



# Strategic Asset Management Plan: Equipment

2023-28

Working together for a safer Scotland







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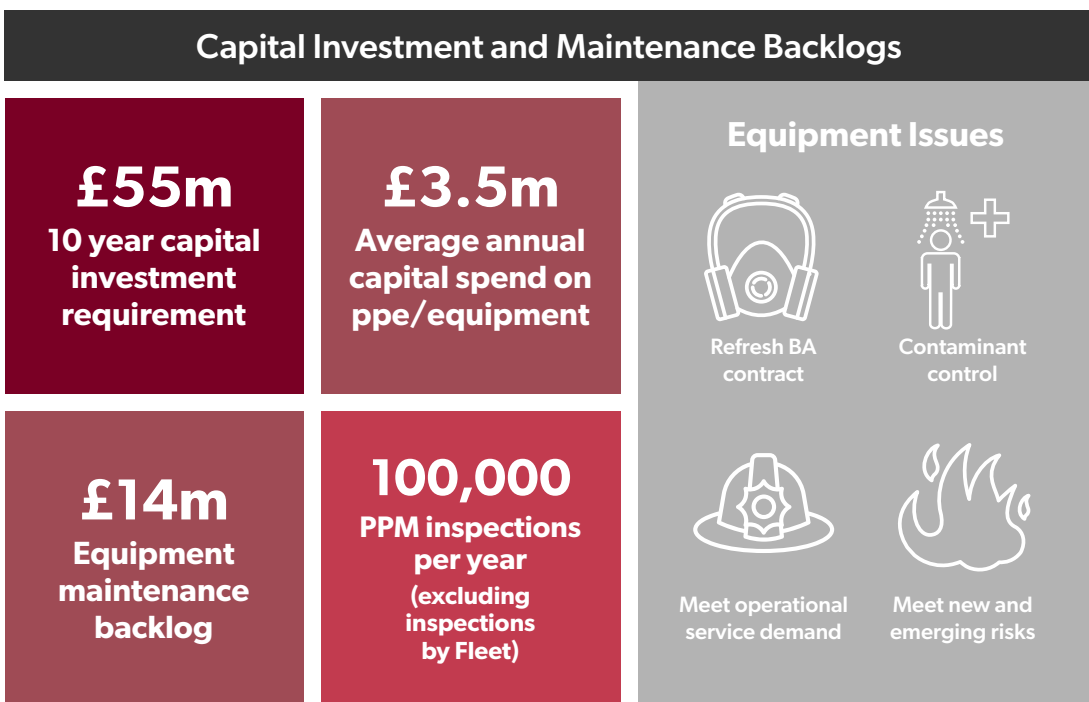
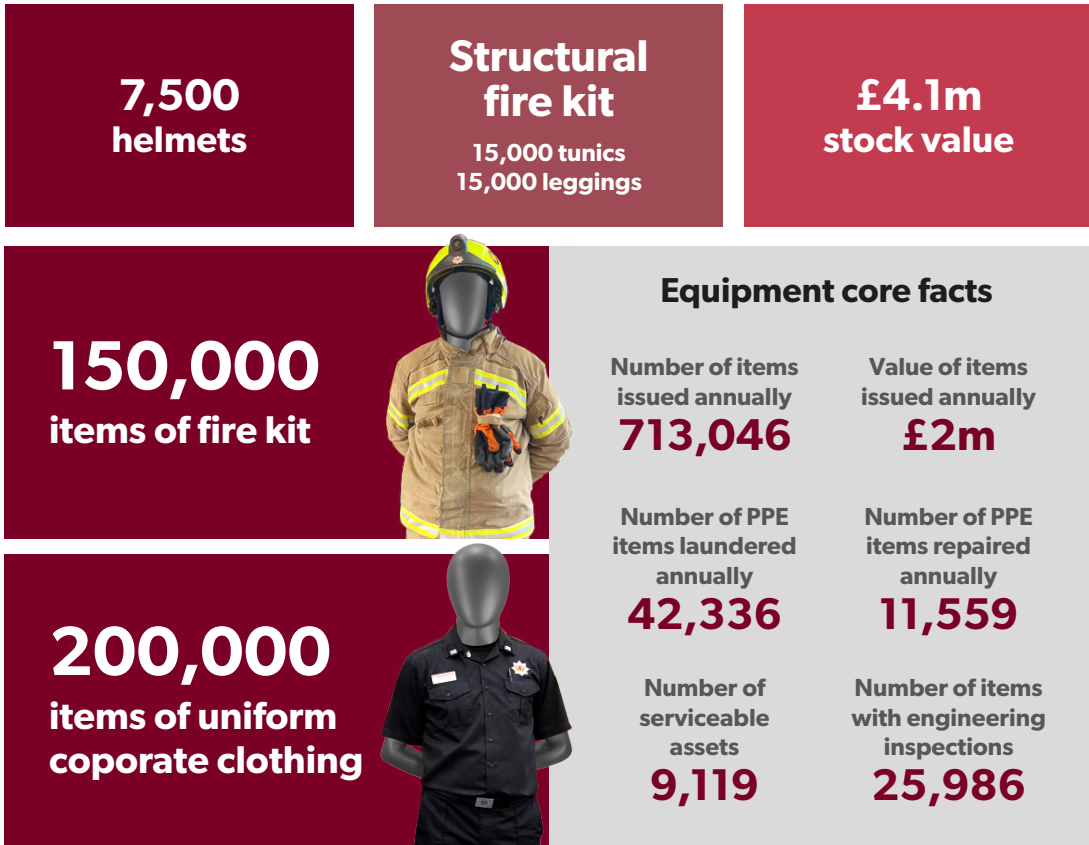
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## i Abbreviations

AMLB	Asset Management Liaison Board
AMS	Asset Management System
ARC	Asset Resource Centre
CIPFA	Chartered Institute of Public Finance Accountancy
H&S	Health and Safety
HRE	Hydraulic Rescue Equipment
ICT	Information and Communications Technology
ISO	International Organization for Standardisation
PPE	Personal Protective Equipment
PRE	Powered Rescue Equipment
PUWER	Provision and Use of Work Equipment
R&D	Research and Development
RICS	Royal Institute of Chartered Surveyors
SAMP	Strategic Asset Management Plan
SCBA	Self-Contained Breathing Apparatus
SFRS	Scottish Fire and Rescue Service
UIG	User Information Group
VIC	Vehicle Inventory Checks



## ii Asset Strategy in Numbers



# iii Foreword by Acting Director Asset Management

It is my pleasure to introduce this 5-year Strategic Asset Management Plan (SAMP) for Equipment which sets out how we aim to manage our equipment assets so as to support the effective delivery of service across the whole organisation.

Asset Management is defined by the Chartered Institute of Public Finance and Accountancy (CIPFA) as the delivery of corporate objectives and priorities of the organisation through the management of assets. This document sets out how we will maintain and renew our vital equipment assets, which are necessary to support our services. Our equipment assets range from ladders, fire hose, helmets, torches and breathing apparatus. All together, they represent a major capital investment.

Despite investment over the past ten years, £48 million, there remains a substantial inherited backlog investment issue. In the current year over 21,000 equipment items are older than the stated replacement cycle, representing an investment backlog for Equipment at approximately £14 million, see Appendix 1. As the SAMP makes clear, additional Capital funding will be required in order to deliver the proposed improvements to equipment assets so as to ensure that we have the right equipment assets to support evolving community risk and climate change, for example increased risk of wildfire and flooding events.

Given that we are in a time of austerity and there has been a reduction in Scottish Government budgets that will continue for the foreseeable future, it is now more vital than ever that The SFRS ensures the efficient and effective use of our equipment assets in order to meet the delivery of key service objectives. This SAMP will ensure that we are entirely compliant with regulatory, contractual and legislative commitments but, more than that, it will also ensure that we strive to implement best practice wherever possible.

**Iain Morris**

**Acting Director Asset Management**



# iv Executive Summary



## a. Background

Appliances and Equipment form the key foundations of SFRS operational response and give our personnel the confidence and ability to operate in a wide range of operational environments. From providing transportation and access for personnel, through to the equipment required to safely and effectively resolve incidents, the provision of modern equipment is fundamental to ensuring the safety of our staff, partner agencies and the public. The main focus of this SAMP is to ensure that equipment assets are used to fully support service needs in the most efficient and effective way and to provide innovative solutions wherever possible.

The Equipment section within the Asset Management Directorate is responsible for evaluating, procuring and validating all the equipment and Personal Protective Equipment (PPE) for use on appliances, fire stations and by personnel, whilst also ensuring that equipment is serviced and maintained to the highest standards of operational readiness and compliant with legal and statutory obligations. There are thousands of operational equipment items, ranging from ladders, fire hose, helmets, torches and breathing apparatus. As we evolve the SFRS asset portfolio, we will work towards maximising the standardisation of assets, enabling them to be deployed as flexibly as possible, both within our organisation and in working with partners to achieve integrated service delivery. This principle is illustrated in the early implementation of a single design of breathing apparatus across Scotland, through a single strategic contract.

The Strategic Asset Management Plan for Equipment, which has been developed in conjunction with members of the Asset Management Liaison Board (AMLB) and

their wider teams, will be published and communicated throughout the Service. Extensive stakeholder engagement was undertaken with regards to this SAMP, including an on-line questionnaire which received over 300 responses, the outcome from this is detailed within Appendix 2: Stakeholder Engagement feedback.

## b. Context

Our AMLB enables strategic asset plans to be developed in a collaborative manner involving all parts of the organisation; and through both internal and external audit and inspection we can gain assurance regarding the effectiveness of our asset management arrangements.



<b>2024</b>	<b>Overarching SAMP</b>
<b>2023</b>	<b>SAMP Equipment</b>
<b>2022</b>	<b>SAMP Property</b>
<b>2022</b>	<b>SAMP Fleet</b>





This SAMP sets out how we will manage, maintain and develop our equipment assets. The SAMP for Fleet was approved by the Board in 2022 and the SAMP for Property was approved in March 2023. The SAMPs for Fleet, Property and Equipment will all be combined in the future into an overarching Asset Management Strategy with an ambition for this to be certified to the International Organization for Standardisation (ISO) 55001 Asset Management Standard.

ISO 55001 was first published in January 2014 and establishes specific requirements for not only implementing and maintaining an asset, but also improving that asset via an Asset Management System. ISO 55001 is designed to provide structure and guidance on an Asset Management System

(AMS) to manage and mitigate risk, whilst benchmarking performance across all sectors and improving performance.

The benefits of this include the ability to ensure that our equipment assets fulfil their necessary functions, support improvements, provide assurance on the Asset management function and provides a focus on a risk-based approach to asset management which has shown to be effective for asset-intensive systems, not necessarily by reducing risk, but by using risk to balance the operational performance of the assets against the asset life-cycle cost. Appendix 3 details the Asset Management risk matrix and links this to the SFRS strategic risk register.

### c. Risks and Challenges

There is a risk that the significant supply chain shortages will be experienced in relation to the supply of commodities because of a lack of global manufacturing capacity. This could result in a delay to projects specified within the Capital programme and the potential increases in

both Capital and Resource costs as demand outstrips financial allocations. The war in Ukraine has no doubt also contributed to material supply and price increase issues, coupled with the ensuing energy and cost of living crises, mean that prices are rising month on month.





Recognising that Scottish Government and UK finances are constrained by the current economic impacts of EU exit, COVID 19 and the war in Ukraine, which have led to increased costs and inflationary pressures throughout supply chains, SFRS has revised the approach to allocating capital funding adopting a risk-based approach which would minimise the risk of failure in terms of service delivery. Our 10-year capital investment plan aims to transform the SFRS legacy asset estate to one which is Collaborative, Service Led, Net Zero and Modernising. Risk management is an integral part of good asset management practice. Risk-based asset management is a process in which risk is used to balance



the operational performance of the asset against life-cycle cost.

