



IRMP 21-25 Risk Review; Response.

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Executive Summary.

Shropshire Fire and Rescue Service has 23 stations strategically located across the County which predominantly use the On-call crewing models. We recognise that an On-Call model would be unsustainable in the large urban areas of Shrewsbury and Telford, the number of incidents would be too high to support staff retention. Therefore, we utilise whole-time crews supplemented by On-Call. This blend provides an agile response that has an availability consistently in and around 95-100%.

The challenge we face is sustaining this high availability at a time of change, especially across rural Shropshire. An ageing workforce and new fitness standards are major factors in staff retention. Service delivery relies on the availability of resources not only for incident response but for the preventative and protective initiatives so crucial to risk reduction.

A national desire to expand the firefighting role is influencing a diversification in the types of incidents we attend. Collaboration with partners now means we respond to missing persons searches and gaining entry to properties to access vulnerable people at imminent risk of harm.

Such diversification is one factor and maybe relevant to the more noticeable national decline evident since 2017/18. However, the national trend of lengthening response times has been evident for 20 years. The NFCC raised concerns that's since 2013/14 primary fire response times have increased on average by 33 seconds. In Shropshire the evidence suggests the flattening of risk away from the urban areas is a factor for increasing response times.

Our response reflects our greatest risks which are;

- People
- Property
- Commerce/Industry
- Environment including countryside and wildlife
- Heritage

Risk Summary.

- On-Call availability reducing due to recruitment and retention pressures
- National Asset deployments; the impact on business as usual including the impact with On-Call staff
- The current national desire to expand the role of the FRS is contributing to an increasing diversity of incident calls; gaining entry is now the second most common after AFA (incident categories)
- Competency challenge, especially amongst On-Call teams
- Public need to have clarity on what our response standard means to them, the response standard in the current IRMP is an average of 15 minutes used to simplify the standard. This means the 20 minutes rural; 15 minutes town and fringe and the 10 minutes urban are all combined into a 15-minute average. The proposed new standard will use the same LSOA classifications but will not measure an average standard.
- Response resources need to reflect the risk. Firefighters are not currently provided with bespoke PPE for the variety of tasks they undertake. For example; MISPER searching in full structural fire kit
- Reliance on technology to support mobilisation and risk intelligence. Will infrastructure and ICT support be sufficient to sustain or improve?
- Risk is changing, flat risk means that risk is rippling out and away from the urban areas. Will On-Call availability be able to service this change?
- Changing weather patterns and spate conditions will challenge organisational resilience, coupled with the learning from Grenfell Tower can fire control meet the demand?
- Financial uncertainty. Will funding change and if so, how will service delivery adapt?
- Governance models. PCC governance influence on future response and collaboration.
- Maintaining the fitness of an aging workforce. Increasing fitness to meet national guidelines. The challenge of maintaining availability of resources.
- The wider reform agenda- HMICFRS, NFCC, Professional standards body and workforce reform.

Findings

Shropshire Fire and Rescue Service deliver an effective response to emergency incidents through ensuring we have professional, well equipped teams strategically located throughout the county to meet the demand and manage risk identified through our integrated risk management plan. Our approach also means that we are able to meet all statutory requirements placed upon the service through legislation including:

- Fire Service National Framework, which sets out the government's objectives and priorities and also the
- Fire and Rescue Services Act 2004
- Civil Contingencies Act 2004

The Service has 3 whole-time stations located in Shrewsbury, Telford, Wellington, and Tweedale overnight to meet the change in risk which deliver a 24/7 response capability with staff who work from each location. On-call firefighters operate from 22 stations and ensure we are in a position to undertake emergency interventions across the whole of Shropshire, through responding to emergency calls from their normal place of work or home.

