

WORKING together

Emergency Services Collaboration Programme

Business Case Integrated Fuel Management System

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Date: December 2015

Doc Name: Integrated Fuel Management System

Version: Draft (v0.06)

Date	By	Decision
	<i>ESCP Strategic Board</i>	

Document Control

Change Control

Version	Date	Author(s)	Summary of Changes
Draft v0.04	01 December 2015	M Shannon	First circulated draft
Draft 0.05	16 December 2015	M Shannon	Revised draft including feedback
Draft 0.06	18 December	M Shannon	Further revisions

Approval Authorities (For Approval Versions Only)

Name	Position	Signature	Date	Version

Distribution

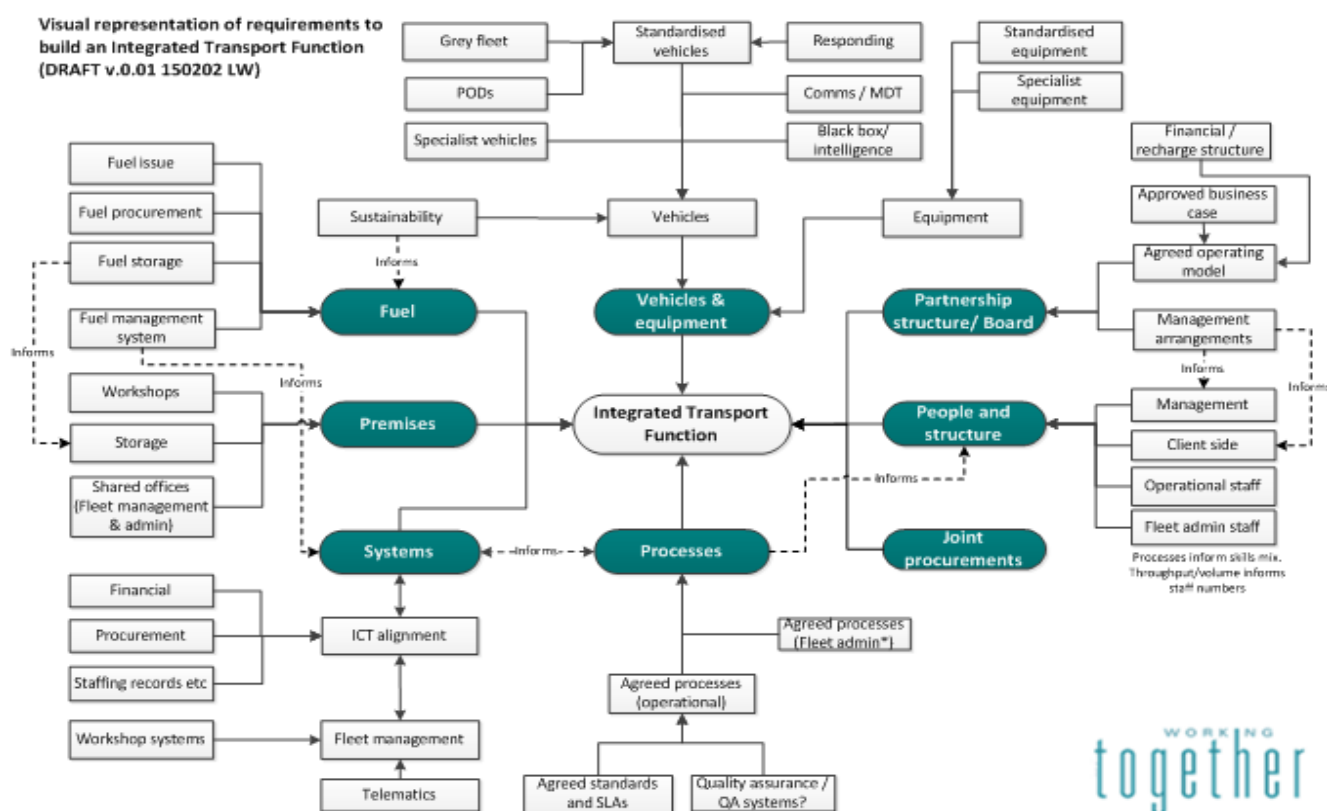
Name	Position	Date	Version

Document Control	1
Change Control.....	2
Approval Authorities (For Approval Versions Only).....	2
Distribution	2
1. Purpose and strategic context – What are we trying to achieve and why? ..	4
2. Background – Where are we now?	6
3. Proposal – How do we get there?	7
4. When will the proposal be delivered and what are the key milestones? ..	13
5. What are the options?	13
6. Preferred option	15
7. What are the costs, benefits, dependencies and assumptions?	15
8. What impact will the proposal have and what are the risks?	21
9. Conclusion.....	22
10. Appendix.....	23

1. Purpose and strategic context – What are we trying to achieve and why?

- 1.1 This business case is the first in a series of linked initiatives enabling the collaboration and integration of the Transport functions of 'blue light' partners involved in the wider Emergency Services Collaboration Programme (ESCP), across Surrey and Sussex.
- 1.2 The ESCP is an integral part of the public service reform agenda and its activities are aligned to the recently published prospectus on Devolution from the three Southern Counties (3SC). These transformational plans provide the opportunity for the emergency services partners to work closer together, improving service to the public, reducing costs, increasing resilience, reducing overlap and responding to the changing pattern of demand. The work of the ESCP is also aligned to the proposed statutory duty for further collaboration planned for introduction in early 2017 as set out in the Government's Spending Review 2015.
- 1.3 The activities of the ESCP are wide ranging and include; improving contact, control and dispatch arrangements, joint operational and support capabilities including the Integrated Transport Function (ITF) Programme, whose Programme Delivery Board sponsor this business case.
- 1.4 The ITF Programme will ensure that, through collaboration, the current and future transport needs for emergency services across Surrey and Sussex are met by improving delivery of services in an affordable, efficient, resilient and sustainable manner.
- 1.5 It is acknowledged that partners have differing levels of commitment or ability to integrate these Transport functions. However, the Programme strategy will allow for differences and enable partners to engage and integrate in a way and to a level suitable to meet the needs of their organisation wherever possible. This collaboration is one of the first and most comprehensive of its type in the UK to date.
- 1.6 Partners of the ITF were awarded £5.96m as a result of a joint bid into the Fire Transformation Fund (FTF) in Summer 2014, to support the work of the ITF Programme Delivery Board as described in the ITF strategy. Whilst Surrey Fire and Rescue Service took the lead on the bid, and are acting as banker, the syndicated bid was awarded to all three Fire Authorities across Surrey and Sussex.
- 1.7 Financial governance arrangements for the FTF have been established and meet the terms and conditions set out by the Department of Communities and Local Government. These have been assessed by Surrey County Council Audit who concluded that 'it is thorough and suitably detailed'. Each partner agency also reports in to its own internal governance and is accountable to the relevant government department for their service. The programme also reports back to the Public Sector Transformation Network.
- 1.8 This proposal represents one of the first opportunities to mobilise the ITF Programme strategy, approved as a working document at Strategic Board in September 2015, embedding the agreed principles of transport integration as well as informing other key work-streams in the Programme.

