

Report title

Review of Policy 341 – Decision Making Model

Report to

Commissioner's Board

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Report by

Assistant Commissioner, Operational Policy and Assurance

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Summary

This report details further work around the review of the Decision Making Model (DMM) in conjunction with National Operational Guidance (NOG). The previous report (21 May 2020) recommended the incorporation of the decision controls within the Decision Control Process (DCP) into the DMM to produce a hybrid model. In order to provide a degree of further scrutiny on this recommendation it was decided to seek an independent view. The independent view was also in support of the recommendation and therefore this report reviews the advantages and disadvantages of both models set against the background of phase two of the Grenfell Tower fire inquiry to produce a final recommendation.

Recommended decision(s)

That the London Fire Commissioner;

1. Approves a review of policy 341 that incorporates a hybrid DMM/DCP model as outlined in appendix 1 in order to ensure alignment with NOG.
2. Notes that, if recommendation 1 is agreed, a further review of the DCP/DMM process will be undertaken following phase 2 of the Grenfell Tower Inquiry.

Background

1. At a CMB meeting (CMB paper 117/17) on the 22 November 2017, in order to align with NOG, the implementation of the DCP was agreed subject to the inclusion of findings relating specifically to any potential impact of its introduction in relation to dyslexia and the associated Equality Impact Assessment (EIA).
2. Following that CMB meeting a number of significant strategic issues, events and professional discussions raised issues and concerns relating to the potential implementation of a change to LFB incident command decision making policies resulting in a delay to the implementation of DCP.
3. At a further CB meeting in April 2019, due to the events occurring at the Grenfell Tower fire, the Commissioner decided that the Brigade needed to reconsider the challenges and benefits of implementing such a fundamental change (of moving the DCP into its incident command

framework) at a time of significant organisational change and other improvement programmes - role-to-rank reforms, revalidation of incident command and DaMOP arrangements.

4. As such, any activities related to the proposed changes were suspended whilst the Assistant Commissioner, Operational Policy and Assurance, in consultation with the Head of Grenfell Tower Investigation and Review Team (GTIRT) considered other options.
5. Further to the above, the recent HMIFRS inspection report (Dec 2019) highlighted the following;

'The brigade is the only service not to use the national incident command decision control process. A review of the process, before a decision to adopt it was made, was suspended by the brigade. This situation is worrying, especially when it is seen alongside the brigade's lack of assurance over the ongoing competence of its incident commanders. This situation needs immediate attention'.

6. A report was presented at Operations Delivery Board (ODB) in May 2020 which recommended the incorporation of the decision controls within the DCP into the DMM to form a hybrid model. This hybrid model would allow alignment with National Operational Guidance (NOG) by amalgamating the DMM with the DCP. Adapting the DMM would capitalise on the recognised benefits of an already embedded and successful model and also allow clear and definite compliance with the following tactical actions from the control measure 'Making decisions' within NOG;
 - Make decisions that support the responsibilities of the fire and rescue service including the safety of personnel, other responders and the public
 - Develop and communicate the incident plan to relevant personnel, including the fire control room
 - Regularly review, update and communicate changes to the incident plan
 - Identify the resources currently available to take immediate action and request those likely to be needed to deliver a full incident plan
7. A decision was made to seek an independent view on whether compliance with NOG should be undertaken through wholesale adoption of the DCP.

Outcome of the independent review

8. Pimento consultancy were engaged to undertake the independent review of the DMM/DCP due to their experience of decision making in the military environment and having previously worked with the Fire and Rescue Service (FRS) whilst still having clear separation.
9. Pimento consultancy's report and findings can be seen in appendix 2. Overall, their findings questioned the fundamental grounds to move away from the DMM highlighting the lack of evidence for change and citing the DMM as a 'clear, simple and fundamentally familiar process'. The report suggests the DCP is not 'entirely intuitive' but recognises the decision controls should prove useful when a commander is under stress and were seen as a highly positive addition to the model.
10. The report made the following recommendations:
 - The DMM should remain extant within the LFB, however it is recommended that the DMM/DCP hybrid model (see appendix 1) is adopted at its core.

- Commission a study into the efficacy of the DMM vs the DCP based on evidence from the fire ground.
- Revisit any requirements for change previously submitted, (focusing on) what are the actual causes for poor decision making - the process used, the teaching methods or the people making the decision ?