Shropshire Fire and Rescue Service strive to provide a safe and effective response to foreseeable fire related risks within the County that are identified within the IRMP. We are committed to driving efficiency through effective planning and working closely with partners to ensure excellent delivery of response services. This approach to collaborative working also sees us providing appropriate support to regional and national deployments. This work is also supported through Shropshire Fire and Rescue

Service maintaining National assets and providing competent and professional people. An example of this is the High-Volume Pumping Unit based at Prees and a boat team located at Shrewsbury.

Through ensuring effective internal and external communications channels, we use appropriate data from our response activity to drive and shape our Prevention and Protection work, with the overall aim being to have the right person, with the right skills and equipment in the right place at the right time, whether it be through Prevention, Protection or Response activity.

Service Aims 2015-20

To enable understanding of our aims and objectives, we produce an Annual Plan which provides measures and targets that are intrinsically linked to our service aims, which are;

1. To be there when you need us in an emergency with a professional and well-equipped team.
2. To reduce the number of fires in our community.
3. To reduce the number of fire related deaths and serious injuries.
4. To deliver a fire and rescue service, which provides value for money for our community now and into the future.

To achieve these aims, it is critical that planning is considerate of all areas of the service so that maximum benefits from collaborative working can be achieved, therefore providing value for money and efficient and effective ways of working. Examples of this can be found in links with the Prevention and Protection Strategy, Asset Plan, Fleet Strategy, People Strategy, Training Strategy and ICT Strategy.

A new Service vision and new set of aims are proposed for 2021-25 in the IRMP.

National Demand

The demand that FRSs face has changed over the past few years. The number of fire incidents attended by FRSs in England peaked in 2003/04 at 473,563. This number fell to as low as 154,461 in 2012/13, although it has since increased to 182,825 in 2018/19. In 2018/19, only around three in ten incidents attended by FRSs were fires. (40 percent were fire false alarms and 28 percent were non-fire incidents). The long-term decrease in the number of fire incidents is due to many factors, including prevention work.¹

The National Fire Chiefs Council has voiced its concern that the latest Home Office figures released in January 2020, show an 11-second increase in response times to primary fires and a 32-second increase in response times to secondary fires compared to 2017/8.

The report notes that, although response times to fires have been increasing gradually over the past 20 years, there was a 'marked increase' from 2017/18.

Primary fires are potentially more serious incidents that pose a threat to people or property. On average, primary fire response times increased by 33 seconds since 2013/14.

The most notable is a 48 second rise in average response time to other outdoor fires.

There has also been an increase in response times to secondary fires by 32 seconds to 9 minutes 42 seconds compared with 2017/18. This is an increase of 59 seconds compared with 2013/14. However, 2018/19 also saw a 19% per cent increase in the number of secondary fires due to a spell of hot, dry weather.²

Local Demand

- Fires in the Home
- Fires in Commercial and Public Buildings
- Deliberate Fires
- Outdoor and other fires including Chimney fires
- False Alarms
- RTC
- Water Rescue
- Flooding
- HAZMAT
- Others
- Missing Persons Search
- Gaining Entry

(Please see Risk Review Performance for incident data and analysis)

¹ Sir Tom Windsor "state of the nation" report HMICFRS

² <https://www.nationalfirechiefs.org.uk/News/fire-response-times-statistics-published-by-the-home-office->

Response Challenges

Fire statistics show there has been an increase in incidents in recent years however these are still significantly down (34% decrease) compared to ten years ago.

