situation

Commanders base their decisions on the way they interpret a situation. Good situational awareness is key to understanding the situation in a coherent way. It helps to predict likely developments. By assessing the situation, a decision maker can understand the current characteristics and details of an incident and consider the desired end state.

Decision makers should continually be assessing the situation to support an accurate awareness. They should gather relevant information whilst making the best use of the time available. Though this list is not exhaustive, they should consider:

- Incident information

- Resource information
- Risk information

Resources

Incident commanders should identify resources currently available and those likely to be required to deliver a safe and effective incident plan. Appropriate internal and external resources should be requested via fire service control in a timely way; fire control should be regularly updated regarding availability and predicted length of deployment.

When requesting resources, the following should be considered:

- Appliances
- Equipment
- Specialist skills and expertise
- Tactical / specialist advisors
- Police, ambulance and other category 1 and 2 responders
- Fire and Rescue Service National Co-ordination Centre (FRSNCC)
- Relief crews

Plan

After assessing the situation, the decision maker should form a plan. They should understand the current situation and their desired outcome. From this they can identify their objectives and develop an incident plan.

This list is not exhaustive but the plan may consider:

- What are the incident objectives and goals?
- What are the tactical priorities?
- What are the operational tactics?

Decision controls

Decision controls are designed to help guard against decision traps that might occur as a result of the type of decision process people naturally adopt. Before moving to the action phase, decision makers should use decision controls as a rapid mental check and as part of their briefing to crews.

Decision controls are a rapid mental check that asks:

- Why am I doing this?
 - a. To what goals does this link?
 - b. What is my rationale?
- What do I think will happen?
 - a. Anticipate the likely outcome of the action, in particular the impact on the objective and other activities.
 - b. How will the incident change as a result of these actions, what cues do I expect to see?
- Is the benefit proportional to the risk?
 - a. Consider whether the benefits of proposed actions justify the risks that would be accepted.

Action

This involves implementing the decisions that have been made. Wherever feasible, decision controls should be applied before this phase, or as soon as possible afterwards. This applies whether decision makers move to *Action* from *Plan* or directly from *Situation assessment*. The two elements of this phase are:

- **Communicate** the outcomes of the decision effectively by issuing instructions and sharing risk-critical information. It may also involve the provision of updates on the situation, on progress, or other information about what is happening at an incident
- **Control** how the activities are implemented to achieve the desired outcomes. Consider delegating responsibility where this will help increase or maintain control.

Active monitoring

The commander should be actively monitoring and evaluating the situation, including progress being achieved against that expected. This ensures that their situational awareness remains accurate. They should consider whether their tactics or incident plans are suitable, sufficient and safe; they should consider and question any areas of uncertainty, especially where they have made assumptions. Operational assurance arrangements can aid commanders in maintaining accurate situational awareness.