Overall analysis and response to the independent review

11. The independent review supports the recommendation made in the ODB report in May 2020. However, as several views have been expressed at a corporate level through debate and professional discussion as to the benefits of both models, it is important to set out the overall advantages and disadvantages of both models in order to aid decision making.
12. Academic research underpins both the DMM and DCP and academics continue to debate the merits of both models. The DCP was derived and developed from the DMM and the synergies and direct correlations are clear. The key difference between the two models is the decision controls within the DCP. Overall knowledge and understanding of decision making, which also references the DCP, is contained within NOG foundation material and will be incorporated into LFB policy and training through NOG integration.
13. A review of the incident management performance database (August 2015-August 2020) has not presented any evidence of a problem or issues with the DMM. Consultation with managers responsible for cross border working have not highlighted an issue occurring with a difference in the two different models used by LFB and its neighbours.
14. Extensive research and comparison into the benefits and/or dis-benefits of both models that is based on actual command performance on the incident ground since 2016 does not exist, as far as we know, and therefore cannot be referenced to aid decision making.

Key risks and impact

15. Wholesale adoption of a new decision making model at a time when the Brigade is undergoing an extensive training regime in several areas (on the back of the phase one inquiry) presents additional workload and challenge to embed the DCP into a Brigade of this size when the current familiar model can be easily adapted. However, this may also present opportunities at a time when every level of incident commander is receiving bespoke face to face training for the three High Rise firefighting related policies.
16. An extensive review of policy, assessment criteria and operational procedure/briefing, alongside a significant training/comms programme would be required for adoption of the DCP presenting higher cost and time factors than that involving adaption of the DMM. However, as above, if there is to be fundamental change in policy it may prove beneficial and timely to address the issue through current NOG integration.
17. There is a risk of confusion over the use of two models within cross border working environments if LFB maintain the DMM whilst other surrounding FRS have already adopted the DCP. However, both models are risk based decision models and as mentioned above have clear synergies and similarities that lead a decision maker to consider the same factors within the incident environment. Furthermore, there is no evidence to date that the status quo has lead to confusion, misunderstanding or poor decision making at cross border incidents.

18. Interoperability also requires consideration but arguably is less of an issue as multi agency working dictates the use of the JESIP joint decision making model which is separate to both DMM and DCP. However, JESIP doctrine is regularly reviewed and NOG will be an influencing factor so the impact on policy will always require attention.
19. The DCP is nationally recognised, the only incident command related decision making model within NOG and aligns with tactical actions and scenarios. Incorporation of the DCP into the DMM would mean LFB are the only FRS that have not adopted the DCP in full. However, it should be noted that there are other elements of NOG that the Brigade will not be adopting e.g. rapid deployment of BA crews.
20. After consultation with the head of GTIRT, there is a possibility that the DMM or decisions regarding the DMM/DCP issue may arise within module 5 of the phase 2 of the inquiry. However, demonstrating improvements in our operational response and training will present an opportunity to highlight this matter alongside close monitoring of the outcomes and impacts of this second phase.

Conclusion

21. There remain two options for decision whilst policy 341 is under review within the NOG implementation project;

Option 1 – The Brigade maintains the use of the DMM but incorporates the decision controls from the DCP to form a hybrid model that aligns with NOG.

Option 2 – The Brigade fully adopts the DCP when aligning with NOG.
22. There is clear reason to change the current version of the DMM as well as argument about the degree of that change on both sides of the debate. Ultimately there is no apparent evidence of a fault with the DMM or that the DCP represents the better model, although academics may disagree on that point.
23. A hybrid model would seem to satisfy the Brigades requirements and would allow alignment with NOG but it would also place it out of sync with its surrounding neighbours and (according to the HMI) the rest of the UK FRS. As there is no evidence to suggest this is causing problems at cross border incidents, there maybe opportunity to take advantage of the current training regime and integration with NOG without having an adverse impact on the training burden.
24. As mentioned above, the hybrid DMM retains the familiarity and understanding of its current version whilst moving towards the DCP through incorporation of the decision controls. Understanding of this hybrid model is much easier to convey and less time is required than wholesale introduction of a new model into the workforce. Therefore, immediate benefit can be gained if the hybrid model is introduced within the current High Rise/Fire Survival Guidance (FSG)/Evacuation and Rescue policy training, specially the guided learning exercise. This training covers every level of incident commander and would act as an effective and timely introduction of the hybrid model that could be followed up through other training interventions and communications.
25. Furthermore, the hybrid model can be incorporated into policy now to support the above training and along with foundation material (covering the DCP), place the Brigade in the ideal position of having taken a significant step closer to understanding of the DCP that can be

incorporated into current workloads and timescales for delivery of those workloads whilst still leaving the door open to accommodate future need.