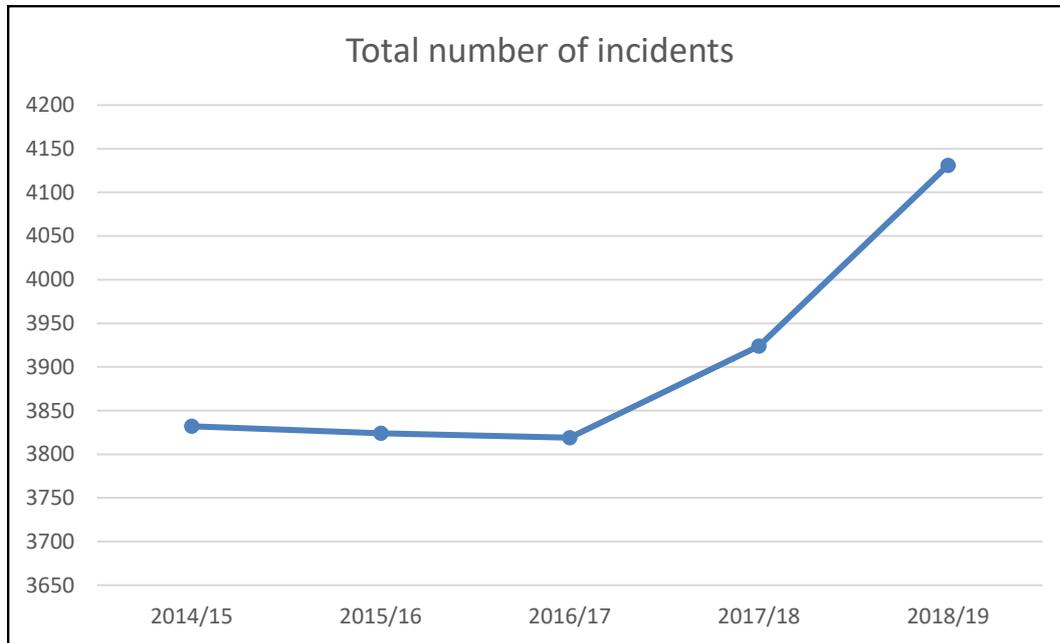


Figure 1 - Total number of incidents attended by SFRS between 2014/15 and 2018/19

This National data is comparable with our service and some of this reduction can be attributed to our efforts in relation to Prevention and Protection activities which are outlined within the Prevention and Protection strategies. Although this should be viewed as a success, it also presents challenges for the service in relation to exposure and experience of staff. It is therefore critical that our people are highly trained and competent to deal with emergencies in a safe and effective manner, therefore limiting damage to life, property and the environment. Our approach to ensuring operational excellence can be viewed within our Training Strategy.

What is also apparent from Home Office statistics is that Fire and Rescue Services are now attending non fire related incidents which are placing similar demand on response assets as that for fire related incidents. This also presents challenge for the service due to the need to ensure staff are competent in an expanding and evolving skill base, which also impacts upon other matters such as time requirements and investment in terms of finance and equipment which are outlined within the Asset Plan and Fleet Strategy.

Challenge is also faced in terms of budget pressures which are driving efficiencies, so it is imperative we continue to identify and implement new and innovative ways of working that continue to secure public and firefighter safety. Our collaborative and inclusive approach to service improvement will continue to ensure we are able to provide excellent services whilst also evaluating value for money in everything we do.

Demand

When seeking to ensure we have an effective response model it is important to understand demand. This can be broken down into:

Predictable Demand - When analysing historical data, we are generally able to predict demand and the IRMP outlines our approach to risk and how it is managed, however the challenge posed relates to where and when an incident will occur. This means that our response model of whole-time and on-call staff is required to maintain a flexible and agile approach to meet dynamic demands on resources across a large geographical area.

Less common but predictable incident type's impact upon the service as there is a requirement to deploy the right person, with the right skills and equipment to the right place effectively. To achieve this, we need to ensure our staff are adequately trained and proficient to respond effectively.

There is a direct correlation between frequency and the likelihood of fire and density of population. We use "big data" (See IRMP Definition of Risk) within the County to identify such areas this translates into LSOA classifications. Our response model reflects the increased volume of fire incidents through the use of whole-time crewing models within the two densely populated areas of Telford and Shrewsbury. On-call resources are spread through rural parts of the County especially in the market towns and larger villages to reduce the risk and the impact of fire in the more rural areas. Continual work to reduce instances of domestic fires is delivered through our people and is outlined within our Prevention strategy and AFD Plan. The use of whole-time crewing in Shrewsbury Telford and Wellington is reflective of the volume of incidents but also acknowledges that an On-Call response would not be sustainable in these locations.

