NORTH WEST FIRE CONTROL

Lancashire Fire & Rescue Service Performance Committee

Quarter 4 2022/2023

Introduction

The following pages set out North West Fire Control's (NWFC) Performance Framework, an explanation of how our Key Performance Indicator's (KPI) are measured and how we are performing.

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Performance Framework

NWFC sets targets for a range of key performance indicators (KPIs) which help us to monitor and measure our performance in achieving success and meeting our priorities. Performance against these KPIs is scrutinised every quarter at the Steering Committee and by the Board of Directors.

The below graphic illustrates our key priorities and how the respective KPI's fit within the overall performance framework.

Response
Average response to answer emergency calls
Percentage of emergency calls answered in 10 seconds
Average response to mobilise first resource to fires
Average response to mobilise first resource to special service calls
Average response to mobilise first resource to fire alarms
Average response to mobilise first resource to all incidents

Performance Measures and XmR Charts

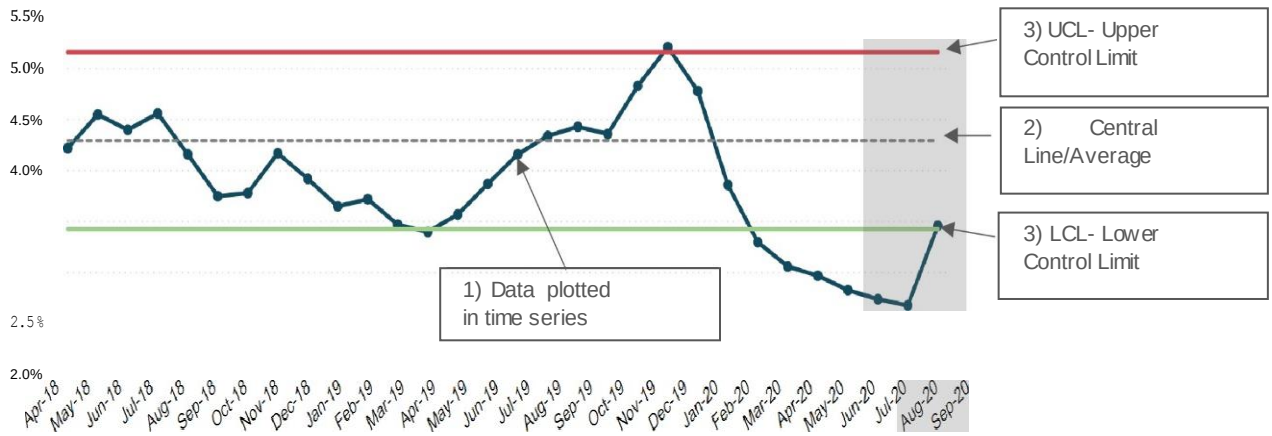
KPI's are monitored either by using an XmR chart, comparing current performance against that achieved in the previous quarter, any forecast/target for the quarter/YTD, or against a pre-determined standard, for example, the response KPI is measured against an average time.

XmR Charts

An XmR chart is a type of process control chart used to monitor and provide insights to a process over time. They are made up of the following components:

1) The data we want to measure plotted in time series
2) A Centre Line - this is based on the average value of our data sample
3) Upper and Lower Control Limits (UCL & LCL) — these are our 'Natural Process Limits' and tell us how much natural variation there is in the data

XmR chart example:



Why use them?

XmR control charts offer two major advantages over other reporting methods:

- We can quickly identify exceptions that fall outside of the normal random variation that occurs within any process or measure
- We don't waste time trying to fix or explain a problem that isn't there

The control limits are calculated in such a way that we can expect 99% of data points to fall between them. In other words, we know that any time they are exceeded something exceptional has occurred and therefore requires further investigation.

By clearly highlighting these exceptions, XmR charts allow us to focus on the signals that indicate something significant has changed (positively or negatively, planned or unplanned). Conversely, they also mean we avoid spending time investigating changes in the data that are likely to be caused by the natural variation in the process/measure.