- 1.9 The activities within the ITF Programme have been informed by a series of externally commissioned studies designed to understand the makeup of partners Transport functions and to identify areas where collaboration and/or integration would be of benefit. These include but are not limited to, all infrastructure (people, premises and systems), supporting the procurement and commissioning, preparation, servicing, maintenance and repair or disposal of the fleets.
- 1.10 The diagram below shows the full extent of the activities within the Programme and how the fuel related work-streams are linked to and inform other aspects of the Programme. It is important to note that whilst the proposal in this business case can be delivered independently, it supports and enables a wider inter-linked series of activities.



- 1.11 The proposal is to invest c.£409,000 (less than 7%) from the FTF to deliver an integrated fuel management system between partners involved in the ESCP.
- 1.12 As a first step to integrate fuel activities, all partners have been included on a National framework let by the Crown Commercial Service (CCS) to purchase bulk fuel at the best possible price.
- 1.13 The next stage and the basis for this proposal is to develop a resilient joint capability that enables partners to have self-service, 24/7 shared access to bulk fuel, using a more efficient, standardised system at reconfigured bulk fuel sites across the Surrey and Sussex region.
- 1.14 This capability will be delivered by; procuring bulk fuel at the best possible price, investing in infrastructure, adjusting bulk fuel site access arrangements as well as amending invoicing,

data and reporting processes.

- 1.15 The proposed changes are also designed to enhance fuel resilience and will have no detrimental impact on each partners' business continuity arrangements. i.e. the continuous provision of bulk fuel. Local Resilience Forums are recognised as a key stakeholder as part of the change process.
- 1.16 The required investment will be partially offset by the savings made through the avoidance of future capital and revenue expenditure to maintain and/or remove life expired bulk fuel infrastructure. As well as by purchasing bulk fuel at a cheaper rate from joint contract frameworks, by increasing the percentage of bulk fuel that is used, through shared use of sites, as litre for litre, it is cheaper than fuel purchased at forecourts.
- 1.17 It is anticipated that there will be a number of phases to this work and whilst the final solution, if approved, is planned to be in place by Q1 2017/18, many aspects of the functionality will go live during 2016/17.
- 1.18 Surrey and Sussex Police currently operate an integrated fuel management system and the contract for this expires in March 2016. They are committed to replace this system, to go live by April 2016. The proposal is to include other ITF partners in the scope of this procurement exercise to enable the establishment of the wider fuel management system, aligned to this time frame.
- 1.19 Whilst the recommended option will, over time, reduce revenue costs and consolidate future capital spending on fuel infrastructure, it is the alignment, integration and ultimately the standardisation of fuel systems across the partners; that is the primary justification for the required investment from the FTF.
- 1.20 In terms of the levels of commitment to this work, all ITF partners are committed to procuring fuel at the best possible price. However, SECAMB has specific operational arrangements which preclude their involvement in the reconfiguration of, and some elements of shared access to, bulk fuel sites.

2. Background – Where are we now?

- 2.1. All partners within the ESCP have different processes in place for the procurement and management of their fuel. With a collective annual fuel expenditure of c.£9m, (including retail fuel card purchases).
- 2.2. A detailed analysis has been undertaken by partners to review the current bulk fuel tank capacity, location, condition, security & access arrangements; to assess options to rationalise bulk fuel sites and to review current processes related to fuel management. The approach consisted of a series of site visits, meetings with key personnel and data gathering from across all partner organisations. See section 10, appendices 1 & 2.
- 2.3. The analysis found that there are different systems and infrastructure in use, ranging from a fully integrated system with electronic monitoring of each vehicle's use, linked to a financial management platform with modern bulk fuel tanks and pumps; to manual, paper based

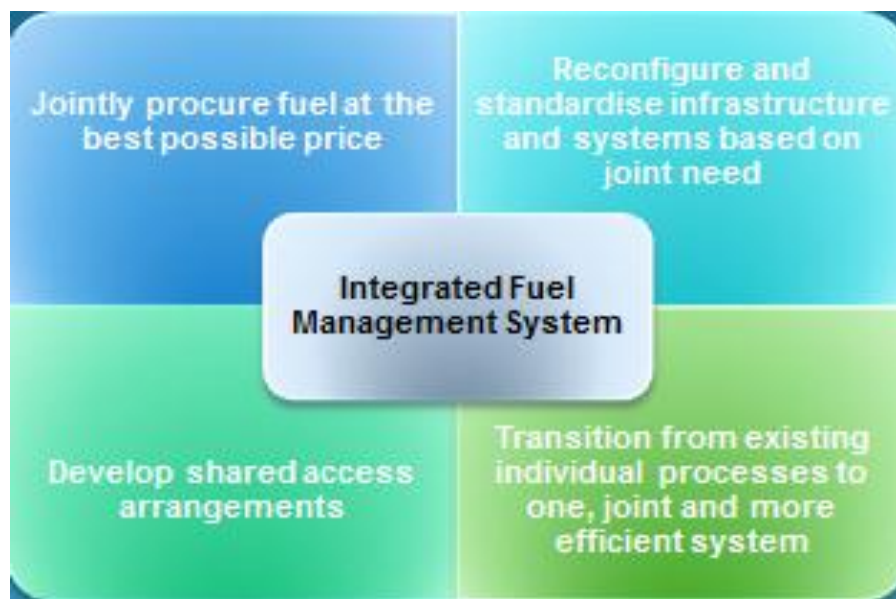
monitoring processes with tanks and pumps that will soon need to be replaced.

- 2.4. It also found that there are 70 bulk fuel tanks currently in use of varying sizes with a total capacity of over 860,000 litres. A number of these are either close enough to each other to warrant exploring their closure or, due to their condition, will ultimately need to be replaced by individual partners.
- 2.5. Another element of this work was to demonstrate to partners how an integrated fuel management system could be of benefit. Surrey and Sussex Police currently operate an integrated system and all partners have attended demonstrations of this system to better understand its functions.
- 2.6. This analysis has formed the basis for the changes that are needed to reconfigure the bulk fuel sites and associated systems to enable joint use.
- 2.7. In addition to the analysis and since October 2015, partners have had access to a joint contract framework that enables them to purchase bulk fuel at the best available price. (set out in section 7) All partners also use 'All-star' fuel cards procured through a CCS contract – a key component of an integrated fuel management system.
- 2.8. Whilst SECamb are involved in the joint procurement of fuel and will review the impact of the proposed shared access arrangements across other partners; they have separate operational requirements to access fuel at 'Make Ready' sites. This operational model involves vehicles not only re-fuelling but also being cleaned and restocked as well as defects being repaired. These elements are undertaken in turn at pre-determined times; crucially not by operational (clinical) staff. SECamb are therefore not involved in the reconfiguration of bulk fuel sites.
- 2.9. The proposed transitional arrangements to establish the new integrated fuel system with the remaining partners (set out in section 3.7 and 3.8) will review how best to accommodate any potential additional demand at shared sites from SECamb.
- 2.10. In light of SECamb's operational decision, the fuel sites analysis was subsequently re-worked reducing the remaining number of bulk fuel tanks in scope to 56, reducing the overall bulk fuel capacity in scope to 584,538 litres.
- 2.11. At the ESCP Strategic Board in September 2015, a business case summary paper set out an outline of the plans to develop an integrated fuel management system across ITF partners. Whilst this paper provided a good overview of the general direction of travel, the subsequent analysis has further informed and developed the understanding of the indicative costs and the way in which a viable solution can be delivered - providing the basis for the proposal in this business case.