26. This position allows for any changes that may impact from phase two of the Grenfell Tower inquiry and/or changes within JESIP doctrine to be addressed by the Brigade in the most effective and efficient manner as Officers will have an understanding of both models.
27. Therefore, it is proposed that the hybrid DMM model forms the basis of the policy review. In addition and in line with previous reports, further to the normal policy review processes, the DCP/DMM process will undergo a review post phase 2 of the Grenfell Tower Inquiry and will be amended should it subsequently be considered that the model itself, or its underpinning NOG principles, need adjustment. This review will also seek to address the independent report recommendation related to an evidence based study of the two models and an analysis of decision making. Evidence can be established following the introduction of the THINCS behavioural marking scheme referenced in the Incident Command strategy. The THINCS process will allow for a more robust assessment of decision making against a recognised behavioural framework and links with other FRS using the same system could be utilised for comparison. The intention is to introduce THINCS within 2021, initially within the training environment and then within our operational assurance processes.
28. A communications plan will be required that will include articles in Shout, Update and Operational News.

Training

29. Alongside the communications plan mentioned above, inclusion of the hybrid model will be incorporated into the current High Rise/FSG/Evacuation and Rescue policy training and the overall ongoing review of all levels of incident command training. Delivery of the revised model will be incorporated into acquisition and maintenance of skills courses together with DaMOP and other continuous professional development sessions.

Costs

30. Costs related to incident command training courses and materials are being addressed through the TCAP process and the training budget for 2020/21 and 2021/22. There is no further impact in relation to costs for the current High Rise/FSG/Evacuation and Rescue policy training as the hybrid model will be incorporated into current training material delivered by in house resources.

Finance comments

31. This report recommends that a review of policy 341 incorporates a hybrid DMM/DCP model. The report notes that the related training costs for incident command training courses will all be addressed through the TCAP process and as a result, the cost of this training will be contained within the existing training contract budget.
32. The report also notes that the inclusion of the hybrid model will be incorporated into the current High Rise/FSG/Evacuation and Rescue policy training. This will not impact those costs as this will be included in current training material delivered through in-house resources.

Workforce comments

33. Subject to approval of the recommendations, policy 341 will be reviewed and passed through the recognised consultation processes.

Legal comments

34. Under section 9 of the Policing and Crime Act 2017, the London Fire Commissioner (the "Commissioner") is established as a corporation sole with the Mayor appointing the occupant of that office. Under section 327D of the GLA Act 1999, as amended by the Policing and Crime Act 2017, the Mayor may issue to the Commissioner specific or general directions as to the manner in which the holder of that office is to exercise his or her functions.
35. Section 1 of the Fire and Rescue Services Act 2004 (the FRSA 2004) states that the Commissioner is the fire and rescue authority for Greater London.
36. Section 28 of the FRSA 2004 empowers the Home Secretary to appoint inspectors of fire and rescue authorities. In 2017 the Home Secretary appointed Her Majesty's Inspectorate of Constabulary (HMIC) as inspectors of fire and rescue authorities under this section and HMIC changed their name to Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS). The Policing and Crime Act 2017 sets out that HMICFRS will inspect and report on the efficiency and effectiveness of fire and rescue authorities in England.
37. Section 28A sets out that the inspection programme and framework requires the approval of the Home Secretary before the inspectors act in accordance with it; that the Home Secretary may, at any time, require us to carry out an inspection of a fire and rescue authority in England, all fire and rescue authorities in England, or all fire and rescue authorities in England of a particular type; that the HMICFRS may also carry out an inspection of a fire and rescue authority in England even though that inspection has not been set out in an inspection programme and the Home Secretary has not required them to do it.
38. HMICFRS is an inspectorate and has powers to secure information, but no powers to give orders for change.
39. It is for the London Fire Commissioner, subject to the oversight arrangements in place from the Mayor, Deputy Mayor, Greater London Assembly and Home Secretary, to take action as a result of HMICFRS's recommendations.
40. When considering the matters in this report decision takers should bear the following matters in mind:
 - a. Section 7 (2)(b) of the FRSA 2004 further requires that the Commissioner must secure the provision of training for personnel.
 - b. As an employer, the Commissioner must comply with the Health and Safety at Work etc. Act 1974 (1974 Act).
 - i. Section 2 of the 1974 Act imposes a general duty on the employer to 'ensure, so as is reasonably practicable, the health, safety and welfare at work of all of his employees.' This general duty extends (amongst other things) to the plant and systems of work, the provision of information, instruction, training and supervision and to the provision and maintenance of a working environment that is, so far as reasonably practicable, without risks to health and adequate as regards facilities and arrangements for welfare at work.
 - ii. Section 3 of the 1974 Act imposes a general duty to 'ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety.'

