FREIGHT INNOVATION FUND (FIF): EVALUATION FEASIBILITY STUDY

Methodological approaches for the retrospective and future evaluations of the FIF

04 NOVEMBER 2026

Contents

1 Executive Summary 5

1.1 The Freight Innovation Fund and purpose of this feasibility study 5

1.2 Overview of the retrospective evaluation design 5

1.3 Overview of the forward-looking evaluation Options 1 and 2 6

1.4 Recommendations 10

2 Glossary 11

3 Introduction 17

3.1 Summary of FIF 17

3.2 Aims of the feasibility study 18

3.3 Approach to the feasibility study 19

3.4 Scope of the feasibility study 20

4 Step 1: Development of the evaluation framework 21

4.1 Theory of change 21

4.2 ToC for the retrospective evaluation (2022/23 to 2025/26) 21

4.2.1 Inputs 21

4.2.2 Intermediate outcomes 21

4.2.3 Outcomes 22

4.2.4 Expected impacts 22

4.3 ToC for the forward-looking evaluation (2026/27 to 2029/30) 24

4.3.1 Inputs 24

4.3.2 Intermediate outcomes 24

4.3.3 Outcomes 24

4.3.4 Impacts 25

4.4 Process maps 27

4.5 Evaluation questions 27

4.5.1 Impact evaluation questions 27
4.5.2 VfM evaluation questions 30
4.5.3 Process evaluation questions 30

5 Step 2: Evidence review and data mapping 32
5.1 Monitoring data 32
5.2 Secondary data 34

6 Step 3: Evaluation methodology 36
6.1 Approach 36
6.1.1 Principles 36
6.1.2 Impact evaluation methods 36
6.1.3 Process methods 46
6.1.4 VfM evaluation methods 50
6.1.5 Limitations of the evaluation approach 58
6.2 Data collection methods for forward-looking evaluation 59
6.2.1 Monitoring data 59
6.2.2 Interviews 61

7 Step 4: Retrospective evaluation design 73
7.1 Evidence for the retrospective evaluation 73
7.1.1 Monitoring data 73
7.1.2 Primary data collection 73
7.2 Impact evaluation 74
7.3 VfM evaluation 78
7.3.1 Expected timelines for the retrospective evaluation 83
7.3.2 Expected budget for the retrospective evaluation 84

8 Step 5: Forward-looking evaluation design options 90
8.1 Forward-looking evaluation: Option 1 92
8.1.1 Evidence for forward-looking evaluation Option 1 93
8.1.2 Process evaluation 95
8.1.3 Impact evaluation 96
8.1.4 VfM evaluation 99

8.1.5 Expected timelines for Option 1 104
8.1.6 Expected budget for Option 1 106
8.2 Forward-looking evaluation: Option 2 121
8.2.1 Additional evidence for forward-looking evaluation Option 2 121
8.2.2 Process evaluation 123
8.2.3 Impact evaluation 124
8.2.4 VfM evaluation 126
8.2.5 Expected timelines for Option 2 126
8.2.6 Expected budget for Option 2 127

9 Step 6: Recommendations for forward-looking evaluation 144
9.1 Proportionality assessment 144
9.2 Risk assessment 146
9.3 Comparative assessment of the evaluation options 148
9.4 Recommended evaluation option 151

Annex A Mapping of existing evidence 153

Annex B Secondary sources 161

Annex C EQ, indicators and data collection methods for process evaluation 168

Annex D Process maps 178

1 Executive Summary

1.1 The Freight Innovation Fund and purpose of this feasibility study

The Freight Innovation Fund (FIF) is a multi-year programme delivered by the Connected Places Catapult (CPC) on behalf of the Department for Transport (DfT). Its main objective is to address persistent barriers to innovation in the United Kingdom (UK) freight and logistics sector and accelerate the development, testing and commercialisation of innovations, along with strengthening the wider innovation ecosystem. The programme has operated for four years, from 2022 to 2026, with funding of around £10m. It has recently been extended for a further four years, from 2026 to 2030.

DfT commissioned Frontier Economics and SYSTRA to undertake a **feasibility study for the retrospective and future monitoring and evaluation of FIF**. The purpose of the study is to identify an appropriate and proportionate evaluation approach for both the previous cohorts (with a retrospective evaluation) and future cohorts (a forward-looking evaluation). The evaluation approaches are designed to maximise evidence and learning on programme outcomes while minimising unnecessary data collection burden on delivery partners and programme participants.

1.2 Overview of the retrospective evaluation design

The retrospective evaluation focuses on the four cohorts that received FIF support over the period 2022/23 to 2025/26. As it is retrospective, there are inevitable limitations on the data available for the evaluation. The proposed evaluation design represents a minimum viable approach comprising an impact evaluation and an indicative value for money (VfM) assessment. Process evaluation is out of scope.

This low-burden approach is designed to make best use of evidence already collected by the CPC, supplemented by a small number of semi-structured interviews with participant small and medium-sized enterprises (SMEs) and Accelerator industry partners who are able to provide their perspective on the FIF-supported innovations and their commercial uptake. The industry partners will be selected using a purposive sampling approach designed to capture a wide range of programme experiences.

The proposed **impact evaluation** approach is to use a theory-based contribution analysis. This method defines a series of contribution claims that align with the impact pathways of the FIF theory of change (ToC) for the cohorts 2022/23 to 2025/26. By using the available monitoring data, complemented by the qualitative evidence from SMEs and industry partners, it will test those contribution claims to determine the potential strength of evidence that supports or counters the claims. The contribution claims will relate to the extent to which FIF contributed to changes in aspects such as commercial readiness, private sector investment,

patents, SME turnover and employment and the impacts on industry partners that would take up the FIF-supported solutions. This approach will also consider whether those outcomes are likely to have been influenced by other factors and to what extent. The overall strength of evidence relating to the contribution to FIF is then determined for each contribution claim.

The proposed **VfM assessment** is to consider whether FIF has met its strategic objectives and to provide partial evidence on the benefits that FIF has delivered relative to the costs. Given the data limitations, the focus is on what has been delivered with the DfT funding invested. Outcomes will be monetised where feasible to provide a sense of relative scale. The proposed VfM assessment is a partial scenario-based cost-benefit analysis (CBA) and cost-effectiveness analysis with full transparency over the outcomes and likelihood of FIF's contribution to those, relative to the costs to DfT of FIF funding.

Retrospective evaluation findings should be interpreted as indicative because of the limitations in the available monitoring data and the limited ability to determine what would have happened without the FIF support (i.e. the counterfactual). Available quantitative data is also limited to short-term outcomes only as the monitoring data was collected at baseline and programme completion. Longer-term outcomes are therefore unlikely to be fully captured.

The retrospective evaluation is expected to take place over two to three months in autumn 2026, with an estimated cost of £80,000 to £96,000.

