



Guidance for flexible crewing to ensure appliance availability during the COVID-19 virus

Contents

1.	Introduction and scope of document.....	3
2.	Definitions.....	4
3.	Health and Safety.....	5
4.	Appliance Availability.....	6
5.	Competence of those required for Flexible Crewing.....	7
6.	Fire Control Room Operators.....	8
7.	Mitigation of Risk.....	9
8.	Training.....	10
9.	Operational Considerations.....	11

Appendix

1.	Risk Assessment.....	12
----	----------------------	----

1. Introduction and scope of document

- 1.1. The subject of riding a fire appliance with reduced crewing has been a national issue for some time due to availability and response of staff, particularly in Services with a large number of RDS staff. Trials and work has been carried out in individual Fire and Rescue Services (FRS) to address this issue, with some Services already having a 'Reduced Crewing' policy in place.
- 1.2. The issue of appliance availability and response of staff across all FRS is likely to be impacted by COVID-19 due to the infectiousness of the virus, the fact that symptoms of the virus are similar to other common illnesses, and the rules surrounding self-isolation for 7 to 14 days if you or a member of your household has symptoms.
- 1.3. This will impact on staffing levels and the ability to staff fire appliances during a national crisis where members of all of our communities require the FRS now more than ever.
- 1.4. A likely outcome will mean that some FRS will, at times, have multiple appliances and stations unavailable for fire cover due to staffing deficiencies. This will lead to areas reduced levels within Services and that reduced fire cover can impact on the resilience within that Service.
- 1.5. FRS during this period will have to be as flexible as possible to gain the best fire cover from the resources at their disposal.
- 1.6. During a period in which the FRS staffing levels are depleted due to various reasons surrounding COVID-19, the Fire Service may be called upon significantly more due to the extreme changes in behaviour and circumstances that the public are experiencing. FRS may also be called upon for other humanitarian and environmental duties that have not previously been experienced in the modern Fire Service.
- 1.7. There will be an expectation from communities during this period that firefighters will attend as quickly as possible, and undertake some meaningful activity that begins to establish a safer situation for those who we serve.
- 1.8. It is important that any decision to use flexible crewing on an appliance should be balanced with the safety of FRS staff and the safety of the public that we serve.

2. Definitions

Retained Duty Staff (RDS)

- 2.1 In the United Kingdom a retained firefighter, also known as an RDS Firefighter or On-Call firefighter, is a firefighter who does not work full-time but is paid to spend long periods of time on call to respond to emergencies through the Retained Duty System.

Fire cover

- 2.2 This relates to fire appliance coverage in a specific area. Although it refers to 'fire' this does not solely mean to fires and encompasses all emergency duties a Fire Service would expect to attend.

Make ups

- 2.3 When Incident Commanders at an incident requires further FRS resources, they request it via the Control Room, and this is called a 'make-up.'

Reliefs

- 2.4 When at an incident for a prolonged time or after your duty shift has ended, the crew that will take over are called reliefs.

Near miss

- 2.5 This is an event not causing harm, but has the potential to cause injury or ill health.

3. Health and Safety

- 3.1 The Fire and Rescue Services Act 2004 Sections 7, 8 and 9 describe the duties placed on fire and rescue authorities for providing an operational response.
- 3.2 The Health and Safety at Work Act 1974 imposes the general duty on fire and rescue authorities to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all of their employees (section 2(1)) and of those persons not in fire and rescue service employment who may be affected by fire and rescue service activity (section 3(1)). A fire and rescue service employee also has a duty to take reasonable care for the health and safety of themselves and of other persons who may be affected by their acts or omissions at work.