- c. When carrying out its functions, the Commissioner is required to 'have regard to the Fire and Rescue National Framework prepared by the Secretary of State (Fire and Rescue Service Act 2004, section 21).
- d. To consider, in developing its operational policies, any relevant national guidance thereon.

Sustainability implications

41. Policy sustainability risk rating is low. The DMM supports further training of staff which may improve environmental awareness

Equalities implications

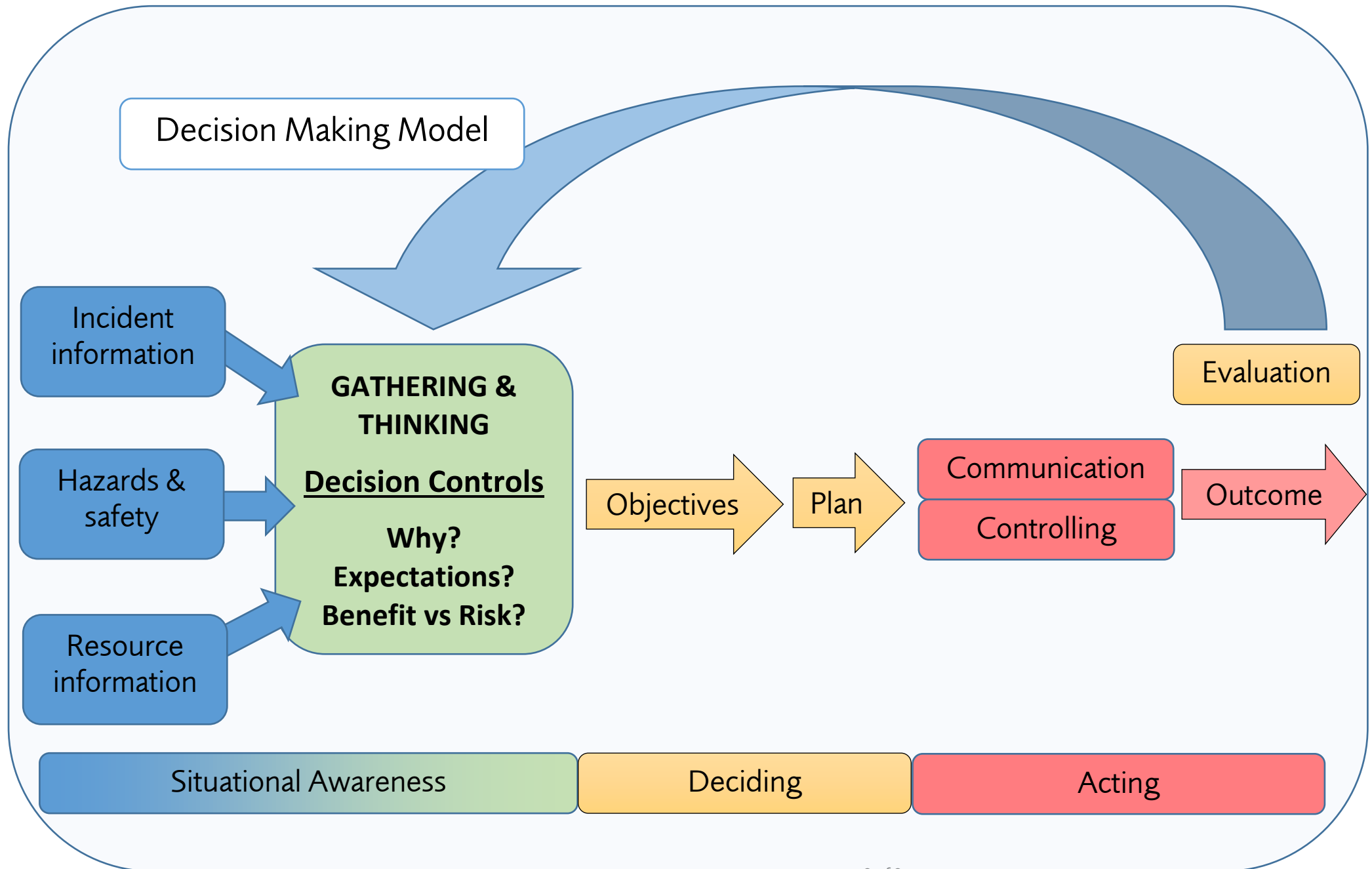
42. The London Fire Commissioner and decision takers are required to have due regard to the Public Sector Equality Duty (s149 of the Equality Act 2010) when exercising our functions and taking decisions.
43. It is important to note that consideration of the Public Sector Equality Duty is not a one-off task. The duty must be fulfilled before taking a decision, at the time of taking a decision, and after the decision has been taken.
44. The protected characteristics are: Age, Disability, Gender reassignment, Pregnancy and maternity, Marriage and civil partnership (but only in respect of the requirements to have due regard to the need to eliminate discrimination), Race (ethnic or national origins, colour or nationality), Religion or belief (including lack of belief), Sex, and Sexual orientation.
45. The Public Sector Equality Duty requires us, in the exercise of all LFC functions (i.e. everything the LFC does), to have due regard to the need to:
 - (a) Eliminate discrimination, harassment and victimisation and other prohibited conduct.
 - (b) Advance equality of opportunity between people who share a relevant protected characteristic and persons who do not share it.
 - (c) Foster good relations between people who share a relevant protected characteristic and persons who do not share it.
46. Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:
 - (a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic where those disadvantages are connected to that characteristic;
 - (b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;
 - (c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.
47. The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

48. Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to—
- (a) tackle prejudice, and
 - (b) promote understanding.
49. Equality Impact Assessment (EIA) was undertaken on 24 April 2020 and reviewed on 23 October 2020. The impact assessment found the proposed changes to have a neutral impact.

List of Appendices

Appendix	Title	Protective Marking
1.	Hybrid Decision Making Model	Official
2.	Pimento consultancy report	Official

Appendix 1 – Hybrid Decision Making Model



Independent ¹ Review of the Decision Making Model

July 2020

Introduction

London Fire Brigade (LFB) is currently in the process of aligning its policies and procedures with National Operational Guidance (NOG). A section within this guidance focuses on incident command and specifically a model to assist incident commanders in decision making. The model contained within NOG is the Decision Control Process (DCP), it was introduced at the beginning of 2016 and has been adopted by most other UK Fire and Rescue Services (FRS).

LFB currently use the Decision Making Model (DMM) for incident command purposes and it has been established within the Brigade for around 15 years. See Image 1 below

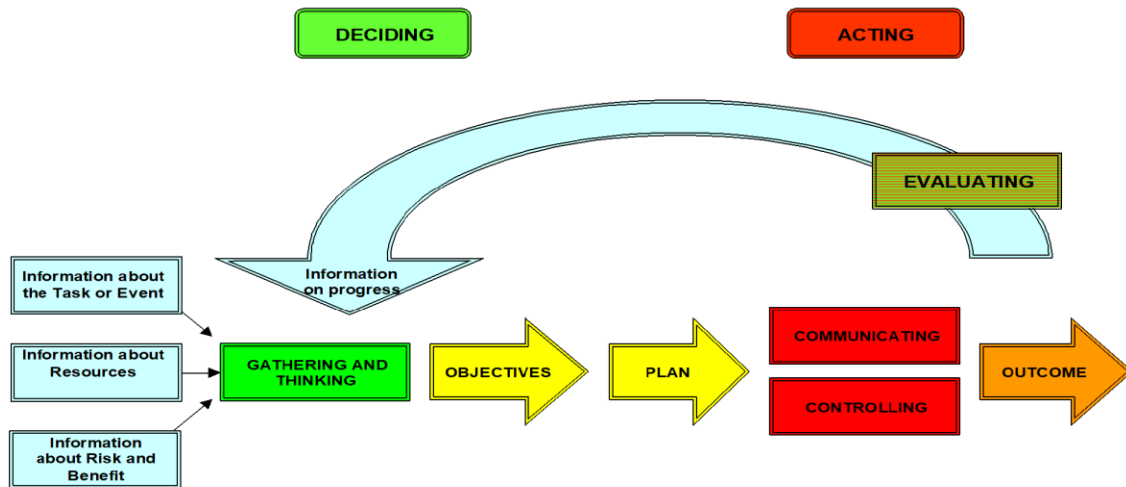


Image 1. LFB DMM

¹ The authors were chosen for their separation from the Fire and Rescue Service combined with experience and knowledge gained from having worked with the FRS whilst serving in the military (the lead author worked as a Gold Commander for the Tactical Response Force 2010-13 and worked directly with the LFB in the design and development of the MOU between the MOD and FRS.