1.3 Overview of the forward-looking evaluation Options 1 and 2

The future evaluation focuses on the four cohorts that are expected to receive FIF support over the period 2026/27 to 2029/30. Two options have been proposed for the future evaluation, each aiming to generate valuable evidence but with different resource requirements and different depths of evidence and learning potential. Both options include process, impact and VfM evaluation.

The proposed future evaluation Options 1 and 2 are both designed to include additional components of FIF support that were not part of the early cohorts: Venture Growth and Unlocking Private Capital. These new components will require additional monitoring data to be collected to reflect their respective outputs and outcomes, and these requirements are included in the evaluation design of both future Options 1 and 2.

The proposed future evaluation Options 1 and 2 have been designed following an extensive feasibility assessment. This considered the data available, the gaps in the data that could be addressed with enhanced monitoring and additional primary data collection, the methods that could be used, and the proportionality of what was possible. This determined that the key sources of data are the monitoring data collected by CPC, administrative data on funding allocations from CPC, semi-structured interviews (detailed below), limited secondary data

sources to verify business outcomes (though this requires purchasing commercial datasets), and documentary review.

The overarching evaluation approach for both future Options 1 and 2 is a contribution analysis. This method defines a series of contribution claims that align with the impact pathways of the FIF ToC for the cohorts 2026/27 to 2029/30. These contribution claims will be tested using evidence generated by applying several evaluation methods to make best use of the data. These include: descriptive analysis (understanding who has been supported, to what extent and what the innovations are); before-versus-after analysis (comparing outcomes at baseline with outcomes at closure and 12 months post baseline); benchmarking (such as comparing outcomes against business case objectives); comparative analysis (such as comparing outcomes against those of unsuccessful applicants); self-reported attribution (to determine the extent to which observed changes in outcomes can be considered attributable to FIF); and the overall contribution analysis that brings all the evidence together.

The contribution analysis assesses the potential strength of evidence that supports or counters the claims. The contribution claims will relate to, for example, the extent to which FIF contributed to changes in commercial readiness, private sector investment, patents, technology readiness levels, SME turnover and employment, and the productivity impacts on industry partners that would take up the FIF-supported solutions. This approach will also consider whether those outcomes are likely to have been influenced by other factors and to what extent. The overall strength of evidence relating to the contribution to FIF is then summarised for each contribution claim as low, medium or high.

The potential for quasi-experimental evaluation methods (which would provide robust evidence of the scale of impact attributable to FIF and not to other factors) was not feasible because of several factors. These include the small sample sizes in each cohort, and pooling across cohorts may still not boost numbers sufficiently; the limitations of administrative datasets in that most only report on VAT-registered businesses so many supported SMEs would not feature; and the lack of metrics in administrative datasets that relate to the outcomes relevant for FIF, such as commercial readiness and network benefits arising from collaborative technology development.

In the absence of quasi-experimental evaluation (which involves comparing outcomes for the successful SMEs with what would otherwise have been expected to happen), the future evaluation Options 1 and 2 both propose primary research-based counterfactuals. These take two forms: first, participants will be interviewed to report on quantitative and qualitative outcomes. For the quantitative outcomes, they will be asked to state the extent to which those outcomes are likely to be attributable to FIF using a pre-defined scale of attribution. This is known as ‘self-reported’ attribution. Secondly, unsuccessful applicants as similar as possible to supported SMEs will be interviewed to understand what they did without the FIF support and what the key outcomes were for them. Options 1 and 2 are different as a larger number

of unsuccessful applicants will be interviewed under Option 2 than under Option 1, therefore strengthening the evidence under Option 2.

The main difference between the options is the breadth of primary research. Option 1 provides a proportionate evaluation for future FIF cohorts. It combines enhanced monitoring with targeted interviews with successful applicants and industry partners and a small number of interviews with unsuccessful applicants to improve coverage of the evaluation framework while keeping burden manageable. Option 2 builds on this by adding longitudinal case studies and interviews with wider industry stakeholders (such as investors, regulators, etc.) and additional interviews with unsuccessful applicants. This would require more resource, but would provide stronger evidence on additionality, delivery pathways and wider ecosystem effects.

The impact evaluation findings are proposed to underpin the VfM evaluation, which would assess the extent to which strategic objectives of FIF have been met, and the benefits exceed costs when taking monetised and non-monetised impacts into account. Table 1 summarises the two forward-looking evaluation options.

Table 1 Summary of the forward-looking evaluation options

Detail	Option 1	Option 2
Data required for impact evaluation	Enhanced monitoring data Semi-structured interviews (with successful SMEs, a few unsuccessful applicants and industry partners)	**As per Option 1, with additional:** semi-structured interviews with wider stakeholders, including academia, trade bodies and regulators; secondary company-level data for successful and unsuccessful SMEs; and longitudinal in-depth case studies with successful SMEs.
Impact evaluation methods	Contribution analysis Descriptive analysis Before-versus-after analysis Benchmarking Primary research-based counterfactuals (minimal)	**As per Option 1, with additional:** expanded primary research-based counterfactual evidence; and longitudinal case studies examining the end-to-end commercialisation journey.

Detail	Option 1	Option 2
Learning potential	Provides evidence on changes in key indicators over time, how FIF was intended to operate versus how it was delivered, how FIF has contributed to participant outcomes, and the assumptions needed to assess whether benefits are likely to exceed programme costs.	**Provides richer and more comprehensive learning than Option 1, with additional:** Wider stakeholder interviews, which provide evidence on spillovers, and wider system-level effects; Secondary data, which provides an independent source to validate the collected indicators for successful and unsuccessful applicants; Longitudinal case studies, which provide richer evidence on end-to-end commercialisation including how and why outcomes arise, the barriers and enablers affecting them, and whether outcomes and benefits persist over time.
Robustness	Relies on minimal primary research-based counterfactuals, has limited evidence on ecosystem-level effects, and does not provide evidence on the full end-to-end commercialisation journey. Findings may be affected by response rates, recall issues and sampling bias. Small sample sizes limit the scope for quasi-experimental analysis.	**As per Option 1, although some limitations are reduced through the additional evidence sources.** Evidence on additionality will remain indicative rather than causal; secondary-data coverage will depend on successful matching and indicator availability; and case studies and wider stakeholder interviews remain subject to selection, recall and response biases.
Value for money	Cost-effectiveness Partial CBA (minimal) Sensitivity and switching analysis	As per Option 1, with additional: evidence to inform assumptions on additionality and persistence; and broader evidence on non-monetised

Detail	Option 1	Option 2
		benefits, spillovers and wider effects.
Timelines and budget	Between 2026 and 2032. Estimated cost: £288,000 to £345,000.	Between 2026 and 2032. Estimated cost: £427,000-£502,000.
Proportionality	Lower evaluation cost and burden, with moderate learning potential. Provides stronger evidence than the retrospective evaluation while keeping resource requirements relatively contained.	Higher evaluation cost and burden, with moderate to high learning potential. The additional resource reflects the greater uncertainty around the new FIF strands and provides stronger evidence on additionality, persistence of outcomes and wider ecosystem effects.

