



**DEVON &
SOMERSET**
FIRE & RESCUE SERVICE

Tiered Response

Rapid Intervention Vehicle

Full Business Case

Project Executive: Peter Bond

Author: Personal data

Release: Draft

Version No: 1.0

Document History			
Version	Date	Changes	Author
0.01	20 Jan 2017	First draft	Personal data
0.02	23 Jan 2017	Updated Strategic and Economic Case	Personal data
0.03	25 Jan 2017	Updated Financial Case	Personal data
0.04	26 Jan 2017	Updated Commercial Case	Personal data
0.05	26 Jan 2017	Updated Management Case	Personal data
0.06	27 Jan 2017	Quality review comments	Personal data
0.07	31 Jan 2017	Quality review comments	Personal data
0.08	7 Feb 2017	Quality review comments	Personal data
0.09	8 Feb 2017	Quality review comments	Personal data

Distribution		
Name	Position	Action Required
Pete Bond	Executive	Approval
Personal data	Senior User	Approval
Personal data	Senior User	Approval
Personal data	Training	Approval
Personal data	Procurement	Quality Review
Personal data	Procurement	Quality Review
Personal data	Finance	Quality Review
Personal data	Finance	Quality Review

Approval				
Version	Name	Position	Signature	Date
1.00	Pete Bond	Executive	Pete Bond	

Table of Contents

1.	EXECUTIVE SUMMARY	5
1.1	HM Treasury Five Case Model	5
1.2	Scope	5
1.3	Strategic Case	6
1.4	Economic Case	7
1.5	Commercial Case	7
1.6	Financial Case	8
1.7	Management Case	8
2.	INTRODUCTION	9
2.1	Background	9
2.2	Service Delivery Review	9
2.3	Procurement	11
2.4	Purpose of the Full Business Case	11
3.	STRATEGIC CASE	12
3.1	Introduction	12
3.2	DSFRS Strategy Plan for 2016-2021	12
3.3	Strategic Principal – Focus on improving public safety	12
3.4	Strategic Objectives	12
3.5	Strategic Principle – Passionate about improving staff safety	13
3.6	Strategic Objectives	13
3.7	Strategic Principle – Continuously improve the organisation's effectiveness	13
3.8	Strategic Objectives	13
3.9	The Case for Change	14
3.10	Investment Objectives	16
3.11	Business Needs - Outcomes	18
3.12	Existing arrangements	19
3.13	'As Is' Financial Model	19
4.	ECONOMIC CASE	23
4.1	Introduction	23
4.2	Option 1 - Do Nothing	23
4.3	Option 2 – VW T5 Van	24
4.4	Option 3 – Toyota Hilux 3.5T Pickup	25
4.5	Option 4 – Mercedes Sprinter MWB Van	26
4.6	Option 5 – Iveco Crew Cab Vehicle	27
4.7	Option 6 - Introduce a Crew Cab, design built body with PTO driven Pump	28
4.8	The Way Forward	31
4.9	Conclsions	Error! Bookmark not defined.
4.10	Recommendation	32
4.11	New Design	33
4.12	Appliance Dimensions	35
4.13	Fire Engineering	36
4.14	Locker Layout	37
4.15	Risk Associated with the Proposed Option	38
4.16	Constraints	39
4.17	Dependencies	39
5.	COMMERCIAL CASE	41
5.1	Procurement Regulations	41

5.2	Route to Market.....	41
6.	FINANCIAL CASE	45
6.1	Introduction	45
6.2	Impact on the organisation's income and expenditure account.....	45
6.3	Financial Models	46
6.4	Procurement Profile.....	47
6.5	'To Be' Financial Model	47
6.6	Equipment - Financial Benefits	50
6.7	Summary of Reduction in Capital Expenditure	50
6.8	Leasing Cost Reduction	50
6.9	Further Benefits.....	50
6.10	Additional Training Requirement	51
7.	MANAGEMENT CASE	52
7.1	Introduction	52
7.2	Role of the Programme and Project Boards	52
7.3	Project Governance Structure	53
7.4	Roles and Responsibilities	54
7.5	V Model Framework	55
7.6	The V Model.....	56
7.7	Controls.....	57
7.8	Benefit Realisation	61
7.9	RIV Delivery Plans	63
7.10	RIV Prototype Delivery Plan	64
7.11	RIV First Year Roll Out Plan	65
8.	ANNEX A	66
8.1	RIV Contract Award Recommendation Report	66

1. EXECUTIVE SUMMARY

This Full Business Case does not stand alone but is an integral part of the new approach to delivering the Service's front line capability called 'Tiered Response'

This Full Business Case builds on the successful delivery of the Light Rescue Pump project.

This Full Business Case does not claim any of the benefits that may be accrued from the development of a new 'on call' availability model and/or changes to the crewing policy (appliances dispatched with reduced crewing numbers).

1.1 HM Treasury Five Case Model

HM Treasury recommends that all spending proposals should be accompanied by a proportionate and well-structured business case.

HM Treasury recommends the use of a Five Case Model:

- Strategic Case – Does the project support the strategic aims and objectives of the organisation?
- Economic Case – Will the project deliver value for money?
- Commercial Case – Is the project commercially viable?
- Financial Case – Is the project financially affordable?
- Management Case – Is the project achievable?

Only if the answer to all five questions is YES should the project proceed

1.2 Scope

This Full Business Case (FBC) covers the delivery of the Rapid Intervention Vehicle but is also an integral part of the Tiered Response approach.

Therefore it is important that this Business Case is recognised as one element of an overall bigger change programme covering the integration of three types of fire appliance strategically geographically located across Devon and Somerset.

1.3 Strategic Case

The proposals in this Full Business Case (FBC) contributes to the delivery of the following Service's strategic objectives:

- Fulfil obligations under the Fire & Rescue Services Act 2004, to make provisions for dealing with emergencies;
- Ensure that our emergency response teams will be deployed with the appropriate skills and resources;
- The number, composition and distribution of our emergency response teams will be based on the risks to the communities they serve;
- Ensure that our emergency response teams will be deployed with the appropriate skills and resources;
- Make sure safety is at the heart of everything we do;
- Train in a realistic way that reflects the risk our staff face and allows them to use the skills they will need at emergency incidents;
- Review and continually improve the way we work;
- Manage our assets to make sure they are efficient and that they effectively support public and staff safety;
- Investigate whether to introduce different response vehicles which use the latest advances in firefighting technology;
- Manage projects so we deliver them on time and on budget;
- Work within an agreed governance framework, putting performance management at the heart of our work;
- All our assets will be managed in the most cost effective way.

1.3.1 Investment Objectives and Benefits

Objectives	Main benefits
Improved performance against Emergency Response Standards	Due to their enhanced manoeuvrability it is predicted that RIVs will arrive at incidents quicker than LRPs and MRPs and so ERS will be improved. Conversely, RIVs will be able to travel further than LRPs and MRP appliances in the same time span stretching ERS range and reaching more properties.
Improve Firefighter safety	<ul style="list-style-type: none"> • Reduced levels of equipment on RIVs will mean that there will be more time available for training on the equipment that is actually carried and used. • RIVs don't carry any equipment in the cab and so this has the potential to reduce injuries in the case of vehicle accidents
Improve efficiency through better use of resources	By matching resources against risk it will be possible to reduce the amount of equipment required to be carried (e.g. BA sets).and also the overall size of the fleet

Objectives	Main benefits
------------	---------------

Achieve standardisation	<p>A standardised fleet with standardised equipment will:</p> <ul style="list-style-type: none"> • Allow stores to reduce the number of items held; • Allow the maintenance department to reduce their training requirements; • Allow one set of operating procedures to be used; • Enable effective attribute based mobilisation; • Simplify end user training requirements, procurement and contract management arrangements.
Reduce impact of the environment	RIVs are more fuel efficient than LRPs and MRPs. In addition RIVs carbon emissions are significantly lower than LRPs and MRs.
Reduce both Capital & Revenue Expenditure	<p>RIVs have lower acquisition and whole life costs compared to LRPs and MRPs.</p> <p>Reduced equipment levels on RIVs will reduce both capital and revenue expenditure.</p>

1.4 Economic Case

Following the comprehensive evaluation of six different options over a period of nine months it was concluded that the option that provided the most cost effective option was to procure a specially designed light weight fire appliance based on a 7T crew cab chassis. This option will deliver all the objectives/benefits identified in paragraph 1.3.1 of the Strategic Case and the reduction in capital expenditure identified in paragraph 1.6.1 of the Financial Case.

The introduction of this option is low risk in comparison to all the other options. As a bespoke vehicle we can ensure it delivers all the Services defined requirements. In addition the ability to carry 5 firefighters makes this a much more flexible and viable alternative to current front line appliances. Its greater water and equipment carrying capacity make this a safe and effective vehicle with the ability to deal with the majority of incidents as a standalone appliance given appropriate crewing availability.

1.5 Commercial Case

The Commercial Case is focused on enabling the investment objectives/benefits identified in paragraph 1.3.1 of the Strategic Case and the reduction in capital expenditure identified in paragraph 1.6.1 of the Financial Case.

In March 2016, the CFOA National Procurement Group (NPG) and Transport Officers Group (TOG) approved the procurement of a national Framework Agreement for UK Fire and Rescue Emergency Response Vehicles (Pumping Appliances, Aerials and Special Vehicles). Devon & Somerset Fire & Rescue Service has led the procurement for this Framework Agreement, which includes the following DSFRS specific lots:

DSFRS Specific Lots 5a, 5b and 10

Lot 5a Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle (4x2 variant)

Lot 5b Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle Unit (4x4 variant)

Lot 10 Incident Support Unit (Light Special Vehicle) – Devon & Somerset FRS

The Framework Agreement has been proactively marketed through pre-procurement engagement to both established and new entrants to the market. The procurement has been carried out in compliance with the Public Contract Regulations 2015 and therefore offers the Service a compliant route to market and can demonstrate that the opportunity has actively sought competition.

The Framework Agreement is due to be awarded by 21st February 2017, with a go-live date of 27th March 2017.

The Commercial Case is focused on enabling the investment objectives/benefits identified in paragraph 1.3.1 of the Strategic Case and the reduction in capital expenditure identified in paragraph 1.6.1 of the Financial Case.

1.6 Financial Case

1.6.1 Summary of Reduction in Capital Expenditure

The following table illustrates the reduction in capital expenditure that can be achieved by the introduction of the full Tiered Response approach and still maintaining a modern, effective and versatile front line operation fire appliance fleet.

Fleet	12 Year Vehicle Replacement Plan	12 Year Equipment Replacement Plan	Total 12 Year Capital Expenditure	Average Annual Capital Expenditure	Capital Cost Reduction	% Capital Cost Reduction
121 MRPs	£40,680,000	£7,623,000	£48,303,000	£4,025,250		
84 MRPs and 37 LRPs	£28,700,000	£6,804,000	£35,504,000	£2,958,667	£12,799,000	26.50%
39 MRPs, 37 LRPs and 45 RIVs	£19,682,000	£5,469,000	£25,151,000	£2,095,917	£23,152,000	47%

1.6.2 Revenue Cost Reduction

Of the forty five MRPs being replaced by RIVs, twenty nine are currently leased. Replacing these vehicles will generate a revenue saving of **£118,900** over three years.

	2017/18	2018/19	2019/20
Number of vehicles	10	10	9
Savings	£41,000	£41,000	£36,900

1.6.3 Further benefits

Further benefits in the form of fuel efficiency savings and workshop utilisation will be achieved. These specific savings will be quantified during the prototype evaluation period between September and December 2017.

1.7 Management Case

The purpose of this Management Case is to outline the system of governance and controls in place to support the delivery of the Tiered Response project. It describes the governance structures in place to support the Programme and Project Boards in delivering the key project aims and objectives. It also outlines the frequency with which governance meetings are convened and the reports that are produced for these groups. Details of the role and responsibilities of the respective members of these groups are provided, as well as a description of the controls and methodologies necessary to guide the delivery of the project.