In 2017, following a period of review, the Corporate Management Board (CMB) within the LFB made the decision to implement change to the LFB's processes, aligning them with the National Operational Guidance (NOG) and more specifically, directing them to switch from the DMM to the Decision Control Process (DCP) at the heart of the NOG.

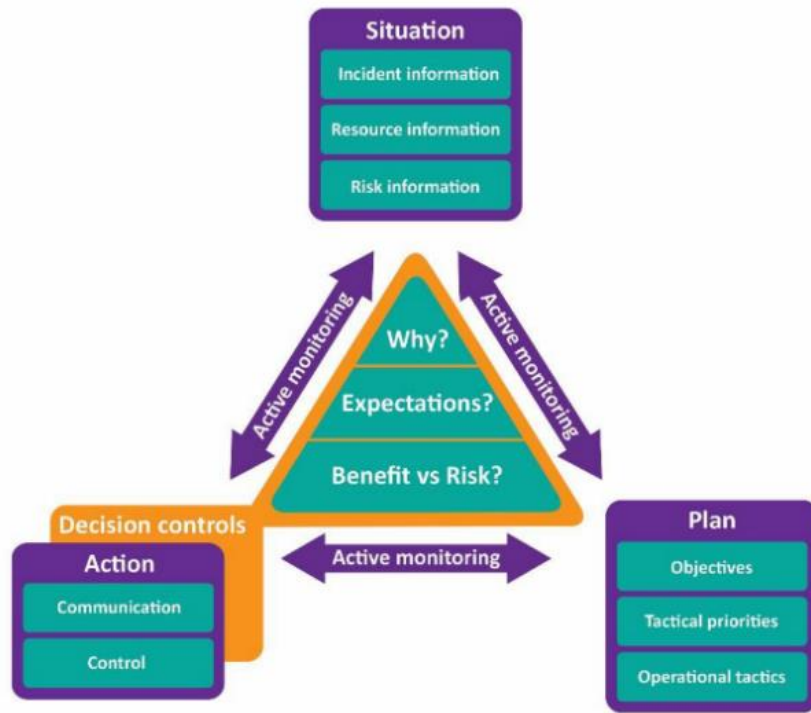


Image 2. NOG DCP

The purpose of this report is to provide an independent informed decision as to which model best supports incident commanders when making decisions and make a recommendation as to which process should be used by LFB moving forward. Any recommendation will, of course, be reinforced by evidence of the process used and any assumptions, deductions and the rationale used.

Study and Review

In this report the author does not intend to lay out either process in its entirety as it is understood that all parties are fully conversant with both, rather to highlight what are felt to be the salient points when they are reviewed in isolation.

DMM

The DMM has been in service with the LFB since its introduction in 2004. Designed to provide an iterative framework around which commanders at all levels can base their thought processes as they make decisions. The model provides a solid base on which dynamic risk assessment² can be founded.