1.4 Recommendations

Two options have been developed for the forward-looking evaluation. Option 1 would improve the quality of evaluation evidence while keeping the approach proportionate, practical and relatively low burden. Option 2 would provide a richer and more robust evaluation, particularly on additionality, wider effects, persistence of benefits and transferable learning, but at higher cost and burden.

On balance, Option 2 is recommended. Although more resource-intensive, it would provide stronger evidence on additionality, delivery pathways and longer-term outcomes. This is particularly important given the small sample sizes, the introduction of new FIF strands from 2026, and the need to understand what works, for whom and in what circumstances.

The additional use of unsuccessful applicant interviews and longitudinal case studies would strengthen the evaluation by providing insight into what may have happened without FIF support, and how outcomes develop beyond programme closure.

2 Glossary

Table 2 Glossary

Term/acronym	Definition
Accelerator	FIF work package providing funding, technical and commercial support, and opportunities for SMEs to test and validate innovations in real-world operational settings.
Additionality	The extent to which an outcome occurred because of FIF and would not otherwise have occurred or would have occurred later or to a lesser extent.
AI	Artificial intelligence.
API	Application programming interface.
Baseline	The position of a participant or outcome before or at the start of FIF support, against which subsequent change can be assessed.
BCR	Benefit cost ratio. A measure comparing monetised benefits with costs.
Before-versus-after analysis	Comparison of outcomes for the same participants at baseline and at one or more later points to identify how outcomes have changed over time.
Benchmarking	Comparison of observed outcomes with an appropriate reference point, such as expectations set out in business cases or applications. Findings from other innovation programmes may also be used as contextual evidence, subject to comparability limitations.
BERD	Business Enterprise Research and Development.
BSD	Business Structure Database.
Case study	In-depth examination of the end-to-end commercialisation journey of a single FIF-supported innovation using multiple sources of evidence to understand how and why outcomes occurred.
CBA	Cost-benefit analysis. An assessment that compares the monetary value of benefits with the costs of an intervention.
Closure	The point at or around the end of programme participation when outcomes and participant experiences are measured.

CO2e	Carbon dioxide equivalent, a common measure used to express greenhouse gas emissions.
Comparative analysis	Comparison of outcomes across groups. In this evaluation, this includes comparing selected outcomes for successful FIF applicants with unsuccessful applicants.
Contribution analysis	The overarching theory-based impact evaluation approach proposed for FIF. It tests whether expected outcomes occurred, whether FIF plausibly contributed to them, whether the expected causal mechanisms operated and whether alternative explanations could account for the findings.
Cost-effectiveness analysis	The cost of achieving quantified (but non-monetised) FIF outputs and outcomes. Relevant examples include the cost per private and public funding leveraged, cost per trial delivered, etc.
Counterfactual	What would have happened to participants or outcomes in the absence of FIF support.
CPC	Connected Places Catapult.
CRL	Commercial readiness level. An indicator of the commercial maturity or readiness of an innovation.
Descriptive analysis	Provides context for the evaluation. This will include the scale and reach of FIF, such as the number and characteristics of applicants, participating SMEs and industry partners; the type and level of support delivered, including trials, training, knowledge-sharing and showcasing activities.
DfT	Department for Transport.
Difference-in-differences	A quasi-experimental method that compares changes in outcomes over time between a supported group and a suitable comparison group not impacted by the intervention.
Discounting	Converting future costs and benefits into present values to reflect the fact that costs and benefits occurring at different points in time are not valued equally.
Displacement	Where gains generated for FIF-supported businesses are partly or wholly offset by losses to other businesses, rather than representing a net increase in economic activity.
DVSA	Driver and Vehicle Standards Agency.
ED&I	Equality, diversity and inclusion.
EBITDA	Earnings before interest, tax, depreciation and amortisation.

EQ	Evaluation question.
FIC	Freight Innovation Cluster. The ecosystem-focused FIF work package for earlier cohorts, supporting collaboration, networking and knowledge sharing. It has been succeeded by FLIN for future cohorts.
FIF	Freight Innovation Fund.
FLIN	Freight and Logistics Innovation Network. The successor to FIC for future FIF cohorts, supporting engagement, collaboration, knowledge sharing and connections across the freight and logistics innovation ecosystem.
Freight Industry Board	A stakeholder forum within FLIN intended to provide ongoing industry insight, engagement and coordination across the freight and logistics ecosystem.
FTE	Full-time equivalent employee.
GtR	Gateway to Research.
GVA	Gross value added.
HE-BCI	Higher Education - Business and Community Interaction.
HESA	Higher Education Statistics Agency.
HM Treasury	His Majesty's Treasury.
IEQ	Impact evaluation question.
IP	Intellectual property.
kWh	Kilowatt hour.
Logic model	A visual representation of the theory of change, showing the links between programme inputs, activities, outputs, outcomes and impacts.
M&E	Monitoring and evaluation.
Match funding	Financial or in-kind contribution provided alongside FIF grant funding by participating SMEs or other partners.
Monetised benefit	A programme benefit for which a sufficiently robust monetary value can be estimated.
MRL	Market readiness level. An indicator of the market readiness of an innovation.
Non-monetised benefit	A benefit that cannot robustly be expressed in monetary terms and is therefore assessed quantitatively or qualitatively alongside monetised benefits.

ONS	Office for National Statistics.
ORR	Office of Rail and Road.
PAYE	Pay as you earn.
PEQ	Process evaluation question.
Primary research-based counterfactual	Evidence used to understand what might have happened without FIF based on primary research, including participants' own assessments and comparisons with unsuccessful applicants. It provides indicative rather than causal counterfactual evidence.
Process map	A representation of the sequence of activities, responsibilities, decision points and interactions involved in delivering a programme or work package.
Propensity score matching	This mimics randomisation to identify a counterfactual by pairing treated subjects with untreated SMEs which have a similar probability of receiving treatment based on observable characteristics.
Purposive sampling/ maximum variation sampling	Selection of interviewees or case studies deliberately to capture a range of relevant characteristics, experiences and outcomes rather than drawing a purely random sample.
Quasi-experimental	A type of impact evaluation method used to estimate the causal effect of a policy, intervention or shock, without random assignment of participants.
R&D	Research and development.
Realist evaluation	This generates evidence to test the theory of change focusing on the contextual factors that drive outcomes. A theory-based evaluation approach focused on understanding what works, for whom, in what circumstances and how, by examining relationships between context, mechanisms and outcomes.
Recall bias	Where participants do not accurately remember past events or experiences, particularly when information is collected some time after they occurred.
Regression discontinuity design	A quasi-experimental method that estimates impact by comparing participants immediately above and below a clearly defined eligibility or selection threshold. It assumes that individuals are similar, allowing the discontinuity to act as a natural experiment.