As a Service, we continue to enforce the Regulatory Reform (Fire Safety) Order 2005, with this work being undertaken primarily by our Protection Team with assistance from Response staff and also partners. Our approach is outlined within the Protection Strategy. Commercial risk is apparent throughout the County and covers a wide range of businesses. Our overarching aim is to assist businesses to prosper and mitigate damage when an emergency occurs. Adopting the principles of Better Regulation and providing a safe, effective and assertive response capability enables protection of businesses and therefore supports economic growth within the County.

Variable Demand- There are occasions where it is not possible to identify trends, however an incident of this nature can place considerable demand on our response capability. Examples of these types of incidents would involve;

- Emerging threats- such as terrorist related incidents of any kind
- Weather related incidents- such as flooding and storm related damage
- Regional and National deployments- These incidents reduce our resources within the County for the period of deployment, however this can be managed

through effective liaison with Fire and Rescue Service National Co-ordination Centre (FRSNCC) if national assets are involved.

Shropshire Fire and Rescue Service will work in collaboration with a range of partners to plan for and resolve incidents within the County that have the potential to cause widespread disruption. This is achieved through playing an active role in the Local Resilience Forum for West Mercia. We also work with partners to produce a Community Risk register³ that reflects all foreseeable risk from a range of incidents and supported by the National Security Risk Assessment.

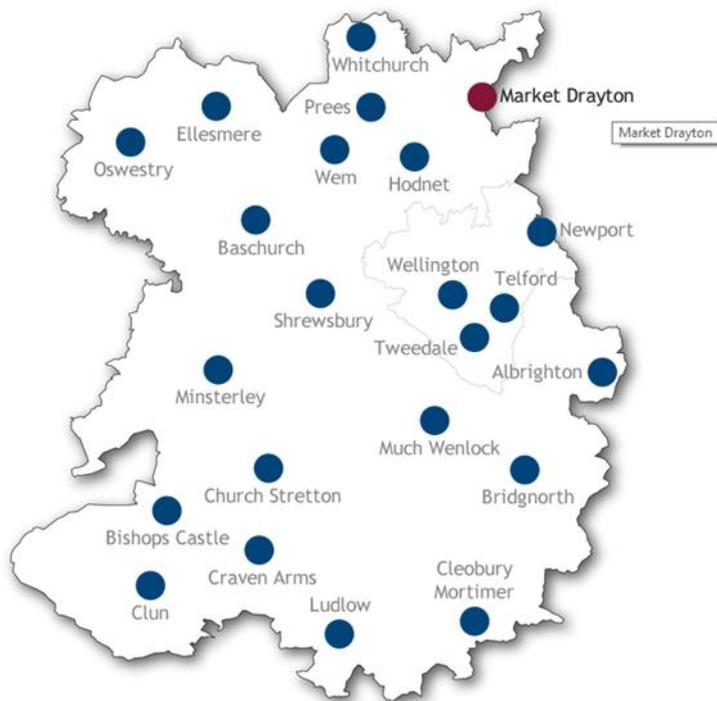
Our Response Resource

Shropshire Fire and Rescue Service has 23 stations strategically located across the County which predominantly use the On-call crewing models. This resource is supplemented by the use of a wholetime crewing model at Shrewsbury Telford and Wellington. We recognise that an On-Call model would be unsustainable in the large urban areas of Shrewsbury and Telford, the number of incidents would be too high and staff retention would fail. Therefore, we utilise whole-time crews supplemented by On-Call. This blend provides an agile response that has an availability consistently in and around 95-100%

To support a safe effective and assertive response there are a range of resources available across the County.