Our 10-year capital investment plan aims to transform the SFRS legacy asset estate to one which is Collaborative, Service Led, Net Zero and Modernising. Risk management is an

integral part of good asset management practice. Risk-based asset management is a process in which risk is used to balance the operational performance of the asset against life-cycle cost.

SFRS have recently implemented a balanced risk-based approach to facilitate the de-risking of The Scottish Fire and Rescue Service of Hydraulic Rescue Equipment (HRE) by expediting Powered Rescue Equipment (PRE) deployment within stations. SFRS have prioritised deploying PRE sets based on the risk of injury from the current HRE. The twin hose model of HRE is deemed as high risk due to its structural composition. Asset Management have prioritised the roll out of PRE-based on a combination of statistical information such as the number of HRE twin hoses in service, the number of HRE events and the usage of HRE within stations.

Risk Rating	Stations
High	201
Medium	57
Low	92

The table shows a breakdown of the number of **High**, **Medium** and **Low** risk stations.

## d. Strategic Asset Management Framework

This SAMP uses a Strategic Asset Management Framework approach developed by the Royal Institute of Chartered Surveyors (RICS) and the Chartered Institute of Public Finance and Accountancy (CIPFA). This requires an Asset Management Policy to provide rules and consistent structure to how we manage assets. The creation of an asset

management policy is also a requirement of ISO 55000.

The Asset management policy is designed to make sure the asset management strategy is reflected in the business decisions of all parts of the organisation. It sets down the rules of behaviour for the organisation, as far as equipment assets are concerned, to ensure that the strategy can be delivered transparently through a consistent process.

The SAMP contains a suite of living documents divided into three clear parts that can be updated separately to remain relevant:

<p style="font-size: 2em; font-weight: bold; margin: 0;">1</p> <p style="font-weight: bold; margin: 5px 0;">The Asset Management Policy establishes:</p> <ul style="list-style-type: none"> <li>• The corporate approach to property assets</li> <li>• The principles to be followed</li> </ul>	<p style="font-size: 2em; font-weight: bold; margin: 0;">2</p> <p style="font-weight: bold; margin: 5px 0;">The Asset Management Strategy establishes:</p> <ul style="list-style-type: none"> <li>• The current equipment asset estate</li> <li>• What we think our future should look like</li> </ul>	<p style="font-size: 2em; font-weight: bold; margin: 0;">3</p> <p style="font-weight: bold; margin: 5px 0;">The Asset Management Action Plan establishes:</p> <ul style="list-style-type: none"> <li>• What we need to do to deliver our strategy</li> <li>• The specific actions and focus areas</li> </ul>
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### 1. An Asset Management Policy

This is a high-level statement of the overall approach to providing equipment assets to meet the organisation's needs. It will make clear, in general terms, the equipment assets that are required to meet corporate and operational objectives.

### 2. An Asset Management Strategy

This will be designed to make sure that the equipment asset strategy is reflected in the decisions of all parts of the organisation. The asset management strategy provides an overview of the organisation's equipment asset estate, together with the governance arrangements, approach and

key initiatives for the management and development of the estate that support corporate objectives.

### 3. An Asset Management Action Plan

The asset management action plan sets out how the necessary changes will be delivered. This is a 'living document' and will be used and adapted in order to manage our asset management programmes of work on a regular basis. This will be regularly reviewed by the AMLB and will form the basis for reporting performance.

The diagram on the next page shows the strategic context of this SAMP:





**e. Managing Investment Backlog**

In recent years, managing within the aforementioned financial constraints has required measures such as:

- Additional equipment safety assessments to enable extending life beyond sector or service norms and in some instances, beyond manufacturer’s recommended periods
- Servicing and recycling of equipment where replacement would normally have taken place
- Providing a strategic capability for the country via selected locations in place of a capability at all operational locations
- Deferring upgrading of operational equipment in line with currently advocated specifications.

Whilst providing a managed solution, this inevitably places additional burdens and cost on the maintenance functions

and whilst mitigated as far as possible, does not eliminate associated risks. Available funding will inevitably mean that prioritisation against the objectives set out within this SAMP, whilst ensuring staff and community safety, will be necessary through the life of this SAMP.

The requirement for immediate equipment replacement will exceed available capital and resource funding for the medium-term future, proposals are therefore based upon analysis of need and cost vs benefit and have taken account of all opportunities to extend useable life.



**Roddy MacKinnon**  
Equipment Manager







# Asset Management Policy





# 1 Asset Management Policy

## 1.1 Introduction

This Asset Management Policy establishes clear objectives by which we will manage our equipment assets, make strategic decisions and define longer terms action plans against our equipment estate. It will remain in place for the next five years and will be reviewed annually to ensure it is still relevant to what we are trying to achieve.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
To promote joint working where it will provide benefit for service delivery and in securing efficiencies	To provide the right equipment, in the right place, fit for purpose, to meet current service delivery needs and for the future	To reduce the environmental impact of our equipment assets	To modernise our equipment assets and ensure that they are maintained to approved schedules

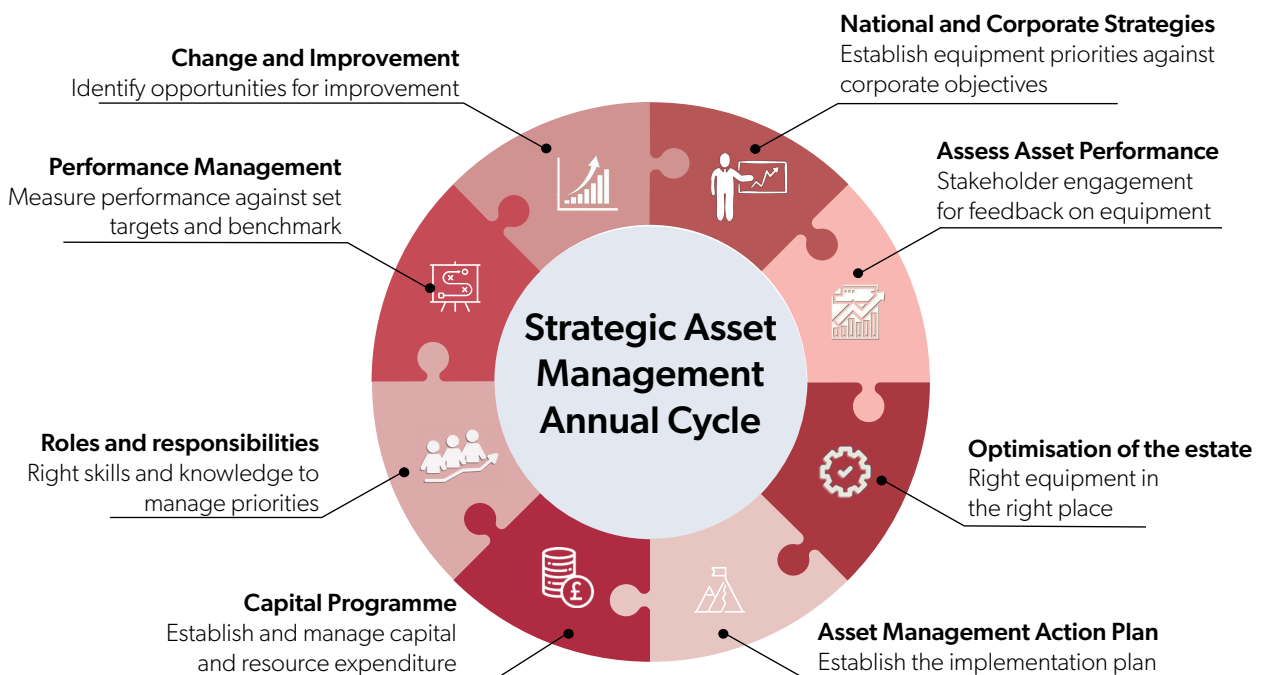
An overarching principle to ensure effective asset management information systems are established, embedded, and managed throughout the organisation will be to follow the principles of ISO 55001 and the RICS guidance on Public Sector Asset Management.

In producing this SAMP we will:

- Assess the condition of the current equipment estate

- Establish objectives for asset management
- Provide a programme of activity for the delivery of the objectives
- Set out a framework for an annual review of the 'state of the equipment estate'

The action plans will be reviewed on an annual basis (using the process cycle below)



## 1.2 SAMP Objectives

To support the objectives of the SAMP we have set out four policy objectives on the following pages. These describe The SFRS commitment to asset management and to achieving the benefits that can be delivered through effective use of the portfolio. These objectives are important for decisions made in respect of our equipment assets:

The four key objectives of the SAMP are framed within an overarching objective of Value for Money. Value for money is defined as the most advantageous combination of cost, quality and sustainability to meet Service requirements. In this context:

- Cost means consideration of the whole life cost of equipment assets
- Quality means meeting a specification which is fit for purpose and sufficient to meet Service requirements
- Sustainability means economic, social and environmental benefits in support of the SFRS Long-Term Vision



### 1.2.1 Modernising

- Help to facilitate Improvements in the way the Service operates
- Provide the most up to date and innovative technology
- Modernise Equipment asset management system
- Tackle backlog investment issues across the range of equipment assets

We will maintain up to date information on the condition and suitability of our equipment assets that enable us to annually draw down a rolling 3-year investment plan, linked to current Service priorities, and developed through our Asset Management Liaison Board, at which all relevant areas of the organisation are represented.

As we evolve the SFRS equipment asset portfolio, we will work towards maximising the standardisation of assets, enabling them to be deployed to better support service delivery objectives. A recent example of this is the work undertaken in connection with the Fleet team, to ensure a standard set of equipment on new 15-tonne rescue pumps.



## 1.2.2 Service Led

- Work with operational staff to help implement key elements of the SFRS Operational Strategy
- Based upon operational need
- Planned in conjunction with key partners
- Ties into SFRS long-term vision and Strategic Plan.

One of the key recommendations of the Christie Commission on the Future Delivery of Public Services was that those individuals and communities receiving public services must be empowered through involvement in design and delivery of the services they use.



Similarly, in designing and commissioning equipment assets we must take account of the valuable insights of those who use and maintain them, from operational firefighters, to control staff, to office-based personnel, fleet mechanics, stores staff and technicians. We will

consult with those who use and those who service/maintain existing assets, taking their views into account in future investment decisions.

This SAMP will tie in with the SFRS Operational Strategy 2022-32, which is a blueprint to inform and assist strategic managers approach to future operational response. Within the Operational Strategy, there are opportunities to review current deployment models and locations of assets including specialist capabilities. This will supersede any previous and legacy arrangements and provide a more proactive approach to the deployment of equipment assets.

## 1.2.3 Net Zero

- Improve Equipment efficiency
- Reduce carbon emissions
- Meet Scottish Government low carbon target requirements

Over the last few decades Scotland has experienced the effects of Climate Change including shifting rainfall patterns and rising sea levels. The nation's warmest years on record have all occurred since 1997 with the average temperature in the last decade around 0.7°C warmer than the 1961-1990 average. The recent global declaration of a climate emergency has acted as a catalyst for asset management transformation. We are committed to minimising our environmental impact through the products we procure. SFRS are committed to supporting the Scottish Government's aspiration of an environmentally sustainable economy, and will continue to progress projects that will help to lower our carbon footprint.

In order to ensure legislative compliance and support our efforts to deliver maximum value from our limited resources, we are keen to continue our efforts to fully adopt the 'Whole Life Cycle' approach to managing our operational equipment assets.

In June 2020, the European Union (EU) published regulations adding perfluorooctanoic acid (PFOA) to its list of persistent organic pollutants (POPs). This has resulted in C8 firefighting foams, which are commonly used amongst UK Fire and Rescue Services, being prohibited for operational use by all Fire and Rescue Services by 1 January 2023. A User Intelligence Group, UIG, led by Asset Management, has been established to develop a long-term sustainable foam strategy for SFRS.