Response bias	An error caused by the way in which people answer questions. It can happen for various reasons, such as wanting to please the researcher, misunderstanding the question or being influenced by question wording.
ROI	Return on investment.
Selective reporting	Where participants report some experiences or outcomes but omit others, either consciously or unconsciously.
Self-reported attribution	Participants' own assessment of the extent to which an observed outcome resulted from FIF support, for example whether FIF contributed 'not at all', 'a little', 'a lot' or was the only reason.
Self-selection bias	Where people who choose to take part differ systematically from those who do not, which may affect how representative the findings are.
Sensitivity analysis	Testing how evaluation or VfM findings change when important assumptions or parameter values are varied.
SIC code	Standard Industrial Classification code.
SME	Small and medium-sized enterprise.
Social desirability bias	Where participants provide responses they believe will be viewed more favourably by others or will result in them being viewed more favourably, rather than fully reflecting their actual views or experiences.
SPV	Special purpose vehicle. In the context of FIF, a collaborative commercial structure or proposition bringing together parties with complementary capabilities to develop and scale a freight and logistics innovation.
Spillover	An effect extending beyond the direct recipients of FIF support. The evaluation distinguishes market, knowledge and network spillovers.
SRS	Secure Research Service.
Substitution	Where supported activity replaces other activity, labour or investment rather than adding to overall activity.
Switching/ break-even analysis	Sensitivity analysis that identifies how far key assumptions or non-monetised benefits would need to change for the overall VfM conclusion to change.
Tech-stacking	Venture Growth workstream bringing together SMEs and other parties with complementary technologies or capabilities to develop more integrated solutions to freight and logistics challenges.
ToC	Theory of change. A framework that explains how an intervention is expected to achieve its intended outcomes, by setting out the links

	between its activities, outputs, outcomes and longer-term impacts, and the assumptions underlying these links.
ToR	Terms of reference.
Triangulation	Combining evidence from different methods, data sources or stakeholder groups to test the consistency of findings and strengthen evaluation judgements.
TRL	Technology readiness level. An indicator of the maturity of a technology.
UK	United Kingdom.
UKIS	UK Innovation Survey.
UKRI	UK Research and Innovation.
Unlocking Private Capital	FIF work package developing evidence and options for potential mechanisms to mobilise private investment into freight and logistics innovation. Details of this package are yet to be finalised.
VAT	Value Added Tax.
VEQ	Value for money evaluation question.
Venture Growth	FIF work package intended to address barriers to commercialisation and investment and help SMEs and collaborative propositions scale. It includes the tech-stacking and scale-up workstreams.
VfM	Value for money. Assessment of whether FIF represents an effective use of public resources, including whether it achieved its strategic objectives and whether its monetised and non-monetised benefits justify the costs incurred.

3 Introduction

This section provides an overview of the FIF, including its objectives, delivery model and evolution over time. It then describes the purpose of this feasibility study, the approach taken to develop the evaluation framework, the scope of the study and the structure of the remainder of the report.

3.1 Summary of FIF

The FIF is a multi-year programme delivered by CPC on behalf of the DfT. The programme has operated for four years, from 2022 to 2026, with funding of around £10m. It has recently been extended for a further four years, from 2026 to 2030.

FIF is designed to address persistent barriers to innovation in the UK freight and logistics sector. These include fragmented supply chains, limited cross-mode coordination, first-mover risk in a low-margin market, and constrained access to capital and testing environments. While innovative solutions exist, these barriers have slowed their commercialisation and uptake across the sector.

By addressing the barriers, FIF aims to accelerate the development, testing and commercialisation of innovations. It also seeks to strengthen the wider freight and logistics innovation ecosystem by improving collaboration, increasing market awareness, and supporting broader economic and environmental outcomes.

The objectives of FIF are:[1]

- To support adoption and investment decisions by helping businesses assess and scale high-potential freight and logistics innovations;
- To provide support to SMEs, including tailored technical, commercial, marketing and investment readiness support;
- To address coordination failures, reducing adoption risk and supporting wider uptake of high-potential technologies; and
- To support commercial scale-up for SMEs and special purpose vehicle (SPV) models through tailored business support and testing of their viability, value generation and investment readiness.

[1] Source: Final Project Proposal Proforma (Stage 3), CPC, 2026.

In line with this, over the first four years, the programme was structured around two complementary components:

- The Accelerator supported SMEs to validate late-stage innovations, typically at technological readiness level (TRL) 5-7, and begin commercialising them into marketable products. It provided access to funding, opportunities to test solutions in operational settings, and targeted business and technical support. The aim was to increase the number of viable, market-ready innovations in the sector.
- The Freight Innovation Cluster (FIC) acted as a cross-sector ecosystem platform, bringing together stakeholders from industry, government, academia and investment. Through engagement, knowledge sharing and networking, it supported collaboration, improved market awareness and helped identify emerging sector challenges.

Building on these foundations, the FIF 2026/27 to 2029/30 includes two additional work packages intended to support businesses beyond technology validation and towards commercial deployment:

- Venture Growth aims to address commercialisation and investment barriers that limit the ability of SMEs to scale their solutions. It will be delivered through two workstreams, tech-stacking and scale-up.
- Unlocking Private Capital will develop an evidence base on how CPC and DfT can use FIF to crowd in private investment. It will produce research and a shortlist of options for potential funding mechanisms to support innovation.[2]

The FIC has been rebranded as the Freight and Logistics Innovation Network (FLIN). The network acts as a catalyst for connecting innovators, operators, corporates, academics and public sector organisations to collaborate on sector challenges. Members can access structured mentoring expertise, share sector insights and knowledge, and receive news from the programme on opportunities to support progression.

3.2 Aims of the feasibility study

DfT commissioned Frontier Economics and SYSTRA to undertake a feasibility study for the future monitoring and evaluation of FIF, alongside a retrospective evaluation of the past programme cohorts. The purpose of the study is to identify an appropriate and proportionate evaluation approach that maximises evidence and learning on programme outcomes while minimising unnecessary data collection burden on delivery partners and programme participants.

[2] The remit of this work package for the following cohorts of the FIF is still to be decided. As such, evaluation plans will need to be adjusted to incorporate the final design of the work package.

The feasibility study considers what can realistically be evaluated given the availability, quality and timing of data, the maturity of programme outcomes and the resources likely to be available for evaluation. It also identifies opportunities to strengthen data collection arrangements so that evidence collected during programme delivery better supports future evaluation. The findings provide the foundation for subsequent monitoring and evaluation activities.

The evaluation framework comprises three complementary strands:

- **Impact evaluation**, which assesses the extent to which FIF has contributed to the outcomes and longer-term impacts identified in the ToC and, to the extent feasible, estimates the additional outcomes achieved compared with what would have happened in the absence of FIF;
- **Process evaluation**, which examines how FIF has been designed, implemented and delivered, assessing whether delivery has operated as intended, identifying the factors that have supported or constrained implementation, and generating lessons to improve future programme design and delivery; and
- **VfM evaluation**, which assesses whether FIF represents an effective use of public resources by considering the extent to which it has achieved its objectives, and whether the benefits delivered are proportionate to the costs incurred.