2. INTRODUCTION

2.1 Background

Devon & Somerset Fire & Rescue Service has in the past predominantly provided the Service Delivery fleet assets on a like for like basis with a focus on standardisation rather than being driven by local need or the Integrated Risk Management Plan (IRMP) requirements. The acquisition of assets has been achieved by using a mix of sole contracts, frameworks and consortiums to provide the procurement platform.

In 2009 a 'Concept of Operations' was developed that proposed the re-alignment of the fleet and equipment assets so that they were more closely matched to local risk and demand.

2.2 Service Delivery Review

The introduction of new Emergency Response Standards (ERS) in 2009 required the service to evaluate its distribution of resources with the aim to improving response times, geographic cover whilst at the same time placing emphasis on local risk.

A full Service Delivery Review was undertaken between June 2009 and June 2011. The review examined a range of appliances/equipment against a range of risk factors and modelled a number of possible appliance distribution scenarios against the national Emergency Response Standards (ERS).

Two user forums were set up, one of them dealt with appliances and the other with equipment. These forums provided the opportunity for the end users and other specialists to discuss/identify what was good, not so good and what could be done better from a range of perspectives.

2.2.1 Risk Response Maps

The production of comprehensive risk/response maps has provided management information based on six years' worth of incident data. This data provided the evidence to support a fundamental change in the DSRFS' approach to service delivery.

Moving away from the 'one size fits all' approach of Medium Rescue Pumps (MRPs) created the opportunity and potential for the development and introduction of smaller lighter appliances which would be better-suited to many of the rural areas in Devon and Somerset.

The IRMP recognised the fact that risk and demand were changing and there were significant variations across the Service. It also acknowledged that the ability of crews (especially those at quieter retained stations) to maintain competence across the very broad range of incidents and for incidents they were unlikely to attend that we may attend is becoming increasingly difficult. In addition, evidence suggested that most equipment carried on our frontline fire appliances was rarely, if ever, used.

The risk profile of the Service has been changing over a number of years and between **2005 and 2016** we can see that:

- Primary fires have decreased by 43%
- Secondary fires have decreased by 55%
- Chimney fires have decreased by 42%
- All false alarms have decreased by 39%
- Special service calls have decreased by 30%
- Co-Responding has increased by 97%

2.2.2 Tiered Response

We have a greater understanding than we have ever had about the risks our staff are likely to face and we should equip and train them accordingly. In addition and from a purely economic perspective, it does not make sense to provide expensive assets that are rarely used and may not be entirely fit for purpose.

So, essentially, the tiered approach is predicated on a principle that all staff are trained and equipped to deal with the types of incidents that they are most likely to face on a day to day basis (Tier 1), based on our analysis of risk and demand. Beyond that we provide enhanced levels of support (Tiers 2 and 3) strategically located across the organisation, again based on risk and demand.

A project to design and build **Light Rescue Pumps** was initiated in 2011. These appliances have a gross weight of 8.5T and carry the equipment needed to cover 80% of the incident types that the Service is currently required to deal with. Thirty seven of these new appliances will be operational by the end of the 2016/17 financial year.

Following the lessons learned from developing the Light Rescue Pump project, the Service decided to take advantage of the latest firefighting technology and new ways of working to enhance its ability to meet our Community Safety and Firefighter Safety commitments.

It was decided to explore a range of different fire appliance configurations aligned to evidenced risk assessments so that we could continue to improve our emergency response service.

A pilot was run for 12 months from April 2015 – April 2016 that examined a range of different **Rapid Intervention Vehicle** (RIV) configurations to assess the following aspirations:

- Their ability to matching resources to risk;
- Firefighting from a point of relative safety;
- Suppressing the fire;
- Improving availability;
- Improving ERS;
- Improving Community safety;
- Cost saving;
- Reducing operating costs.

2.2.3 RIV Pilot Lessons Learned

The pilot demonstrated that the concept of a Rapid Intervention Vehicle is sound.

However, the use of a petrol engine to drive the pump has a number of major issues and is therefore not viable going forward. The proposed solution is to revert to a traditional vehicle engine driven Power Take Off (PTO) to drive the pump.

It is important to recognise that the RIVs are designed to be despatched at the same time as a LRP or MRP, get to the incident quickly, the crew undertake a risk assessment and depending on the incident type either contain the incident while waiting for the second pumping appliance to arrive OR if possible start dealing with the incident directly.

2.2.4 The Pilot Recommendations

It was recommended that the Service implement a **Tiered Response** consisting of a mixed fleet of MRPs, LRPs and a single composite design of RIV. This recommendation was approved by the Executive Board.

2.3 Procurement

The project team, in association with the User Group, developed a RIV User Requirement and Technical Specification which has been used, as part of the formal procurement process, to identify a preferred supplier.

2.4 Purpose of the Full Business Case

The preparation of the Full Business Case (FBC) is a mandatory part of the business case development process, which is completed following procurement of the scheme – but prior to contract signature – in most public sector organisations.

The purpose of the FBC is to:

- Identify the 'market place opportunity' which offers optimum VFM;
- Set out the negotiated commercial and contractual arrangements for the deal;
- Demonstrate that it is 'unequivocally' affordable;
- Put in place the detailed management arrangements for the successful delivery of the scheme.

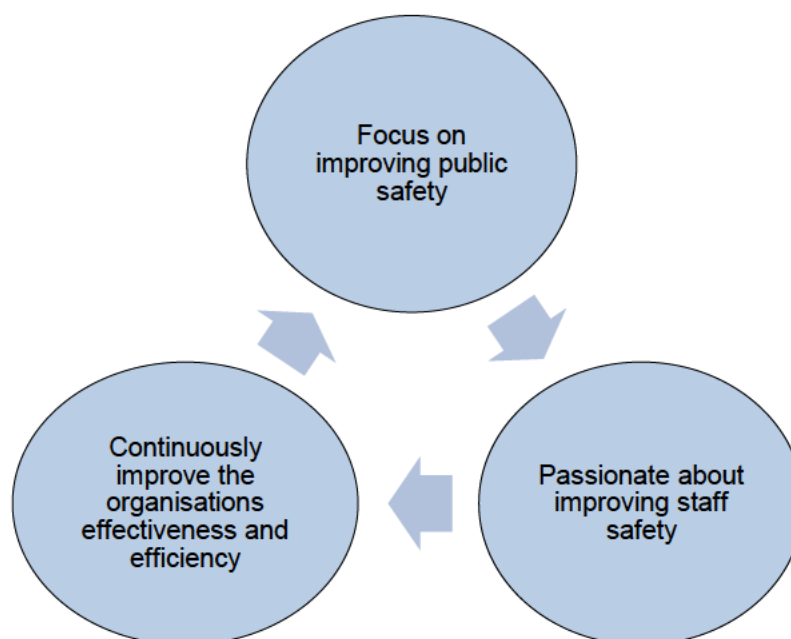
3. STRATEGIC CASE

3.1 Introduction

The proposed operational change contained in this document is in line with the organisation's Vision, Strategic Principles and financial constraints of the Service.

3.2 DSFRS Strategy Plan for 2016-2021

The Service vision for the future is based on three Strategic Principles:



3.3 Strategic Principal – Focus on improving public safety

‘Respond to local emergencies with appropriate skills and resource’

3.4 Strategic Objectives

No	Strategic Objective
3.4.1	Fulfil obligations under the Fire & Rescue Services Act 2004, to make provisions for dealing with emergencies
3.4.2	Ensure that our emergency response teams will be deployed with the appropriate skills and resources
3.4.3	The number, composition and distribution of our emergency response teams will be based on the risks to the communities they serve
3.4.4	Work with partner agencies to develop appropriate fire and non-fire response arrangements
3.4.5	Investigate whether to introduce different response vehicles which use the latest advances in firefighting technology

3.5 Strategic Principle – Passionate about improving staff safety

‘Work hard to be a highly skilled and competent workforce’

3.6 Strategic Objectives

No	Strategic Objective
3.6.1	Optimise our use of resources
3.6.2	Make sure safety is at the heart of everything we do
3.6.3	Train in a realistic way that reflects the risk our staff face and allow them to use the skills they will need at emergency incidents
3.6.4	Review and continually improve the way we work

3.7 Strategic Principle – Continuously improve the organisation’s effectiveness

‘Transform the way we work to ensure we deliver best value for taxpayers’

3.8 Strategic Objectives

No	Strategic Objective
3.8.1	Manage our assets to make sure they are efficient and that they effectively support public and staff safety
3.8.2	Manage projects so we deliver them on time and on budget
3.8.3	Use advanced technology to reduce costs and improve public and staff safety
3.8.4	Work within an agreed governance framework, putting performance management at the heart of our work
3.8.5	All our assets will be managed in the most cost effective way

3.9 The Case for Change

The following elements when considered together makes a compelling argument for the implementation of the Tiered Response approach:

3.9.1 Strategic

The proposals in this Full Business Case contribute to the delivery of the strategic objectives listed in 3.4, 3.6 and 3.8 above;

3.9.2 Funding

The impact on the Service of the Government grant reduction as part of the Comprehensive Spending Review for 2017/2020 is:

Year	Impact
2016/17	Actually a £2.5m cut
2017/18	Actually a 2.7m cut
2018/19	Estimated to be a £1.4m cut

The Service has a three year rolling programme that supports capital investment. The tests of affordability are measured by compliance with the CIPFA Prudential Code for Capital Financing for Local Authorities. Under this code, the Authority is required to set a suite of indicators to provide assurance that capital spending is prudent, affordable and sustainable. These indicators are reviewed annually, although set for the three year period. They also include setting maximum borrowing limits to provide assurance around prudence and the setting of maximum debt ratios to provide assurances in relation to affordability and sustainability.

The focus of this Authority has been to control the debt ratio within a 5% revenue ceiling. To achieve this, the Service suspended the vehicle replacement programme whilst this project was developed and piloted. This has created a backlog of replacement and increased maintenance costs.

3.9.3 Integrated Risk Management Plan

The IRMP is designed to provide the right resources at the right time in the right place. The review team used a predictive risk mapping tool called the Fire Services Emergency Cover toolkit (FSEC) and workload predictive software called PHOENIX as well as analysing 5 years' worth of the Service's own incident data. This has ensured that consideration has been given to as wide a range of hazards and risks as reasonably practicable. These risks have been assessed and control measures identified to ensure that we reduce both the risk of incidents occurring and their consequences.

3.9.4 Service Delivery Review

The purpose of the Service Delivery Review was to analyse the Service response risks, mapped against the Service Emergency Response Standards, based on 5 years' worth of incident data.

The analysis has been carried out on eighty three stations taking into account type and number of incidents, demand curves, hours off the run and station efficiency (Station 60 and Lundy excluded)

3.9.5 Service Delivery Review Outcome

One of the outcomes of the Service Delivery Review clearly indicated that the majority of front line personnel were concerned that the MRPs were too big for the stations grounds in which they were located.

Further, it was evident that the current appliances carry too much equipment, the majority of which is very rarely, if ever, used. Analysis identifies that **40%** of this equipment is used on **80%** of occasions.

Further, with regards to dwelling fires, 92% of these were confined to the room of origin and were dealt with using one Breathing Apparatus (BA) team consisting of two wearers and one hose reel jet and one covering/safety jet.

Irrespective of whether equipment is used or not it still has to be purchased, training provided and maintained. Because the Service has adopted a 'one size fits all' approach in the past this means that all firefighters have to be trained across a broad range of activities and equipment which they may very rarely use. This situation has improved with the implementation of LRPs and can now be enhanced further by introducing an additional tier of RIVs.

3.9.6 Location of Response Assets

The methodology used to decide where current response assets is now out of date. This guidance sought to provide a response standard that was focussed on the commercial density of property rather than risk to life in residential areas. The SOFC guidance assumed that all risks were comparable and therefore fire appliance design and equipment should also be similar (one size fits all).