## 1.2.4 Collaboration

- Work with Emergency Services partners
- Utilise National Fire Chiefs Council (NFCC) framework
- Supports Scottish Emergency Services National Collaboration Strategy
- Seek learning opportunities from other Fire Services

The purpose of the SFRS is to work in partnership with communities and with others in the public, private and third sectors on prevention, protection and response to improve the safety and wellbeing of people throughout Scotland. SFRS actively engage, support and evaluate the benefits of collaboration opportunities with emergency services and key partners, so as to improve the efficiency and effectiveness of the Service.

It is important that collaboration is considered at each stage of the equipment management cycle, especially at the outset. Collaboration at each stage may be considered in a different context and can be effective in isolation or as a whole:

- Collaboration between users and when establishing the user specification and needs
- Collaboration between partners at the procurement stage
- Collaboration between partners for the maintenance, support and contract management of a piece of equipment



**NFCC**  
National Fire  
Chiefs Council

**SCOTLAND  
EXCEL**

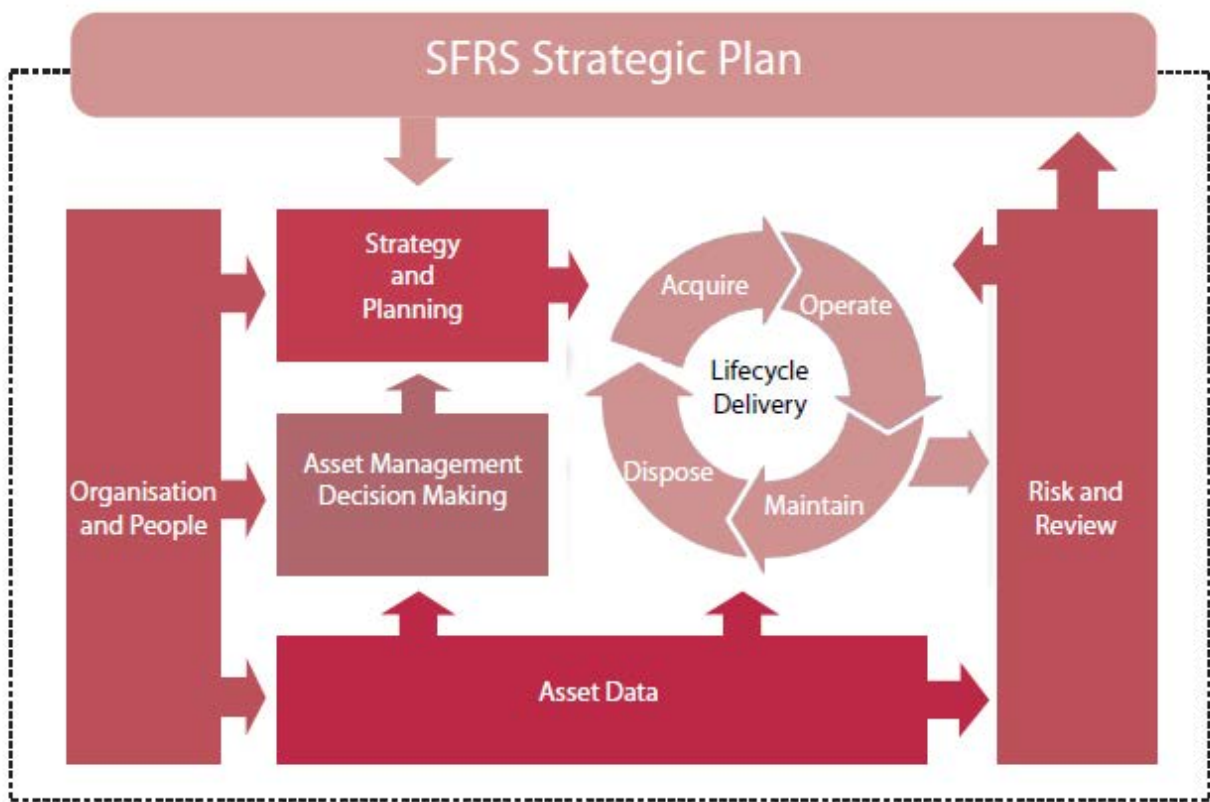
The SFRS continues to be represented at various national procurement forums as coordinated by Scottish Government. SFRS is a member of Scotland Excel a purchasing consortium which includes all Local Authorities. The organisation also continues to build relationships with the Procurement Forum established by the National Fire Chiefs Council. The SFRS also continues to seek collaborative opportunities with other partner organisations such as Crown Commercial Services with whom the SFRS have outsourced a number of projects for completion.





### 1.3 Decision Making

We recognise that effective asset management requires interventions at each stage of the asset lifecycle. This policy sets out how we will manage each of these stages as depicted in the following diagram:

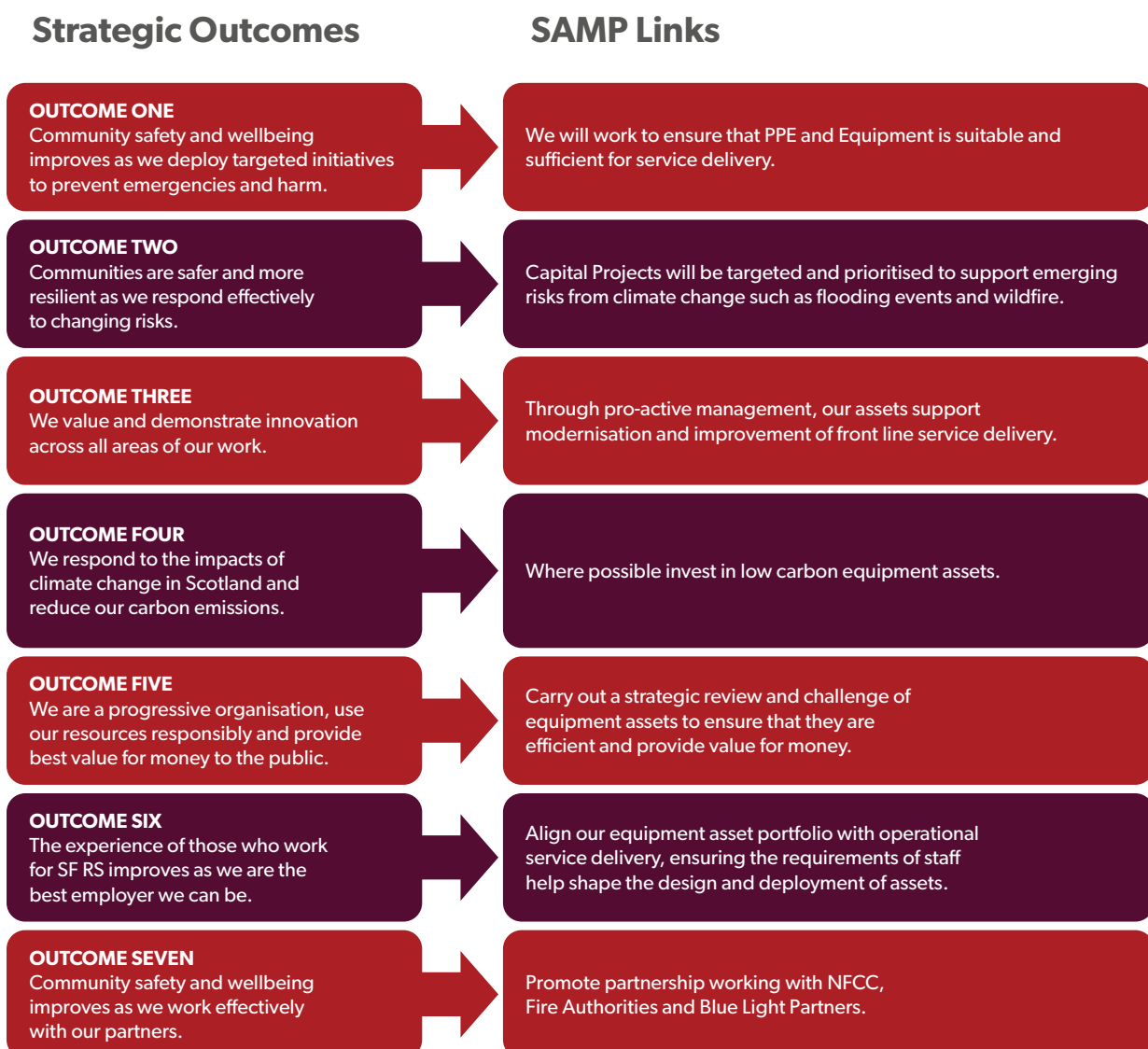


Our Asset Management Liaison Board enables strategic asset plans to be developed in a collaborative manner involving all parts of the organisation; and through both internal and external audit and inspection we can gain assurance regarding the effectiveness of our asset management arrangements.

We will manage the risks associated with our assets, to avoid negatively impacting on our service delivery, safety of the public and employees, financial sustainability, legal compliance, environment, internal control and reputation. We will ensure our asset information systems provide the data we require to manage performance, and enable continuous improvement.

## 1.4 Strategic Alignment

Our equipment assets are crucial to the delivery of an effective fire and rescue service. The management of our assets must be aligned to the overall direction of SFRS and, as such, this strategy has been written to work alongside the SFRS Strategic Plan. The table below illustrates where good asset management and robust processes in terms of risk and safety management directly contribute to, or are directly influenced by, the delivery of The SFRS strategic outcomes:







# Asset Management Strategy





## 2 Asset Management Strategy

### 2.1 Introduction

This SAMP illustrates how SFRS will procure, maintain and replace operational equipment items in order to meet current and future operational needs. SFRS aims to maintain a high standard of operational equipment through continual improvement and evaluation.

SFRS came into existence on 1st April 2013 with the merger of 8 legacy fire services. Thereafter it was discovered that some equipment assets from certain former services were non-compliant with legislative requirements, compounding this was a lack of information or documentation on equipment assets, this was mainly as a result of a lack of investment by some former Services. The legacy equipment

asset estate was ageing and not entirely able to meet the demands of a modern 21st Century Fire Service.

Since 2013 the Equipment team have worked hard to ensure a standard approach is taken across all equipment asset categories, including structural fire kit, breathing apparatus, safe working at height (SWAH) and trauma kits. New practices, including the development and training of staff members, have been introduced to ensure full legal compliance. Condition surveys of assets has been undertaken and a SFRS asset management system has been introduced. Capital and Resource has been targeted to certain equipment categories to address areas of concern.