3.3 Approach to the feasibility study

The feasibility study was developed through an iterative process combining documentary review, discussions with DfT and assessment of existing evidence and data sources. The development of the study comprised six stages:

- **Inception: Establishing the scope of the work**, confirming project governance and identifying the documentation required to support the study;
- **Step 1: Development of the evaluation framework**, reviewing and updating the existing ToC, developing a programme process map, and identifying priority evaluation questions (EQs) and indicators;
- **Step 2: Evidence review and data mapping**, assessing existing monitoring and external data sources to determine their suitability for supporting future evaluation and identifying evidence gaps;
- **Steps 3, 4 and 5: Evaluation design and feasibility assessment**, developing alternative evaluation options and assessing their feasibility, proportionality, analytical robustness, resource requirements and expected learning; and

- **Step 6: Recommended way forward**, summarising the feasibility study and recommending a proportionate approach to future monitoring and evaluation.

3.4 Scope of the feasibility study

This report presents the findings of the feasibility study and provides the proposed evaluation framework for FIF. It covers:

- Retrospective impact and VfM evaluation approach, focusing on 2022-2026; and
- Forward-looking impact, VfM and process evaluation approach. Two design options are offered for DfT's consideration, labelled Option 1 and Option 2.

The report is structured as follows:

- Section 4: presents an updated ToC and process map, alongside EQs and indicators;
- Section 5: presents the data mapping exercise and evidence gaps;
- Section 6: describes the proposed methodologies for the impact, process and VfM evaluations;
- Section 7: sets out the proposed retrospective evaluation design, covering the earlier FIF cohorts (2022 to 2026);
- Section 8: presents two alternative options for the forward-looking evaluation design, covering future FIF cohorts (2026 to 2030); and
- Section 9: sets out the recommendations for future evaluation.

4 Step 1: Development of the evaluation framework

The evaluation framework is underpinned by a ToC and EQs. These are described in this chapter.

4.1 Theory of change

This describes how a programme is expected to achieve its intended outcomes by setting out the causal pathways linking inputs and activities to outputs, outcomes and impacts. As part of this feasibility study, the ToCs were reviewed and refined to ensure they accurately reflect the current design of FIF and provide a robust foundation for the proposed evaluation framework.

Two separate ToCs have been developed for FIF: one covering the retrospective programme delivered between 2022/23 and 2025/26 and one covering the future programme planned for 2026/27 to 2029/30. Separate ToCs have been developed to reflect the evolution of the programme, particularly the introduction of Venture Growth and Unlocking Private Capital as additional work packages. The accompanying logic models provide a visual representation of each ToC (see Figure 1 and Figure 2, respectively).

The ToCs and updated logic models build on the programme's existing logic models developed by CPC. The review drew on programme documentation, including CPC proposal material, programme guidance, and recent documentation including more detail on the Venture Growth and Unlocking Private Capital work packages, alongside discussions with DfT. This evidence was used to validate and update the existing logic models, providing greater detail on programme inputs and activities, and refining the expected outputs, outcomes and impacts.

4.2 ToC for the retrospective evaluation (2022/23 to 2025/26)

4.2.1 Inputs

The successful delivery of FIF relied on DfT funding, support from DfT and CPC officers, wider stakeholder engagement, external delivery partner support and previous programme learning. The Accelerator sub-programme also relied on SME match funding and the participation of the SMEs and industry partners, while the FIC relied on digital infrastructure and the support of an Advisory Board.

4.2.2 Intermediate outcomes

Accelerator SMEs were expected to improve their technical, commercial and investment readiness, and to increase their number of connections with the industry stakeholders. For

industry partners, exposure to trials and evidence on technical viability was expected to increase awareness of available freight innovations and reduce perceived adoption risk.

FIC membership was expected to increase SMEs' engagement and interest in the success of FIF, strengthen relationships and knowledge sharing, and support partnership between FIC members and other stakeholders.[3] FIC also provided tailored support to SMEs, including commercial and sector access, investment readiness, customer acquisition skills and opportunities for consortium-based innovation. This included the technology stacking collaborative competition, which can be seen as a precursor to the future cohorts' Venture Growth programme. In addition, FIC sessions were expected to strengthen SMEs' focus on equality, diversity and inclusion (ED&I).

4.2.3 Outcomes

Accelerator trials, alongside increased SME skills and connections to industry stakeholders were expected to increase the number of market-ready freight innovations, commercial traction, and public and private investment raised by the SMEs. Adoption of new solutions was also expected to increase industry partners' support for innovation and their productivity.

Meanwhile, FIC outputs were expected to contribute to a more connected, collaborative and inclusive freight innovation ecosystem. They were also expected to lead to increased collaboration, enhanced visibility of innovative solutions and rate at which SMEs transition to market-ready solutions.