4. Appliance Availability

- 4.1 It should be a FRS aspiration to meet the minimum staffing level for front line appliances in their Service.
- 4.2 Although appliance availability has been one of the most important issues that all FRS face, the current COVID-19 crisis will have a direct impact on this issue and likely exacerbate it.
- 4.3 Ongoing efforts to address this wider issue often involves recruitment campaigns and retention of staff, however those are long-term solutions and the situation that every FRS faces now with appliance availability during this period is acute.
- 4.4 This has required FRS to implement Business Continuity Plans (BCP) and to explore other methods to ensure that any loss of frontline staff and the direct effect on appliance availability due to COVID-19, is addressed through alternative means. It has to be acknowledged that even through the implementation of BCP's and other methods, that this may not be sufficient to minimise the depreciated levels of staffing the FRS faces due to the nature of this virus.
- 4.5 Staffing fire appliances with flexible crewing when FRS have unprecedented staffing shortages should be considered, when necessary during this period to ensure that fire cover can be provided across Service areas.
- 4.6 The benefits would be that certain FRS areas that have flexible crewing appliances can respond quickly and take some meaningful activity immediately, rather than a delayed response or no response at all. The risk of not responding or a delayed response could see an escalation of an incident and also damage public perception of the FRS, considering the expectation that place upon us in times of emergency.
- 4.7 Flexible crewing of appliance when necessary, will increase appliance availability in a Service during times where depreciated staffing levels would normally impact hugely appliance availability and fire cover.
- 4.8 The more options of appliance availability during this period will also avoid frustration for firefighters who want to serve during this unprecedented time.

5. Competence of those Required for Flexible Crewing

- 5.1 In the event that flexible crewing of a fire appliance is necessary, and the required skills below are met, they may be utilised as required and identified by their FRS and supported by an additional supporting appliance or appliances if the incident requires it.
- One crew member qualified as initial incident commander level 1 (ICL1).
 - One crew member qualified as an emergency response driver and breathing apparatus wearer.
 - One crew member qualified as a breathing apparatus wearer.
- 5.2 The incident commander (IC) must in all occasions carry out a Dynamic Risk Assessment (DRA), with no exceptions.
- 5.3 Appropriate Personal Protective Equipment (PPE) should be worn according to the type of incident.
- 5.4 All Fire Service Breathing Apparatus (BA) procedures should be adhered to when flexible crewing is in place.
- 5.5 Any equipment or procedures that require more than three personnel should not be actioned until the arrival of a supporting appliance or appliances, or alternative equipment should be utilised.
- 5.6 When a flexible crewing appliance is mobilised, consider notifying an on duty level 2 commander.

6. Fire Control Room Operators

- 6.1 It is important that Fire Control Room Operators (CRO) ensure that robust call handling/intelligence gathering is carried out when there is the potential to utilise a flexible crewing appliance and this should form part of the decision process when mobilising resources.
- 6.2 CRO should be notified immediately with up-to-date with crew availability so prompt and effective mobilising decisions can be made.
- 6.3 CRO's should have an awareness surrounding the local arrangements that have been put in place for the mobilisation of appliances with flexible crewing.
- 6.4 Appliances with flexible crewing should be considered by individual FRS for Pre-determined attendances (PDA's), 'make-ups' and 'reliefs.'
- 6.5 Consider that CRO should inform the IC when a PDA, make-up or relief appliance en-route, consists of a flexible crewing.
- 6.6 Utilising appliances with flexible crewing for standbys should be decided by the individual FRS, basing their decision on resources, ongoing incidents and risks within the areas that the appliance would be expected to cover.
- 6.7 Any mobilisation to an over-the-border incident for a flexible crewing appliance, CRO should consider informing the neighbouring FRS Fire CRO that the appliance en-route consists of the flexible crewing.
- 6.8 Individual FRS should risk assess and determine which incident types that flexible crewing appliances can be mobilised to, irrespective of whether it is a single appliance attendance or multiple appliance attendance. Once this decision has been made this should be reviewed regularly.
- 6.9 Consider consulting with other FRS nationally that have already implemented frontline emergency response vehicles that have fewer crew than the traditional fire appliance, to identify the incident types that have been chosen for those response vehicles.