Following the implementation of a new Fire Control system in late 2016 operational resources are now mobilised to incidents based on actual attributes required to undertake the task.

We now have the opportunity to match appliance location with risk and use the Tiered Response approach to ensure that each location has the most appropriate appliance and equipment assigned.

3.9.7 Service Delivery Review - Key Findings

The Service Delivery Review identified a number of issues that need to be addressed

No	Issue
1	Response assets are currently distributed/located in line with an out-of-date methodology
2	Response assets and their locations have not been reviewed in line with the year on year reduction in operational activity
3	Response assets are not currently located based on risk
4	Significant amounts of equipment that are carried on current appliances is very rarely used
5	There is evidence to indicate that some locations are under resourced
6	At the moment some retained fire fighters are struggling to maintain their competences particularly with regards to the equipment carried on appliances that they never or very rarely use
7	Some special appliances are not located where the most strategic coverage/support can be provided
8	Some appliances are too big for the locations that they are based at.

The Tiered Response approach is specifically designed to address all the issues identified above, subject to ratification through the IRMP process.

3.10 Investment Objectives

The following table indicates the link between the Service strategic objectives and the core benefits delivered by this Business Case.

Strategic Objectives	Investment Objectives	Main benefits
3.4.1 3.4.2 3.4.3	Improved performance against Emergency Response Standards	Due to their enhanced manoeuvrability it is predicted that RIVs will arrive at incidents quicker than LRPs and MRPs and so ERS will be improved. Conversely, RIVs will be able to travel further than LRPs and MRPs appliances in the same time span stretching ERS range and reaching more properties.
3.4.2 3.6.2 3.6.3 3.6.4 3.8.1	Improve Firefighter safety	<ul style="list-style-type: none"> Reduced levels of equipment on RIVs (compared to MRPs) will mean that there will be more time available for training on the equipment that is actually carried and used; RIVs don't carry any equipment in the cab and so this has the potential to reduce injuries in the case of vehicle accidents.
3.4.3 3.8.1	Improve efficiency through better use of resources	By matching resources against risk it will be possible to reduce the amount of equipment required to be carried and also the overall size of the fleet (e.g. BA sets).
3.4.4 3.4.5 3.8.2 3.8.4	Achieve standardisation	<p>A standardised fleet with standardised equipment will:</p> <ul style="list-style-type: none"> Allow stores to review stock levels and where appropriate reduce them; Allow the maintenance department to reduce their training requirements (compared to the requirement for MRPs); Allow one set of operating procedures to be used; Enable effective attribute based mobilisation; Simplify end user training requirements and procurement/contract management arrangements.
3.8.3	Reduce impact of the environment	RIVs are more fuel efficient than LRPs and MRPs. In addition RIV's carbon emissions are significantly lower than LRP's and MRP's.
3.8.5	Reduce both Capital & Revenue Expenditure	RIVs have lower acquisition and whole life costs compared to LRPs and MRPs. Reduced equipment levels on RIVs will reduce both capital and revenue expenditure.

3.11 Business Needs - Outcomes

The following outcomes will be achieved by the introduction of RIVs:

- Improved performance against ERS; as RIVs will be smaller, lighter and more agile appliances;
- Improved Community Safety; through being able to attend incidents more quickly and by extending ERS response areas;
- Have the ability to deal with some incidents as a standalone appliance; as an RIV will be considered a main pump;
- Have lower acquisition and whole life costs compared to LRPs or MRPs; the indicative acquisition savings are in the order of £70k on an LRP and £140k on an MRP;
- A more cost effective fleet; by the savings made on whole life costs for running and maintenance costs;
- Reduced impact on the environment; by introducing smaller vehicles with lower emissions;
- Have sufficient equipment available to enable crews to safely deal with a high proportion of incidents; by utilising an inventory aligned to the findings of the strategic asset review and the integrated risk management plan (IRMP);
- Rationalised levels of equipment; by alignment of the inventory required to findings of the IRMP;
- Improved efficiency through better use of resources; by alignment to the IRMP recommendations;
- Better matched resources to risk; by alignment to the IRMP recommendations;

The following outcomes will **NOT** be achieved solely by the RIV as they can be adopted across the entire Tiered Response fleet of appliances;

- Reduced establishment at all On Call stations; with a crewing policy change appliances would be mobile without waiting for 5 personnel;
- Improved availability; with a crewing policy change appliances would be available for more of the time;
- The ability to fight fires from a point of relative safety; by the inclusion of new technology such as a 'water misting unit';
- The ability to suppress fires so that firefighters can subsequently be committed into safer environments; by the inclusion of new technology such as 'water misting unit'.

3.12 Existing arrangements

The Service has an operational fleet of 138 front line appliances, 121 deployed with 17 available in reserve. There is currently an expectation that the working life of a front line appliance is twelve years.

From 2009 – 2013 there was a moratorium on the procurement of new fire and rescue appliances. The freeze on procurement had resulted in a significant number of appliances having to continue in service beyond their scheduled 'end-of-life' date. As the appliances aged there was a corresponding increase in the number of mechanical failures experienced.

The dangerous situation of an ever aging fleet has been mitigated by the introduction in 2015/16 by introducing 37 new LRPs. However by the end of 2016 we still had 33 appliances beyond their scheduled working life.

If the Service had not introduced Light Rescue Pumps we would have had to continue to maintain an aging fleet beyond their operational life expectancy.

3.13 'As Is' Financial Model

The Full Business Case has two '**As Is**' financial models. The first covers a twelve year period from 2014/15 to 25/26 and is based on the assumption that the Service had not adopted a Tiered Response approach and had continued to procure MRPs. This is included for comparison purposes.

The second '**As Is**' financial model covers a twelve year period from 2014/15 to 25/26 and is based on the assumption that the Service had implemented a Tiered Response approach, procured 37 Light Rescue Pumps and then stopped.

The following 'As Is' financial model covers the costs of a twelve year period from the 14/15 financial year to the 25/26 financial year and is based exclusively on the use of MRP appliances only.

File: RIV Full Business Case v1.00 (2)
Version Date: 9 Feb 2017

The following '**As Is**' financial model covers the costs of a twelve year period from the 14/15 financial year to the 25/26 financial year and is based the use of MRPs and LRP appliances.

File: RIV Full Business Case v1.00 (2) Page 21 of 66

4. ECONOMIC CASE

4.1 Introduction

The following options have been considered:

4.2 Option 1 - Do Nothing

This option will mean that:

- Rapid Intervention Vehicles will not be introduced into the Service;
- The number of MRPs in service will not be reduced.

Advantages

- No further disruption to Operational staff; by not introducing new appliances requiring training and familiarisation;
- There is already a contract in place to purchase LRPs as MRP replacement appliances until 31st April 2019.
- There will be a national Fleet framework in place for Emergency Response vehicles led by Devon and Somerset for the procurement of alternative vehicles.

Disadvantages

- We will not achieve any additional improved performance against ERS over that which is currently being delivered by LRPs;
- We will not achieve any additional acquisitions cost saving other those already being made by the introduction of LRPs;
- We will not achieve any reduced whole life costs over that already being made by the introduction of LRPs;
- We will not reduce wider operating costs over that already being made by the introduction of LRPs;
- We will not achieve improved Community Safety over that already being made by the introduction of LRPs.

Risks

- There is a risk that if we do not introduce RIVs into the fleet then we will not be able to improve ERS over that already being made by the introduction of LRPs;
- There is a risk that we will not meet our Strategic Objectives of reducing costs to meet funding cuts over that already being made by the introduction of LRPs;
- There is a risk that we will not improve efficiency by better use of resources i.e. staff and equipment over that already being made by the introduction of LRPs;
- There is a risk that we will not improve Community Safety over that already being made by the introduction of LRPs;

4.3 Option 2 – VW T5 Van



3.2T Van with a Brendon Pump powered by a 16HP Honda petrol driven engine

Advantages

- Provided improved performance against ERS;
- Provided better manoeuvrability than MRPs or LRPs with good road handling characteristics;
- Provided good crew space;
- Provided ability to fight fires from a point of relative safety with a high pressure misting system i.e. outside the premises by utilising new techniques’;
- Low acquisition costs (indicative cost of £50k);
- Good fuel economy.

Disadvantages

- Could not carry 5 fire officers (maximum of 4);
- Significant reduction of equipment carrying capacity due to weight carrying limitations (3.2T);
- Provided a limited water carrying capacity (only 200 Litres);
- Emitted significant amounts of CO from the petrol driven pump;
- Emitted excessive noise from petrol driven pump;
- Did not provide the ability to carry a ladder;
- Had restricted access to equipment and BA sets;
- Had to have light weight racking to offset the weight of the pump requiring frequent maintenance;
- Lacked the ability to deal with incidents as a standalone appliance.

4.4 Option 3 – Toyota Hilux 3.5T Pickup



Toyota Hilux – 3.0 Litre with a Briggs & Stratton Vanguard petrol engine driving a Hale HPX 75 pump

Advantages

- Provided improved performance against ERS;
- Provided better manoeuvrability than MRPs or LRPs;
- Provided ability to fight fires from a point of relative safety with a fog nail system i.e. outside the premises by utilising new techniques’;
- Relatively low acquisition costs (indicative cost of £60k);
- Had traditional locker configuration;
- Had good pump and hose reel access.

Disadvantages

- Could not carry 5 fire officers (maximum of 3);
- Provided poor crew space – rear seat is very cramped;
- Significant reduction of equipment carrying capacity due to weight carrying limitations (3.5T);
- Poor road handling characteristics;
- Provided a limited water carrying capacity (only 300 Litres);
- Emitted significant amounts of CO from the petrol driven pump;
- Relatively poor fuel efficiency.

4.5 Option 4 – Mercedes Sprinter MWB Van



Petrol driven Hale HPX 75 pump

Advantages

- Provided improved performance against ERS;
- Provided better manoeuvrability than MRPs or LRPs with good road handling characteristics;
- Provided ability to fight fires from a point of relative safety with a fog nail misting system i.e. outside the premises by utilising new techniques;
- Had good pump and hose reel access;
- Had good crew space;
- Had an acceptable volume of water (750 litres).

Disadvantages

- Acquisition costs (indicative cost of £75k) considering performance;
- Emitted high CO levels from the petrol driven pump;
- Emitted excessive noise from petrol driven pump;
- Provided only 3 seats;
- No capacity to carry a ladder;
- Provided a limited equipment stowage options due to the fact it was a van.

4.6 Option 5 – Iveco Crew Cab Vehicle



Advantages

- Provided improved performance against ERS;
- Provided better manoeuvrability than MRPs;
- Can accommodate a crew of five;
- Provided ability to fight fires from a point of relative safety with a fog nail misting system i.e. outside the premises by utilising new techniques;
- Can perform as a standalone appliance;
- Had a 20/10 CAFS PTO driven pump;
- Had the ability to carry a ladder;
- Had a good volume of water (750 litres) enhanced by CAFS;
- Had a good equipment inventory;
- Provided good weight and volume carrying capacity;
- Had good pump and hose reel access;
- Can match resources to risk – sending fewer resources (2/3) to incidents that they can either deal with or contain;
- Can provide Improved Community Safety due to increased availability and size of vehicle for access.

Disadvantages

- Could not drive a 20/10 pump in high pressure mode;
- Acquisition costs (actual cost of 180K in 2010);
- Had an automated manual gearbox which has proven unreliable in use;
- Had limited rear crew space (foot well).