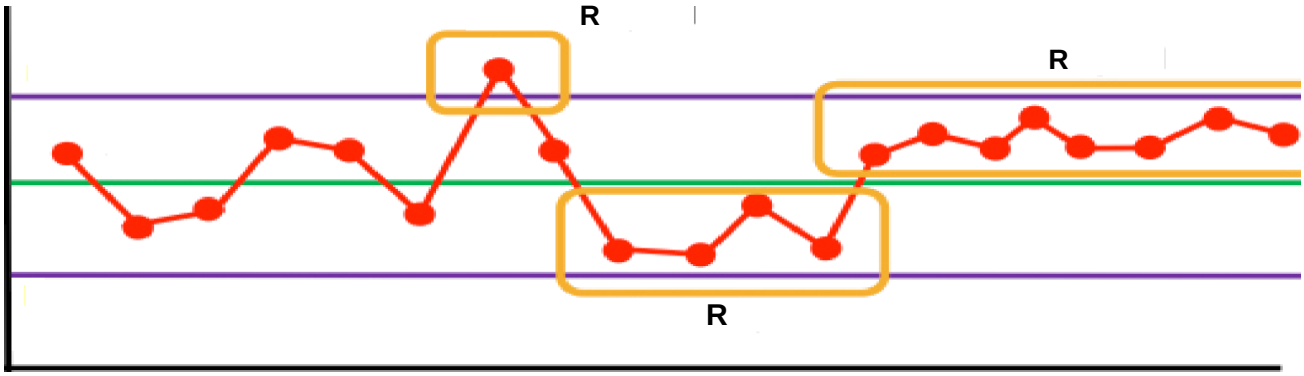
How to read XmR charts

There are three common signals we look for in an XmR chart that indicate a need for further investigation/intervention:

Rule 1) **Special Cause** or Outlier — A point outside the Control Limits

Rule 2) Long Run — At least 8 consecutive points running on one side of the Central Line

Rule 3) Short Run — At least 3 out of 4 consecutive points closer to a Control Limit than to the Central Line



An exception report is generated if one or more of these rules are triggered.

Summary of Exception Reports

This report reports on both positive and negative exceptions for Q2 for 2022/23

Positive Exceptions

KPI ref & name	Reasons for an Exception Report	Analysis undertaken	Recommendations/Positive Action Taken to improve performance

Negative Exemptions

KPI ref & name	Reasons for an Exception Report	Analysis undertaken	Recommendations/Positive Action Taken to improve performance
Emergency Calls	Missing data	Investigation by NWFC and system contractors have found that due to a connection failure, the data on number of calls is not retrievable. This had no impact on service delivery during the period.	Connection failure has now been resolved and working with system contractors to ensure that resilience in place to prevent this from re-occurring.

Incoming Calls

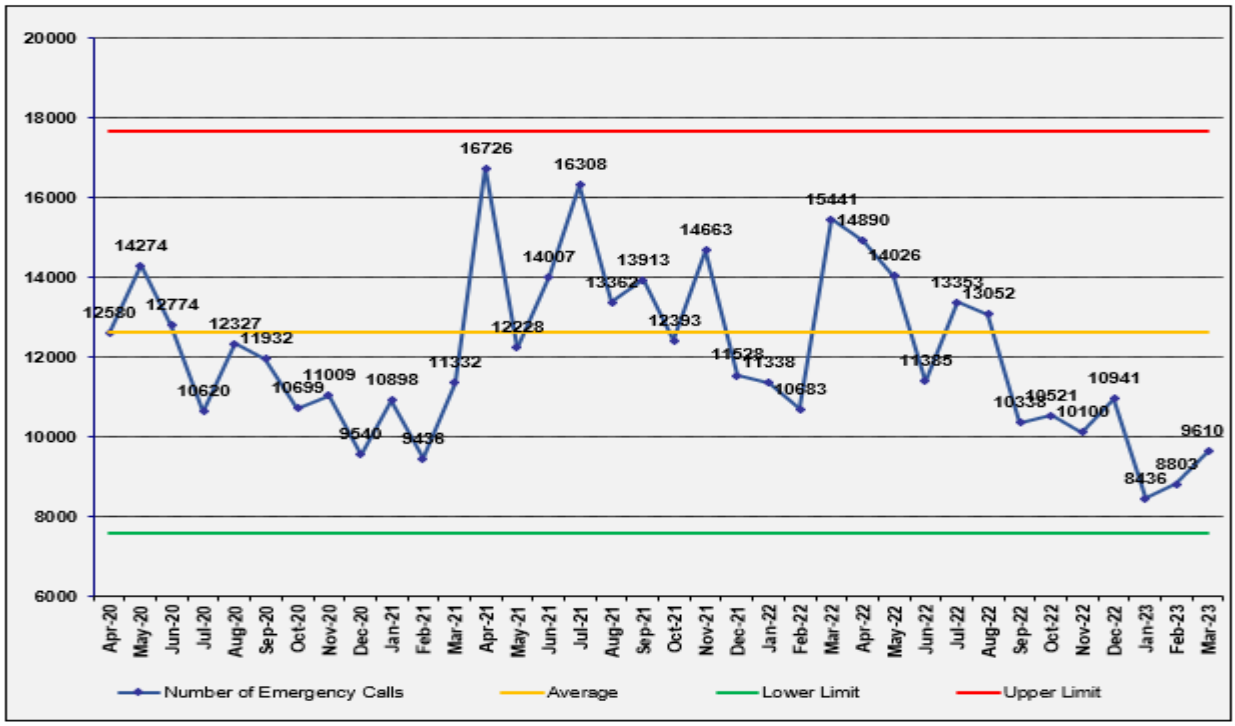
Emergency Calls

The number of emergency calls that North West Fire Control receive is measured. This includes 999 calls from members of the public, calls from other emergency services and calls from fire alarm monitoring organisations reporting a fire alarm at a premises.