7. Mitigation of Risk

- 7.1 Although FRS aspiration are to meet the minimum staffing level for front line appliances in their Service, it is acknowledged that during these unprecedented times that this will not always be possible. A flexible crewing appliance with professionally trained firefighters, mobilised by professionally trained CRO, to incident types that have been agreed by their FRS, can provide limited but effective and positive intervention, at the earliest opportunity.
- 7.2 If flexible crewing appliances are going to be utilised in a FRS, then careful consideration should be given to the station areas that they would cover, taking into account the risk profiles in that area.
- 7.3 It should be considered that the use of a flexible crewing appliances should not be widespread through a FRS, but placed strategically whereby they can be supported by fully staffed appliances if required.
- 7.4 Once a flexible crewing appliance has been utilised at an incident, FRS should consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood.
- 7.5 Individual FRS Health and Safety reporting arrangements should be followed i.e. 'near miss reporting' if any issues are found during incidents with a flexible crewing appliances so that robust investigation and action can be taken if required.

8. Training

- 8.1 As with every emergency incident, the DRA undertaken by every IC first on scene is a pivotal point, and one in which will largely determine the success in resolving the incident, as well as safeguarding the public and firefighters. This is why any use of flexible crewing should only occur if the right skill criteria are met.
- 8.2 The importance of having a fully trained ICL1 will be paramount in the use of any flexible crew due to the need to make risk-based decisions and undertaking risk assessments with a reduced crew.
- 8.3 If implementation of flexible crewing was able to be achieved with the advantage of time, specific scenario training relating to incidents where crewing levels were lower than the norm could be applied using Service instructors. There will be difficulty to apply this training in the current circumstances due to the time factor and also the need to socially distance from each other and also any training required could further deplete staffing levels in FRS. There is a requirement to apply a minimum level of training to ensure all crews are safe to operate flexible crewing arrangements but traditional training methods may not be suitable or achievable during this time.
- 8.4 It should be a consideration for FRS to revisit training packages or any guidance relating to ICL1 training and ensure all staff who are required to review the guidance.
- 8.5 If any FRS have ICL1 or reduced crew training packages that can be shared with other FRS, they should be shared to ensure that training is reinforced to key staff during a period in which IC will be required to utilise all of their command skills and situational awareness.
- 8.6 FRS should ensure that any ICL1 training is classed as vital and risk critical training to safeguard that competencies are achieved or maintained so appliance availability is maintained.
- 8.7 If practicable, CRO should receive FRS specific training relating to the mobilisation of flexible crewing appliances.

9. Operational Considerations

9.1 A flexible crewing appliance may arrive as the first resource to an incident, or as a subsequent part of the PDA or part of a make-up. It's not an expectation that the first crew in attendance at dynamic incidents will resolve the whole incident, rather they can start to bring a sense of order to often chaotic scenes. The generic actions that may be taken by a crew of three on the first appliance to arrive may include:

- Information gathering
- Update Control
- Immediate lifesaving actions
- Immediate emergency care
- Evacuation of occupants/ customers affected
- Initial Operational Response Procedures at a hazardous materials incident
- Prevent members of the public from being at risk
- Establishing an inner cordon
- Requesting assistance appropriate to the needs of the incident via Control
- Securing water supplies
- External defensive firefighting
- Vehicle stabilisation and initial access
- Securing access and egress to the scene of operations
- Organising an RVP or Marshalling area

9.2 A moral pressure could be put on crews whereby the number of personnel in attendance cannot resolve an incident immediately until further resources arrive. This can happen under normal circumstances due to varying reasons. It is important that the any crew attending understand that although they may need to wait for further resources, they are still able to complete actions like the ones listed above that can prevent an escalation of an incident and take some control of the situation.

9.3 All personnel should:

- Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system.
- Recognise physical limitations in performing tasks and personal limitations in knowledge and experience.
- Be vigilant and able to identify and react safely to new or unexpected hazards.
- Reduce risk by taking action to reduce personal and team exposure risk.
- Communicate safety critical information and unexpected developments to supervisors and commanders.