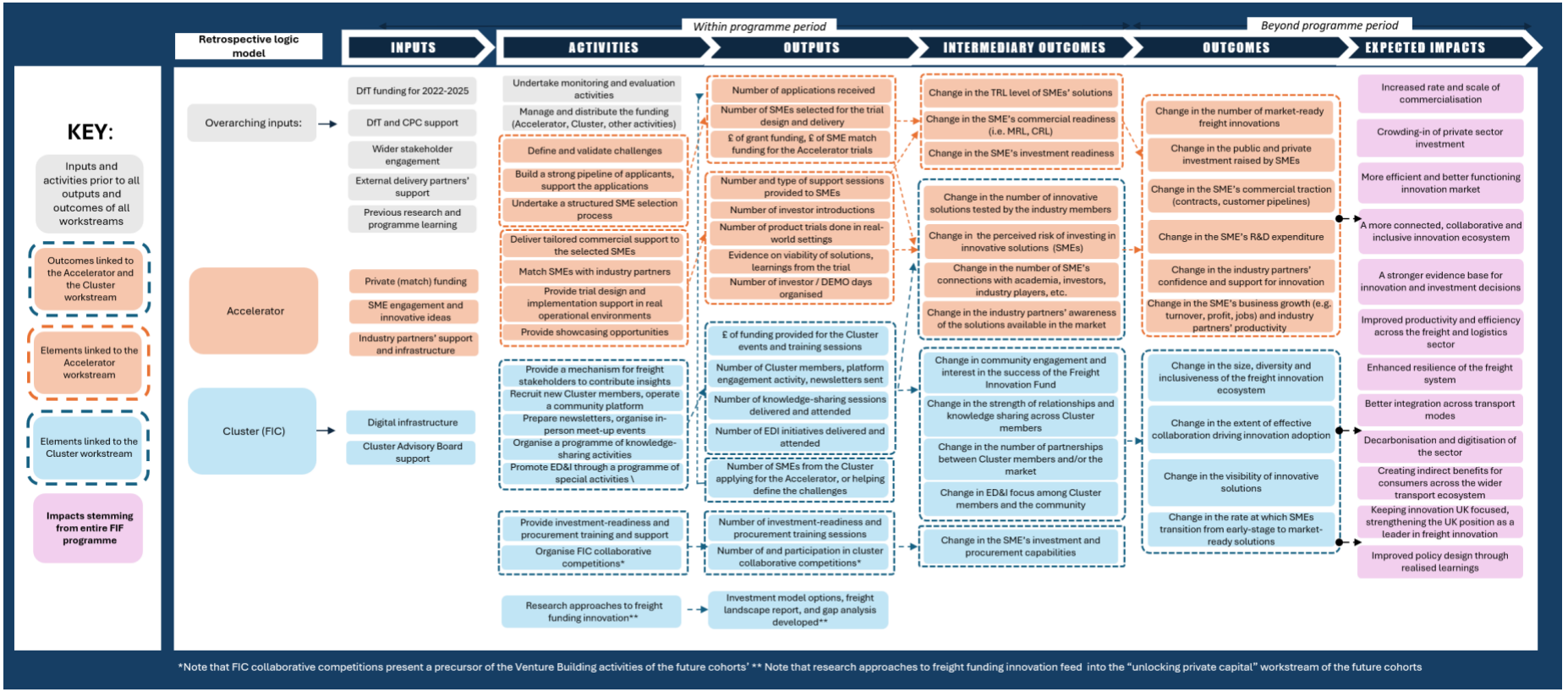
4.2.4 Expected impacts

Over the longer term, FIF was expected to increase the commercialisation and adoption of freight and logistics innovations, crowd in private investment, and contribute to a more efficient, connected and inclusive freight innovation ecosystem. By reducing information gaps and perceived risks, the programme was also expected to improve innovation and investment decisions by industry and government.

Greater adoption of innovative solutions was expected to improve productivity, efficiency and resilience across the freight and logistics sector, while supporting greater integration across transport modes, decarbonisation and digitisation. FIF was also expected to strengthen the UK's position in freight and logistics innovation and generate learning to inform future policy and programme design.

[3] These activities were expected to increase awareness of innovative solutions in the market and reduce the perceived risk of innovation, thereby reinforcing the Accelerator outcomes.

Figure 1 FIF logic model for cohorts 1 to 4 (retrospective)



4.3 ToC for the forward-looking evaluation (2026/27 to 2029/30)

This section expands the ToC to incorporate the key changes envisioned for the future cohorts. Only the new work packages, Venture Growth and Unlocking Private Capital, are covered below, as the aspects described in the retrospective ToC in Section 4.2 will still be in place.[4]

4.3.1 Inputs

The future cohorts are expected to rely on the same overarching inputs as the retrospective cohorts – with FIC renamed to FLIN.

In addition, the Venture Growth sub-programme will draw on specialist expertise and advisory support, and Unlocking Private Capital will draw on market evidence, investor engagement, and the wider policy and regulatory context.

4.3.2 Intermediate outcomes

The tech-stacking workstream of Venture Growth is expected to encourage the formation of SPVs. This is intended to bring together parties with complementary technologies and skills, to develop more integrated, end-to-end solutions to industry-wide freight and logistics challenges.[5] Meanwhile, the scale-up workstream is expected to increase SMEs' commercial and investment readiness, strengthen their connections with other stakeholders and increase investor interest in innovation.[6] The Unlocking Private Capital work packages is expected to generate evidence on investment barriers and funding gaps.

4.3.3 Outcomes

In the medium term, Venture Growth is expected to increase the pipeline of market-ready SMEs and SPVs, strengthen their ability to scale solutions, raise funding and acquire customers. Meanwhile, Unlocking Private Capital is expected to inform the establishment of a new financial mechanism to mobilise private capital.

[4] Aside from the removal of certain activities from the FLIN remit (investment readiness and collaborative competitions) and their transfer to the Venture Growth work package, no major changes are envisaged for the FLIN and Accelerator.

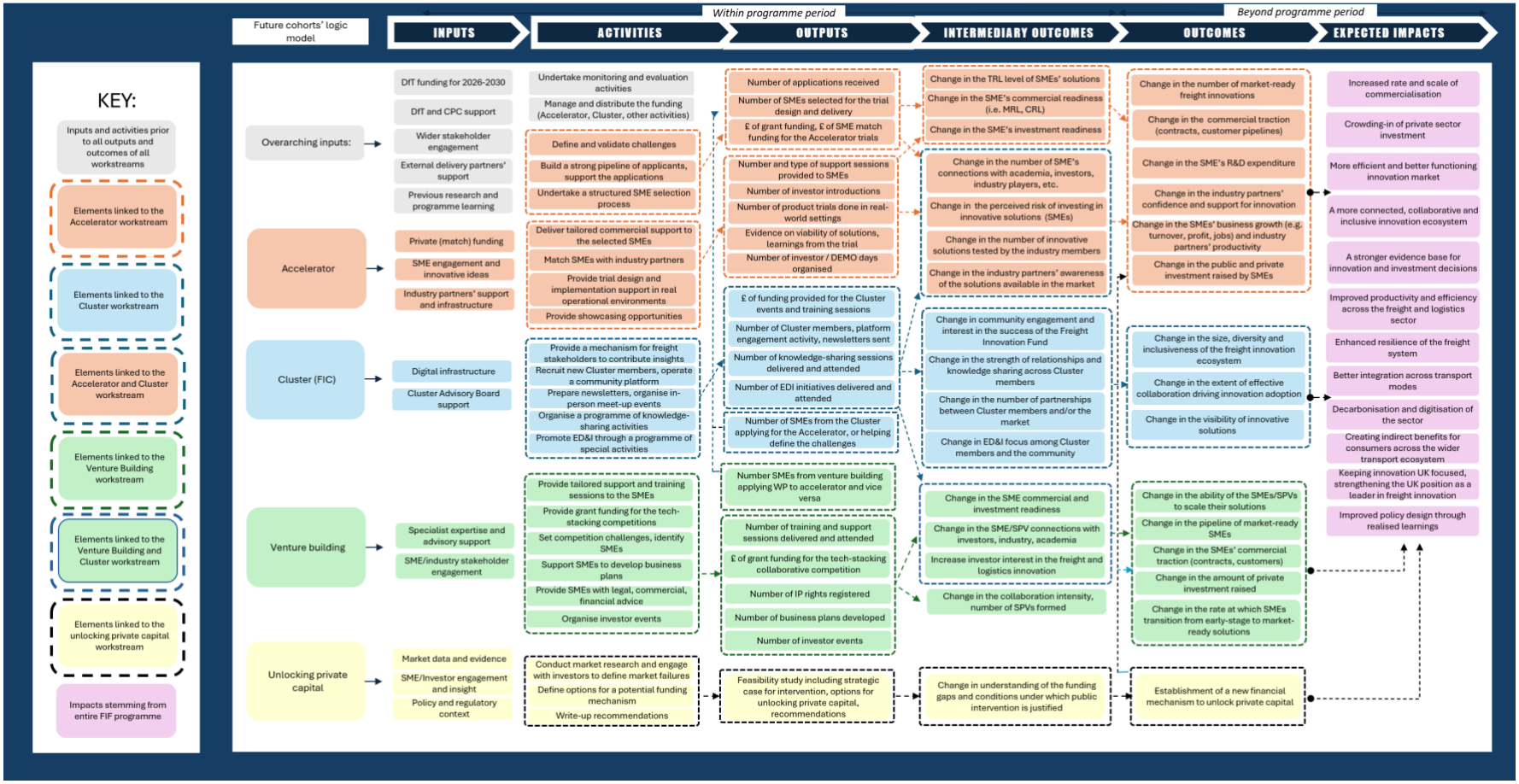
[5] 'SPV is a newly formed commercial entity or consortium created to bring together an SME, industry partners, public-sector stakeholders and other contributors to collectively develop, operate and scale a freight and logistics innovation solution. This programme will actively establish foundations for SMEs to validate SPV models as a route to scale; it will not create legal entities but will generate robust evidence of their viability and provide structured tools and guidance to support SMEs and partners in assessing, shaping and preparing investible collaborative propositions.' Source: Final Project Proposal Proforma (Stage 3), CPC.