3. Proposal – How do we get there?

- 3.1. This section sets out an overview of **what** the key elements are and **how** it is proposed to deliver this capability. Section 4 sets out **when** the phases and key milestones are planned to be delivered.

- 3.2. To reiterate the overview in section 1, the proposal is to develop a resilient joint capability that enables partners to purchase bulk fuel at the best possible price and to provide shared access to this, using a more efficient standardised system, at reconfigured bulk fuel sites across the Surrey and Sussex region.
- 3.3. There are a number of elements required to deliver the new capability, some of which have already begun and others are proposed to be delivered during 2016/17 with the final solution, if approved, anticipated to be in place by Q1 2017/18.
- 3.4. There are 4 key elements;



3.5. Jointly procure fuel at the best possible price

- 3.5.1. In October 2015 a CCS framework for purchasing bulk fuel went live. All ITF partners are named on the contract, giving access to the best available market price.
- 3.5.2. Moving from the existing bulk fuel contracts onto the CCS framework will generate financial savings. These will contribute towards the investment required to fund the changes to the infrastructure that are needed to enable an integrated fuel management system.
- 3.5.3. In addition to this, the latest available figures from 2014/15, (see section 10 appendix 3) show that 44% of all fuel is purchased as bulk fuel. These figures also show that during 2014/15 bulk fuel was on average 1.5 pence per litre cheaper than fuel purchased on a forecourt.
- 3.5.4. Enabling staff to have shared access to bulk fuel sites across the region is one of the key drivers in reducing the percentage of (more expensive) fuel being purchased at forecourts. As part of the integrated fuel management system, fuel cards will be assigned to each vehicle. The data from these can then be used as a control point to help manage fuel purchasing behaviours, and therefore reduce costs. Influencing a change in behaviours i.e. managing excessive use of fuel purchased at forecourts vs available bulk fuel sites, will however need to be driven by individual partners' operational management teams.

3.5.5. The table in section 7.3 sets out the potential savings for this element of the proposal.

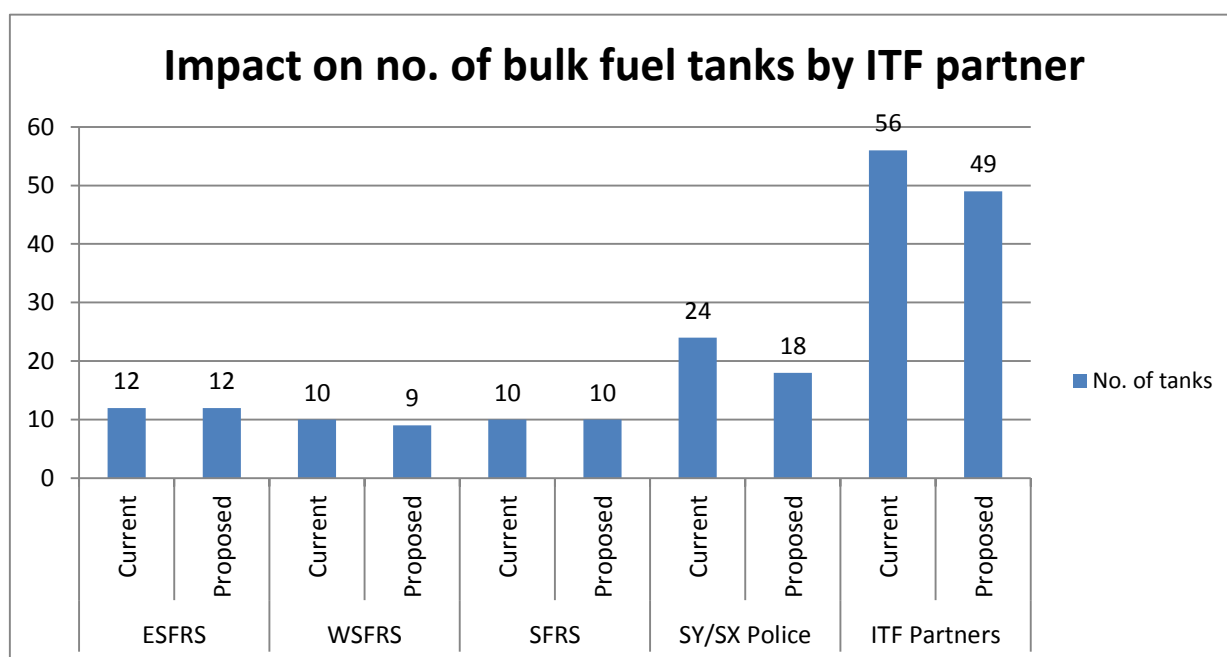
3.6. Reconfigure and standardise infrastructure and systems based on joint need

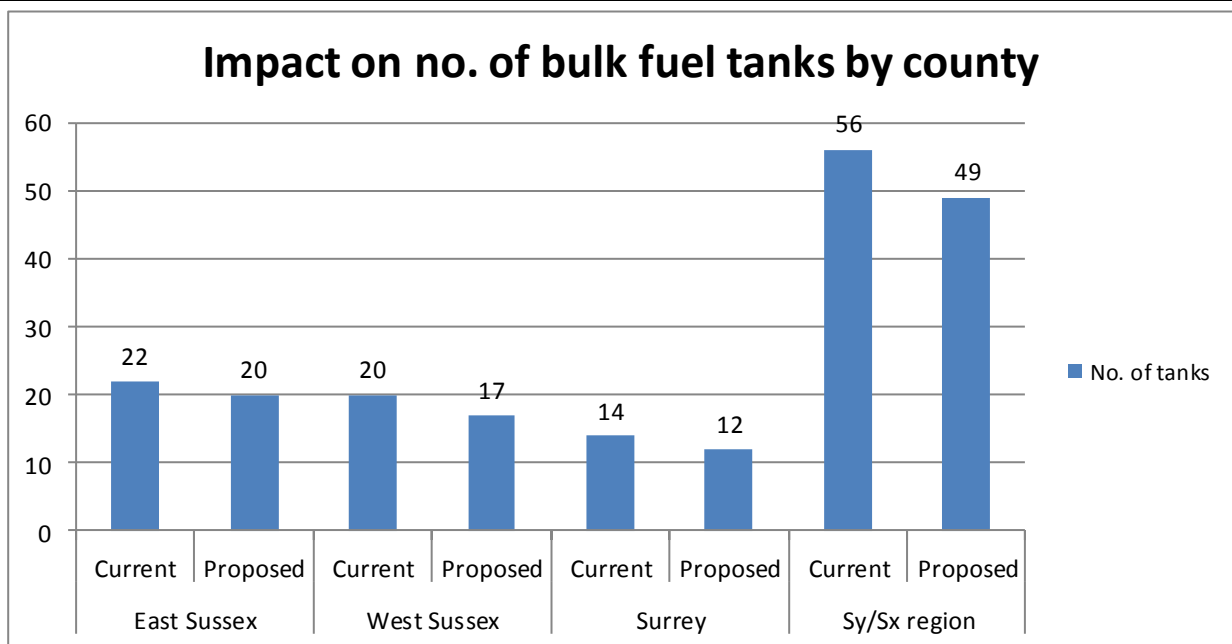
3.6.1. A key element of the analysis described in section 2 was to establish what the future joint configuration of bulk fuel sites needs to be in an integrated fuel management system. This included an assessment of which tanks could be closed due to their proximity to others. It also reviewed the overall capacity requirements, resilience needs and which upgrades are required to the infrastructure. For a full breakdown, see section 10, appendix 2.