4.7 Option 6 - Introduce a Crew Cab, design built body with PTO driven Pump

Advantages

- Will improve performance against ERS;
- Will improve Community Safety; through being able to attend incidents more quickly and by extending ERS response areas;
- Will provide the ability to fight fires from a point of relative safety; by the inclusion of new technology such as 'Fog Nail';
- Will provide the ability to suppress fires so that firefighters can subsequently be committed into safer environments; by the inclusion of new technology such as 'Fog Nail';
- Will provide the ability to deal with some incidents as a standalone appliance; as an RIV will be considered a main pump;
- Lower acquisition costs and whole life costs compared to LRPs or MRPs; the indicative purchase savings in the order of £70k on an LRP and £140k on an MRP;
- Will be more cost effective fleet; by the savings on running and maintenance costs;
- Will reduce impact on the environment; by introducing smaller vehicles with lower emissions;
- Will have sufficient equipment available to enable crews to safely deal with a high proportion of incidents; by utilising an inventory aligned to the findings of the strategic asset review and the integrated risk management plan (IRMP);
- Rationalised levels of equipment; by alignment of the inventory required to findings of the IRMP;
- Will be more manoeuvrable than MRPs or LRPs;
- Will have excellent road handling characteristics;
- Will accommodate a crew of 5;
- Will provide good crew accommodation;
- Will provide excellent size to weight ratio i.e. nearing LRP equipment inventory on a smaller, more cost effective chassis;
- Will give reduced life costs over the same period as LRPs;
- Will provide full access to equipment through a bespoke body design and by utilising all available space;
- Will have the ability to carry a first floor ladder;
- Will have a greater volume of water of between 650 & 1000 litres of water (dependant on chassis);
- Will have improved equipment inventory over all options piloted;
- Will provide good weight and volume carrying capacity;
- Will provide excellent pump and hose reel access (with an option for 22mm hose).

Disadvantages

- This solution is based on a crew cab chassis with a body attached rather than a composite van. This makes the vehicle more complex to build. However, the Service is able to mitigate this risk by making use of the lessons learned from the LRP development to ensure that there will be a comprehensive and rigorous test and acceptance regime in place linked to stage payments and transfer of title.

4.7.1 Options Evaluation

OUTCOMES	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
	Do Nothing	VW T5	Toyota Pickup	Mercedes	Iveco Daily	New Design
Improve performance against ERS	0	4	3	5	5	5
Improve community safety by attending more quickly	0	4	3	5	5	5
Fight fires from a point of relative safety	0	2	2	3	4	5
Suppress the fire so that fire fighters can commit safely	0	2	2	3	4	5
Ability to deal with incidents as a standalone appliance	5	1	2	2	5	5
Lower acquisition and whole life costs compared to current LRP and MRP	0	5	5	5	5	5
A more cost effective fleet by saving on running costs & maintenance	0	5	5	5	5	5
Reduce impact on the environment with lower emissions	0	1	1	1	3	5
Carry sufficient equipment to enable crews to safely deal with a high proportion of incidents	5	0	0	2	3	5
Rationalise level of equipment by aligning inventory to IRMP	0	0	0	2	3	5
Total	10	24	23	33	42	50

This options evaluation originally appeared in the OBC has been reviewed following the procurement process and the recommended option still stands.

4.8 The Way Forward

It is important that the Service's future fleet of appliances and equipment are matched to risk and are designed to improve service to the community, firefighter safety, be cost effective whilst at the same time reducing our impact on the environment.

No	Recommendations
1	That in the future all vehicles and equipment should be distributed based upon the principles of a tiered approach and of matching resources to risk, as defined in the Service IRMP.
2	It is predicted that the introduction of Rapid Intervention Vehicles (RIVs) will demonstrate that these vehicles are better matched to the risk at a significant number of locations.
3	That the service works towards operating a mixed fleet of pumping appliances comprising of Medium Rescue Pumps (MRPs), Light Rescue Pumps (LRPs), Rapid Intervention Vehicles (RIVs) and Incident Support Units (ISUs).
4	That the future pumping appliance fleet contains some vehicles with off road capability (4x4 drive).
5	Key user requirement specifications will be written for all future vehicle requirements and that the end users should be involved in this process.
6	Based on the fact that the trial was successful, the RIV replacement programme should commence immediately.
7	The appliances and equipment should be aligned using the risk map, local profiles and other research.
8	The standardisation of Service equipment, such as hydraulic rescue equipment should continue and gather momentum.
10	New specialist vehicles such as Incident Support Units (ISUs) should be introduced and be distributed strategically according to risk.
11	The introduction of the new specialist vehicles will facilitate the continuous removal or replacement of several items of equipment from pumping appliances.

4.9 Conclusions

In conclusion it was deemed that the use of a petrol engine to drive the pump has a number of major issues and is therefore not viable going forward. The proposed solution is to revert to a traditional vehicle engine driven Power Take Off (PTO) to drive the pump.

A consistent message from the crews was that, given sufficient water and equipment, this vehicle would be capable of dealing with a good number of incident types alone and a significant number when supported by an LRP or MRP.

There is a risk that the crew enthusiasm for having greater capability built into the vehicle results in the size creeping up closer and closer to matching that of a LRP or MRP. To mitigate this risk the project team established a User Group to firstly propose a list of incident types that RIVs would be able to attend. The list was presented to the Project Board and after due challenge it was agreed that RIVs could be considered as a Main Pump and should be mobilised to all incidents as part of any appropriate response.

The list of incident types then drove decisions regarding the number of crew, water capacity and equipment carrying capability. These decisions have shaped the size and type of vehicle defined in the User Requirement and Technical Specification.

To aid these deliberations the Service was able to acquire the loan of a vehicle (at minimum cost = £600) for eight weeks. This vehicle, developed by Pickup Systems, should NOT be considered the complete solution to our requirements but had the benefit of encompassing a number of the lessons learned from the pilot.

Finally, the recommended option would satisfy all of the outcomes (critical success factors) defined in section 1.1 of this document. It would enable the Service to obtain a vehicle designed to our specification which will deliver ALL the outcomes identified and eradicating all the shortcomings of the other pilot vehicles trialled. It will deliver a bespoke appliance designed by the Service ensuring that it meets all the requirements of a smaller firefighting vehicle, whilst retaining the ability to attend any incident as a Main Pump. By utilising more modern firefighting technology, such as 'Fog Nail', the appliance will be able to operate with less water and can therefore be designed as a smaller vehicle (potentially under 7½ Tonne).

The introduction of this option is low risk in comparison to all the other options. As a bespoke vehicle we can ensure it delivers all the requirements defined by the user group. In addition the ability to carry 5 firefighters makes this a much more flexible and viable alternative to current front line appliances. Its greater water and equipment carrying capacity make this a safe and effective vehicle with the ability to deal with the majority of incidents as a standalone appliance given appropriate crewing availability.

4.10 Recommendation

On the basis of the above analysis:

Option 6 is the Recommended Approach

**Challenge the market to design a bespoke solution
that fully meets the Authority's requirements.**

4.11 New Design

Personal data redacted.



Personal
data
redacted.

P
e
r
s
o

[REDACTED]

4.12 Appliance Dimensions

Personal data redacted.



4.13 Fire Engineering

Personal data redacted.



4.14 Locker Layout

Personal data redacted.



Personal data redacted.



4.15 Risk Associated with the Proposed Option

Risk	Consequences	Counter Measure	RAG
There is a risk that no decisions will have been taken on the RIV rollout plan (locations and cascade) in time for the delivery of the initial batch of vehicles.	The RIVs will sit idle at SHQ. A backlog of vehicles will build up and the benefits identified in the Full Business Case will be delayed.	Raise issue with project Board and EB. Offer to facilitate the decision making process	R
There is a risk that prototype testing will take longer than scheduled due to issues being identified and remedial action needed.	The build of some or all of the 14 vehicles scheduled in 2017/18 will not be completed Capital funding will need to be rolled over into 2018/19. Benefits identified in the Full Business Case will be delayed. New procurement needed, if changes are deemed material changes (as defined by the public Contract Regulations 2015)	Review the delivery plan with the preferred supplier and attempt to build a contingency.	R
Due to the reduction of equipment being carried there is a risk that LRPs and RIVs will have insufficient equipment to deal with major incidents.	Delay in ability to deal with major incidents. Threat to firefighter safety. Reputational damage.	Raise issue at Project Board. Implement a range Incident Support Units.	R
There is a risk that the current RIV design fails to meet the user requirement.	This could result in delayed delivery of the operational fleet and additional costs due to the need to evoke the change process.	<ul style="list-style-type: none"> The user requirement has been approved by the user group; There were users on the bid evaluation panel; Any deviation from the user requirement will be identified at the call off contract discussions with the supplier. 	A

Risk	Consequences	Counter Measure	RAG
There is a risk that the engine, gearbox and transfer box configuration will not deliver the pumping capability required.	Fundamental requirement not meet. Entire business case undermined. Stop project and start again should be considered.	<ul style="list-style-type: none"> Undertake analysis to understand the problem – Complete; Engage with vehicle and pump supplier to develop options; Test options as part of the prototype evaluation. 	A
There is a risk that insufficient capital funding is available to procure replacement RIVs.	RIV delivery delayed or cancelled.	Early and continuous engagement with the Fire Authority to match funding against the operational demands and risks of the Service. Spread procurement over three years.	A
There is a risk that the preferred supplier will not be able to deliver the RIVs against the delivery plan due to existing contractual commitments to other Fire Services	RIV rollout delayed. Cost increase. Threat to Business Case.	Monitor progress of the prototype evaluation carefully and identify any problems as soon as possible.	A

4.16 Constraints

The project is subject to the following constraint:

- The roll out of forty five RIV appliances is constrained by the Services capacity to manage that degree of change. The roll out plan must cope with, not only the test and acceptance of these new vehicles from the manufacturer but also the cascade of existing appliance to ensure that the overall strategist disposition of capability matches the risk profile.

4.17 Dependencies

The project is subject to the following dependencies:

- The ability of the preferred supplier to schedule and build forty five RIV appliances in three years taking into account their existing and future order book;
- The successful award of Lots 5a, 5b and Lot 10 from the National Framework for Fire and Rescue Emergency Response vehicles.

5. COMMERCIAL CASE

5.1 Procurement Regulations

The Public Contract Regulations 2015 provide the legal framework for public procurement of supplies, services and/or works. They set out procedures which must be followed before awarding a contract when its value exceeds set thresholds.

The Regulations state that for contracts where the total value of the contract exceeds a given threshold, currently set at £164,176 for supplies, the procurement process must follow a prescribed route to effect 'a fully OJEU compliant tender'.

The purpose of the Regulations is to open up the public procurement market and to ensure the free movement of supplies, services and works within the European Union. In most cases they require competition. The Regulations reflect and reinforce the Value for Money (VfM) focus of the Government's procurement policy. This requires that all public procurement must be based on VfM, defined as "the optimum combination of whole-life cost and quality to meet the user's requirement", which should be achieved through competition, unless there are compelling reasons to the contrary.

5.2 Route to Market

5.2.1 Framework Agreement for UK Fire and Rescue Emergency Response Vehicles

In March 2016, the CFOA National Procurement Group (NPG) and Transport Officers Group (TOG) approved the procurement of a national Framework Agreement for UK Fire and Rescue Emergency Response Vehicles (Pumping Appliances, Aerials and Special Vehicles). Devon & Somerset Fire & Rescue Service has led the procurement for this Framework Agreement, which includes the following DSFRS specific lots:

DSFRS Specific Lots 5a, 5b and 10

Lot 5a Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle (4x2 variant)

Lot 5b Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle Unit (4x4 variant)

Lot 10 Incident Support Unit (Light Special Vehicle) – Devon & Somerset FRS

The Framework Agreement has been carried out in compliance with the Regulations and therefore offers the Service a compliant route to market. The terms and conditions of the Framework and call-off agreement have been established based on the customs and practice within the Fire Sector to protect the Authorities assets and interests. The transfer of risk, title and ownership terms (including Authority owned free issued equipment), linked to stage payment processes have been established in line with the build and delivery of the vehicles. Services credits linked to key performance indicators are also captured.

The Framework Agreement is due to be awarded by 21st February 2017, with a go-live date of 27th March 2017.