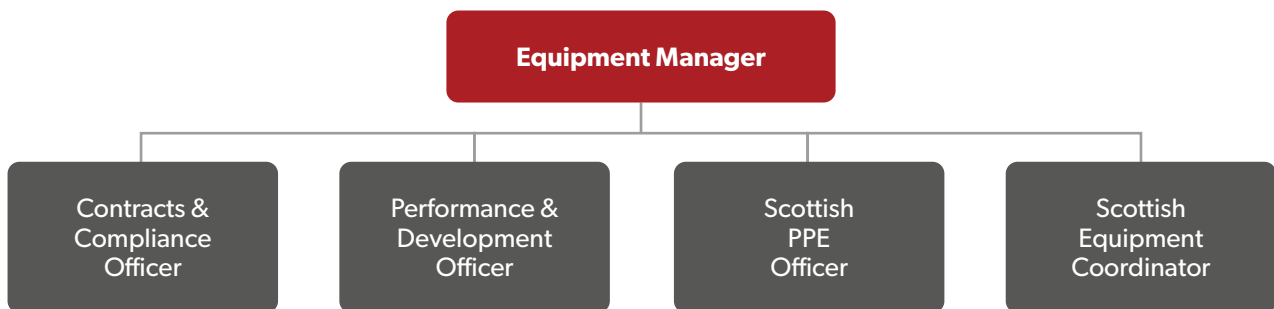


## 2.2 Control of the Equipment Strategy

The strategy will be reviewed annually in conjunction with, and supported by key stakeholders, primarily Service Delivery (user) representatives. This will be linked closely to the SAMPs for Fleet, Property and the SFRS Operational Strategy. This Strategy will predominantly address equipment needs that are part of a cyclical replacement programme. Significant changes to the Strategy would normally only occur due to one of the following criteria being demonstrated

- An urgent operational need is identified that cannot be met by utilising existing equipment or by adapting existing equipment at economical cost
- Significant investment to make substantial savings through opportunities such as economy of scale or collaborative procurement
- A health and safety related issue, interoperability, or equipment fatigue issue suggests an alternative should be sought outside of the SAMP for Equipment strategy planning
- The equipment becomes obsolete or the supplier cannot for any reason continue to support the product
- New technology or improvements in technology that offer long term cost savings or an increased functionality to the user are identified
- Where legislation, guidance or notable practice dictates a new or altered approach or deems a change in process and operating practices is required
- Where there may be wider and/or more specific operational considerations including those of partner organisations and collaborative initiatives, such as alignment of equipment to underpin consolidation or development of operational practices and services being delivered

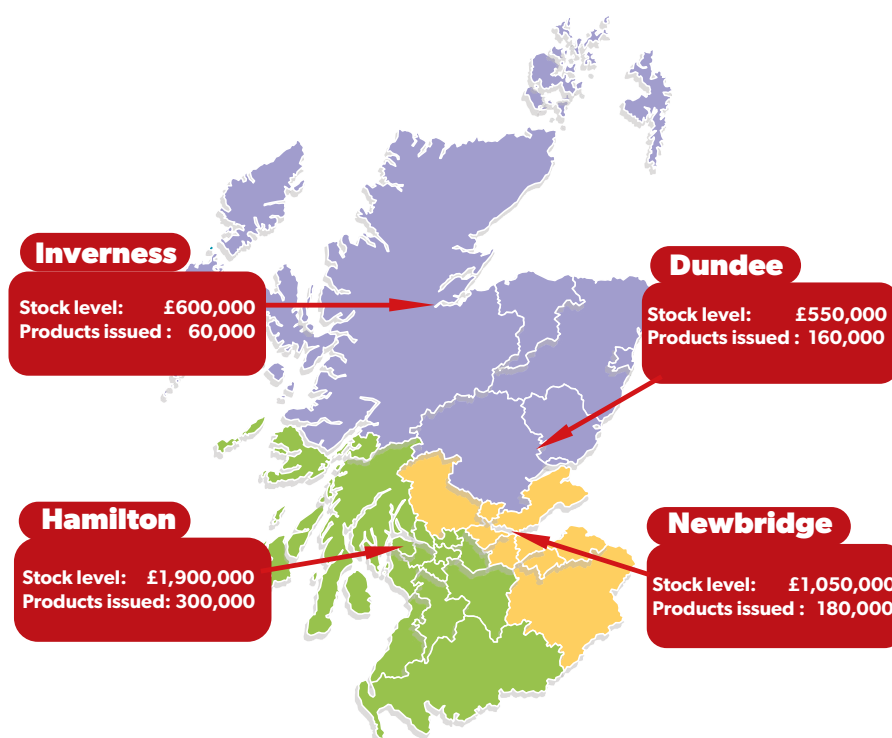
## 2.3 Equipment Section Structure



The Equipment team comprises over 40 members of staff, who are responsible for evaluating, procuring and validating all of our equipment and PPE for use on appliances, fire stations and by personnel, whilst also ensuring that equipment is serviced and maintained to the highest standards of operational readiness and compliant with legal and statutory obligations.

## 2.4 Stores and Logistics

This section operates from the Asset Resource Centres (ARC). The Stores and Logistic functions are responsible for providing the storage and distribution of operational equipment, uniforms, PPE, consumables and a whole variety of goods used by SFRS. Deliveries are co-ordinated from 4 ARC stores.



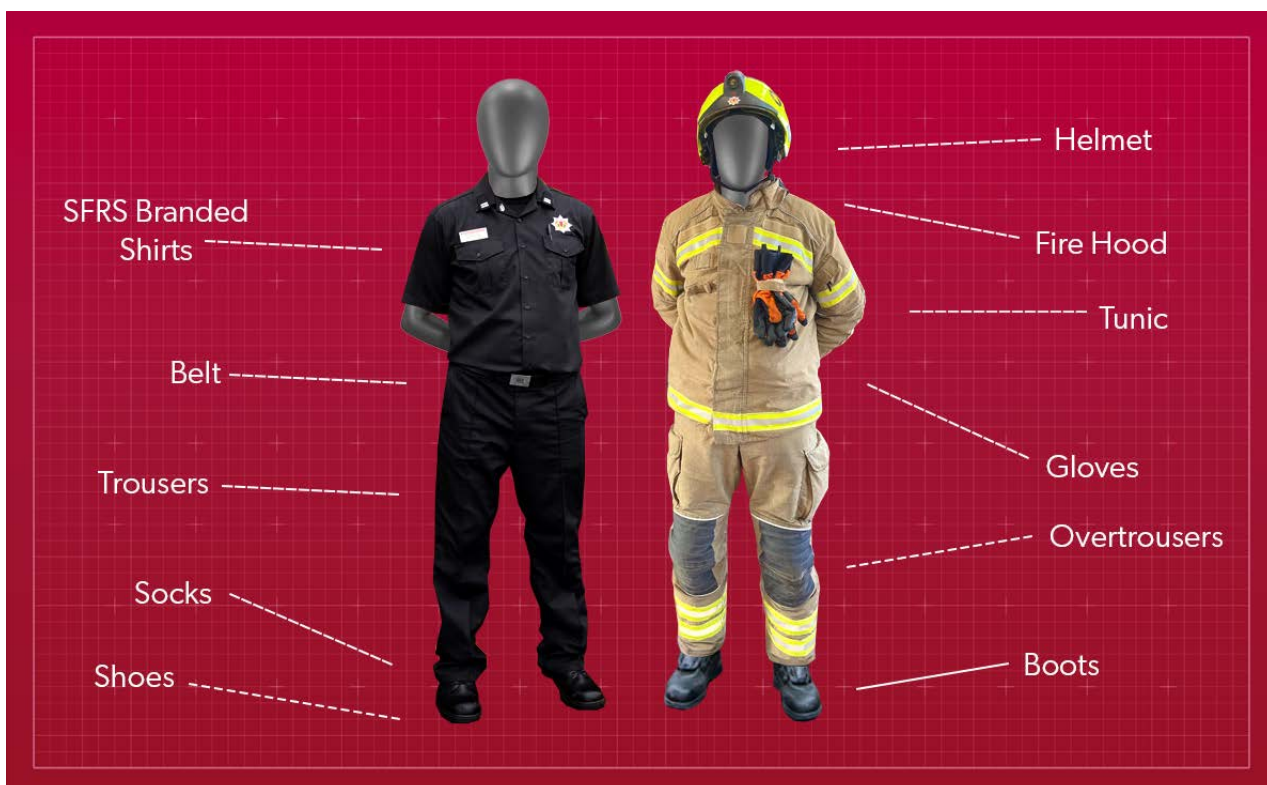
The Cambuslang Asset Resource Centre, which will replace the Hamilton ARC, is set to become operational in Summer 2023.



## 2.5 Procurement

By using our limited resources wisely, we always seek to invest in providing our staff with the highest quality equipment and personal protective equipment (PPE) we can. Any investment will support collaboration and the national procurement agenda wherever there is a clear business case to do so. All assets will be specified, procured and maintained under the principles of protecting the front line, improving firefighter safety, providing value for money, adopting the whole life cycle approach to asset management, engaging with end users, utilising innovative new technologies, supporting national procurement and NFCC research and development, and actively pursuing collaboration opportunities with partners.

Major equipment procurements are often collaborative and governed by formal contracts which can include fully managed services being provided alongside the item of equipment. These can be entered into alone or aligned to consortium frameworks (collective purchase agreements), that may offer the Service the advantage of better price, terms and conditions and aggregated bulk purchase efficiencies.



We aim for the forefront of firefighting technology, setting standards that will be recognised nationally, whilst investing in our people through the procurement of the most up-to-date, effective and efficient assets available. Where possible we will collaborate, including through NFCC national research and development, to identify, develop and evaluate new and innovative equipment technologies to continue to improve our effectiveness, value for money and firefighter safety.



## 2.6 Equipment Lifespans and Review Periods

Some items of equipment are governed by factors such as legal compliance and manufacturer's guidance with end of life dates or component expiry dates. Where there are no such constraints, indicative review dates have been identified in this SAMP and form part of the annual work planning processes for the Equipment section. These key dates inform how we plan for the mid-term evaluation and end of life replacement of our equipment to ensure that Service equipment meets user requirements.

With a number of items currently tracked and maintained in the Service, the procurement of new and replacement equipment requires careful planning. Planning for the lifespan of equipment is not necessarily a process that can be applied evenly across all equipment types. Some equipment may have fixed manufacturer determined or safety led lifespans which force the disposal at a set date of equipment that may appear to be in perfectly serviceable order, whilst other equipment, whilst well used and worn, may be perfectly suitable to stay in service and will continue to perform well for many years. This document does establish lifespans for equipment (see Appendix 1) which in some cases are fixed, however, in many cases may be aspirational only and might need to be flexible and regularly revised, based on a number of considerations at any given time.

Equipment replacement programmes vary across the UK Fire

Services, and there is no appropriate industry benchmark to measure average lifespans for most pieces of equipment. The increasing age of a piece of equipment can have the potential to present increased maintenance and repair costs, however, this must be offset against the replacement costs and procurement processes needed to replace it. In many cases low operational usage, above average maintenance cycles alongside the quality of the product that is procured at the outset will determine the lifespan of many pieces of equipment. Conversely, consideration is also given to whether the lifespan of a piece of equipment will limit the ability to respond to technological advances. It is important to regularly assess the current lifespans of the equipment in use to determine whether it is beneficial to reduce or extend these lifespans further.

## 2.7 Maintenance and Servicing

SFRS have recently changed from Services undertaking internal cleaning and repairs to PPE to a new external service from an approved single contractor, MSA Bristol, who also manufacturer the structural fire kit, and ensure that all items are cleaned to the stated manufacturer's standard. The service also includes annual health checks, which includes a monitoring process, this is essential for new decontamination cleaning controls. SFRS also introduced a total care package for service and maintenance of Self-contained breathing apparatus (SCBA) Sets.





## 2.8 Equipment Decommissioning and Disposal

Alongside the purchase of new equipment, existing equipment no longer fit for purpose will be decommissioned and disposed of in a planned way. The disposal plan will consider the following issues:

- Redeemable residual value of the item to SFRS
- Security - To ensure equipment (PPE) cannot be acquired by purchasers for purposes that are detrimental to the national interests, for example crime and terrorism
- Young Firefighters Association, Training, or similar initiatives

- Assisting other UK Fire Services and partners
- Assisting developing countries and charities (low or zero-value items only without appropriate approval). Any decision to gift higher value items will need appropriate approval
- Maintain an adequate audit trail and assurance of appropriate disposal

In the past few years SFRS have donated Hydraulic Rescue Equipment to Ukraine; Structural Firefighting PPE and Ballistic Protection PPE to Ukraine; Sent PPE to Moldova; Donated PPE kits to Paraguay and Mexico; Donated Replaced BA sets and Cylinders to Paraguay and Mexico and Donated PPE to Lebanon and Beirut



## 2.9 Equipment Deployment

The deployment of operational equipment across the county will be informed by risk analysis comprising the strategic fire cover model and by analysis of incident activity and data, for example a number of stations have been identified as wildfire stations. This will help ensure an efficient distribution of equipment, matched to community risk, standard of response and maintenance of competencies.