3.6.2. The proposed changes will reduce the number of bulk fuel tanks and their capacity. However standardising, electronically linking and improving access to the remaining sites will enable staff to access fuel at a better price, more often and at more sites.

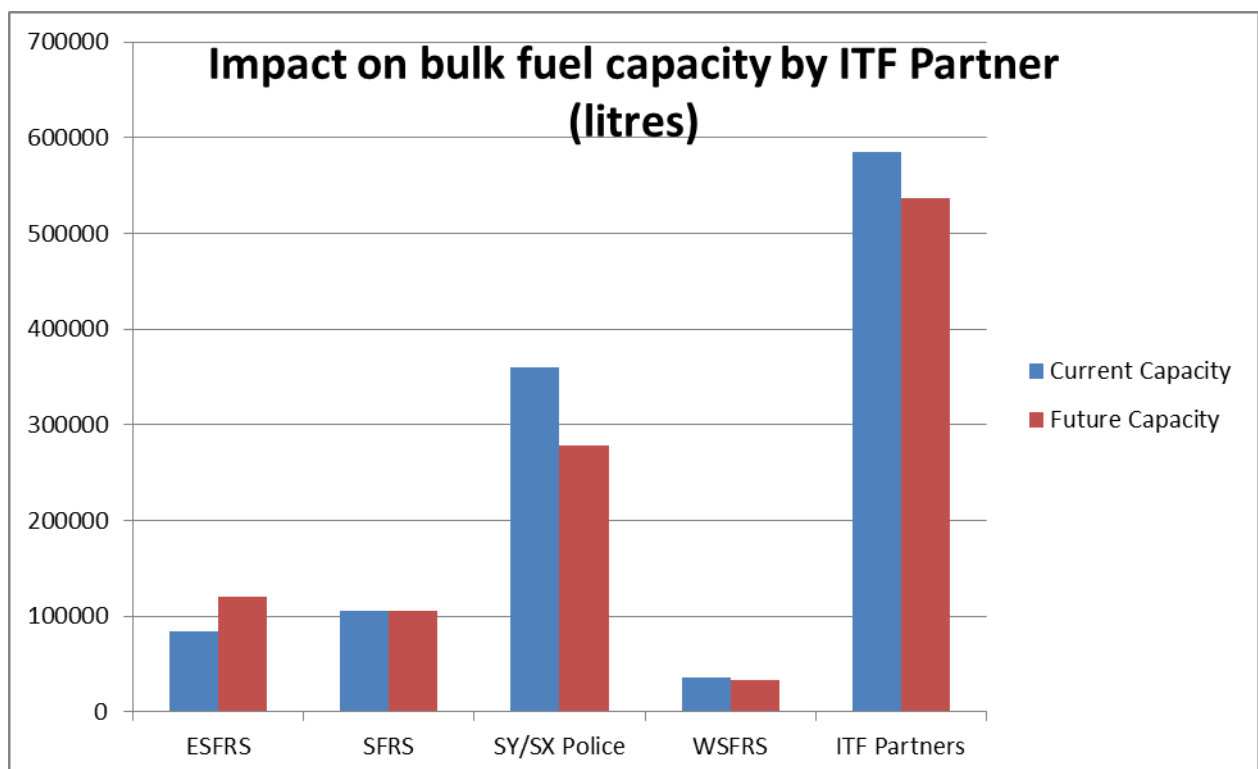
3.6.3. All planned changes are taken in view of maintaining or enhancing resilience. This includes maintaining sufficient reserve stock levels, enabling 24/7 access at more sites and enhancing supply chain management through improved re-ordering processes.

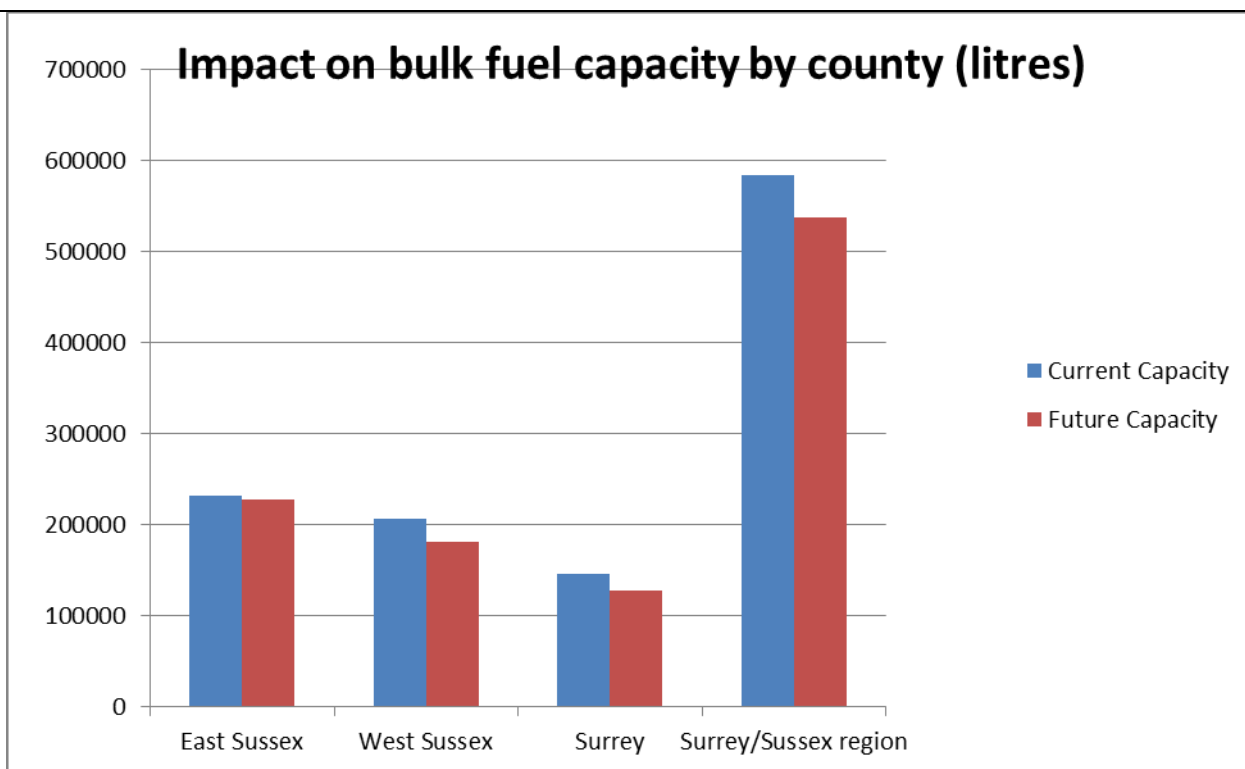
3.6.4. Number of bulk fuel tanks: The first graph below shows the proposed reduction of bulk fuel tanks by individual partner and that the total number will decrease from 56 to 49, an overall reduction of 7. The second graph shows how this reduction is spread over the 3 county areas.