5.2.2 Framework Agreement Lots

The Framework Agreement lots are split into two categories, Multiple Suppliers and Single Supplier. This separation is to enable the Service to procure RIVs off this framework without having to go through a further competition process (which is required via the multiple supplier lots).

CFOA TOG Specific Lots 1 – 4 (all multiple supplier)

- Lot 1 Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Inc. Conversion only & Refurbishment
- Lot 2 Medium Rescue Pumping Appliances (over 7.5 and up to 15 tonnes) - Inc. Conversion only & Refurbishment
- Lot 3 Super Rescue Pumping Appliances (over 15 tonnes) - Inc. Conversion only & Refurbishment
- Lot 4 Light, Medium and Super Rescue Pumping Appliances (3 tonnes and over) – Including. Conversion only and Refurbishment

DSFRS Specific Lots 5a and 5b (all single supplier)

- Lot 5a Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle (4x2 variant)
- Lot 5b Light Rescue Pumping Appliances (3 to 7.5 tonnes) – Devon & Somerset FRS Rapid Intervention Vehicle Unit (4x4 variant)

CFOA TOG Specific Lots 6 – 9 (all multiple supplier)

- Lot 6 Aerial Appliances – including Conversion only and Refurbishment
- Lot 7 Light Special Vehicles (3 to 7.5 tonnes) including Conversion only and Refurbishment _
- Lot 8 Medium Special Vehicles (over 7.5 and up to 15 tonnes) – Including. Conversion only and Refurbishment
- Lot 9 Super Special Vehicles (over 15 tonnes) – Including. Conversion only and Refurbishment

DSFRS Specific Lots 10 (single supplier)

- Lot 10 Incident Support Unit (Light Special Vehicle) – Devon & Somerset Lead FRS

5.2.3 Framework Agreement Evaluation Results and Pricing

The evaluation process for the Framework Agreement has resulted in the following suppliers being successful with their tender submission:

Lot No.	Lot Description	Multiple or Single Supplier Lot	Potential Provider/s
1	Light Rescue Pumping Appliances	Multiple	1. Angloco 2. Emergency One 3. John Dennis Coachbuilders 4. Rosenbauer 5. W H Bence Coachworks
2	Medium Rescue Pumping Appliances	Multiple	
3	Super Rescue Pumping Appliances	Multiple	
4	Light, Medium and Super Rescue Pumping Appliances	Multiple	
5a	Rapid Intervention Vehicle (RIV) – 4x2 variant	Single	Emergency One
5b	Rapid Intervention Vehicle (RIV) – 4x4 variant	Single	Emergency One
6	Aerial Appliances	Multiple	1. Angloco 2. Emergency One 3. John Dennis Coachbuilders 4. Rosenbauer 5. W H Bence Coachworks

Lot No.	Lot Description	Multiple or Single Supplier Lot	Potential Provider/s
7	Light Special Vehicles	Multiple	1. Angloco 2. Emergency One
8	Medium Special Vehicles	Multiple	3. John Dennis Coachbuilders 4. Rosenbauer 5. S Macneillie 6. W H Bence Coachworks
9	Super Special Vehicles	Multiple	1. Angloco 2. Emergency One 3. John Dennis Coachbuilders 4. Rosenbauer 5. W H Bence Coachworks
10	Incident Support Unit (ISU)	Single	Emergency One

The following pricing is for RIVs is available to the Service via the recommended Framework Agreement:

- Rapid Intervention Vehicle (4x2 variant) - £107,977.87
- Rapid Intervention Vehicle (4x4 variant) - £127,977.87

A breakdown of this pricing and available costed options is provided within section 4.1 of the Contract Award Recommendation Report (provided in ANNEX A). The report also provides a full breakdown on the procurement undertaken and results of that process.

5.2.4 Recommendation

Award a Call-Off Contract to Emergency One (UK) Ltd for RIV 4x2 and 4x4 appliances via Lots 5a and 5b of the CFOA Framework Agreement for UK Fire and Rescue Emergency Response Vehicles.

The approval of this Full Business Case will automatically approve the award of the contracts for RIVs.

6. FINANCIAL CASE

6.1 Introduction

The Economic Case recommends that the Service Introduces RIVs and replaces the MRP appliances that are at end of life.

The financial case is based on the following assumptions:

Assumption – the economic case recommendations are accepted.

Assumption – the proposed RIV fleet of 45 appliances is procured. This does not include reserves and so the total number of RIVs covered by this financial model is 50.

Assumption – RIVs will start to be deployed during 2017/18 financial year.

Assumption – An annual rate of inflation of 2% over the next 10 years.

Assumption - All future fire and rescue appliances will be procured via capital expenditure rather than leasing.

The financial case deals with the affordability of the option chosen in the Economic case.

The unit cost quoted by the preferred supplier for a 4x2 RIV is £108k (excluding equipment).

The unit price is broken down into four stage payments:

- Stage 1 - The chassis;
- Stage 2 - The fire engineering;
- Stage 3 - The vehicle body including equipment stowage and electrics;
- Stage 4 - 10% retention for 3 months.

The unit price includes vehicle certification, documentation, warranty and training.

The production schedule is identified in the Management Case. In summary it is posed to implement:

- 15 RIVs plus 1 reserve in 2017/18;
- 15 RIVs plus 2 reserves in 2018/19;
- 15 RIVs plus 2 reserves in 2019/20.

Given the uncertainty over Brexit and the economic outlook there is a risk costs could increase at a greater rate but any impact is not likely to be material.

6.2 Impact on the organisation's income and expenditure account

The purchase of the appliances and equipment will be via the capital programme. Funding for which, in the medium term, is planned to be via revenue contribution (either direct revenue funding or via earmarked reserve) and from existing borrowing. The appliance replacement programme has been modelled into the capital programme for some time and therefore the funding requirement has been identified. The Authority made provision for this expenditure last year.

The payment stream for the scheme over the intended lifespan of the project is as follows:

	2017/18	2018/19	2019/20	Total
Capital:				
RIV Appliances	£1,728,000	£1,870,000	£1,904,000	£5,502,000
Equipment	£480,000	£510,000	£510,000	£1,500,000
Total	£2,208,000	£2,380,000	£2,414,000	£7,002,000

There will be minor revenue costs for travel and accommodation in relation to acceptance testing and contract management which have been built into the 2017/18 revenue budget and will need to be done so for future years.

The scheme has been incorporated into the 2017/18 capital programme and the resulting revenue funding has been budgeted for. There is an assumption that the current level of revenue funding of capital will continue. The associated risk is that the total revenue funding for the Service will continue to reduce and the contribution to capital budget may have to reduce. However the Service is aware of this risk and has modelled for it in the Medium Term Financial Plan and has been prudent over recent years and set aside a substantial capital earmarked reserve to cover any shortfall given the current capital programme.

One of the advantages of the Tiered Response approach as well as a reduced capital budget requirement was future revenue savings on vehicle leasing, maintenance and running costs. In future year budget setting processes the impact of the Tiered Response will need to be reflected in the revenue budgets.

Overall affordability

The cost of the project is £7.002m over the expected lifespan of the contract period. This has been built in to the Service 3 year capital programme to be presented to the Authority in February 2017. When setting the capital programme regard is given to affordability. The tests of affordability are measured by compliance with the Chartered Institute of Public Financial Accountants (CIPFA) Prudential Code for Capital Financing for Local Authorities. The Prudential Indicators support the affordability of the proposed capital programme.

As the Service has significant liquid funds any cash flow risks are mitigated.

6.3 Financial Models

The Financial Case is constructed around three different models. Each model shows the annual cost of maintaining the Service appliance fleet and identifies the savings that can be achieved.

All three 'As Is' financial models cover a twelve year period from 2014/15 to 2025/26.

6.3.1 Financial Model 1 – Do Nothing

The MRP fleet to be procured in line with the 'end-of-life' dates of the appliances.

6.3.2 Financial Model 2 – Implement LRPs Only in Support of the MRPs

The LRP fleet procurement (70 appliances) will be smoothed out over 4 years. The MRP replacement Fleet procurement (34 appliances) will **not** be smoothed but will be matched to the 'end of life' demand over 10 years.

6.3.3 Financial Model 3 – Implement Both LRPs and RIVs in Support of the MRPs

The Service Delivery Review and IRMP recommended that the Service could implement the following Tiered Response structure with no increase of risk to life.

Appliance Type	Current	Proposed Future
MRP	84 Operational	39 Operational
LRP	37 Operational	37 Operational
RIV	Nil	45 Operational

6.4 Procurement Profile

The procurement profile is based on the assumption that this recommendation is implemented.

From 2017/18 we would only need to procure three MRPs a year.

By the end of 2016/17 we would have taken delivery of the last 5 LRPs taking our strength up to 37 operational appliances.

We will spread the procurement of forty five RIVs over three years (15 per year).

We will spread the procurement of the five reserve RIVs over three years.

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
MRPs	0	3	3	3	3	3	3	3	3	3
LRPs	18	0	0	0	0	0	0	0	0	0
RIVs	0	16	17	17	0	0	0	0	0	0

6.5 'To Be' Financial Model

The 'To Be' financial model is based on the procurement profile defined in Paragraph 6.4 above.

To Be' Financial Model - 39 MRPs, 37 LRPs and 45 RIVs												
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
MRP Replacement				£250,000	£255,000	£260,000	£265,000	£270,000	£275,000	£280,000	£285,000	£290,000
MRP Replacement				£250,000	£255,000	£260,000	£265,000	£270,000	£275,000	£280,000	£285,000	£290,000
MRP Replacement				£250,000	£255,000	£260,000	£265,000	£270,000	£275,000	£280,000	£285,000	£290,000
LRP 1	£150,000											
LRP 2	£150,000											
LRP 3	£150,000											
LRP 4	£150,000											
LRP 5	£150,000											
LRP 6	£150,000											
LRP 7	£150,000											
LRP 8		£162,000										
LRP 9		£162,000										
LRP 10		£162,000										
LRP 11		£162,000										
LRP 12		£162,000										
LRP 13		£162,000										
LRP 14		£162,000										
LRP 15		£162,000										
LRP 16		£162,000										
LRP 17		£162,000										
LRP 18		£162,000										
LRP 19		£162,000										
LRP 20		£162,000										
LRP 21		£162,000										
LRP 22		£162,000										
LRP 23		£162,000										
LRP 24		£162,000										
LRP 25		£162,000										
LRP 26			£172,000									
LRP 27			£172,000									
LRP 28			£172,000									
LRP 29			£172,000									
LRP 30			£172,000									
LRP 31			£172,000									
LRP 32			£172,000									
LRP 33			£172,000									
LRP 34			£172,000									
LRP 35			£172,000									
LRP 36			£172,000									
LRP 37			£172,000									
LRP 38			£172,000									
LRP 39			£172,000									
LRP 40			£172,000									
LRP 41			£172,000									
LRP 42			£172,000									

RIV 1				£108 000									
RIV 2				£108 000									
RIV 3				£108,000									
RIV 4				£108,000									
RIV 5				£108 000									
RIV 6				£108,000									
RIV 7				£108,000									
RIV 8				£108 000									
RIV 9				£108 000									
RIV 10				£108,000									
RIV 11				£108,000									
RIV 12				£108 000									
RIV 13				£108,000									
RIV 14				£108,000									
RIV 15				£108,000									
RIV 16				£108,000									
RIV 17					£110,000								
RIV 18					£110,000								
RIV 19					£110 000								
RIV 20					£110 000								
RIV 21					£110,000								
RIV 22					£110,000								
RIV 23					£110 000								
RIV 24					£110,000								
RIV 25					£110,000								
RIV 26					£110,000								
RIV 27					£110 000								
RIV 28					£110,000								
RIV 29					£110,000								
RIV 30					£110 000								
RIV 31					£110 000								
RIV 32					£110,000								
RIV 33					£110,000								
RIV 34						£112 000							
RIV 35						£112,000							
RIV 36						£112,000							
RIV 37						£112,000							
RIV 38						£112 000							
RIV 39						£112,000							
RIV 40						£112,000							
RIV 41						£112 000							
RIV 42						£112,000							
RIV 43						£112,000							
RIV 44						£112,000							
RIV 45						£112 000							
RIV 46						£112,000							
RIV 47						£112,000							
RIV 48						£112,000							
RIV 49						£112 000							
RIV50						£112,000							
	£1,050,000	£2,916,000	£2,924,000	£2,478,000	£2,635,000	£2,684,000	£795,000	£810,000	£825,000	£840,000	£855,000	£870,000	
													£19,682,000
										Equipment	39x63k		£2,457,000
										Equipment	42x36k		£1,512,000
										Equipment	50x30k		£1,500,000
										Total Cost of Front Line Appliances and Equipment over 12 Years			£25,151,000
										Average Cost per Year			£2,095,917

6.6 Equipment - Financial Benefits

The RIVs will carry significantly less equipment than the current MRP. The following table illustrates the unit cost of equipment carried on each MRP, LRP and RIV respectively.