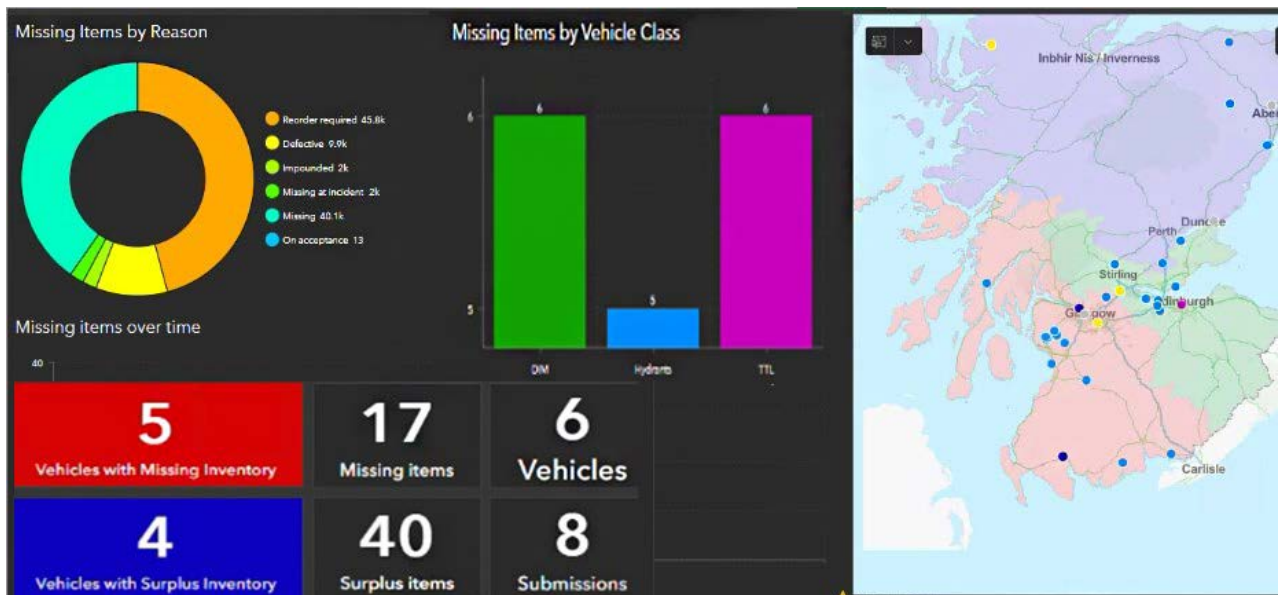


## 2.10 Vehicle Inventory Checks

Work is underway to simplify the way our crews can ensure they are fully equipped with emergency equipment. A pilot study is currently in process at a number of Fire Stations, allowing firefighters to carry out essential vehicle inventory checks (VIC) through a new mobile application.

The app, which does not require Internet connection, will make inventory checks quicker and easier, and help identify any recurring issues with equipment. Should the current pilot be successful, a further soft launch will be extended to a single station within our East and West Service Delivery Areas.

Ultimately, we aim to have the mobile application deployed to Getac Tablets and, potentially, other mobile type devices, at stations across Scotland. The move would see paper-based checks removed, and the mobile application used to carry out checks on all of our Service vehicles.



[Sample Vehicle Inventory Check Dashboard]





## 2.11 Standardisation

Since the formation of SFRS in 2013, we have standardised Equipment and PPE for 6,500 Firefighters. Working with Local Senior Officers (LSOs) and other stakeholders we have determined where to locate resources so that they can be deployed in the most effective way. Commensurate with this approach, is the understanding that the Service needs to retain standardisation for identified areas of operational response, for example Water and Rope Rescue, in line with a risk-based approach, where stations may come together to form a team for specialist rescue. Employing a risk-based approach enables the Service to retain flexibility and the agility to review existing appliances and equipment disposition and deployment models and modify operational response as necessary.

£600,000 has also been invested on 24 new Water Rescue Boats. This includes the standardisation of Water Rescue Capability and Water Rescue Stations across Scotland.





## 2.12 Breathing Apparatus Sets

Central to an effective operational response, is a state-of-the-art Breathing Apparatus Set (BA Set) which has the confidence of the workforce. As the single most risk critical and identifiable item of equipment used to ensure the safety of the Firefighter within the risk area, the modern BA Set must be high performing, simple to use and enable SFRS personnel to make effective interventions to save life and resolve incidents

In 2015 SFRS replaced 4 legacy suppliers of Self-Contained Breathing Apparatus (SCBA) Sets to a single SCBA supplier in a 10-year contract award. This meant the introduction of over 2,500 SCBA sets and over 5,200 cylinders. An increase to 50% communications across sets, every set has downloadable body guard systems which increases Firefighter safety. SFRS also introduced a total care package for service and maintenance of SCBA Sets.

The SCBA contract is due for renewal in 2025. We will identify opportunities to enhance safety using research and innovation to inform the procurement of our next generation SCBA Set. The SFRS will pro-actively, and at an early stage, commit resources to research and understand the most effective technologies to inform the procurement of the next generation of SCBA Sets. Areas for research include biotelemetry, integrated safety systems, thermal imagery and enhanced SCBA Sets for specialist response.





## 2.13 Powered Rescue Equipment



The rationale for replacing Hydraulic Rescue Equipment (HRE) with Powered Rescue Equipment (PRE) is based on the risk of high-pressure injection injury (HPII) to Firefighters and casualties during extraction. Although the use of PRE and HRE are the same, the operating mechanism and equipment design is different. The PRE is battery powered and does not have a hose for pressurised hydraulic oil to flow through, however, both the PRE and HRE contain pressurised hydraulic oil within the valve body. SFRS are de-risking the service so far as reasonably practicable by the removal of HRE and the risk of a HPII from the hoses.



£4.8 million has been invested in Powered Rescue Equipment (PRE) since 2021, PRE will replace Hydraulic Rescue Equipment (HRE) on all front-line appliances with an expected completion date of March 2024. The new PRE has the following benefits:

- New and intelligent switching technology
- Higher speed thanks to a new and efficient drive system
- Include a 360° rotatable and foldable handle made of fibreglass reinforced plastic
- Additional Led lighting illuminates the working area
- New connection point for converting hose-connected tools to battery-operated rescue equipment

SFRS have recently implemented a balanced risk-based approach to facilitate the de-risking of The Scottish Fire and Rescue Service of Hydraulic Rescue Equipment by expediting Powered Rescue Equipment deployment within stations. SFRS have prioritised deploying PRE sets based on the risk of injury from the current HRE. The twin hose model of HRE is deemed as high risk due to its structural composition. The Equipment section have prioritised the roll out of PRE-based on a combination of statistical information such as the number of HRE twin hoses in service, the number of HRE events and the usage of HRE within stations.



## 2.14 Equipment Asset Composition

The composition of some of the Equipment Assets can be summarised as follows;

- 250,000 items of PPE
- 2,500 self-contained breathing apparatus sets
- 5,000 SCBA cylinders
- 550 Hydraulic rescue equipment cutters
- 450 Hydraulic rescue equipment Spreaders
- 575 Hydraulic rescue equipment power packs
- 2,800 ladders
- 490 AED's
- 900 light portable pumps
- 43 rescue boats
- 52 outboard motors



## 2.15 Equipment Reviews

Equipment reviews will consider:

- An initial assessment of the user core needs against the task and likely usage.
- An assessment of the suitability of the current piece of equipment (if applicable) will be undertaken to determine whether this item is adequately meeting user requirements.
- Whether the current item is still required or whether there is another way of addressing the user needs (i.e. other equipment in the Service, different operating models, collaboration with others).
- An initial superficial review of technology or delivery options available on the market. This will not lead to market testing of items at this stage or include items in development that are not available for purchase. It may also be prudent to engage with the NFCC Research and Development Hub to explore options at this stage and avoid duplication of effort. It is important to comply with procurement regulations where at this stage no preferential supplier or market interest is identified or engaged with which might lead to accusations of improper practice during the procurement phase.
- The potential for collaborative procurements with other partner agencies will be explored.



## 2.16 Process for Acquiring new equipment

This SAMP has been developed from a thorough understanding of the performance of the existing equipment provision including its strengths, weaknesses and overall suitability for the defined role by the users. This may in many cases mean that much of the existing equipment does not necessarily have a current and reviewed specification. However, before a significant replacement exercise is undertaken, a full specification should be developed as this will be the foundation upon which the future provision will be based on and measured against. The process involved in acquiring new equipment, in this case Thermal Imaging Cameras, is detailed below.

No	Activity Description	Owner	Start Date	End Date
1	Complete Commodity Strategy	UIG	18/11/21	02/05/22
2	Peer Review of Commodity Strategy	Category Lead	03/05/22	05/05/22
3	Approval of Commodity Strategy	HoF&P	05/05/22	29/07/22
4	Confirm Specification, Evaluation Criteria and Quail /Price	UIG	22/03/22	11/10/22
5	Complete Mini Competition and Evaluation Documents	UIG	22/03/22	11/10/22
6	Peer Review Mini Competition and Evaluation	Category Lead	11/10/22	14/10/22
7	Issue Mini Competition	Procurement	14/10/22	04/11/22
8	Deadline for Submissions	PCS	04/11/22	
9	Open Tender Documents	Procurement	04/11/22	
10	Evaluate Tenders	Evaluation Panel	04/11/22	29/11/22
11	Moderation Meeting	Evaluation Panel	29/11/22	29/11/22
12	Draft Tender Recommendation Report	Procurement	29/11/22	30/11/22
13	Peer Review of Evaluation and Recommendation	Category Lead	05/12/22	06/12/22
14	Prepare Contract Award and Debrief Letters	Procurement	06/12/22	08/12/22
15	Approval of Contract Award and Debrief Letters	HoF&P	12/12/22	12/12/22
16	Issue Award and Debrief Letters - Contract Award	Procurement	23/12/22	

In order to examine an element of the provision of equipment, a user specification will normally be drafted. This details the explicit "needs" and "wants" of the user in order to identify the essential and desirable requirements of any type of equipment. This will lead to the development of the user specification.

This initial user specification can then be developed into a full specification document which will include not only the user's requirements but also other important information such as whole life costs, environmental impact, financial data, health and safety implications assessed during a Provision and Use of Work Equipment (PUWER) assessment, service and maintenance requirements, procurement routes, collaborative opportunities and market research to inform

the user of what is available and current. Only when a full specification has been agreed and signed off by the User Information Group (UIG) can the procurement process begin.