This is not a KPI but provides an overview of the number of calls that are received each month.

KPI: N/A Number of Emergency Calls		Quarter 26,849	Direction of Travel

Number of Emergency Calls	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	135,455	26,849	162,590	37,462
Target:				



The number of reported emergency calls for Quarter 4 has decreased, with all three months being closer to the Lower Control Limit. Upon investigating any possible reasons for this fall in emergency call numbers, NWFC has established that for Quarter 4 there is some missing data from this period, which our data extraction software is unable to retrieve. This has been reported to our software contractors, who have now fixed the issue and are looking at further resilience measures. This has not affected transferring NWFC data to FRS IRS software.

There is missing data from 17th – 29th January 2023 and from other dates in January and February for several hours at a time during specific days. Not all the emergency calls and administrative calls data are missing during these periods, but these have identified as to when there were connection failures and therefore not all data has been retrievable.

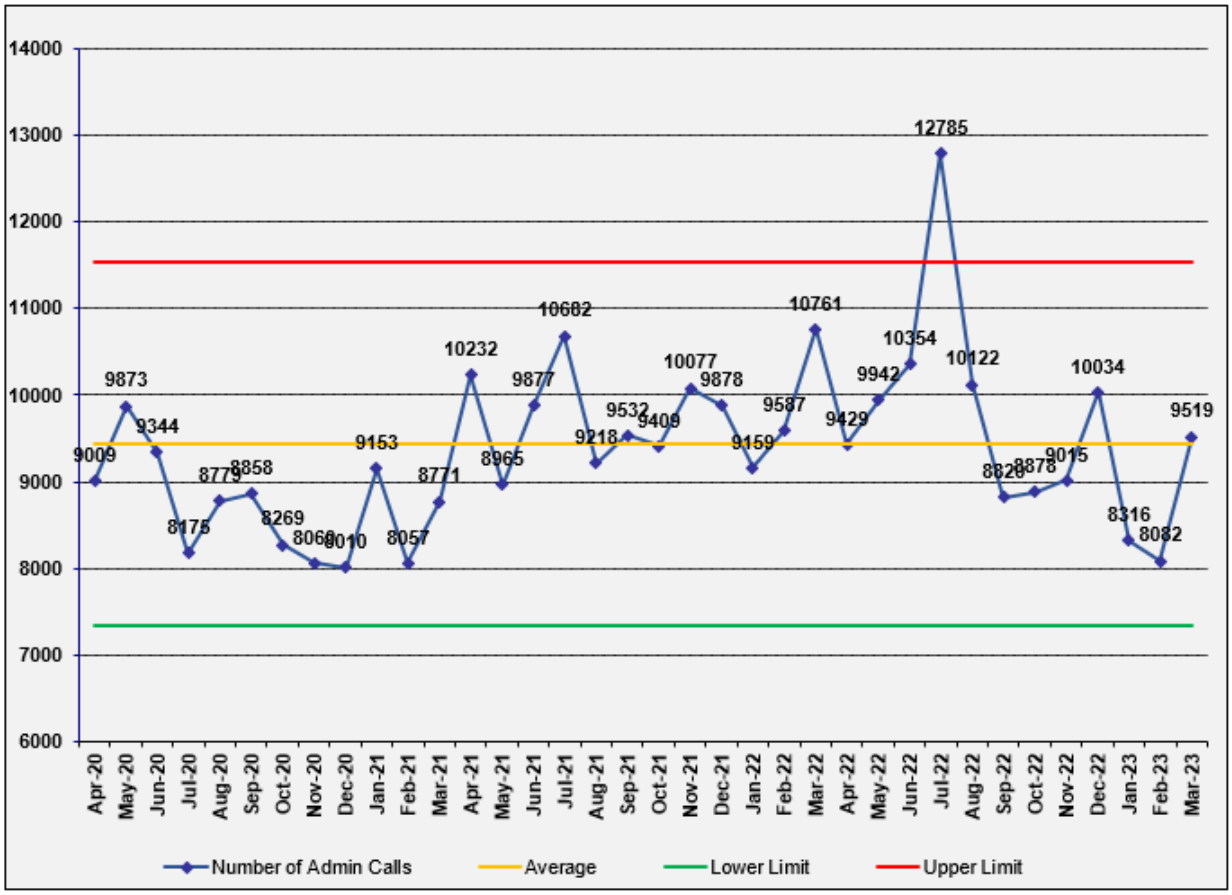
Administrative Calls

The number of administrative calls that North West Fire Control receive is measured. This includes calls from each fire and rescue service updating on the availability of resources, reporting injuries, advising about community activities they are participating in. Administrative calls also include calls from other agencies that are not emergencies, e.g. call from Environment Agency reporting on flood levels, or Highways Agency advising about motorway closures.