	MRP	LRP	RIV
Equipment	£63,000k	£36,000	£30,000

These costs reductions have been built into the three financial models and are included in the summary below.

6.7 Summary of Reduction in Capital Expenditure

The following table illustrates the reduction in capital expenditure that can be achieved by the introduction of the full Tiered Response approach and still maintaining a modern, effective and versatile front line operation fire appliance fleet.

Fleet	12 Year Vehicle Replacement Plan	12 Year Equipment Replacement Plan	Total 12 Year Capital Expenditure	Average Annual Capital Expenditure	Capital Cost Reduction	% Capital Cost Reduction
121 MRPs	£40,680,000	£7,623,000	£48,303,000	£4,025,250		
84 MRPs and 37 LRPs	£28,700,000	£6,804,000	£35,504,000	£2,958,667	£12,799,000	26.50%
39 MRPs, 37 LRPs and 45 RIVs	£19,682,000	£5,469,000	£25,151,000	£2,095,917	£23,152,000	47%

6.8 Leasing Cost Reduction

Of the forty five MRPs being replaced by RIVs, twenty nine are currently leased. Replacing these vehicles will generate a revenue saving of **£118,900** over three years.

	2017/18	2018/19	2019/20
Number of vehicles	10	10	9
Savings	£41,000	£41,000	£36,900

6.9 Further Benefits

Further benefits in the form of fuel efficiency savings and workshop utilisation will be achieved. These specific savings will be quantified during the prototype evaluation period between September and December 2017.

6.10 Additional Training Requirement

The introduction a new vehicle into the existing fleet will necessitate some user training having to be undertaken. However having awarded the contract to the company who built the LRPs means that many of the cab and pump controls will be identical and so the degree of additional training will be small.

In addition, 95% of the equipment being carried on an RIV is common to a LRP. Therefore, the need for additional equipment training will also be limited.

7. MANAGEMENT CASE

7.1 Introduction

The management case is concerned with the deliverability of the project.

The purpose of this Management Case is to outline the system of governance and controls in place to support the delivery of the Tiered Response project. It describes the governance structures that exist to support the Programme and Project Boards in delivering the project's key aims and objectives. It also outlines the frequency with which governance meetings are convened and the reports that are produced for these groups. Details of the role and responsibilities of the respective members of these groups are provided, as well as a description of the controls and methodologies necessary to guide the successful delivery of the project.

7.2 Role of the Programme and Project Boards

7.2.1 Programme Board

Proactive and visible senior management commitment is absolutely essential for effective Programme Management. The Programme Board is responsible for providing a mechanism to prioritise the projects in line with the business objectives. The Board should create a clear decision-making structure with agreed line of accountability that facilitates swift decision making. Programme Board members should:

- Take effective steps to ensure compliance with the governance and prevent pet projects from being progressed under the Programme 'radar';
- Cascade down the rationale for their decisions to all Programme and Project staff;
- Demonstrate behaviours essential to the success of Programme Management by taking a Programme-wide perspective rather than departmental.

The Programme Board is responsible for investment decisions, defining the direction of the business and establishing frameworks to achieve the desired outcomes. The Board should create an environment in which the Programme can thrive and provide continued commitment and endorsement in support of the Senior Responsible Owner's (SRO) efforts to deliver the strategic objectives.

7.2.2 Project Board

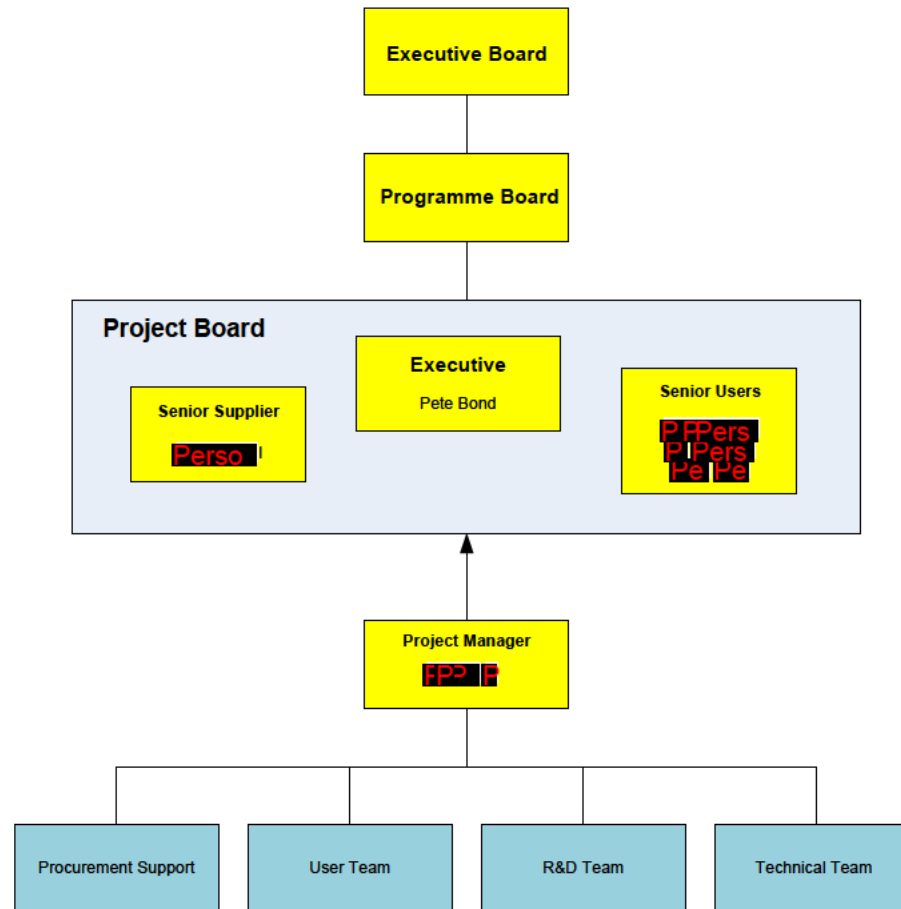
The Project Board is responsible for ensuring that the project remains on course to deliver products to the required quality, time and budget as defined in the Business Case. The Project Board is the project's 'voice' to the outside world and is responsible for ensuring that progress, issues and risks are escalated upwards and the stakeholder communication plan is effectively implemented.

The level of management required will depend on such factors as budget, scope and importance of the project. The Project Board's responsibilities are in addition to the member's normal work, which makes it particularly important that the Project Manager keeps them regularly informed but only asks for decisions at key points in the project.

The Project Board consists of three roles:

- Executive;
- Senior User;
- Senior Supplier.

7.3 Project Governance Structure



7.4 Roles and Responsibilities

7.4.1 Senior Responsible Owner (Programme Board Chair)

The Senior Responsible Owner (SRO) is ultimately accountable for the success of the Service Delivery Programme, of which the Tiered Response Project is part. The SRO is responsible for enabling the Service to exploit the new business environment resulting from the Programme, meeting the new business needs and delivering new levels of performance, benefits and service delivery.

The SRO responsibilities include:

- Owning the vision for the Programme and being its 'champion', providing clear leadership and direction throughout its life;
- Securing the investment required to set up and run the Programme, and fund the transition activities into 'Business as Usual' so the desired benefits can be realised;
- Providing overall direction and leadership for the delivery and implementation of the Programme, with personal accountability for its outcome;
- Being accountable for the Programme's governance arrangements by ensuring the Programme, including its investment, is established and managed according to appropriate requirements and quality;
- Being responsible for key Programme documentation especially the Business Case;
- Managing the interface and communication requirements with key stakeholders;
- Managing the key strategic risks;
- Maintaining the alignment of the Programme to the organisations strategic direction;
- Commissioning and chairing reviews of the Programme;
- Managing and supporting the Programme Manager.

7.4.2 Executive

The Executive is ultimately responsible for the project, supported by the senior users and senior supplier.

The Executive is responsible for:

- Overall Project guidance & strategy compliance;
- Ensuring the Project delivers value for money;
- Representing corporate and Programme management;
- Appointing key personnel;
- Approving and monitoring costs & timescales;
- Project assurance (role vacant);

The Executive chairs project board meetings.

7.4.3 Senior User

The Senior User represents the interests of all those who will use the output of the project.

The Senior User is responsible for:

- Representing user interests;
- Monitoring progress from user perspective;
- Ensuring outcomes reflect user needs;

- Contributing to decisions for proposed changes;
- Ensuring user resources are available;
- Briefing users.

7.4.4 Senior Supplier

The Senior Supplier is accountable for the quality of the products delivered by the suppliers during the procurement stage. The Senior Supplier is responsible for:

- Representing procurement interests;
- Agreeing the objectives for procurement activities;
- Monitoring progress from procurement perspective;
- Committing procurement resources;
- Contributing to decisions on proposed changes;
- Resolving procurement requirements/priority conflicts.