9.4 It is worth considering by FRS that the risk appetite of firefighters during this period could increase due to affect that COVID-19 virus has had on our communities and our way of life. The nature of firefighters is that they want to help and protect our communities during difficult times and given the opportunity will act in best faith to do this. This has to be managed by individual FRS to ensure that any risk is balanced against the benefit that taking action would gain. We want to ensure that IC and firefighters take a measured approach, however it is also important to not become risk averse during this time.

Appendix 1: Risk Assessment

Activity: This Risk Assessment has been carried out to assess the hazards and risks associated with crews being mobilised to, attending and carrying out operational activities with a crew of 3.			Additional Information: This Risk Assessment is a direct response due the likelihood of FRS nationally having to staff fire appliances with flexible crewing when they have unprecedented staffing shortages. Flexible crewing should only be considered when necessary, during this period to ensure that fire cover can be provided across FRS areas.				
People at risk: A: Wholetime / On/Call firefighters C: Officers G: Support Staff H: Public I: Other Agencies							
1. Task	2. Hazard and Outcome	3. Risk Groups	4. Control Measures	5. Indication of Risk			6. Additional Control Measures
				Likelihood	Severity	Rating	
Non-mobilisation of a flexible crew as the first vehicle to an incident (leading to a delayed attendance time for the first appliance)	<ul style="list-style-type: none"> Escalation of incident Risk to operational personnel, other emergency service personnel, and community i.e. Self-deployment). 	A, C, H, I	<ul style="list-style-type: none"> Mobilisation of a flexible crew appliance to initiate tasks associated with incident type agreed with FRS. Full PDA mobilised with a flexible crewing appliance. Robust call handling/ intelligence gathering during emergency phone call into Control. Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. 	2	5	10	<ul style="list-style-type: none"> Longer solutions include recruitment and retention initiatives to improve appliance availability Once a flexible crewing appliance has been utilised at an incident, FRS should consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood.

	<p>Outcomes</p> <ul style="list-style-type: none"> – Death or serious injury – Damage to property and the surrounding environment – Reputational damage to the Service 		<ul style="list-style-type: none"> • Fire Services Act 2004 • Fire and Rescue National Framework for England 2018 				
<p>Mobilising / Driving – excessive speed of initial response due to moral concern over flexible crewing</p>	<ul style="list-style-type: none"> – Moral pressure to respond by neighbouring stations due to potential isolation of flexible crew. – Other road users / Public (Road risk) <p>Outcomes</p> <ul style="list-style-type: none"> – Death or serious injury – Damage to vehicle – Potential Litigation 	A, C, G, H, I,	<ul style="list-style-type: none"> • Full PDA mobilised with a flexible crewing appliance. • Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. • Route confirmed prior to fire appliance leaving station (sat nav / MDT provision). • Vehicle checks carried out as recommended by the Standard Tests and maintained according to manufacturer's guidance. • Early update to Control from first in attendance appliance. 	2	4	9	<p>10. Consider amendments to emergency response driving training to include the topic of moral pressures pertaining to driving to incident where a flexible crewing appliance is in attendance.</p> <p>11. Turning out and responding to an Incident procedures in individual FRS.</p> <p>12. Bespoke training package on flexible crewing delivered to personnel and CRO.</p>
<p>2.Delay of additional crews' availability due to 'run' times of supporting appliances</p>	<ul style="list-style-type: none"> – Moral Pressure to act. – Members of the Public self-deployment. – Attempting a task outside the 	A, C, G, H, I,	<ul style="list-style-type: none"> • Individual FRS should risk assess and determine which incident types that flexible crewing appliances can be mobilised to, irrespective of whether it is a single appliance attendance or multiple appliance attendance. Review regularly. 	3	4	12	<ul style="list-style-type: none"> • When a flexible crewing appliance are mobilised, CRO to inform on duty Level 2 commander. • Incident ground communications to keep all resources informed of incident progress. • Once a flexible crewing appliance has been utilised at an incident, FRS should