3.6.5. Bulk fuel tank capacity – The first graph below shows, by partner, the proposed changes to capacity - with an overall reduction of 8.16% (47,749 litres). The second graph shows how this is spread over each county area and that whilst ESFRS have an increased bulk fuel capacity within their tanks; there is a small net decrease across East Sussex due to the reduction of Police capacity.





3.6.6. The analysis, set out in section 10, appendix 2 also shows the requirements to upgrade and standardise the other components of the infrastructure for the reconfigured bulk fuel sites. Each partner has differing requirements in terms of the changes that are needed, ranging from sites being decommissioned and closed, to new tanks and pumps being installed as well as installing the associated components to electronically link and monitor use. These requirements are summarised in table 1 below.

Table 1

Organisation	Bulk Fuel Tanks							Additional Infrastructure Requirements*		
	Current Number	Alteration to tank		Future Number	Tank Capacity (litres)			Controller Unit	Fuel Pump	Tank gauge
		Close	Replace		Existing	Proposed	Change +/-			
East Sussex FRS	12	0	12	12	83500	120000	36500	12	12	12
Surrey FRS	10	0	0	10	105600	105600	0	10	9	9
Surrey & Sussex Police	24	6	0	18	360073	278097	-81976	18	0	0
West Sussex FRS	10	1	0	9	35365	33092	-2273	9	0	9
Total for ITF Partners	56	7	12	49	584538	536789	-47749	49	21	30
*there are some further ancillary items required - these are set out in section 7										

3.6.7. In summary, these proposed changes will see 7 bulk fuel tanks closing, reducing the total number from 56 to 49 and 12 of the remaining 49 tanks will need to be replaced. There is then a varying requirement to upgrade the other associated components at each of the 49 sites to the standard needed to operate an integrated fuel management system.

3.6.8. The proposed changes in this section (3.6) inform the total cost of delivering the integrated fuel management system and these are set out in section 7.

3.7. Develop shared access arrangements

3.7.1. This element of the proposal relates to the need to allow partner organisations access to each-others' bulk fuel sites. Whilst the initial analysis of the proposed 49 sites has not identified any insurmountable issues, a site by site assessment will be undertaken in advance of the infrastructure changes to assess and define the following issues:

- ✓ Size of vehicle – large fuel tankers already access the majority of sites but the requirements of the largest vehicles across partners fleets will need to be re-confirmed.
- ✓ Fuel deliveries/maintenance – There are a variety of operational processes in place to manage the delivery of fuel and maintenance of fuel sites – these will need to be re-assessed and aligned in light of the proposed changes.
- ✓ Liabilities/insurance – If errors, accidents or thefts occur when partners are using other bulk fuel sites, the process for how this is managed will need to be clearly defined.
- ✓ Security – Current security arrangements will need to be re-assessed in advance of partners accessing other bulk fuel sites.

3.8. Transition from existing individual processes to one, joint and more efficient system

3.8.1. The final component of the proposal relates to the administration and management of the delivery, usage, invoicing and payment for bulk fuel.

3.8.2. The central feature of an integrated fuel management system is the reduction and automation of administration and management processes. This is a key component of this proposal as it is recognised that ITF partners currently have a wide range of manual processes that this system would need to consolidate into one, integrated process.

3.8.3. Surrey & Sussex Police currently operate an integrated fuel management system and have developed processes for Sussex Police to 'lead' the administration of the system on behalf of Surrey Police, creating a customer/supplier relationship.

3.8.4. This arrangement essentially means that Sussex Police (the supplier), monitor the use of fuel via the fuel management software and fuel cards and recharge Surrey Police (the customer) for their actual use. The re-ordering of bulk fuel is also monitored and administered by Sussex Police.

3.8.5. The Surrey & Sussex Police fuel management system is also linked to their financial management platform (SAP) which enables transactions to be invoiced and processed in line with actual use.

3.8.6. The proposal, ultimately, is to get to a position where ITF partners can, as far as possible replicate this system. However there are key differences and challenges when applying this system across the ITF partner organisations.

3.8.7. The key issue is that there needs to be one, 'lead' partner identified to administer the system.

3.8.8. The way the system works means that only the 'lead' partner would have access to the fuel management software. Under the proposal and where possible this will be linked to other partners' financial management platforms for invoicing and payment. Where this is not possible transitional arrangements will need to be established.

3.8.9. The 'customer' partners would rely on the 'lead' partner to monitor the levels of fuel in the bulk fuel tanks and place orders on the partner's behalf for fuel deliveries. This in turn raises complex questions around how orders for fuel are paid for, who would actually own the fuel as well as issues around insurance liabilities, the impact on resilience plans and alike. These issues will be explored as part of the proposed solution.

3.8.10. The proposed approach to manage all these issues is to develop a plan and working groups to transition from the existing individual arrangements to new, integrated processes and systems. And to do this in a way that will allow the joint capability of shared access to bulk fuel to progress alongside these transitional arrangements.

3.8.11. The key elements of these transitional arrangements are;

- ✓ Process map all existing systems & processes
- ✓ Develop a transitional intra-partner invoicing process
- ✓ Develop a transitional bulk fuel ordering process
- ✓ Review and establish links to financial management platforms (i.e. SAP etc.)
- ✓ Review and establish links to fleet management platforms
- ✓ Establish if one, 'lead', partner can be enabled to purchase and order fuel for all partners

4. When will the proposal be delivered and what are the key milestones?

4.1. The overall final solution is planned to be in place by Q1 2017/18.

4.2. The shared access and transitional arrangements for existing processes will, if approved, need to begin to be reviewed from January 2016.

4.3. Communications and stakeholder engagement will need to begin in early 2016.

4.4. The infrastructure changes will begin from Q1 2016/17 and are anticipated to take a minimum of between 9 and 12 months to implement.

4.5. This will enable the first shared access to bulk fuel sites from Q2 2016/17 onwards.

4.6. The initial project plan, with indicative timeframes attached below.



Integrated fuel
system - delivery plan

5. What are the options?

5.1. This section sets out the 3 available options for change, providing a summary and analysis of their impact.

5.2. Option 1 – Procure bulk fuel from the same source

5.2.1. This is effectively the 'do nothing' option as this element has been delivered.

5.2.2. All partners would continue to procure fuel independently, but from the same contract at the

same given price per litre. There would be no changes to the current bulk fuel site numbers, locations or management arrangements.

5.2.3. There would be no additional costs for the procurement of fuel, no opportunity to avoid maintenance costs for the 56 bulk fuel tanks or the current costs for managing fuel within each partner's organisation.