This is not a KPI but provides an overview of the number of calls that are received each month.

KPI: N/A Number of Administrative Calls		Quarter 25,917	Direction of Travel

Number of Admin Calls	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	115,296	25,917	117,377	29,507
Target:				



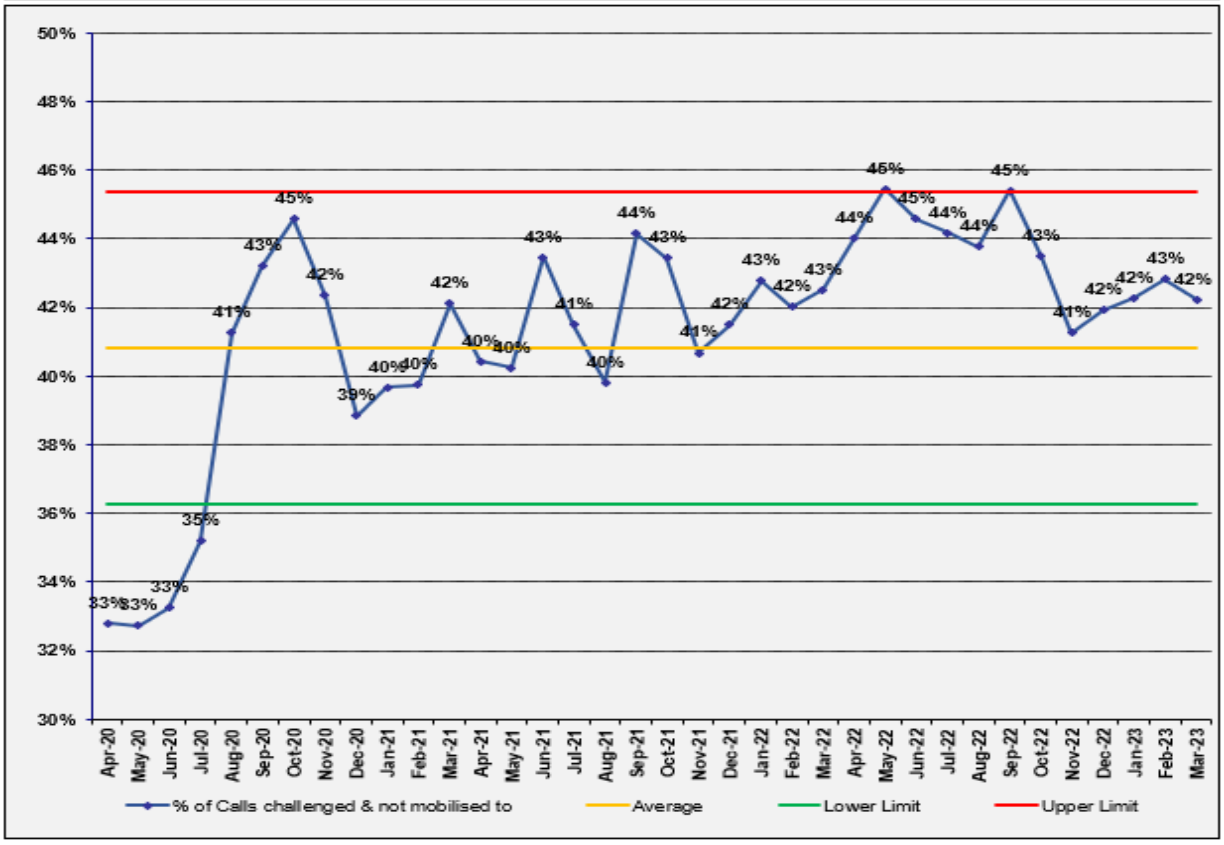
Similar to emergency calls, there is missing data that is not retrievable for administrative calls for Quarter 4.

Number of Calls Challenged Resulting in No Mobilisation

Any call where Control Room Operators ask additional questions provided by the fire and rescue services in order to determine if a response is required. Examples of these incident types are automatic fire alarms, animal rescues, bonfires and NWAS gaining entry.

KPI: N/A Percentage of Call Challenged Not Mobilised to.		Quarter 42%	Direction of Travel =

Percentage of Call Challenged Not Mobilised to	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
		42%		42%
Target:				



NWFC continues to support Fire & Rescue Services with its call challenge questions, which determines whether there are resources mobilised to incidents such as automatic fire alarms. In supporting these initiatives, 42% of calls challenged are not required to be mobilised to, and therefore all resources to be available for other emergencies.

NWFC has recently supported both Lancashire and Cumbria fire and rescue service in updating their call challenge questions for automatic fire alarms.

Call Answering Times

Accumulative Response to Answer Emergency Calls

The average answer time for all Emergency calls for quarter 4 2022/ 2023 was 5.1 seconds this is an improvement of 0.9 seconds when compared to the same period in 2021/ 2022.