³ West Mercia LRF

Fire Stations



Albrighton
Baschurch
Bishops Castle
Bridgnorth
Church Stretton
Cleobury Mortimer
Clun
Craven Arms
Ellesmere
Hodnet
Ludlow
Market Drayton
Minsterley
Much Wenlock
Newport
Oswestry
Prees
Shrewsbury
Telford Central
Tweedale (Madeley)
Wellington
Wem
Whitchurch

SFRS Appliance Resources

To achieve the current operational model SFRS needs to have a broad range of appliances, equipment and personnel with specialist skills that can be deployed individually or as part of a team. The allocation of resources demonstrates how SFRS are committed to providing our people with the right equipment to ensure they are able to deal effectively with incidents, whilst also maintaining the safety of our teams.

The following section provides an overview of some of the Service's resources. Further information on individual stations can be found in the SFRS Station Profile document available at: www.shropshirefire.gov.uk

28 x Frontline Fire Appliances

10 x Incident Support Units (ISUs)

1 x Prime Mover (PM)

2 x Aerial Ladder Platforms (ALPs)

2 x Incident Command Units (ICUs)

1 x Rescue Tender (RT)

1 x Water Rescue Unit (WRU) consisting of 2 boats

1 x Water Carrier (WC)

1 x Pinzgauer (L6P)

2 x Light Pumping Unit (LPU)

1 x Foam Pod (FP)

1 x Environmental Protection Unit (EPU)

1 x Welfare Unit (WU)

This fleet of resources is supported by our dedicated team of workshop technicians who ensure fleet availability, whilst the identification of future firefighting capability inclusive of water provision, new technology and remote access vehicles is undertaken by our Operations Team and ensures we are providing the right equipment in the right place, to deal effectively with incidents.

Systems and Information Technology

To support the effective deployment of our fleet, we ensure that technology is embraced and utilised, such as mobile data terminals (MDT's) which contain software that is able to relay critical safety information and considerations to our people when attending an incident, therefore increasing both firefighter and public safety, through pre identification and familiarisation of risk by operational staff.

This technology is supported by robust systems, processes and information to further support our people when faced with incidents. Examples of this include our risk management system and our alignment to national operational guidance, which provides consistency in the way all FRS's approach similar incident types.

Emergency Services Network (ESN)

ESN will be the new communication system utilised by the three emergency services and other public safety users in the UK and will provide the next generation integrated critical voice and broadband data services.

SFRS are engaged and supporting an incremental approach to adopting ESN, which will provide a resilient multi-agency communications network.

Within SFRS, the Emergency Services Mobile Communications Programme (ESMCP) Team have identified a number of products that can potentially be adopted locally, these include;

- MDT replacement- Completed
- New mobile phones
- Tablet procurement
- Changes to the methods of alerting/mobilising – both critical and non-critical.

The team are also fully engaged with the ESMCP Regional Management Team and EE to ensure areas of poor coverage are identified and are working towards bringing together a Coverage Assurance Strategy.

In addition to ESN, SFRS along with Hereford and Worcester Fire and Rescue Service (HWFRS) have entered into a joint procurement project for replacement Integrated Communication Control Systems (ICCS). Although not specifically an ESMCP project; it is very closely linked as the ICCS will be required to be ESN compliant.

Fire Control

Our response is supported by our highly skilled Fire Control Staff, who play an integral role in our operations through call handling, information gathering, deploying appropriate assets and managing incident logs, whilst also providing appropriate guidance and support to those in need.

SFRS Fire Control is based in the Headquarters building in Shrewsbury. It consists of 4 operating terminals, featuring the SEED Command and Control mobilising system and an integrated telephony system. These systems enable Fire Control operators to receive all emergency calls, mobilise all of SFRS resources and contact other agencies involved in incidents.

Fire Control development and the Alliance- The alliance aims to increase capacity and resilience to deal with emergencies. This is especially pivotal to the future of fire control. The ability for a fire control to function resiliently at moments of high work volume such as SPATE or a major incident is an essential requirement.