5.2.4. The key benefit for option 1 is the savings generated by procuring fuel via the same contract. Whilst this contract went live in October 2015, partners will only be able to purchase fuel at the lower price following the expiry of their existing contracts.

5.2.5. Table 3 in section 7.3 shows the usage, reduced price per litre of bulk fuel under the new contract and the associated projected savings.

5.3. **Option 2 - Procure bulk fuel from the same source and rationalise bulk fuel sites**

5.3.1. Under this option all partners would use Option 1 to procure bulk fuel. Partners would also reduce the number of bulk fuel tanks and share access to them but continue to store and issue fuel using existing processes. As the existing processes for managing fuel would remain, no savings from reducing manual processes would be realised.

5.3.2. The analysis in section 10, appendix 2 shows that, if partners were able to share access to bulk fuel sites, 7 tanks could be decommissioned at a cost of £35,000 (@ £5,000 per site).

5.3.3. Each partner would reduce their requirement to provide and maintain fuel storage facilities for all partners to use.

5.3.4. Other than the lack of maintenance required on the redundant sites, no further financial benefit would result from implementing this option.

5.3.5. Due to the reduced number of tanks the risks of environmental issues is also reduced.

5.3.6. The operational benefits associated with sharing bulk fuel sites in this option would be outweighed by the overly complex arrangements needed to manage the administration related to partners using each other's sites through existing systems and processes.

5.4. **Option 3 – Combine options 1 & 2 and introduce an integrated fuel management solution**

5.4.1. This option combines options 1 & 2 but also, through the development of transitional arrangements, will introduce an integrated fuel management system, using common fuel cards.

5.4.2. It will deliver a resilient, joint capability that enables partners to purchase bulk fuel at the best possible price and to provide shared access to this, using a more efficient standardised system, at reconfigured bulk fuel sites across the Surrey and Sussex region.

5.4.3. Surrey and Sussex Police have offered to act as the 'lead' partner managing the administration of the system.

5.4.4. A plan will be developed to address any issues related to shared access

5.4.5. Interim arrangements will also be established to manage the transition to one, 'lead' partner

administering the system.

5.4.6. This option requires an investment of c.£409,000 to reconfigure the infrastructure and upgrade the associated systems needed to operate an integrated fuel management system.

5.4.7. Delivering option 3 is the first step, and would act as a catalyst towards, the wider integration of the partners transport functions in line with the ITF Strategy.

5.5. Options Overview. The attached document sets out a comparison of the options in section 5.



Options Summary
v.2.docx

6. Preferred option

6.1. **Option 3** is the option recommended by the Integrated Transport Function Delivery Board, providing shared, rationalised bunkers and an integrated fuel management solution across the partners engaging in this work.

7. What are the costs, benefits, dependencies and assumptions?

7.1. Option 1

7.1.1. Cost - No investment required.

7.1.2. Cashable benefits - Projected savings of c.£13,000 per annum from procuring fuel from a joint contract framework.

7.1.3. Non cashable benefits

- This option is limited to cashable benefits only.

7.2. Option 2

7.2.1. Cost - £35,000 for bulk fuel tank decommissioning (7 sites @ £5,000 per site.) The decommissioning requirements are set out in the analysis in section 10, appendix 2.

7.2.2. Cashable benefits - Projected savings of c.£13,000 per annum from procuring fuel from a joint contract framework and by year 2, a c.£14,000* saving by increasing the use of bulk fuel vs fuel purchased at forecourts. These calculations also form part of option 3 and are set out under section 7.3. *Whilst this saving is achievable in this option, it is at risk due to the overtly complex nature of leaving partners individual processes in place.

7.2.3. Non-cashable benefits

- Each partner would reduce their requirement to provide and maintain fuel storage facilities for all partners to use.
- Due to the reduced number of tanks the risk of environmental issues is reduced.

7.3. Option 3, the recommended option.

7.3.1. Cost – c.£409,000 for the following elements;

7.3.2. The investment costs relate to the upgrading and standardisation of the bulk fuel infrastructure. This is made up of a capital element for bulk fuel tanks and associated equipment in 2016/17 as well as a 2 year (2016/17 – 2018/19) revenue commitment for maintenance and licencing.

7.3.3. The analysis in section 10, appendix 2 sets out each partners differing requirements to bring their infrastructure up to the standard required to operate an integrated fuel management system. Table 2 below shows the associated costs.

Table 2

ITF Partner Organisation	Capital										Revenue						Totals for ITF		
	Tank decommission		Tank Replacement		Controller Unit		Fuel Pump		Tank gauge		Sim Cards*		Annual Service**		Software Licence***				
	Unit Cost £5000		Unit Cost £7070		Unit Cost £3000		Unit Cost £750		Unit Cost £750		Unit Cost £200		Unit Cost £400		Unit Cost £1000		No.	Total Cost (£)	
	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)			
East Sussex F&RS	12	60000	12	84840	12	36000	12	9000	12	9000	12	2400	12	4800	0	0	84	206040	
Surrey F&RS	0	0	0	0	10	30000	9	6750	9	6750	10	2000	10	4000	0	0	48	49500	
Sy & Sx Police	6	30000	0	0	18	54000	0	0	0	0	18	3600	18	7200	5	5000	65	99800	
West Sussex F&RS	1	5000	0	0	9	27000	0	0	9	6750	9	1800	9	3600	0	0	37	44150	
Total	19	95000	12	84840	49	147000	21	15750	30	22500	49	9800	49	19600	5	5000	234	399490	
												Total revenue costs (£)							34400
												Total capital costs (£)							365090
												Total investment required (£)							399490

Financial Assumptions	
*each site controller unit requires a sim card, which is charged on an annual basis. The assumption is that the FTF will fund this for year 1 and 2 (the unit cost is for 2 years for each partner). The ongoing costs will then need to be met by individual partners.	
** In year 2, following the expiry of the warranty, an annual service visit will be required for each site. The assumption is that the FTF will support this in year 2 and from year 3 onwards individual partners will need to support this.	
***each software operator from the lead partner administering the system requires a software licence, we are assuming the requirement is 5 and the FTF fund will support this for year 1 and 2.	

7.3.4. Project management delivery costs. These are estimated at c.£10,000 for a project manager for 2 days per week over a 3 to 4 month period.

7.3.5. Administration of the system during transitional period. Whilst it is not anticipated that there will be significant additional costs related to the administration of the system during the period of transition, a risk has been added (see section 8.2) to structure the potential areas of cost that could be impacted on.

7.3.6. Cashable benefits - Projected savings of c.£13,000 per annum from procuring fuel from a joint contract framework and by year 2, a c.£14,000 saving by increasing the use of bulk fuel. This

section also sets out the projected avoided capital and revenue spend of c.£224,000 on life expired bulk fuel infrastructure and revenue costs that are assumed would need to be replaced/spent within 2 years if this proposal does not go ahead.

7.3.7. Table 3 below sets out the projected savings from partners procuring bulk fuel from a joint contract framework that went live in October 2015. SECamb have been excluded from this calculation as they are currently on a contract that is cheaper than the other partners CCS framework. It is not yet confirmed if this is available to other partners and when these prices expire. The assumption for this calculation is that this is not available to other partners at this time and any further savings will be accounted for, if and when they become available.