Percentage of Calls Answered in 10 seconds

89.68% of all incoming Emergency calls were answered within 10 seconds for quarter 4 2022/2023.

Summary	Metric
Avg. Ringing Duration for Answered Calls	5.1
Avg. Call Duration for Answered Calls	-
Total Call Count	-
% Calls Answered Within 1 Secs	15.34%
% Calls Answered Within 2 Secs	42.50%
% Calls Answered Within 3 Secs	58.57%
% Calls Answered Within 4 Secs	67.11%
% Calls Answered Within 5 Secs	72.71%
% Calls Answered Within 6 Secs	78.54%
% Calls Answered Within 7 Secs	83.08%
% Calls Answered Within 8 Secs	86.06%
% Calls Answered Within 9 Secs	88.15%
% Calls Answered Within 10 Secs	89.68%
% Calls Answered Within 20 Secs	96.96%
% Calls Answered Within 30 Secs	98.76%

The average call duration for answered calls and total call count have not been completed due to missing data that has been explained on page 8 with regards to the number of reported emergency calls presented.

Average Response to Mobilise First Resource

The mobilisation of the first resource to incidents is taken from the time when the Control Room Operator at North West Fire Control answers a call on our telephony system until the first fire service resource is sent.

The following incidents have been agreed to be exempt from the results.

- Chemical suicide
- NWAS gaining entry
- Assist other agency, e.g., missing persons
- Suspect packages / white powder / bombs
- Arson threats
- Threatening to jump (from height or into water)
- Attendance to be made to a non-critical incident within 2 hours.

The removal of these incident types is due to them not requiring an immediate attendance or requires consultation with an officer such as a National Inter-agency Liaison Officer (NILO), who determines the required attendance.

In addition, a sample of calls have also been analysed and where it has been necessary due to fire and rescue service action plans to contact an officer or contact another agency or organisation prior to mobilising, these calls have also been exempted. A list of these additional exemptions with the reasons for removing them are available.

Accumulative Response to Mobilise First Response to Fires

During quarter 4, the average time to mobilise the first response to fire related incidents was 81 seconds. This compares to 78 for the same quarter in 2021/2022.

Accumulative Response to Mobilise First Response to Special Service Calls

During quarter 4, the average time to mobilise the first response to special service incidents was 113 seconds. This is an 8 second improvement compared to the same quarter in 2021/2022.

Accumulative Response to Mobilise First Response to Fire Alarms

During quarter 4, the average time to mobilise the first response to fire alarm calls was 93 seconds this is a 1 second increase compared to quarter 4 in 2021/2022.

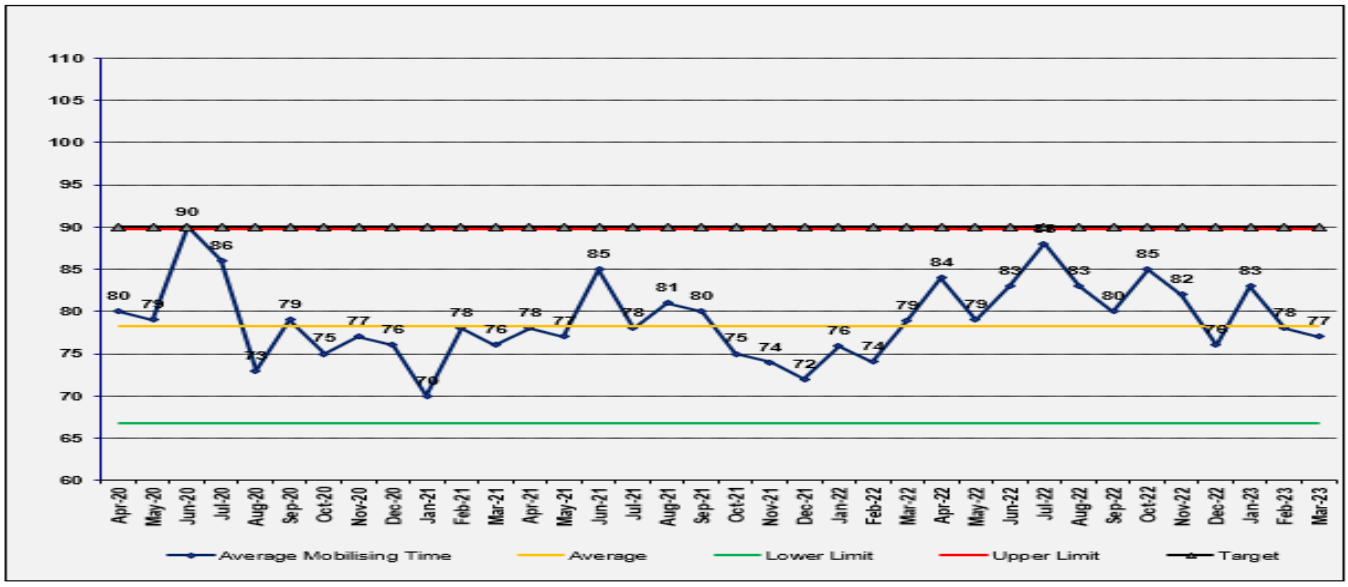
Accumulative Response to Mobilise First Response to All Incidents

During quarter 4, the average time to mobilise the first response to all incidents was 91 seconds. This is an improvement of 2 seconds compared to quarter 4 in 2021/2022.