[6] The broader networking and de-risking of innovation through the FIC and Accelerator are expected to reinforce the Venture Growth outcomes.

4.3.4 Impacts

The future cohorts with the new Venture Growth and Unlocking Private Capital work packages are expected to reinforce the wider impacts identified in the retrospective ToC. They are expected to support greater commercialisation of freight innovations, crowd in private investment, strengthen the UK's position in freight and logistics innovation, and generate further learnings to inform future policy design.

Figure 2 FIF logic model for cohorts 5+ (forward-looking)



4.4 Process maps

Process maps are a way of showing the different activities associated with every part of the design and delivery of a project, initiative or policy. The maps in Annex D show the main processes associated with each of the work streams which comprise the FIF (see Table 34, Table 35 and Table 36). Each map sets out the individual tasks undertaken by the principal stakeholder groups, including DfT, CPC, SMEs and industry partners/investors. This is useful when designing a process evaluation as it allows evaluators to break down sometimes complex workflows into discrete processes, to show how different parties influence the design and delivery of the workflow, and to isolate how specific actions can have an impact on a programme. Breaking down the design and implementation of a programme like this supports the design of the evaluation by making clear decision points, milestones and dependencies, therefore identifying at what points data are or can be generated, and how these data can support the evaluation. The approach is intended to support a consistent understanding of roles and responsibilities across the full process, while also illustrating the points at which different parties engage and interact.

Each work package is broken down into the key project phases to show how activity progresses over time. These phases comprise the work package design stage, application phase, assessment phase, project mobilisation, project delivery, and benefits realisation and knowledge sharing. This is intended to enable a clear view of the end-to-end journey for each work package and supports identification of opportunities for review, alignment and improvement.

4.5 Evaluation questions

This section sets out EQs for each of the impact, VfM and process evaluations of FIF.

4.5.1 Impact evaluation questions

The impact evaluation questions (**IEQs**) were developed based on the ToC presented in Section 4.1 and the objectives of the FIF. They were discussed and agreed with DfT to ensure that they address the priority questions for policy development and learning.

An initial long list of EQs was developed to reflect the key pathways within the ToC and was subsequently prioritised based on (i) alignment with the programme objectives set out in Section 3.1 and the ToC, (ii) the expected value of the evidence for informing future policy and programme delivery, and (iii) the feasibility of generating robust evidence given the anticipated availability of data. The main change in the IEQs from the initial long list was to subsume detailed questions within higher-level questions to ensure they are practical and pragmatic. This resulted in the following set of IEQs:

- **IEQ1**: To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?
- **IEQ2:** To what extent and how has the FIC (and its successor FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector and with other sectors in the supply chain?
- **IEQ3:** To what extent and how has the Venture Growth strand enabled collaborative tech-stacking solutions in freight and logistics that would not have otherwise been possible, or would have taken longer?
- **IEQ4:** To what extent is FIF strengthening the UK freight and logistics innovation ecosystem and contributing to research and development (R&D) growth?
- **IEQ5:** To what extent has the FIF improved SMEs' commercial readiness?
- **IEQ6:** To what extent has the FIF improved SMEs' investment readiness?
- **IEQ7:** To what extent has the FIF supported growth and productivity improvements among participating SMEs and industry partners that take up the technology?
- **IEQ8:** To what extent has the FIF addressed key barriers and challenges in the freight and logistics sector?

Table 3 provides further detail on the relevance of each EQ to the ToC and programme objectives. Annex A sets out the proposed indicators and evidence sources for each EQ.

Table 3 Impact evaluation questions

Evaluation question	Relevant element of the ToC/objective
IEQ1: *To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?*	Directly relates to the objectives to **provide tailored support to SMEs** and **support adoption and investment decisions**. It primarily relates to the Accelerator activities (technical support, commercial support, trials), outputs (applications, funding, training, trials delivered), and outcomes relating to technology readiness, deployment of innovations and SMEs' technical capabilities.
IEQ2: *To what extent and how has the FIC (and its successor the FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector*	Directly relates to the objective to **address coordination failures**. It primarily relates to the FIC/FLIN activities (platform, networking, knowledge sharing, ED&I and showcasing), outputs (membership, engagement, sessions delivered), and outcomes relating to collaboration, knowledge sharing and relationships across the freight and logistics innovation ecosystem.

Evaluation question	Relevant element of the ToC/objective
and with other sectors in the supply chain?	
IEQ3: *To what extent and how has the Venture Growth strand enabled collaborative tech-stacking solutions in freight and logistics that would not have otherwise been possible, or would have taken longer?*	Directly relates to the objective to **support commercial scale-up for SMEs.** It primarily relates to Venture Growth activities (tech-stacking, business support, investor engagement), outputs (supported SMEs, collaborative projects, business plans), and outcomes relating to product scaling and market-readiness.
IEQ4: *To what extent is FIF strengthening the UK freight and logistics innovation ecosystem and contributing to R&D growth?*	Primarily relates to longer-term outcomes and impacts of innovation activity, **R&D**, ecosystem development, knowledge spillovers, and wider adoption of innovation.
IEQ5: *To what extent has the FIF improved SMEs' commercial readiness?*	Directly relates to the objectives to **provide tailored support to SMEs** and **support commercial scale-up**. It primarily relates to Accelerator and Venture Growth outcomes concerning commercial readiness, commercial capability and commercial traction (i.e. contracts).
IEQ6: *To what extent has the FIF improved SMEs' investment readiness?*	Directly relates to the objectives to **support adoption and investment decisions** and **support commercial scale-up**. It primarily relates to investment readiness support and outcomes and impacts concerning investor engagement, investment readiness and private investment secured.
IEQ7: *To what extent has the FIF supported growth and productivity improvements among participating SMEs and industry partners that take up the technology?*	Directly relates to the objectives to **support adoption and investment decisions** and **support commercial scale-up**. It primarily relates to longer-term outcomes and impacts concerning SME growth, productivity, turnover and employment.
IEQ8: *To what extent has the FIF addressed key barriers and challenges in the freight and logistics sector?*	While these questions are not directly related to the business case objectives, they are important for testing how the programme has affected outcomes, which is a key consideration in the policy design. They cut across the various outcomes of the ToC.