Officers

Our Group of Operational Officers provide support to our crews and also incorporate specialist skill sets such as Hazardous Materials and Environmental Protection Officers as well as National Inter Agency Liaison Officers who working closely with our blue light partners. We continue to work closely with other agencies to resolve operational incidents such as Environment Agency, Local Authorities and voluntary organisations such as the Red Cross who assist those affected through compassionate support and also advise on appropriate courses of action to return to normality where possible. For Incident Command we use a “Nearest Officer Mobilising” (NOM) system to ensure the greatest level of supervision and command is provided to the fireground as quickly as possible. This supports firefighter and community safety whilst being the backbone of organisational learning.

Partners

SFRS has worked with its partners through the Joint Emergency Interoperability Programme (JESIP) to improve the ways in which the Service, responds to major and complex incidents, locally, regionally and nationally. The JESIP Assurance visit undertaken in early 2017 identified that the Service had a very positive attitude towards JESIP as well as recognising the positive impact it had on improving interoperability locally and beyond.

Work continues with partners and SFRS are embedded within the Local Resilience Forum and contribute to the West Mercia Community Risk Register⁴, preparing and planning for major risks within our area. This valuable work not only contributes locally, but also influences nationally in regard to approaches and mitigation factors applied to reducing risk, which can be found within the National Risk Register⁵.

Standards of Response

Current Response Standard

To support our ethos of having the right people in the right place with the right skills and equipment at the right time, we provide response standards based upon the nature of the incident. These being;

	Life Risk Fires		Road Traffic Collisions		
Risk Areas	Minimum of 5 firefighters in:	Minimum of 8 firefighters in:	Minimum of 5 firefighters in:	Minimum of 8 firefighters and Rescue Pump in:	Rescue Tender arrives within:
High	10 minutes	13 minutes	10 minutes	13 minutes	30 minutes
Medium	15 minutes	18 minutes	15 minutes	18 minutes	30 minutes
Low	20 minutes	20 minutes	20 minutes	20 minutes	30 minutes
Target	85%	85%	80%	80%	85%

- The first fire engine will arrive at an emergency incident with at least 4 firefighters within 15 minutes on 89% of occasions.
- The first fire engine will arrive with a minimum competent crew of 4 staff on 100% of occasions.

However, in order to drive performance improvement, the Service will continue to measure standards in more detail for specific incident types:

This table was derived from historical National standards of fire cover that also supports our Pre-determined attendance.

⁴ West Mercia LRF

⁵ National Risk Register

Proposed Response Standard

The proposed new standard is more transparent and will give the public a clear picture of what the incident response will be in the LSOA they reside.

High Medium and Low risk terminology has been replaced with the LSOA criteria of,

Urban	1 appliance	10 minutes
Town and fringe	1 appliance	15 minutes
Rural	1 appliance	20 minutes

The new standard is based on the current standard however it acknowledges the concept that all areas will comprise of high medium and low risk criteria. The likelihood and impact are managed separately. The response aspect is primarily based on frequency and likelihood of fire.

In terms of 'weight of attack', we have constructed pre-determined attendance criteria for all emergency incident types. This ensures that Fire Control deploy the right number of people, with the right skills and the right equipment to every incident.

In addition to the response standards outlined above, we also have a resilience standard, which relates to the minimum level of response we deploy during exceptional periods of demand on operational resources. This has been set as at least one fire engine to anywhere within the County within 20 minutes.

Call handling is monitored and managed separately as the quality of information gathering should not be compromised by unnecessary haste resulting in an adverse incident outcome. The proposed new standard will measure from the moment resources are allocated to an incident until the moment the first appliance arrives at the incident.

Future Risk and Review

The risk picture has identified that incident types are changing. Resourcing specialisms such as line safety, water safety and other areas such as RTC are areas under constant review and scrutiny. The IRMP acknowledges that these reviews coupled with others; such as Narrow Access and 4x4 provision will be part of a continuous process of evaluation and resourcing to risk

Future Evaluation Projects.