LFRS - Average Mobilisation to Fires

KPI: NWFC 6.0 Lancashire Fire: Average Response to Mobilise First Resource		Quarter 79	Direction of Travel

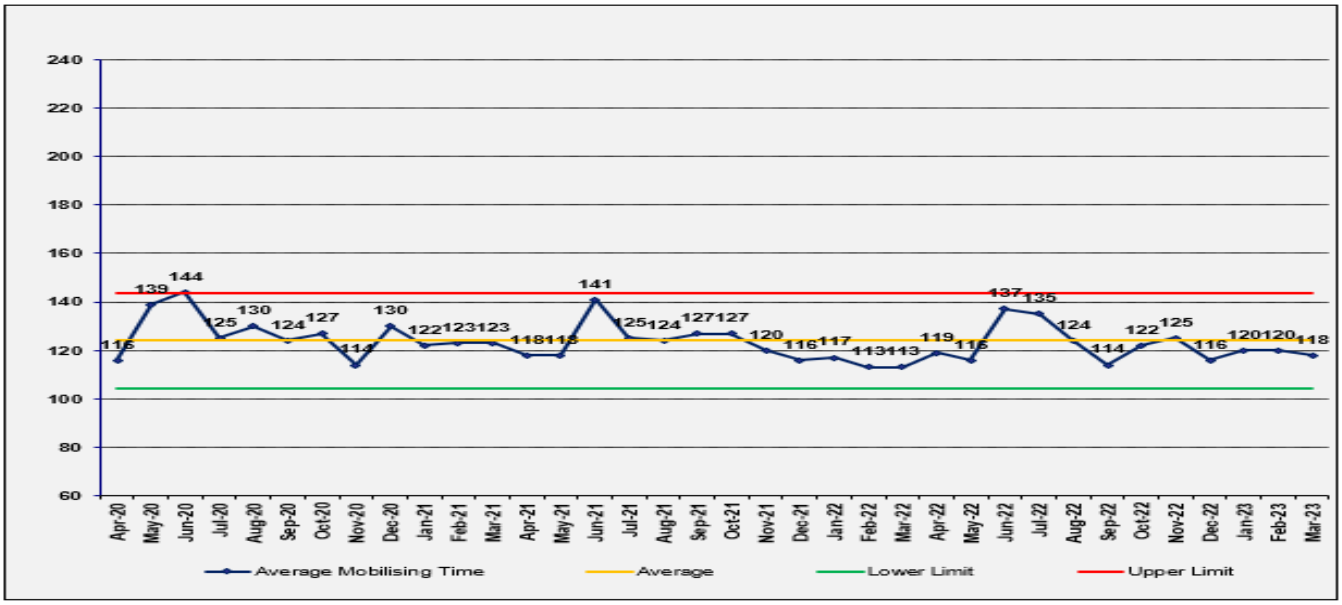
Number of seconds to mobilise first resource	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	82	79	77	76
Target:	90 Seconds	90 Seconds	90 Seconds	90 Seconds



LFRS - Average Mobilisation to Special Service Calls

KPI: NWFC 6.1 Lancashire SSC: Average Response to Mobilise First Resource		Quarter 119	Direction of Travel

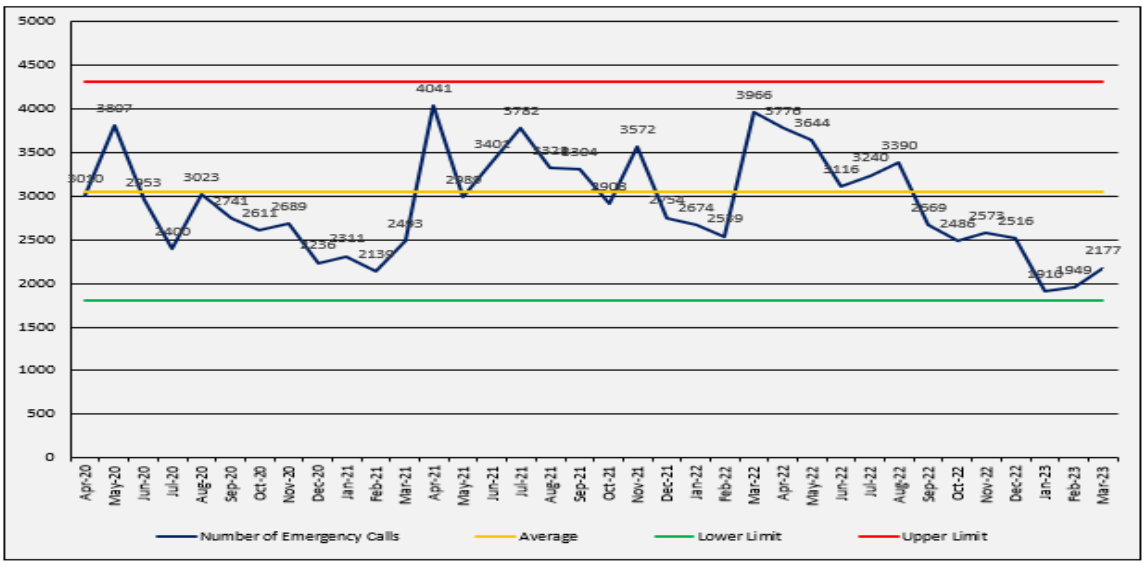
Number of seconds to mobilise first resource	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	122	119	122	114
Target:				