Table 3

Partner	Bulk fuel usage (litres) per year (based on 2014/15)	Current price per litre in Oct 15 (pence)	CCS price per litre in Oct 15 (pence)	Saving price per litre in Oct 15 (pence)	Saving (£) per year
East Sussex FRS	250,000	88	86.37	1.63	4,075
West Sussex FRS	219,869	88.2	86.37	1.83	4,023
Surrey FRS	199,426	88.93	86.37	2.56	5,105
Surrey & Sussex Police	1,243,556	86.37	86.37	0	0
Total/average (excl. SECamb)	1,912,851	87.87	86.37	1.50	13,203
SECamb* (not included in total)	1,929,976	85.6	86.37	-0.77	-14,860

7.3.8. Bulk fuel vs purchasing forecourt fuel. Table 4 below sets out the projected savings from using more bulk fuel vs purchasing fuel from the forecourt. This will be enabled through improved 24/7 shared access and better monitoring of fuel use via fuel cards. The overall bulk fuel use is currently 44% of all fuel purchased. This calculation assumes the new, lower CCS framework price is being paid. It shows the effect of increasing the proportion of bulk fuel used in 10% increments. It assumes a 20% positive shift towards bulk fuel used (from 44% to 64%) by 2018/19. The full analysis for this element is in section 10, appendix 3.

Table 4

% shift towards bulk fuel use	Projected savings by partner (£)				
	ESFRS	SFRS	WSFRS	Police	Total
10% - year 1	539.10	875.11	507.79	5,088.67	7,010.67
20% - year 2	1,078.20	1,750.22	1,015.58	10,177.34	14,021.35

7.3.9. Table 5 below sets out the projected avoided capital and revenue expenditure for life expired bulk fuel infrastructure and associated avoided revenue spend, which is assumed to be required if this proposal does not go ahead.

Table 5

Life expired infrastructure - avoided capital & revenue costs															
ITF Partner Organisation	Capital								Revenue						Totals for ITF
	Tank decommission		Tank Replacement		Fuel Pump		Controller Unit		Sim Cards*		Annual Service**		Software Licence***		Total
	Unit Cost £5000		Unit Cost £7070		Unit Cost £750		Unit Cost £3000		Unit Cost £200		Unit Cost £400		Unit Cost £1000		
	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	No.	Cost (£)	
East Sussex F&RS	12	60000	12	84840	12	9000	0	0	0	0	0	0	0	0	153840
Sy & Sx Police	0	0	0	0	0	0	18	54000	18	3600	18	7200	5	5000	69800
									total avoided revenue spend (£)						15800
									Total avoided capital spend(£)						207840
									Total avoided spend (£)						223640

7.3.10. Non cashable benefits

- Each partner would reduce their requirement to provide and maintain fuel storage facilities for all partners to use.
- Enhanced supply chain management through improved re-ordering processes.
- Due to the reduced number of tanks the risks of environmental issues is reduced.
- Unsupervised, automatic authorisation and data collection would produce a reduction in the number of hours spent to maintain manual processes.
- 24/7 access to bulk fuel across all partner sites, increasing fuel resilience.
- Timely and accurate provision of fuel costs/data.
- Review and refurbishment of tank sites will lead to reduced risk of environmental issues.

7.4. **Cost Benefit Analysis – over a 2 year period.**

Option	Costs		Cashable benefits (within 2 years)		Non cashable benefits
	Item	value (£)	Item	value (£)	
1	n/a	0	joint fuel contract*	26000	N/A
	Total costs	0	Total cashable benefits value (£)	26,000	
2	decommissioning fuel tanks	35,000	joint fuel contract*	26,000	Each partner would reduce their

			bulk vs forecourt fuel**	21,000	requirement to provide and maintain fuel storage facilities for all partners to use.
	Total costs	35,000	Total cashable benefits value (£)	47,000	Due to the reduced number of tanks the risks of environmental issues is reduced.
3	Upgrades to bulk fuel infrastructure Inc. decommissioning in option 2	399,490	Joint fuel contract*	26,000	Each partner would reduce their requirement to provide and maintain fuel storage facilities for all partners to use.
			Bulk vs forecourt fuel**	21,000	Enhanced supply chain management through improved re-ordering processes.
	Project Management	10,000	Avoided capital & revenue spend for partners replacing life expired bulk fuel tanks & equipment***	223,640	Due to the reduced number of tanks the risks of environmental issues is reduced. Un supervised, automatic authorisation and data collection would produce a reduction in the number of hours spent maintaining manual processes:
	Total costs (£)	409,490	Total cashable benefits value (£) (by year 2)	270,640	24/7 access to bulk fuel across all partner sites, increasing fuel resilience. Timely and accurate provision of fuel costs/data. Review and refurbishment of tank sites will lead to reduced risk of environmental issues.
*This assumes a £13,000 saving is replicated in years 1&2					
**this assumes a 20% shift in the volume of bulk vs forecourt fuel by year 2. (£7,000 in year 1 and £14,000 in year 2). Enabled by improved 24/7 access to more sites and management of behaviours via fuel card data.					
***this assumes ESFRS will need to decommission and replace 12 tanks, and pumps within the next 2 years and Sy/Sx Police need to replace their elements of the system from Q1 2016/17.					

7.5. Return on investment – on the recommended option (3)

7.5.1. Table 6 below shows the effect of procuring bulk fuel through a joint framework, increasing the use of bulk vs forecourt fuel and avoiding capital and revenue expenditure. The combination of these elements shows that by the end of the proposed contract life (4 years) 83% (£340,440) of the investment will have been offset. After year 4 the recommended option will continue to generate revenue savings of £27,000 from the joint fuel contract and impact on purchasing more bulk vs forecourt fuel.

Table 6

Area of saving	Year 1		Year 2		Year 3	Year 4	ROI
	Q3 16/17	Q4 16/17	Q3 17/18	Q4 17/18	2017/18	2018/19	
Joint fuel contract	13000		13000		13000	13000	52000
Bulk vs forecourt fuel		7000		14000	14000	14000	49000
Avoided revenue spend				15800		15800	31600
Avoided capital spend				207840			207840
Return on Investment (ROI)	20000		250640		27000	42800	340440

7.6. Financial Sensitivity Analysis

7.7. This section sets out the sensitivities to which the investment could be exposed.

7.8. Time slippage – the proposal requires specialist input from individual partners to progress the transitional arrangements from existing systems as defined in the project plan. Any significant lack of input to this process and suitable project management resources could impact on the ability of changes to infrastructure to go live.

7.9. All costings are at current prices. The overall amount of infrastructure investment is subject to confirmation via the procurement process currently underway. Whilst the financial assumptions are well informed, the marketplace for the infrastructure may influence the price of the bespoke equipment needed.

7.10. Dependencies

7.10.1. The alignment or interoperability between partners fuel management systems.

7.10.2. The alignment or interoperability between partners financial management systems.

7.10.3. Agreed shared access arrangements between partners.

7.11. Assumptions

7.11.1. The financial assumptions are based on previous costings from SFRS regarding a new fuel tank installation in 2014. They are also based upon a business case to replace bulk fuel infrastructure from ESFRS in 2013. In addition a price matrix was provided by the current Sy/Sx police supplier.