	<p>Crew's capability</p> <p>Outcomes</p> <ul style="list-style-type: none"> - Death, serious injury - Stress - Potential litigation 		<ul style="list-style-type: none"> • Full PDA mobilised with a flexible crewing appliance. • Turning out and responding to an Incident procedures in individual FRS. • Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. • The IC must in all occasions carry out a DRA, with no exceptions. • If upon completion of the DRA it is assessed that current resources are not sufficient to safely resolve the incident, then further resources should be requested. • Request an ETA from oncoming appliance via Control. • Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system. 				<ul style="list-style-type: none"> • consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood. • Ongoing analysis using individual FRS Health and Safety reporting arrangements.
3. Insufficient resources / crew	<ul style="list-style-type: none"> - Moral Pressure - Members of the public self-deployment. - Attempting a task outside the Crew's capability <p>Outcomes</p> <ul style="list-style-type: none"> - Death, serious physical or psychological injury/stress - Potential litigation 	A, C, G, H, I	<ul style="list-style-type: none"> • Individual FRS should risk assess and determine which incident types that flexible crewing appliances can be mobilised to, irrespective of whether it is a single appliance attendance or multiple appliance attendance. Review regularly. • Full PDA mobilised with a flexible crewing appliance. • Turning out and responding to an Incident procedures in individual FRS. • Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. 	3	4	12	<ul style="list-style-type: none"> • When a flexible crewing appliance are mobilised, CRO to inform on duty Level 2 commander. • Incident ground communications to keep all resources informed of incident progress. • Consider defensive tactics until further resources allow. • Limited Offensive tactics as determined by DRA. • Once a flexible crewing appliance has been utilised at an incident, FRS should consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood.

			<ul style="list-style-type: none"> • Appropriate PPE worn according to type of incident. • The IC must in all occasions carry out a DRA, with no exceptions. • If upon completion of the DRA it is assessed that current resources are not sufficient to safely resolve the incident, then further resources should be requested. • Request an ETA from oncoming appliance via Control. • Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system. 				<ul style="list-style-type: none"> • Ongoing analysis using individual FRS Health and Safety reporting arrangements. • Bespoke training package on flexible crewing delivered to personnel and CRO.
<p>4. On scene considerations</p>	<ul style="list-style-type: none"> – Members of the public (self-deployment, and / or agitated) – Moral duty to act by flexible crew – BA – deficient crew (inability to implement stage 1 BA procedures) <p>Outcomes</p> <ul style="list-style-type: none"> – Death, serious physical or psychological injury – Potential litigation 	A, C, H, I	<ul style="list-style-type: none"> • Individual FRS should risk assess and determine which incident types that flexible crewing appliances can be mobilised to, irrespective of whether it is a single appliance attendance or multiple appliance attendance. Review regularly. • Full PDA mobilised with a flexible crewing appliance. • Turning out and responding to an Incident procedures in individual FRS. • Minimum skill level required i.e. IC-ICL1, emergency response driver and BA wearer. • Appropriate PPE worn according to type of incident. • The IC must in all occasions carry out a DRA, with no exceptions. • If upon completion of the DRA it is assessed that current resources are not sufficient to safely resolve 	3	4	12	<ul style="list-style-type: none"> • When a flexible crewing appliance are mobilised, CRO to inform on duty Level 2 commander. • IC to consider skills of crew en-route and plan to adopt operational tactics where necessary. (Hierarchy of control: Self safety, Crew safety, Casualty safety) • Consider defensive tactics until further resources allow. • Limited Offensive tactics as determined by DRA. • Incident ground communications adopted to keep all resources informed of incident progress. • Once a flexible crewing appliance has been utilised at an incident, FRS should consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood.