LFRS - Number of Emergency Calls Received

KPI: N/A Lancs FRS Emergency Calls		Quarter 6,036	Direction of Travel

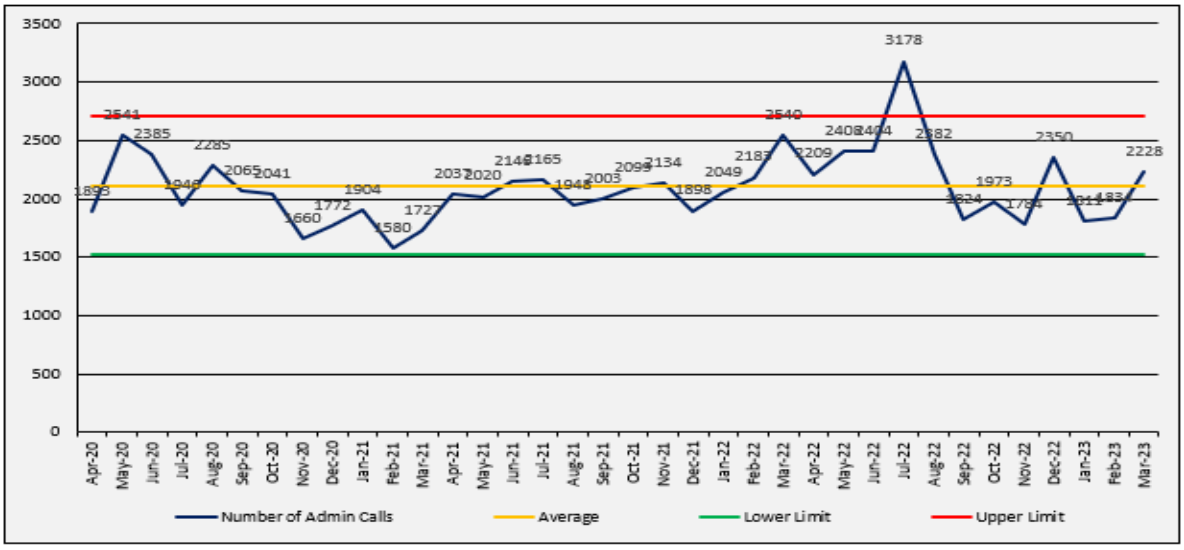
Number of Emergency Calls	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	33,446	6,036	39,258	9,179
Target:				