The Full Specification may also need to consider a number of other wider issues such as:

- The outcome of the PUWER assessment
- Costs and independencies such as ICT
- Wider procurement considerations and adherence to sustainable procurement routes
- Ethical and sustainable disposal of assets
- Whole life costs including disposal



## 2.17 2022/23 Capital Programme

Approximately £3.7 million was spent on Equipment assets in 2022/23:

<b>Structural Fire Kit</b> <b>£2,200,000</b>	<b>Water Rescue Capability</b> <b>£30,000</b>	<b>Gas Tight Suit Replacement</b> <b>£100,000</b>	<b>Smoke Hoods</b> <b>Smoke Curtains</b> <b>£100,000</b>
<b>Safe Working at Height Kits</b> <b>£140,000</b>	<b>Air Bags</b> <b>£245,000</b>	<b>Wildfire PPE</b> <b>£300,000</b>	<b>Wildfire Equipment</b> <b>£90,000</b>
<b>Thermal Imaging Cameras</b> <b>£100,000</b>	<b>Evacuation Boards</b> <b>£10,000</b>	<b>PRE</b> <b>£300,000</b>	<b>Ladders</b> <b>£100,000</b>

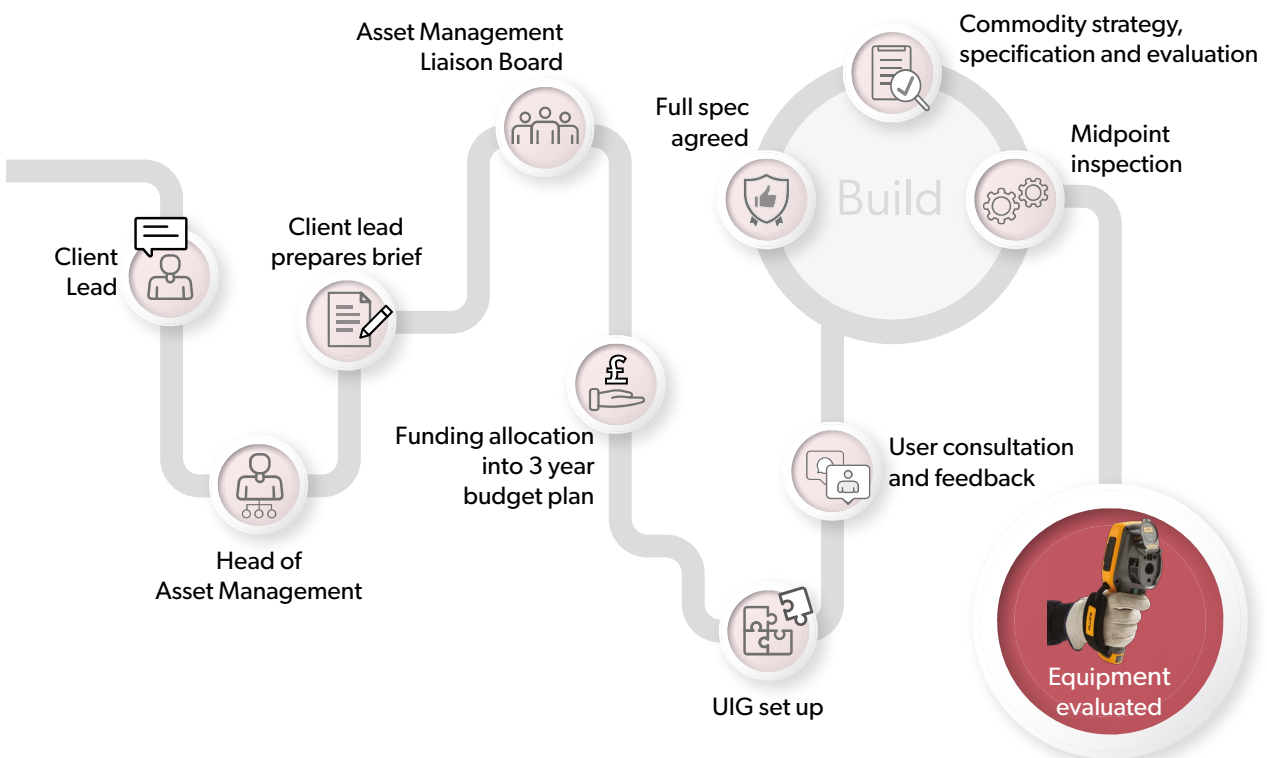


## 2.18 New Equipment Development Pathway

In conjunction with the User Intelligence Group (UIG) Additional or Replacement Equipment should follow a process similar to the diagram below which ensures that a formal justification is evidenced and placed in context of the SFRS Strategic Plan ensuring all interested parties are involved in the process, Health & Safety requirements are met and that the equipment is fit for the purpose intended.

Selecting effective equipment for the wide variety of roles is a complex process that takes into consideration a number of factors such as:

- Existing equipment profile
- Technical expertise of the equipment team
- Manufacturers long term support and extended warranty packages
- Parts availability for the life of the product
- Specialist tool requirements
- Suitability for role
- Health and Safety requirements
- Training requirements
- Environmental considerations
- Equipment whole life cycle costs
- Equipment evaluation by operational users
- Financial viability of the supply chain by the services procurement department



## 2.19 Reducing Exposure to Contaminants

Worldwide research into the potential effect of contaminants on firefighters continues to provide evidence that exposure may put those responding to, or attending incidents, at an increased risk of related future health issues. It has been established unburnt products of combustion produced by fire are a major source of contaminants, some of which have proven to be carcinogenic. The SFRS is committed to mainstreaming behavioural, cultural, and organisational change to ensure the protection of our personnel and has developed initiatives such as ‘clean cab’ appliances and established a cross Directorate SFRS Contaminants Group.

The SFRS have undertaken work to minimise the risk of contaminants for staff. This includes a substantial review of how fire appliances, personnel and PPE are decontaminated during and following an incident, we have trialled station zoning systems to limit potential spread and issued specialist decontamination wipes. SFRS also operates a specialist cleaning and repair contract which allows Firefighters Personal Protective Equipment (PPE) to be fully decontaminated post-incident; repaired as per manufactures instructions and in line with the British standard for the cleaning and repair of firefighters PPE.

The process for contaminant control in some legacy or older stations is hindered by their design not allowing reconfiguration without major investment or replacement. Recognising the need to ensure the wellbeing of firefighters, replacement of these stations is required to meet contaminant control.

## 2.19.1 Smoke Hoods and Smoke Curtains


Following the Interim Phase 1 Grenfell Recommendations, the SFRS undertook a trial and evaluation of both these products to assess the potential benefits within the operational environment, including High Rise incidents. Trial results provided strong evidence that both pieces of equipment enhanced tactical options by reducing the spread of products of combustion and providing safer options for casualty evacuation. The SFRS has made the decision to purchase Smoke Curtains and Smoke Hoods and will look to explore how these can best be used to support operational response. Deployment model is for 2 smoke hoods on each frontline appliance and 1 smoke curtain per appliance.


- 22/23: 210 smoke curtains procured at a cost of £100,000
- 22/23: 1,200 Escape hoods procured at a cost of £138,000
- 23/24: Additional 210 smoke curtains being procured


## 2.20 Asset Management System


The effective management of our extensive asset portfolio is assisted through the use of Civica Tranman Asset Management System.


Operational Equipment						
Current Operator	Name	Asset Number	Service Due	Kit No	Equipment Type	Desc / Size
ARGYLL AND BUTE						
ARGYLL AND BUTE	COLL / ARINAGO	16083771	19/08/2021		LIFEJACKET	SEAFIT 275N
ARGYLL AND BUTE	COLL / ARINAGO	16083925	19/08/2021		LIFEJACKET	SEAFIT 275N
ARGYLL AND BUTE	KILMELFORD	2BAE375	19/08/2021		EMERGENCY AIR SUPPLY	EASE SET
ARGYLL AND BUTE	CRAIGNURE	2BAE443	19/08/2021		EMERGENCY AIR SUPPLY	EASE SET
ARGYLL AND BUTE	OBAN	2BAS3056	19/08/2021		BA SET	PSS 7000 COMM


  
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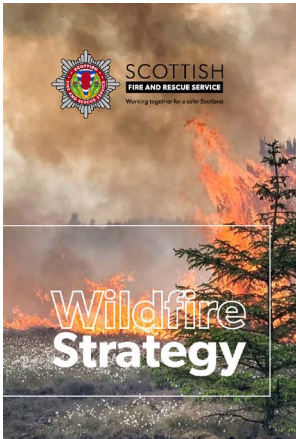
  
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## 2.21 Wildfire Strategy

The SFRS is currently in the implementation stage of delivering a new strategy for developing and enhancing its wildfire capability. While significant work has been undertaken with partners and stakeholders to increase awareness of the risk of wildfire, the location of SFRS wildfire resources, equipment and PPE, remains relatively unchanged since the formation of the national service in 2013. The new strategy considers the increased risk of wildfire and changing climate in Scotland; the latest developments in wildfire management, training and operational procedures; and the advances in technology that have been made in PPE and equipment.

Wildfires can occur anywhere across the geographic area of the SFRS. Wildfire is a generic term used to describe incidents of a large land based nature. These include fires that may involve all the major vegetation types found in Scotland i.e. moorland, heather, gorse, grass, forestry and natural woodland. The implementation of a National Wildfire Strategy, and its inclusion in our Operational Strategy, will help meet the risks posed by Climate Change in Scotland.

Following a UIG process and a procurement exercise, 10 All Terrain Vehicles (ATV's) equipped with fire fighting media have recently been procured to assist Firefighters to tackle wildfires. 10 trailers plus 10 4 by 4 vehicles for towing. As well as 4 additional support vans.



25 stations have received full head to toe PPE specific to designed to meet wildfire requirements. This is a light weight 2-piece tunic and legging combination.

We will identify lightweight PPE that provides the correct level of protection at Wildfires and initiate a review of the location and type of Wildfire equipment across the Service.

Equipment Type	Quantity Per Appliance	Number of Appliances	Total Items
Back pack sprayers	10	4	40
Brush Cutters	2	4	10
Leaf Blowers	5	4	20
Gorgi Hand Tools	8	4	32
Hand Beater	10	4	32
Pick Axe	2	4	20
Honda WX10 Pump (1")	2	4	12
Layflat Hose	5	4	16
Collapsible Tank 3000L (Portable Dam)	2	4	10
Bottled Water (Case 24)	5	4	20
Fuel Cans (20L) – Kerosene/Petrol/Diesel	2	4	20
Dry Powder Fire Extinguisher 9kg	1	4	4
Radio Repeater Units	1	4	4
Hand Held Radios	2	4	8
Drip Torches	4	4	20
Pick Axe	1	10	20
Long Handled Spade	2	10	20
Shovel	1	10	10
Rucksacks	3	10	30
Mattock	1	10	10
Loppers	1	10	10
Hand Axe	2	10	20
T-Card System (inside rear doors)	1	4	4
Radio Battery Charging Unit	1		
Radio Batteries	2	4	8







# Asset Management Action Plan





## 3 Asset Management Action Plan

### 3.1 Introduction

To keep the SAMP relevant and aligned to changing corporate priorities, it will be refreshed on an annual basis. Each of the four objectives are supported by an Asset Management Action Plan with detailed objectives and actions.

Throughout the development of the SAMP, engagement and consultation with our focus groups has been undertaken as well as an internal survey being issued on the intranet to all staff members. Based on the feedback received we have identified a number of areas for improvement. The improvement actions are documented below against the strategic objectives. We will continue to engage with all of our stakeholders as we seek to implement these improvement actions.

The Asset Management Strategy will be reviewed annually, whilst the Asset Management Action Plan will be managed, monitored and updated continuously to report on progress and achievements. This means that the document will be continually changing to reflect achievement of actions and capturing new priorities and initiatives as they are identified.

### 3.2 Equipment Performance Evaluation Criteria

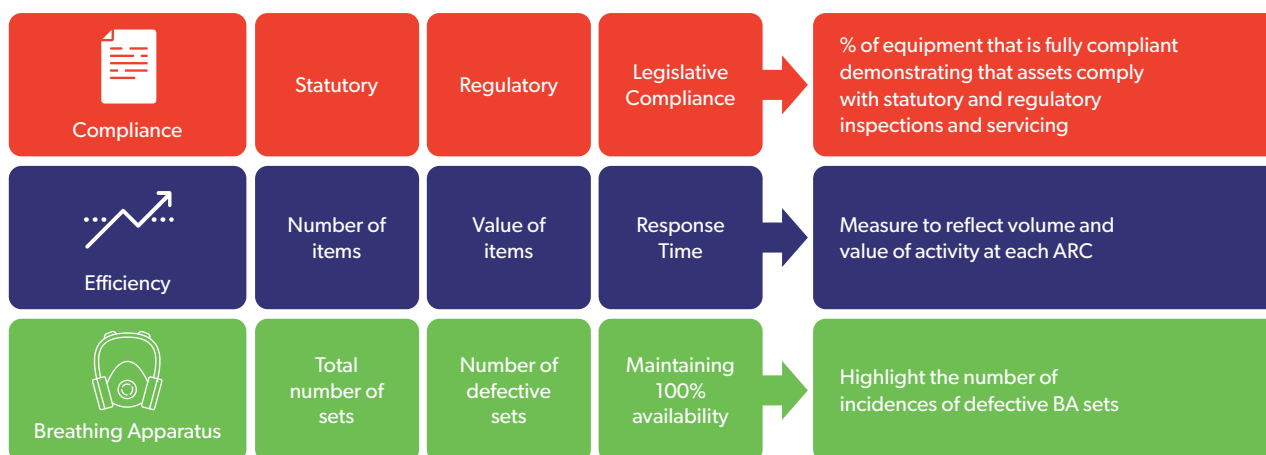
Measuring the success of the SAMP is of critical importance. A range of qualitative and quantitative Key Performance Indicators (KPIs) will be measured to show progress over time and will also be used for benchmarking purposes against other blue light partners.