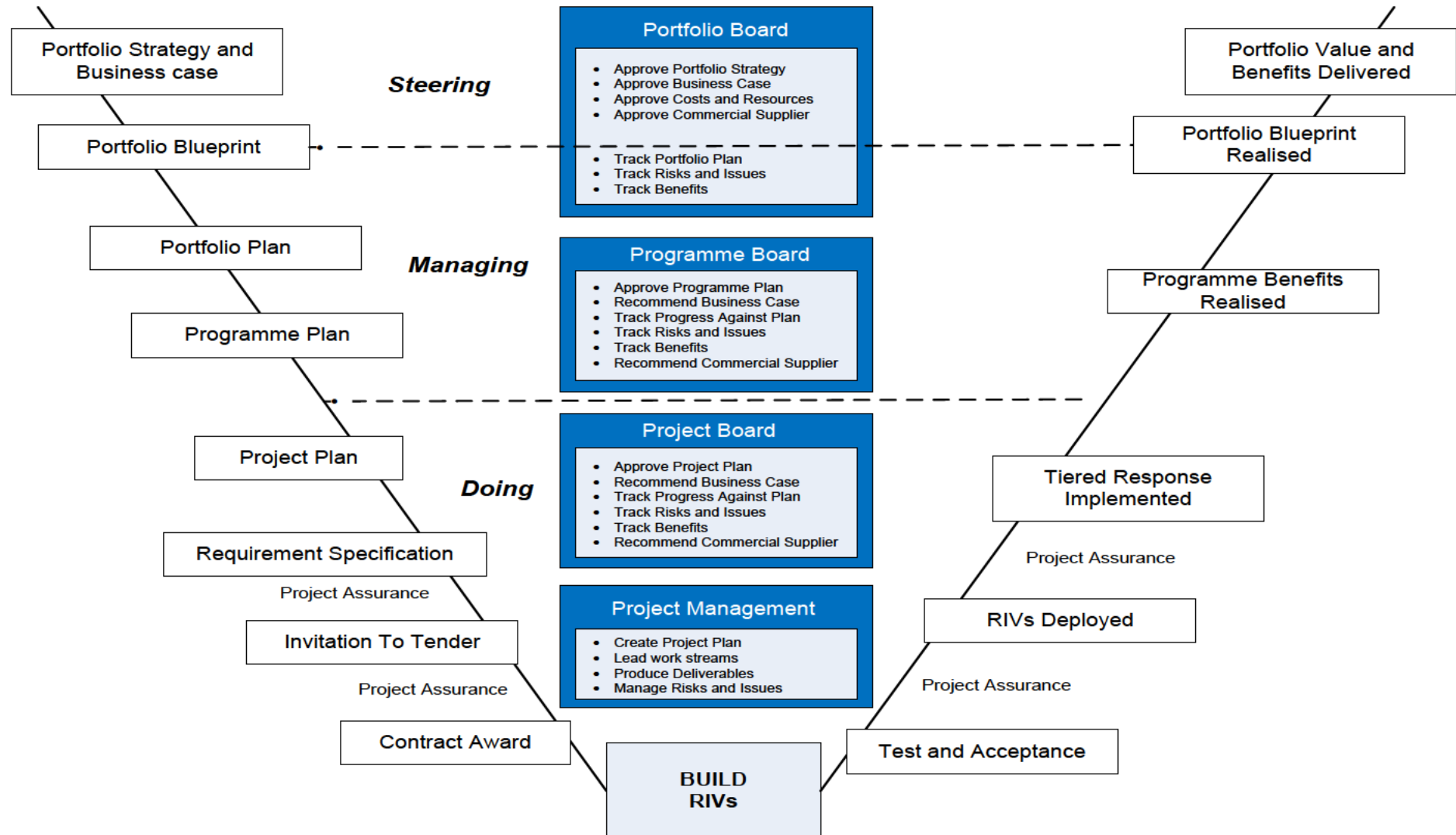
7.5 V Model Framework

The V-Model is a graphical representation of the development lifecycle. It summarises the main steps to be taken in conjunction with the corresponding high level deliverables.

The V-Model represents the sequence of steps in the life cycle that are applied to the portfolio of Programmes and Projects. It identifies the activities and results that have to be produced during analysis, requirement specification, procurement, build and release into live operation. The left side of the 'V' represents the steps needed to identify requirements, and the creation of user specifications. The right side of the 'V' represents integration of all parts of the build and their quality verification. It operates at a cascade of three levels, from Steering to Managing to Doing. It is designed to ensure that:

- The Service Portfolio is clearly articulated in a Blueprint for the Service;
- The Blueprint will be brought into service through a series of Delivery Plans;
- Each Programme and Project is initiated in line with the plan;
- Each Programme and Project delivers its intended scope, to time, cost and quality;
- Each component is tested and properly integrated together before being released into service;
- The Service Strategic Vision associated benefits are realised.

7.6 The V Model



7.7 Controls

7.7.1 Quality Management

7.7.1.1 Quality Policy

The Service Quality Policy will be used as the basis for ensuring this project delivers a quality product. It is designed to provide guidance and direction to the project teams on all aspects of quality.

The Quality Management System (QMS) is built on the principles identified in the Quality Policy.

The successful delivery of the Tiered Response Project will rely on forming customer/supplier relationships. The RIV supplier will have their own QMS. The Service Quality policy is based on implementing a common QMS based on national and international best practice.

7.7.1.2 Quality Management System

The Service Quality Management System (QMS) will be used as the basis for managing project quality. It provides a set of processes and practices that ensure a common sense approach to the management of quality. The system is designed to deliver products that meet and maintain the customers' requirements. The QMS covers:

- Quality review process;
- Assurance process;
- Change management process;
- Configuration process;
- Quality tolerance and acceptance criteria.

7.7.1.3 Quality Review Process

At the core of the QMS is the Quality Review Process. For the Tiered Response Project, the key to success is identifying the characteristics of the RIV and the supporting documentation that makes it fit for purpose.

Quality Review is the process by which the Project ensures that products meet the quality criteria specified for them. The Quality Review process is about examining products to determine that they meet the requirements. The Quality Review process increases productivity by:

- Catching errors early in the development of a product;
- Reducing rework;
- Improving recognition and identification of dependencies across Programmes and Projects;
- Enabling accuracy of the finished product;
- Encouraging the concept of deliverables as team property, rather than belonging to an individual;
- Enabling the monitoring of the use of the correct standards and templates;
- Ensuring that sufficient time is built into Project plans for product reviews.

Standards are drawn from the PRINCE2, Managing Successful Programmes and OGC guidance.

7.7.1.4 Assurance Process

A holistic approach to assurance will be taken to ensure that it encompasses:

- Quality Assurance - creating and maintaining the quality system to ensure its application is effective in achieving the end product that meets quality and customer expectations, in accordance with the Quality Management Strategy;
- Technical Assurance - assessing the solution is compliant with technical and British Standards (BS EN 1846-1);
- Business Assurance - assessing the Business Case and the continued viability of the Project against it; and
- Stakeholder Assurance - assessing the mechanisms and performance of the stakeholder management arrangements.

The activity of quality assurance creates and maintains the Quality Management System (QMS). The activity also monitors the QMS to ensure that it is being operated correctly and that it is producing end products that meet the customer's quality expectations. The quality assurance function is separate and external from the organisation's Project Management and operational activities.

7.7.2 Change Control Process

Changes to requirement specification or scope can ruin a Project unless they are carefully controlled. Change is, however, highly likely. The Service Change Control Process will be used to ensure that any Requests for Change (RFCs) that are raised for a change to a Tiered Response Project over the duration of the Project life-cycle is fully understood, impact assessed and authorised within the appropriate governance structure. The process provides an audit trail for all RFCs that have been implemented.

In general the Change Control Process does not encompass how the outputs from the Project are implemented as a Business Change. This is covered by the Business Change Manager role.

A Project issue may be raised at any time. All issues are captured on the Issue Log. Following an initial assessment two types of specific change can occur:

- A Request for Change – which, for whatever reason, will cause a change to a product. Any additional cost to carry out the change will have to be funded by Service;
- An Off-Specification – covering error or omissions found in the work that has already been undertaken or is planned in the future. Any additional cost to carry out the change will **NOT** have to be funded by DSFRS.

7.7.3 Configuration Management

7.7.3.1 File Naming Convention

The formal file naming convention shall be a plain English description of the product that is then followed by a version number. For example:

Tiered Response Project Full Business Case v0.7

7.7.3.2 Document version Number

The standard lifecycle for a document is:

- Initial Creation;
- Working Drafts;
- Informal Reviews;
- Redrafts;
- Formal Reviews;
- Approval.

It should be noted that even at the initial draft stage; a Security Classification must be applied at the top and bottom of every page and centred.

The method for version numbering to be used is illustrated in the following table:

Status	Version	Review
Initial Draft	v0.01	Informal
2 nd Draft	v0.02	Informal/Formal
3 rd Draft	v0.03	Informal/Formal
4 th Draft	v0.04	Informal/Formal
Approval	v1.00	Formal
1 st Revision	v1.01	Informal/Formal
2 nd Revision	v1.02	Informal/Formal
Approval	V2.00	Formal

The first draft is designated V0.01, and this can be described as the 'Initial Draft' in the Document History. The second draft is V0.02, the third draft V0.03, and so on until the document achieves Sign-off and Approval, at which point it becomes V1.0 and is baselined and published. The Author/Product Owner decides at which points they want to have informal Peer-to-Peer reviews and when formal reviews should take place. A formal review must take place prior to the document being offered for sign-off and approval.

Further modification and development of a product starts with the designation V1.01 and progresses through V1.02, V1.03 etc. until V2.0 is attained (via a Request for Change – see Section 7.7.2).

7.7.4 Issue Management

A Project issue is anything that could have an effect on the Project, For example:

- A change to the requirement;
- A change to corporate direction;
- A problem that was not anticipated;
- A new risk;
- A query.

Managing Project issues involves:

- Capturing and formally logging the issue in the Issues Log;

- Assessing the Project issue;
- Investigating the required action;
- Documenting the action;
- Reviewing the Issues Log on a regular basis.

7.7.5 Risk Management

Managing risk effectively across the Project increases the likelihood of successfully delivering the Project's objectives. The Project will use Management of Risk (MoR) methodology, as the best practice guidance to managing risk. This methodology outlines risk management principles, approach, process and how to embed the process.

The methodology outlines the four high level process steps as:

- Identifying risks in relation to key objectives;
- Evaluating the risks to establish:
 - the probability of the risks occurring;
 - the potential impact if the risks did occur;
 - the organisation's attitude to the risks in terms of willingness to accept them or not.
- Deciding what to do about the risks – transfer, tolerate them or mitigate the likelihood of them occurring;
- Monitoring the situation and regularly reporting.

Managing risk also involves escalation through the Project Board and Programme Board levels.

7.7.6 Stakeholder Management

Stakeholder management is a vital component to running a successful Project. Stakeholder Management is designed to ensure proactive communications, consistency of language and the reduction in the number of obstacles placed in the way of the Project. It is vital that the Project team understand the stakeholder's objectives, goals and needs.

The approach to stakeholder management will be to:

- Define the goals of the Scheme;
- Identify the stakeholders;
- Map identified stakeholders against influence on the desired outcome and involvement in the Project;
- Understand the stakeholders needs;
- Develop a stakeholder and communication plan;
- Manage and review the map, plan and stakeholder engagement against the Project goals.

7.8 Benefit Realisation

7.8.1 Benefits Realisation Strategy

The Service is forecasting to deliver a range of quantified and un-quantified benefits to stakeholders across the Service and to members of the public. The benefits that have been identified will be realised through the delivery of new Rapid Intervention Vehicles and a re-alignment of the existing fleet.

The majority of the Project's benefits can only be fully realised once all elements of the Tiered Response approach are in place; therefore, attributing these benefits to individual tiers is inappropriate, because any one tier on its own delivers only a part of the infrastructure which is needed in its entirety for the benefits to be realised.

Analysis has produced a Benefits Model that provides a logical linkage between capabilities implemented by individual tiers and Service strategic objectives.

7.8.2 Benefits Realisation Plan

The Benefits Realisation Plan (BRP) is an evolving document; the Benefits Manager should start drafting the BRP during the benefits planning Stage and it should generally be finalised before the Project proceeds into implementation. The BRP should be included as an Annex to the Full Business Case (FBC).

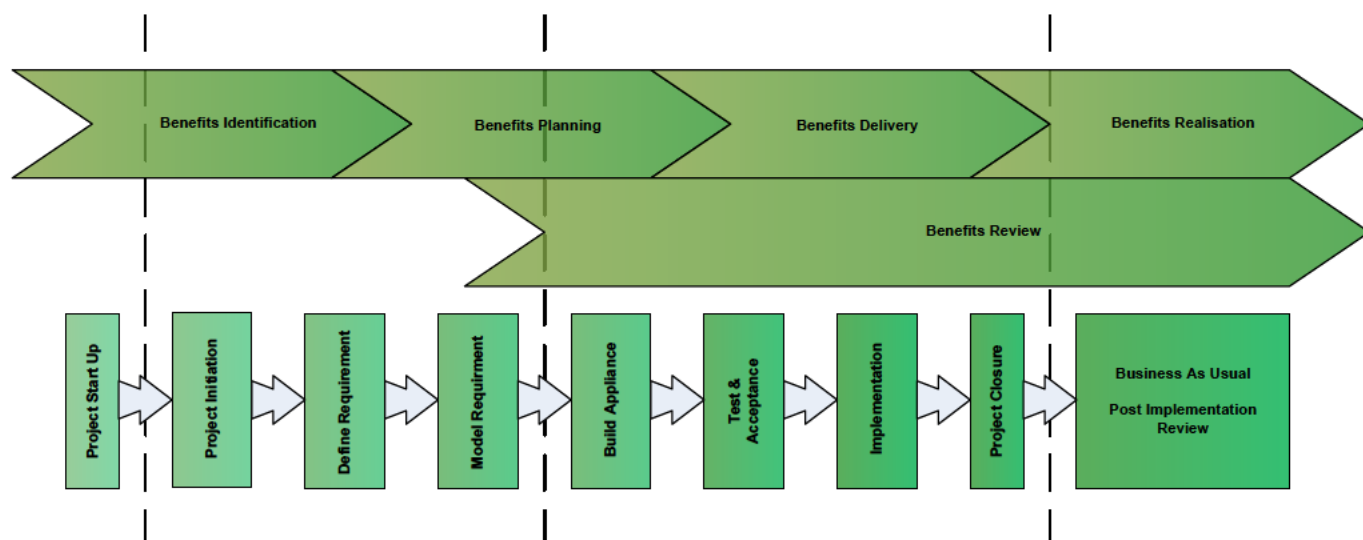
The BRP is separate from the Project delivery plan, but the two need to be closely linked to ensure that the business changes and Project milestones / deliverables are aligned. This alignment is critical because once the Service or capability is implemented; the BRP continues and stays live beyond the end of the Project until such time that the benefits have been realised to the satisfaction of the business.