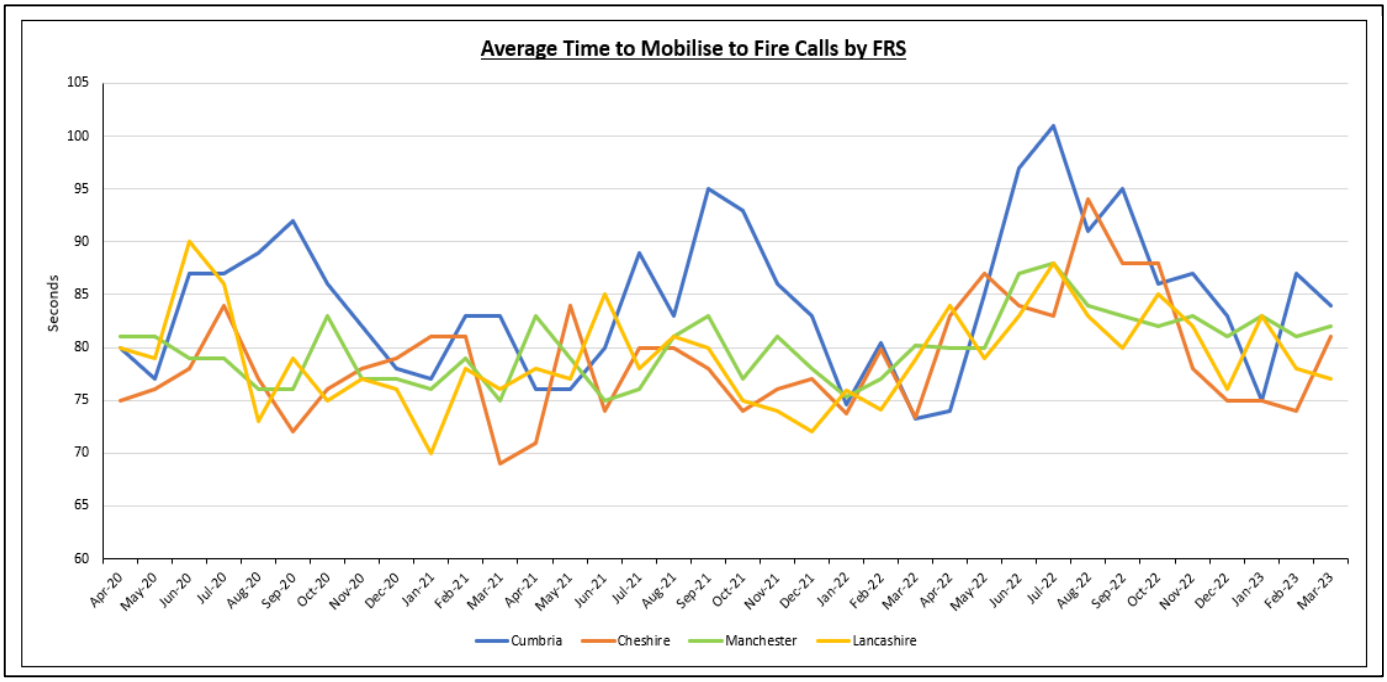
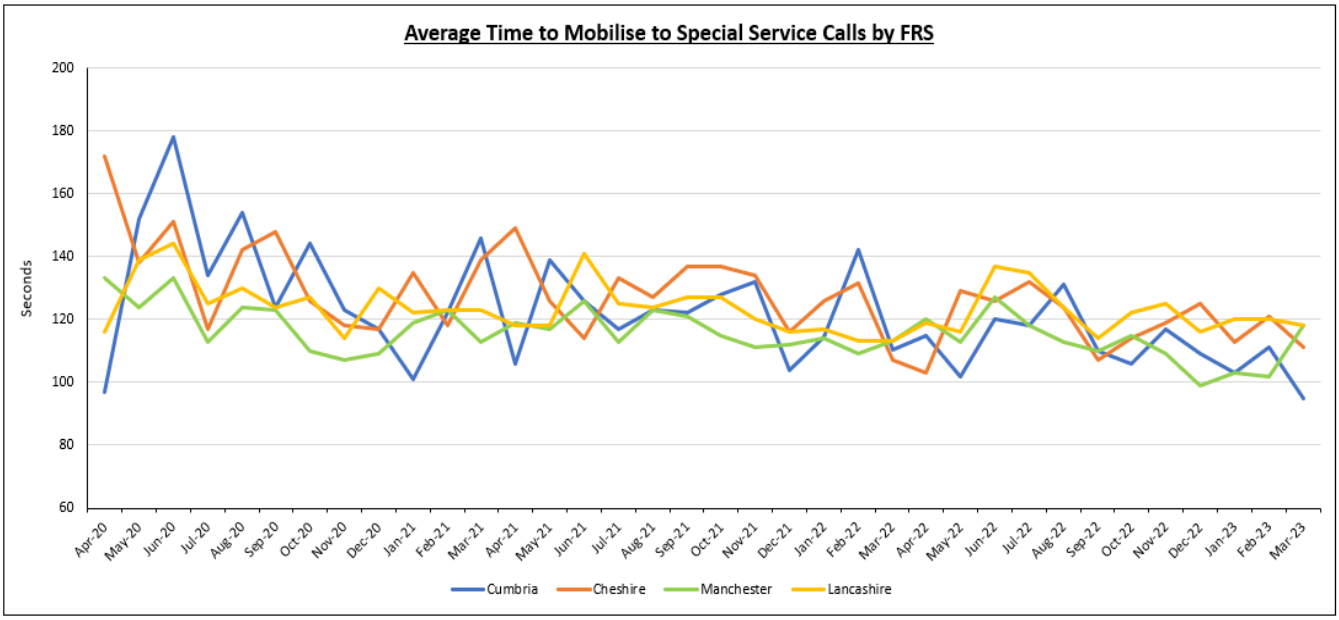
LFRS - Number of Administrative Calls Received

KPI: N/A Lancs FRS Admin Calls		Quarter 5,873	Direction of Travel

Number of Emergency Calls	Year to Date	2022/2023 Quarter 4	Previous year to date	2021/2022 Quarter 4
	26,385	5,873	25,222	6,772
Target:				



Comparative Accumulative Response to Mobilise First Response to Fires



Comparative Accumulative Response to Mobilise First Response to Special Service Calls