Understanding the efficiency of our equipment estate will enable SFRS to demonstrate that they are obtaining best value and using resources effectively. Alongside this, understanding the effectiveness of the equipment estate will be equally important. Both these areas will enable the success of the SAMP to be measured. The internal stores KPI's for 2022/23 are noted below:

KPI Measure April 22 – March 23	Asset Resource Centre Location			
	West	East	North	H&I
Average days for Requisition to be approved	2	2	2	2
Average days for Requisition to be processed after approval	1	1	1	1
Number of Requisitions completed in a year	10,967	11,798	5,066	4,304
Number of Requisitions created in a year	12,840	12,873	6,254	5,358
Number of Requisitions on back order in a year	827	679	829	358
Completed Back Orders in a year	41	38	42	27
Number of products issued in a year	303,688	186,587	159,942	62,829
Number of products on back order in a year	960	748	1,012	462
Number of PPE items ordered in a year	6,559	4,463	3,279	2,053



Proposed new KPI's for the Equipment section are noted below:



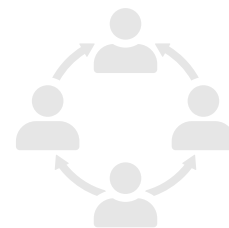
### 3.3 Proposed Future Year Capital Programme

	2023/24	2024/25	2025/26
<b>Equipment – PPE: Capital Allocation</b>	<b>£3,740,000</b>	<b>£3,250,000</b>	<b>£2,650,000</b>
Ladders	£250,000	£250,000	£250,000
Air Bags	£120,000	£200,000	
Portable Pumps	£100,000	£80,000	£80,000
Water Rescue Capability	£100,000	£100,000	
Gas Tight Suits Replacement	£150,000	£100,000	
Smoke Hoods and Smoke Curtains	£150,000		
Safe Working at Height (SWAH) Kits	£100,000	£50,000	
Powered Rescue Equipment		£100,000	£100,000
Structural Fire Kit	£2,000,000	£2,000,000	£2,000,000
Thermal Imaging Cameras	£100,000	£100,000	
Gym Equipment	£20,000	£20,000	£20,000
Fire Fighting Hose	£200,000	£250,000	£200,000
Wildland Fire PPE	£100,000		
Wildland Fire Fighting Equipment	£350,000		



## 3.4 Improvement Actions

Throughout the development of the SAMP, engagement and consultation with our focus groups has been undertaken as well as an internal survey being issued on the intranet to all staff members. Based on the feedback received we have identified a number of areas for improvement. The improvement actions are documented below against the SAMP strategic objectives. We will continue to engage with all of our stakeholders as we seek to implement these improvement actions over the next 3 years.



Action Reference	Objective	Action Title	Action Description	Accountability
C1	Collaborative	Blue Light Collaboration Group	We will continue to promote joint working through participation in the Blue Light collaboration group where it will provide benefit for service delivery and in securing efficiencies.	Asset Management Liaison Board
C2	Collaborative	Benchmarking	In 2024/25 we will engage with other Fire Services from around the UK, including Northern Ireland and Wales to develop meaningful benchmarking information so as to better assess performance. Key metrics will be developed to help us better compare the equipment portfolio, so as to drive efficiency improvements and reduce our environmental impact.	Performance Board
C3	Collaborative	Share and Lead on Best Practice	We work with other fire and rescue services within the UK to share and lead on best practice and seek to realise efficiencies from joint working and procurement opportunities.	Asset Management Liaison Board



Action Reference	Objective	Action Title	Action Description	Accountability
M1	Modernising	New Equipment Development Pathway	To further enhance our user engagement in 2023/24 and in the future, we will strive to publicise and make operational staff aware of the personnel involved and the findings of the new Equipment User Intelligence Groups (UIG)	Asset Management Liaison Board
M2	Modernising	Asset Allocation	We will work with our Operational colleagues through attendance at SDA meetings in 2023/24 and in the future, to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment	Asset Management Liaison Board
M3	Modernising	Raise the Profile of the Equipment Section	In order to raise the profile and stress the importance of the work undertaken by the Equipment Section, we will promote key aspects of our work on a dedicated equipment news page on the iHub in 2024	Asset Management Liaison Board
M4	Modernising	Asset Management System	In 2024/25 we will establish the key requirements of an Equipment Asset Management System and work with ICT and Procurement colleagues to procure and implement a system that helps us to better manage the Equipment Asset estate	Digital Board
M5	Modernising	Contaminant Control	In 2024/25 we will work with Service Delivery colleagues and the Health & Safety team to help develop proposals for contaminant control measures for operational equipment	Asset Management Liaison Board; Contaminants Group





Action Reference	Objective	Action Title	Action Description	Accountability
M6	Modernising	Implement ISO55001	In order to ensure effective asset management information systems are established, embedded, and managed throughout the organisation we will implement the principles of ISO 55001 and the Royal Institution of Chartered Surveyors (RICS) guidance on Public Sector Asset Management in 2024/25	Senior Leadership Team
M7	Modernising	Equipment Structure	Succession and Workforce Planning is a key issue. There are too many single points of failure and not enough succession planning within the current structure. We will seek to implement a new structure for Equipment in 2023/24 that seeks to address single points of failure, provide deputies for key positions, give staff promotion opportunities and a clear career path	Senior Leadership Team



Action Reference	Objective	Action Title	Action Description	Accountability
N1	Net Zero	Reduce CO2 Emissions	We will continue to work to reduce CO2 emissions by 6% per annum, as per our strategies and plans. Our CO2 will be reduced through undertaking a greater number of carbon reduction projects. This will significantly reduce our carbon footprint and support the environment in Scotland. Equipment team to meet with Energy team in 2023/24 and in the future on a more regular basis to seek to reduce equipment energy consumption wherever possible.	Environment & Carbon Management Board
N2	Net Zero	Foam	In 2023/24 we will continue to work as a priority to phase out firefighting foam and environmentally dispose of existing stocks.	Environment & Carbon Management Board





Action Reference	Objective	Action Title	Action Description	Accountability
S1	Service Led	Stakeholder consultation	In 2023/24 and in the future, we will increase key stakeholder consultation on the provision of high-quality equipment, uniform and PPE to maximise both quality and value for money. This aims to ensure that decisions to review, monitor and approve procurement of assets are consulted and challenged and support the SFRS vision.	Asset Management Liaison Board
S2	Service Led	Project Communication	In 2023/24 and in the future, we will work with our Operational colleagues to make them more aware well in advance of planned works, we will also be more transparent in the allocation of funding for projects, with the intention being to improve the overall communication on the entire process of project approval.	Asset Management Liaison Board
S3	Service Led	Vehicle Inventory Check System	In 2024/25 we will seek to fully implement the VIC Check system so as to improve asset information within fire stations and to assist with stock management.	Digital Board
S4	Service Led	Cambuslang Asset Resource Centre	The Fleet store in the Glasgow Workshop will be merged with the Hamilton Stores in Summer 2023 in the Cambuslang ARC. We will work to minimise disruption to ARC activity whilst planning the move from the existing stores to the new facility.	Asset Management Liaison Board

# 4 Strategic Asset Management Plan: Equipment on a Page

## Delivering Our Plan



Reduce Investment Backlog



Renewal of BA contract



Meet new and emerging risks



Improve contaminant control

## Our Objectives

VALUE FOR MONEY



Modernising



Service Led



Net Zero



Collaborative

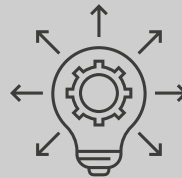
## Measuring Success



KPIs



Benchmarking



Improvement Actions

Progressing towards  
ISO55001 accreditation







# Appendices

## **Appendix 1:**

Equipment Investment Backlog

## **Appendix 2:**

Consultation Feedback

## **Appendix 3:**

Asset Management Risk Matrix

# Appendix 1: Equipment Investment Backlog

Equipment Asset Type	Total	Replacement Cycle	Unit Cost	Quantity to replace 2023	Backlog cost to replace 2023
13.5 meter ladder	583	16	£2,675	78	£208,650
12 meter ladder	10	16	£2,200	7	£15,400
10.5 meter ladder	229	16	£2,075	58	£120,350
9 meter ladder	396	16	£1,575	43	£67,725
7.5 meter ladder	4	16	£1,500	4	£6,000
7 meter ladder	9	16	£1,500	9	£13,500
5.5 meter ladder	41	16	£400	9	£3,600
short Ext ladder	780	16	£350	219	£76,650
Roof ladder	667	16	£600	177	£106,200
Split stow ladder	41	16	£300	0	£0
PPV Fan	183	10	£2,202	106	£233,412
Light Portable Pump	916	10	£3,854	640	£2,466,560
Portable Generator	249	10	£700	216	£151,200
Inflatable Boats	30	3	£8,250	10	£82,500
Rib Boat	6	5	£12,000	6	£72,000
Boat Trailer	37	5	£2,000	9	£18,000
Outboard Motors	45	3	£5,750	17	£97,750
Hydraulic Cutters	620	10	£3,275	0	£0
Hydraulic Spreaders	528	10	£3,237	0	£0
Hydraulic Combi tool	307	10	£3,319	0	£0
Hydraulic Ram	964	10	£3,028	0	£0
Hydraulic Pedal cutter	445	10	£1,088	0	£0
Hydraulic Hand pumps	310	10	£400	0	£0
Hydraulic power packs	561	10	£2,200	0	£0
Life jackets	3353	10	£100	2163	£216,300
Gas Tight Suit	1033	10	£800	0	£0
PRPS Suit	300	10	£1,300	0	£0
Air bags	775	18	£1,500	414	£621,000
Air Bag Regulator	316	18	£350	153	£53,550
Air bag Controller	453	18	£700	281	£196,700
Air Bag Hoses	601	18	£170	427	£72,590
Air Shore Kits	9	5	£60,000	9	£540,000
SCBA Sets	2498	10	£600	0	£0
SCBA Cylinders	5263	15	£300	0	£0
SCBA Compressor	125	10	£20,000	91	£1,820,000
Electronic Personal Dosimeter	1072	10	£500	1072	£536,000
Lay Flat Fire hose	15000	10	£160	4500	£720,000
Portable Gas Monitors	362	5	£500	362	£181,000
Thermal Image Camera	418	5	£5,000	300	£1,500,000