			<p>the incident, then further resources should be requested.</p> <ul style="list-style-type: none"> Request an ETA from oncoming appliance via Control. Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system. Safe System of Work implemented to keep fire personnel safe. IC outlines operations that can be adopted in the initial stage. Any BA deployment will only be undertaken when safe systems of work can be fully implemented. A comfort wear using BA should be considered if necessary. 				<ul style="list-style-type: none"> Ongoing analysis using individual FRS Health and Safety reporting arrangements. Bespoke training package on flexible crewing delivered to personnel and CRO.
<p>5. Use of equipment with insufficient crew</p>	<ul style="list-style-type: none"> Moral Pressure to act Members of the Public assisting <p>Outcomes</p> <ul style="list-style-type: none"> Manual handling injuries; Crush injuries; 	A, C, G, H, I	<ul style="list-style-type: none"> Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. Appropriate PPE worn according to type of incident. The IC must in all occasions carry out a DRA, with no exceptions. If upon completion of the DRA it is assessed that current resources are not sufficient to safely resolve the incident, then further resources should be requested. Request an ETA from oncoming appliance via Control. Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system. 	2	4	8	<ul style="list-style-type: none"> Consider use of alternative equipment – e.g. 9m, 10.5m ladder or short extension. When a flexible crewing appliance are mobilised, CRO to inform on duty Level 2 commander. Tasks carried out in-line with manual handling operations (Considering the exemption for fire and rescue services – for example “During efforts to rescue a casualty, fight a fire or contain a dangerous spillage” Reg 5 Section 184 – Manual Handling Operations 1992) IC to consider skills of crew en-route and plan to adopt operational tactics where necessary. (Hierarchy of control: Self safety, Crew safety, Casualty safety)

			<ul style="list-style-type: none"> • Safe System of Work implemented to keep fire personnel safe. • Manual handling assessment using T.I.L.E (Task, Individual capability, Load and Environment) • Tasks restricted to those safely carried out by limited firefighter numbers on the incident ground. • Fitness levels of operational firefighters (individual FRS 'Occupational-Health Policy' and three yearly medical) 				<ul style="list-style-type: none"> • Consider defensive tactics until further resources allow. • Limited Offensive tactics as determined by DRA. • Incident ground communications adopted to keep all resources informed of incident progress.
6. Loss of communication due to insufficient crew	<ul style="list-style-type: none"> – Breakdown in command and control – Escalation of incident – Inability to summon assistance <p>Outcomes</p> <ul style="list-style-type: none"> – Death, serious physical or psychological injury/stress <p>Potential litigation</p>	A, C, G, H, I	<ul style="list-style-type: none"> • Minimum skill level required i.e. IC- ICL1, emergency response driver and BA wearer. • Appropriate PPE worn according to type of incident. • The IC must in all occasions carry out a DRA, with no exceptions. • If upon completion of the DRA it is assessed that current resources are not sufficient to safely resolve the incident, then further resources should be requested. • The IC should ensure that timely updates are passed to Control and any risk critical information is passed immediately to Control. • Request an ETA from oncoming appliance via Control. • Perform tasks in a competent and responsible way and exercise self-discipline within the command and control system. • Safe System of Work implemented to keep fire personnel safe. 	2	3	6	<ul style="list-style-type: none"> • When flexible crewing appliance are mobilised, CRO to inform on duty Level 2 commander. • Incident ground communications to keep all resources informed of incident progress. • Consider the use of handheld main scheme radios, to allow crew to update Control when they are away from the appliance. • Consider defensive tactics until further resources allow. • Limited Offensive tactics as determined by DRA. • Once a flexible crewing appliance has been utilised at an incident, FRS should consider reviewing/ debriefing the incident to ensure that any lessons learnt are understood. • Ongoing analysis using individual FRS Health and Safety reporting arrangements. • Bespoke training package on flexible crewing delivered to personnel and CRO.

Fatalities	5	10	15	20	25
Major	4	8	12	16	20
Serious	3	6	9	12	15
Minor	2	4	6	8	10
Negligible	1	2	3	4	5
	Very Unlikely	Unlikely	Moderate	Likely	Very Likely
SEVERITY	LIKELIHOOD				

Low Risk	Acceptable - Monitor
Moderate Risk	Acceptable- Consider implementing further control measure if reasonably practicable to do so.
High Risk	Unacceptable. Activity must not proceed.