Fully scalable, the DMM was designed to be, and remains, equally applicable at the individual level as at Brigade level thus ensuring continuity of thought and training as a firefighter progresses through their career.³

Based around a traditional decision action cycle the DMM follows the familiar path of the OODA loop – Observe, Orient, Decide, Act. Whilst, for many, this may appear outdated, or even archaic, it is its simplicity and familiarity that ensures it remains the absolute cornerstone of decision making globally. The OODA loop is the basis of all UK military planning doctrine and remains fundamental to command based organisations across the globe⁴

In researching how the DMM is introduced, its supporting policy and paperwork⁵ the author found it to be a clear, simple, and fundamentally familiar process. These three elements make the teaching, learning and, most importantly, the application of any process easy.

DCP

The DCP was introduced to the wider FRS as a replacement for the DMM⁶ within the National Operational Guidance (NOG) for Incident Command on 1st Jan 2016. The development of the DCP came about following research conducted at Cardiff University to *'better understand the decision making at operational incidents'* published in March 2015 by Sabrina Cohen-Hatten⁷. The paper scientifically breaks down decision making and studies the relationships between analytical decision making and intuitive decision making in an attempt to ascertain how excessive pressure can affect the two processes.

Whilst the DCP contains many of the familiar instructions you find in decision-action cycles the author found the layout and format lacking in clarity which may prove problematic. Whilst accepting that age and experience lead to a bias toward the familiar, the DCP comes across as jumbled and confused. At first glance, double headed arrows give the perception of flexibility and fluidity however they also allow for

² The dynamic risk assessment being the cornerstone to all incident ground operations

³ Shared command philosophy is demonstrated across all Arms and Services of the military and has proven highly successful since its inception

⁴ 'OODA remains core to all ...decision making process...' Tightening the OODA Loop – paper by JL Vagle 2016

⁵ DMM Policy 341 reviewed 5 Feb 2018

⁶ Prior to NOG the Fire and Rescue Manuals were in use, specifically Fire Service Operations Vol 2 which contained the DMM

⁷ An Investigation in Operational Decision Making In Situ: Incident Command in the UK Fire and Rescue Service

confusion. If read literally, a user could perceive that carrying out actions before planning⁸ is one of the courses of action promoted by the DCP. Clearly, instruction in the DCP would rule this out however it does suggest that the DCP is not entirely intuitive.

The addition of explanatory wording (central column of questions) with the DCP model provides greater guidance and enhanced direction which should prove useful when a commander is under stress, is seen as a highly positive addition by the author.

Discussion

Why change? It is the author's assumption that the only reason for change would be to improve firefighter and public safety by increasing the understanding and effectiveness of the processes that drive decision making. In turn, any change to the model upon which decision making is based must enhance this process.

The scoping study that led to the introduction of DCP was limited to a number (approximately 30), of simulation exercises whereas DMM has been developed and honed over many years of use by LFB. This raises a question as to the scientific rigor and comparison of practices that led to the introduction of DCP. Clearly this report cannot comment to the technical validity of the study but does question some of the base assumptions used by its author: Having established that *'there are a number of processes that incident commanders **may** use'* the author then highlights that, *'Intuitive decision-making...**may** include conditional processes'* and *'analytical decision making...**may** include rule selection...'*. It is fine to base a study on assumptions, but if such a study leads to institutional change, then these assumptions must be validated and agreed. It is unclear to the author if this has been achieved.

Similarly, the author is aware that detractors of the DCP have questioned sample size used during the research process. Whilst these two points can bring into question the validity of the study the author is content that its findings are fundamentally sound and provide an excellent basis for discussion.

Of greater interest to the author is why it was felt that such a study was required. Had evidence arisen that suggested the DMM did not work? Where failures in commanders' decision-making being highlighted and then linked to the DMM? No evidence has been presented to the author that a requirement for change been discussed with the current leadership cohort. Had this been the case then, combined with the questions above, the logical progression would have been to commission a study into decision making.

It would seem that the need for reform was established following operations in Grenfell Tower. However, no evidence was presented that the content or format of DMM was in anyway attributable to the outcomes of the Grenfell operation and it is more likely that the application of the DMM was a factor,

⁸ Feedback to the author following 'beta' testing - the DCP was shown it to an independent 3rd party, unfamiliar with either the DMM or the DCP

rather than the model itself, as a result of the unprecedented nature of the incident. This would suggest it is unlikely that the DCP would have changed the outcomes if it similarly had not been applied correctly.