Equipment Asset Type	Total	Replacement Cycle	Unit Cost	Quantity to replace 2023	Backlog cost to replace 2023
FF Decon Showers	29	10	£8,000	27	£216,000
Mass Decon Structures	9	10	£70,000	9	£630,000
Tyre Compressor	84	10	£1,000	84	£84,000
Air Structures	15	5	£5,000	15	£75,000
AED	598	5	£1,300	8	£10,400
Hapsite Smart	9	10	£50,000	9	£450,000
Hazmat ID	5	10	£80,000	5	£400,000
Radiation monitors	51	5	£1,500	51	£76,500
Hose reel branch	789	10	£400	725	£290,000
Mainline FF Branch	1057	10	£600	936	£561,600
Firefighting Helmets	6600	15	£200	200	£40,000
FF Tunic	13200	10	£320	0	£0
FF Leggings	13200	10	£260	0	£0
USAR Helmet	415	10	£120	415	£49,800
USAR Tunic	415	10	£130	415	£53,950
USAR Leggings	415	10	£100	415	£41,500
USAR Rescue Boots	415	5	£140	415	£58,100
Wild fire Helmet	256	10	£120	0	£0
Wild fire Tunic	429	10	£194	0	£0
Wild fire Leggings	256	10	£150	0	£0
Wild fire Boots	256	10	£150	0	£0
Wild fire Gloves	256	10	£50	0	£0
Rope Rescue Helmet	170	10	£120	170	£20,400
Rope rescue PPE	170	10	£400	170	£68,000
SRT Helmet	800	10	£90	800	£72,000
Dry suit	800	10	£410	800	£328,000
Light weight under suit	800	10	£43	800	£34,400
Heavy Under suit	800	10	£90	800	£72,000
water rescue boots	800	10	£80	800	£64,000
Water rescue Gloves	800	3	£15	800	£12,000
PFD	400	10	£100	150	£15,000
Flood response Helmets	400	10	£40	400	£16,000
Foul weather suits	6600	10	£90	0	£0
Foul weather under suit	6600	10	£60	0	£0
Flood response boots	400	10	£80	400	£32,000
HVP Helmet	120	10	£90	120	£10,800
HVP Suits	120	10	£200	120	£24,000
<b>TOTAL:</b>					<b>£14,002,087</b>



# Appendix 2a: Stakeholder Engagement Feedback

Stakeholder Engagement with Focus Groups		
Area	Feedback from Focus Groups	How the SAMP: Equipment will aim to address the feedback
<b>Regional Urban</b>	<b>Some areas of equipment are dated and require an upgrade or next best alternative</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Turnaround for laundering and repair of PPE is not fast enough for the need. Not enough spare kit held</b>	M5: Work with Service Delivery colleagues and Health & Safety to develop proposals for contaminant control within stations. Include contaminant control measures for operational equipment.
	<b>Limited spare equipment</b>	M5: Work with Service Delivery colleagues and Health & Safety to develop proposals for contaminant control within stations. Include contaminant control measures for operational equipment.
	<b>We should have all of our records online</b>	M4: Seek alternative system





## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP: Equipment will aim to address the feedback
<b>Regional Rural</b>	<b>Some items of equipment are getting close to end of life and there are better / more advanced equipment available</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Stations even when ordering perishables and equipment available on Tech1 are frequently challenged or informed they are not entitled to have them</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Some equipment is starting to get old</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>On Call Volunteers are still operating with HRE</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Collaboration opportunities should be explored and maximised where possible as long as it does not hinder SFRS</b>	C1 To continue to promote joint working through participation in the Blue Light collaboration group where it will provide benefit for service delivery and in securing efficiencies.



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP: Equipment will aim to address the feedback
<b>Regional Remote</b>	<b>Lack of communication/feedback of repairs</b>	M6: In order to ensure effective asset management information systems are established, embedded, and managed throughout the organisation we will implement the principles of ISO 55001 and the Royal Institution of Chartered Surveyors (RICS) guidance on Public Sector Asset Management in 2023/24.
	<b>Varies across appliances/stations. Needs standardised</b>	M1: To further enhance our user engagement, we will strive to publicise and make operational staff aware of the personnel involved and the findings of the new Equipment User Intelligence Groups (UIG)
	<b>There is a mixture of old and new equipment across appliances.</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Lighter tunics for use at RTC etc would be beneficial</b>	S1: Increase key stakeholder consultation on the provision of the high-quality equipment, uniform and PPE to maximise both quality and value for money. This aims to ensure that decisions to review, monitor and approve procurement of assets are consulted and challenged and support our vision.
<b>Training</b>	<b>Training should have the most up to date and current equipment in use to train with</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Insufficient quantity of all equipment</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP: Equipment will aim to address the feedback
<b>Service Delivery East, West, North</b>	<b>Condition of equipment has deteriorated in recent years, from age/availability of spare appliances to availability of fireground radios.</b>	M2: We will work with our Operational colleagues to let Fire Stations know well in advance when their equipment is scheduled for replacement and be more transparent in allocating equipment assets, with the intention being to improve the overall communication on the entire process of acquiring new equipment
	<b>Small-gear (i.e. Toolkit) scope, quality, standardisation &amp; practical containment/stowage/deployment issues are potential operational weaknesses.</b>	M1: To further enhance our user engagement, we will strive to publicise and make operational staff aware of the personnel involved and the findings of the new Equipment User Intelligence Groups (UIG)
	<b>BA sets toward end of cycle and defects common</b>	S1: Increase key stakeholder consultation on the provision of the high-quality equipment, uniform and PPE to maximise both quality and value for money. This aims to ensure that decisions to review, monitor and approve procurement of assets are consulted and challenged and support our vision.
	<b>Structural firefighting PPE is fairly new however, only having two sets of kit is very limiting at busy stations given how long it takes to launder</b>	M5: Work with Service Delivery colleagues and Health & Safety to develop proposals for contaminant control within stations. Include contaminant control measures for operational equipment.
	<b>Lightweight PPE for RTC's, special services and wildfires would be an improvement for both health, safety and welfare of personnel</b>	S1: Increase key stakeholder consultation on the provision of the high-quality equipment, uniform and PPE to maximise both quality and value for money. This aims to ensure that decisions to review, monitor and approve procurement of assets are consulted and challenged and support our vision.



# Appendix 2b:

## Internal Questionnaire Feedback

An internal questionnaire focusing on the Strategic Asset Management Plan for Equipment was developed giving all officers and staff within Scottish Fire and Rescue Service an opportunity to participate. The questionnaire was open for eight weeks and attracted responses from a wide range of officers and staff across all areas of the Service.

A total of 300 responses was received. The feedback from the questionnaire is aligned with that of the focus groups and has provided a holistic understanding of officer's and staff's perception of current and future equipment. The results of the analysis and feedback received have informed the strategy and have been incorporated throughout.

Participants were asked to what extent they agreed or disagreed with the four key strategic objectives set out within the Equipment SAMP. They were also asked to rank the objectives in order of importance. The percentage of respondents who 'agreed' or 'strongly agreed' with the objectives order were:

- Objective 1 — Modernising: 59%
- Objective 2 — Service Led: 56%
- Objective 3 — Collaborative: 61%
- Objective 4 — Net Zero: 69%

91% of respondents agree that SFRS should have a Strategic Asset Management Plan for Equipment. In addition to this, participants were asked to rate their perception of current equipment. The results were:

- Opinion of condition of operational equipment: 38% of respondents felt it was good or very good
- Age of operational equipment: 18% of respondents felt it was good or very good

Nearly 80% of respondents felt that PPE was very good in terms of condition and age.

Respondents had the opportunity to utilise the 'free text' fields to add additional comments - these comments have provided an in depth understanding of respondent's views. Analysis of these comments has highlighted a particular focus and interest across the following areas:

- Safe and well maintained — Faulty/damaged equipment can sometimes take too long to return to operational duty.
- Improving current operational equipment — A lack of access to spare equipment.
- Maintenance logistics — PPE shortages often result in frontline appliances being off the run.
- Equipment upgrades — Comms on BA sets.
- Carbon reduction — Generally concerns and Net Zero is in staff focus. Battery powered PPV fans



# Appendix 3:

## Asset Management Risk Matrix

We will manage the risks associated with our assets, to avoid negatively impacting on our service delivery, safety of the public and employees, financial sustainability, legal compliance, environment, internal control and reputation.

Risk	Impact	Mitigating Action if Required	Aligned to Strategic Risk Register
<b>Failure to minimise communities' exposure to risk and harm</b>	There is a risk that assets in poor condition due to age, defect, or poor maintenance fail in operational use resulting in poor service delivery, a pollution event, or injury to a member of the public	Robust training and procedures for asset use and maintenance, coupled with the monitoring of relevant performance indicators, appropriate business continuity arrangements and reporting of events/near misses will mitigate this risk	Ability to improve the safety and well-being of people throughout Scotland through the delivery of our services
<b>Failure to ensure the Health, Safety and Wellbeing of firefighters and other employees</b>	There is a risk that lack of training, assets in poor condition due to age, defect, or poor maintenance fail in operational use or training resulting in injury to an SFRS employee	Robust procedures for asset use and maintenance, coupled with the monitoring of relevant performance indicators, appropriate business continuity arrangements and reporting of incidents/near misses will mitigate this risk	Ability to have in place a suitably skilled, trained and motivated workforce that is well supported both physically and mentally
<b>Failure to procure equipment which is fit for purpose</b>	There is a risk that not undertaking a PUWER assessment during the UIG process will result in equipment not being fit for purpose or compatible with other equipment	Robust procedures to be followed during the UIG process which must include PUWER assessments to ensure the correct equipment is procured, safe, compatible with other equipment and fit for purpose.	Ability to have in place a suitably skilled, trained and motivated workforce that is well supported both physically and mentally
<b>Failure to deliver Service Transformation</b>	There is a risk that through poor planning or lack of affordability assets required to deliver service transformation are not available when required	By ensuring early cross directorate visibility of organisational priorities through the Asset Management Liaison Board, realistic timelines can be developed and plans put in place	Ability to anticipate and adapt to a changing environment through innovation and improved performance
<b>Failure to ensure Financial Sustainability</b>	There is a risk that insufficient funding is available to maintain an adequate asset portfolio to deliver our service.	Work will continue with Scottish Government to highlight asset investment requirements	Ability to deliver a high quality, sustainable service within the funding envelope
<b>Failure to ensure Legal Compliance</b>	There is a risk that assets are not used or maintained in accordance with legal and regulatory requirements	By maintaining an ongoing review of the legislative environment and ensuring policies and procedures are subject to regular review across all disciplines, this risk will be mitigated	Ability to ensure legal and regulatory compliance



Risk	Impact	Mitigating Action if Required	Aligned to Strategic Risk Register
<b>Failure to have in place a suitably skilled, engaged and flexible workforce, ensuring capacity, to deliver service priorities</b>	There is a risk that SFRS cannot attract or retain sufficient skilled staff to support, develop and maintain an adequate asset base	Through follow up engagement arising from the recent Staff Survey and the implementation of identified actions to address concerns raised, this risk can be mitigated	Ability to have in place a suitably skilled, trained and motivated workforce that is well supported both physically and mentally
<b>Failure to maintain effective systems of control</b>	There is a risk that procedures for the use, maintenance and support of assets are not adhered to	The Service's Assurance Framework and Health and Safety arrangements are designed to ensure that effective controls are maintained and any weaknesses are highlighted and addressed	Ability to ensure legal and regulatory compliance
<b>Failure to implement contamination control measures within legacy stations</b>	There is a risk that legacy stations will fail to implement contamination control measures due to insufficient space, deterioration of premises and availability of finance resulting in increased risk of cancer for SFRS employees	Standard station design is the level that is required. Upgrades to stations and business case for funding for small stations under preparation to present to Scottish Government.	Ability to ensure legal and regulatory compliance
<b>Failure to implement contamination control measures resulting in firefighters being exposed to potential carcinogenic at operational incidents</b>	There is a risk of contaminants entering the firefighters' body at operational incidents if policy and procedures are not updated and implemented as discussed at the contaminants group.	<p>Contaminants group in place to progress with control measures. The contaminants Policy and Operational Guidance (POG) and the Management Arrangement shall provide the minimum requirements to be achieved in order to reduce the risk of contaminants entering the body.</p> <p>Annual health screening is to be explored by the FBU and the NHS. Liaising with the Fire Brigade Union (FBU), UK FRS and Prof Stec on achievable control measures for contaminants.</p> <p>Information, instruction and training is being given to all staff that don't require additional finances. Additional PPE being issued to allow for additional laundering requirements.</p>	Ability to ensure legal and regulatory compliance
<b>Failure to maintain confidence in the Service</b>	There is a risk that high profile asset-related failure leads to high profile political and media interest	The actions outlined above are intended to ensure such failures are avoided or at least minimised.	Ability to collaborate effectively with partners and communities, to enhance service delivery and best value





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