- PPE Provision for Wildfire
- Working at Height
- Rescue Capability Review
- Narrow Access
- Water strategy
- Firefighting technology

- Welfare arrangements review
- National resilience assets

Continual Improvement

SFRS recognises the importance of adopting National Operational Guidance (NOG) in its entirety and that this will be supported by a suite of local policies, procedures, training packages and equipment notes. Adoption will impact on many departments within the Service, all of whom are regarded as stakeholders within the Services implementation framework.

Our people are constantly seeking to identify more effective and efficient ways of working and this is evidenced through our commitment to Service Transformation and change management projects, which overarch all areas of the service. Examples of this include new staffing models, the introduction of a new command and control vehicle in collaboration with Hereford and Worcester through a strategic alliance and nearest Officer mobilising.

To ensure we continue to provide an excellent service to our community, we must continue to be innovative and flexible in the way we manage and deal with emergencies.

We recognise that it is very rare for us to respond to an emergency on our own and we will continue to carry out joint planning with our partners to ensure we are prepared to deal with all types of emergency on a local, regional and national scale. We will always ensure that when we are required to respond, we will do so in a timely manner with the right staff, who have the right skills, the right equipment and the right support.

We must also be prepared to think differently about the tactics we employ to deal with and manage emergencies. Accordingly, this new approach must embrace a preparedness to be more adventurous in learning from operational incidents and to think about different approaches to dealing with emergencies. Finally, we must be prepared to be ambitious and there is no reason why Shropshire Fire and Rescue Service cannot or should not achieve excellence whilst at the same time, achieve our planned efficiencies and demonstrate excellent value for money.

Grenfell Tower

The Grenfell Tower tragedy has led to several investigations and inquiries, producing recommendations that are wide reaching and will shape the direction of response activities for the Fire sector into the future. Shropshire Fire and Rescue Service are engaged with the recommendations and are working nationally, regionally and locally to ensure we are able to implement any recommendations that enhance our capability to respond effectively, whilst working with partners to provide joint solutions to meet the requirements.

On-Call Sustainability

SFRS provides a high level of availability, the best in mainland England, however maintaining this is a challenge. Social pressures, legislation and the changing economy of Shropshire are just 3 factors but there are many more.

Nationally FRS are experiencing a shortage of crews available at on-call stations. This low availability predominantly impacts on daytime or office hours cover. We have worked innovatively through previous IRMP to create the resources and infrastructure to overcome such challenges however we recognise the challenge of maintaining this.

The on-call model depends on having enough appropriately trained firefighters within a few minutes of the fire station when the call comes in. There needs to be a continued, concerted effort from services and Government to attract enough firefighters to crew engines when they are needed. This includes providing greater flexibility in working arrangements and considering other incentives, such as financial.⁶

Making sure on-call firefighters have the right training and are competent is another challenge. The limitation on training time is significant with a vast array of competing priorities adding pressure to drill night and other training opportunities.

The HMICFRS recognises the difficulties involved, however we will need to find more innovative ways to develop and maintain the skills of on-call firefighters.

We have committed to a long term On-Call Sustainability Project that will address the future challenges of providing an On- Call response.

Response Proposals

Clarify the current response standard to; first appliance from time of resource allocation to time in attendance.

Urban	1 appliance	10 minutes
Town and fringe	1 appliance	15 minutes
Rural	1 appliance	20 minutes

1. What constitutes an emergency and what will be included in the response standard.
2. Resource Deployment Review. Examples; Use of second pumping appliances at Shrewsbury and Telford. Could these be utilised differently to support service delivery? Incorporating specialist reviews;
 - PPE Provision for Wildfire
 - Working at Height
 - Rescue Capability Review
 - Narrow Access
 - Water strategy

⁶ Sir Tom Windsor "state of the nation" HMICFRS

- Firefighting technology
 - Welfare arrangements review
 - National resilience assets
3. Alliance development including implementation of NOG/JOL and operational policy.