7.11.2. The future configuration of fuel sites is subject to potential changes to the estate.

7.11.3. All tank replacements are 10,000 litres (all in ESFRS & from 2013 business case)

7.11.4. The interim administration arrangements will establish a viable system to allow partners to accurately manage and invoice other partners' use of fuel.

7.11.5. Any suitable infrastructure from the decommissioning process will be re-used.

7.12. Funding

7.12.1. The costs of the recommended option (3) will, if approved, be funded by the Fire

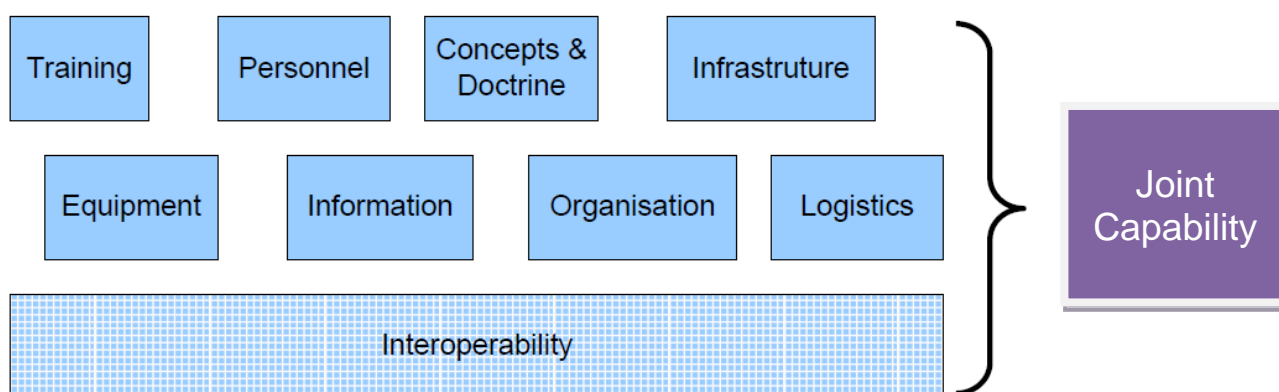
Transformation Fund.

- 7.12.2. The three Fire partners in Surrey and Sussex are in receipt of transformation grant funding. It was provided as enabling funding to develop an integrated transport function across the blue light partners. This provides the opportunity to fund initiatives which, as stand-alone projects by themselves, may not warrant individual partner investment, but when jointly implemented help facilitate the overall aim of delivering an integrated transport function.
- 7.12.3. The £409,000 cost of the recommended option (3) represents less than 7% of the £5.96m FTF grant.
- 7.12.4. In addition to the cost of the recommended option approximately £200,000 has currently been committed from the FTF on Programme staff costs, if this approved it would leave a balance of approximately £5.3m for the planned investments on workshops integration and a standardised Telematics solution.

8. What impact will the proposal have and what are the risks?

8.1. What impact will the proposal have?

- 8.1.1. The way in which the proposed changes will be delivered will have no detrimental impact on the continuous provision of bulk fuel for all partners.
- 8.1.2. To ensure the scope of the project plan encompasses all the areas likely to be impacted on, a capability assessment has been undertaken to provide a consistent structure to ensure all areas are assessed.
- 8.1.3. The process for this is the mnemonic - TEPID OIL.



- 8.1.4. All of the areas in the diagram above consider the theme of interoperability, to ensure a holistic approach to capability integration.
- 8.1.5. The attached table below sets out the areas that have been included for the integrated fuel management system.



TEPID OIL fuel
business case.docx

8.2. What are the risks?

- 8.2.1. Delays in the approval and subsequent procurement process result in Surrey/Sussex Police needing to go to market individually to replace their current process.
- 8.2.2. Potential for additional administration costs during the period of transition. Some examples of these areas are; additional demand from partners accessing each other's sites. I.e. access issues related to more vehicles on site more often, increased throughput of fuel potentially resulting in additional deliveries, increased number of and therefore additional administration of invoices.
- 8.2.3. Lack of commitment or formal withdrawal by one or more partners reducing benefits of the future model to such an extent that it becomes unviable.
- 8.2.4. Capacity of support functions to enable the projects to advance might be limited or unavailable.

9. Conclusion

- 9.1.1. Approving the recommended option (3) supports the wider aims and objectives of the 3SC Devolution prospectus and the anticipated statutory requirement to further collaborate as set out in the Government's Spending Review 2015.
- 9.1.2. The proposal to introduce an integrated fuel management system represents the first step towards mobilising the Integrated Transport Function Programme strategy; embedding the agreed principles of transport integration between partners.
- 9.1.3. Whilst able to be introduced independently, the proposal is intrinsically linked to and is a catalyst for the development of other work-streams in the wider ITF Programme. Business cases on other elements of the Programme covering workshops integration and a joint vehicle telematics solution are also in development. And this proposal should be viewed as part of that wider scope.
- 9.1.4. This activity will also provide an opportunity to explore what works more broadly in terms of the need to understand the impact on other parts of individual organisations that support the Transport functions; finance, legal, HR, operations etc. There may also be an opportunity to use this as a 'case study' for the Public Service Transformation Network as there will be some 'read across' for integrating other functions.
- 9.1.5. Specifically, for the 'blue light' services in Surrey and Sussex, the investment will rationalise bulk fuel sites, increase access 24\7, improve operational resilience, and reduce fuel costs using a standardised system across the region.
- 9.1.6. There will be no detrimental impact on each partners' business continuity arrangements. i.e. the continuous provision of bulk fuel.
- 9.1.7. The majority (83%) of the investment will also be offset within 4 years through the avoidance of capital and revenue expenditure on life expired bulk fuel infrastructure. As well as by purchasing bulk fuel at a cheaper rate via joint contract frameworks, by increasing the percentage of bulk fuel that is used, through shared use of sites.
- 9.1.8. Financial savings *are* an important aspect of this proposal. However, it the alignment,

integration and ultimately the standardisation of fuel systems across the partners; that is the primary justification for the required investment from the Fire Transformation Fund.

9.1.9. In addition to this £409,000 investment. Approximately £200,000 has currently been committed from the FTF on Programme staff costs, if this proposal is approved it would leave a balance of approximately £5.3m for the planned investments on workshops integration and a standardised Telematics solution.

9.1.10. Whilst all partners could act as the 'lead' partner and administer the system. Surrey & Sussex Police have indicated that they are willing and able to upscale their existing solution, building on their experience of rolling out a comparable system across Surrey Police.

9.1.11. If approved, the proposed system will go live into an 'initial operating capacity' from Q1 2016/17 with the final solution in place by 2017/18.

10. Appendix

10.1. Appendix 1 – Fuel systems and process analysis



Fuel systems and
Process Analysis.doc

10.2. Appendix 2 – Fuel capacity and infrastructure requirements



Appendix 2 - fuel
capacity and infrastru

10.3. Appendix 3 – Fuel usage analysis



Appendix 3.xlsx

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