It is recommended that the Benefit Realisation Plans should contain the following minimum level of information:

- A map of the anticipated benefits and how these build up over time;
- Benefits monitoring and measurement methods - the method to be used to measure benefits realisation, which will vary according to the type of benefit being realised (i.e. different measurement methods will be employed for performance benefits versus financial benefits);
- Review mechanisms, including appropriate milestones when benefit reviews should be carried out;
- On-going benefits tracking and reporting process, which will outline what benefits realisation information is to be provided to the Service and how often the information is required;
- Planned Benefit Review dates and involved stakeholders;
- Corrective action processes to address under-realisation of forecast benefits;
- Governance structures, roles, responsibilities and accountability for delivering benefits;
- The assumptions and risks underpinning the realisation of benefits;
- Details of handover activities to sustain the benefits realisation process after the Project has finished;
- Details and responsibilities for realisation beyond the closure of the Project.

7.8.3 Benefits management lifecycle and approach

Benefits Management is a continuous process that starts when a new idea or business need has been identified and continues beyond the formal closure of the Project. A summary of each benefits management "activity", mapped to the high-level Project management lifecycle, is outlined below.



7.8.4 Benefits Identification

Benefits identification is an iterative and on-going process. During the Project Start-Up stage, an assessment is made to identify how the Project contributes to the Service strategic and business objectives.

The strategic fit and anticipated benefits of the Project have been identified, now the benefits need to be mapped to capabilities, enablers, business changes and strategic outcomes via the creation of Benefits Dependency Networks (BDN); and the anticipated benefits should be documented.

7.8.5 Benefits Planning

During Project Start-Up and Initiation, the benefits are identified in the Outline Business Case (OBC).

Benefits profiles, which describe aspects of the benefit such as ownership and measurement, should be created. A Benefits Realisation Plan - detailing who is responsible for benefits management, where the benefits will be realised and when realisation will occur - should also be drafted during this stage.

7.8.6 Benefits Delivery and Benefit Reviews

As the Project moves through the Project lifecycle and the scope and delivery plan are further defined, the Benefits Profiles and Benefits Realisation Plan should be refined and updated (and any revised measurement details and forecasts should be fed into the relevant cases of the Full Business Case (FBC)).

Regular reviews and on-going monitoring of benefits should be conducted during the execution and implementation of the Project. The reviews should analyse the original benefit assumptions and forecasts and the progress towards realisation.

At Project Closure a formal benefits review should take place, in conjunction with key stakeholders, to evaluate the level of benefits achieved and identify any further benefits that can be realised by the delivered capability or service. This information should be formally recorded in the End Project Report, which will also detail on-going benefits realisation activities and plans for Post-Implementation Review activities.

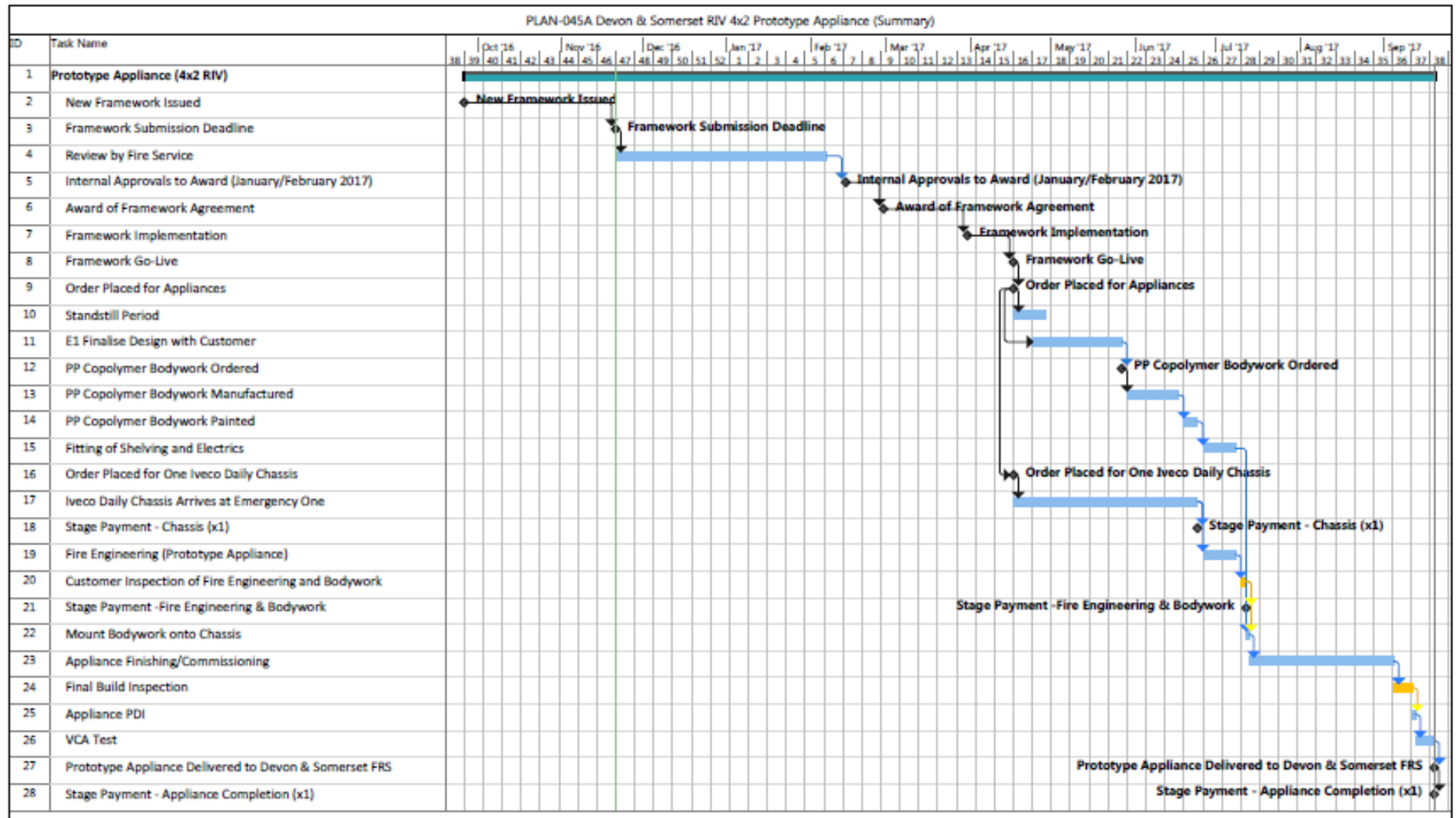
7.8.7 Benefits Realisation

During the benefits realisation stage (which will continue until the benefit becomes “Business As Usual”), post-implementation reviews should be held to examine ways of maximising benefits and minimising costs on an on-going basis. The information collated during post-implementation activities will be incorporated into a final Benefits Realisation Report.

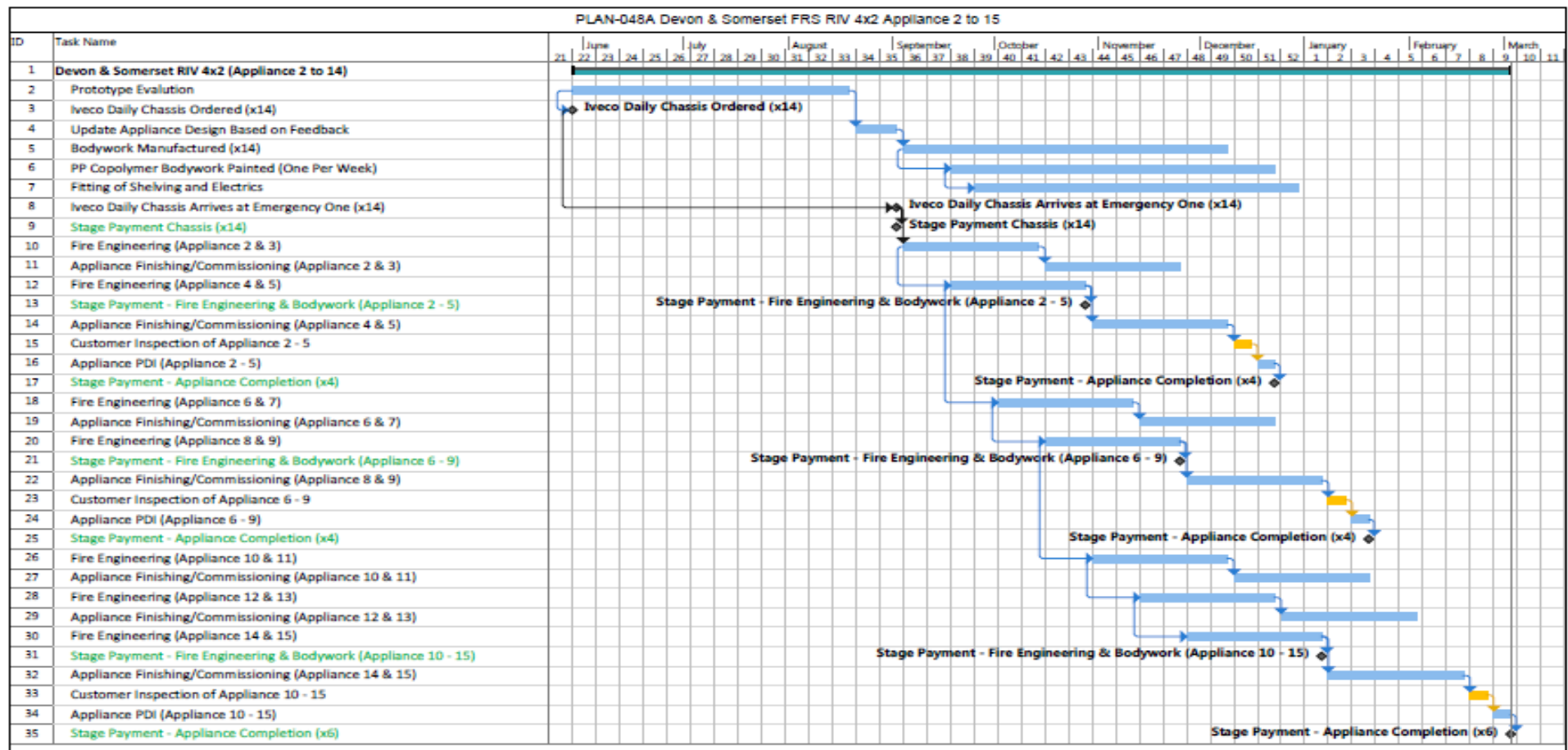
7.9 RIV Delivery Plans

The first plan covers all the activities and products needed to build the initial RIV as a prototype. The second plan covers the delivery of production RIVs in 2017/18 financial year.

7.10 RIV Prototype Delivery Plan



7.11 RIV First Year Roll Out Plan



8. ANNEX A

8.1 RIV Contract Award Recommendation Report



DS199-16 DS224-17
RIV Contract Award