In a briefing note for the Director of Safety dated 6th Jul 2017, it states, '*aside from the scientifically validated benefits*', another 10 other reasons to introduce the DCP. Whilst all these ten reasons are absolutely valid, non are to do with improving decision making. In line with the author's key assumption made at the head of this section, **these 10 reasons are thus not relevant to the argument**. As for the '*scientifically validated benefits*' whilst they may be such, it appears that it was self-validated by its creator – thus somewhat undermining their value.

Conclusion

Whilst developing this paper the fundamental question bothering the author has been, *why change?* If this were to be the case then a whole series of questions must be asked:

Were examples of weakness because of the DMM process failing or, rather examples of a failure in training of the DMM or the failure of individual commanders to implement what they had been taught?

If After Action Review (AAR) revealed that commanders were confused by DMM and therefore unable to implement it successfully, then DMM would need revision. If, however, commanders understood the DMM process but failed to implement it, then the training of commanders would be key. Furthermore, and perhaps less palatable, if Commanders understood the DMM process but failed to implement it for other reasons, for example a lack of practical experience or an inability to respond, react and adapt to a fast changing situation then attention should be given to the selection of commanders, and the efficacy of their training. In short do not change the system to offset a failure in command but train commanders to adapt and overcome.

Recommendations

This paper recommends the following actions:

1. Policy 0341 The DMM should remain extant within LFB, however it is recommended that the DMM/DCP Hybrid flow diagram is adopted at its core. See image 3 below.

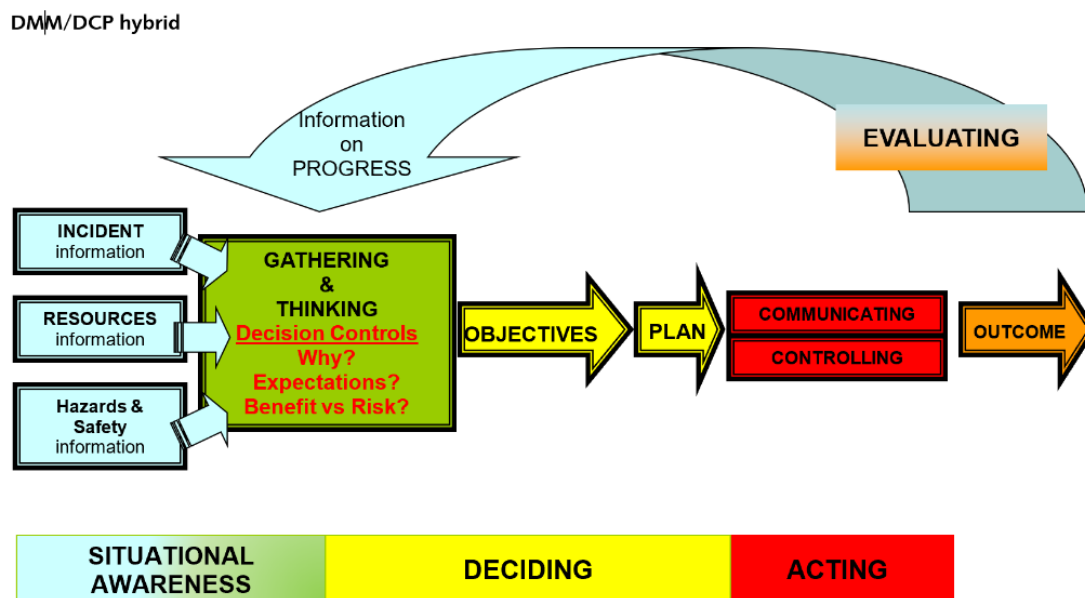


Image 3. DMM/DCP Hybrid

2. Commission a study into the efficacy of the DMM vs the DCP based on evidence from the fire ground.
3. Revisit any requirements for change previously submitted. What are the actual causes for poor decision making? The process used, the teaching methods, or the people making the poor decisions? In the authors experience, it is far easier to blame a process or template rather than to identify and retrain those personnel in need of support.