4.5.2 VfM evaluation questions

The VfM evaluation questions (**VEQs**) reflect the Green Book guidance. The Green Book, amongst other things, sets out that VfM should assess whether the intervention meets its strategic objectives, and whether the benefits of a programme are likely to outweigh its costs.[7]

This has resulted in two EQs to be answered as part of a VfM assessment:

- **VEQ1:** To what extent has FIF met its strategic objectives?
- **VEQ2:** To what extent are the benefits, including both monetised and non-monetised benefits, of FIF likely to exceed the public costs?

More detail on VfM methodology is set out in the following sections.

4.5.3 Process evaluation questions

The process evaluation questions (PEQs) were developed based on the process maps presented in Section 4.4 and the objectives of the FIF. The questions were designed to encompass several factors including:

- Fidelity: the extent to which the core components of the programme are being delivered as originally intended;
- Reach: the success of the FIF in engaging its target audience;
- Context and barriers: the extent to which resources or internal and external factors impacted the FIF's delivery; and
- Mechanisms of effect: specific activities or interactions which were most valuable to different participants during the FIF's operation.

This resulted in the following PEQs, which will be assessed throughout the process evaluation:

- **PEQ1:** Was FIF implemented as intended across its different work packages?
- **PEQ2:** Were application and selection processes clear, fair and proportionate?
- **PEQ3:** How well was the FIF delivered and supported in practice?
- **PEQ4:** How effective were governance, reporting and risk management arrangements?
- **PEQ5**: Did the FIF's monitoring provide useful, high quality and complete data for tracking progress and improving delivery, without placing too much burden on participants and delivery staff?

[7] HM Treasury (2026), Green Book. Available at: The Green Book (2026) - GOV.UK, Box 1. Definition of value for money.

- **PEQ6**: Did programme marketing, communications and outreach effectively support delivery?
- **PEQ7**: What lessons (stratified by participant type, sector, maturity and work package) should inform future rounds of FIF?

5 Step 2: Evidence review and data mapping

To inform the evaluation framework, the existing monitoring and secondary data available for FIF were reviewed. This work mapped the proposed EQs and indicators against the available evidence to assess the extent to which existing data could support the retrospective and forward-looking evaluations, identify where evidence is strongest or weakest, and highlight remaining evidence gaps.

5.1 Monitoring data

Programme documentation and CPC information relating to monitoring and evaluation were reviewed alongside participant surveys administered by CPC. Two main sources were considered:

- **CPC's monitoring and evaluation (M&E) plans**: M&E plans suggest that CPC intended to collect a relatively broad range of monitoring information across the programme. However, the documentation available for this feasibility study does not consistently establish whether all the planned data collection was implemented in practice.
- **Surveys administered by CPC:** The participant surveys provide greater certainty on the information collected, as they show the specific questions included in the baseline and closure surveys. These surveys relate only to Accelerator SMEs and capture a number of indicators relevant to the evaluation (covering pre- and post-FIF information).[8]

Given the greater certainty around what was collected through the surveys, the retrospective evaluation design places greater reliance on survey-based indicators. Evidence identified only through the M&E plans is treated as potentially available rather than confirmed. Its availability, coverage and completeness should be verified during the evaluation inception phase, which will determine whether and how these additional indicators can be incorporated into the retrospective analysis.

The existing Accelerator survey administered by the CPC provides the strongest evidence on investment readiness (IEQ6) and SME growth (IEQ7), with partial coverage of technological and commercial readiness (IEQ1 and IEQ5). Coverage is much weaker for FIC outcomes, wider ecosystem and R&D effects, and sector barriers (IEQ2, IEQ4 and IEQ8). Table 4 presents the data assessment framework – it assesses the quality of the existing evidence and the main gaps, with more detailed indicator-level coverage provided in Annex A .

[8] Availability of indicators across baseline and endline is not consistent (with most indicators available at endline).

Table 4 Data assessment framework

EQ	Relevance and quality of the evidence	Key gaps remaining
IEQ1: Technological readiness and deployment	**Partial**. Some evidence on perceived technical capability and satisfaction with technical support, with limited related evidence on adoption/commercialisation.	Most core indicators on trials, funding, product development and deployment are not covered.
IEQ2: FIC collaboration and knowledge sharing	**Very limited**. The Accelerator survey does not systematically capture FIC participation or collaboration outcomes.	Most FIC-specific indicators are not covered.
IEQ4: Innovation ecosystem and R&D	**Limited**. Some evidence on follow-on private R&D investment and IP (intellectual property).	Wider R&D activity, innovation risk, visibility and ecosystem change are not consistently captured.
IEQ5: Commercial readiness	**Partial**. Direct evidence on contracts secured and some related evidence on business skills.	No consistent before-versus-after measures of commercial readiness, repeat contracts or commercial confidence.
IEQ6: Investment readiness	**Strong**. Good coverage of public and private funding, repeat funding rounds, customers and investor connections.	Confidence in accessing funding and perceptions of investor engagement is less well covered.
IEQ7: SME growth and productivity	**Moderate to strong**. Good evidence on employment and contracts, with baseline turnover captured.	Limited follow-up turnover evidence and little on industry-partner productivity.
IEQ8: Freight-sector barriers and challenges	**Very limited**. Little systematic evidence on whether FIF addressed wider market barriers.	Decarbonisation, digitalisation, remaining barriers and unintended impacts are largely not covered.

Source: Frontier Economics, based on sample survey provided by CPC.
Note: Full coverage of retrospective evaluation data is to be confirmed.

A 'do nothing' approach, retaining broadly the existing evidence base, is not considered sufficient to evaluate future cohorts as it would carry these gaps forward and limit the evaluation's ability to assess the full set of EQs. It would also miss entirely the new strands of FIF that will be introduced from 2026/27.

This data assessment reveals that to evaluate future FIF cohorts, data collection should therefore combine **enhanced CPC monitoring** (i.e. include additional metrics related to the new FIF strands of Venture Growth and Unlocking Private Capital) with **targeted primary research**, with purposive samples. See below for more detail on primary research. Table 24 and Table 26 set out the indicators, data sources and collection timeline proposed for future cohorts.

5.2 Secondary data

Secondary data sources were reviewed to assess whether they could support the evaluation by providing evidence on participant outcomes. The review considered the many datasets that could be relevant (including official statistics such as the ONS, DfT, DSIT etc. and commercial datasets) and assessed the variables available, level of granularity, coverage, frequency, access requirements and cost, as well as the time and uncertainty involved in identifying and matching FIF participants within each source. The detailed assessment of individual sources is presented in Annex B .

The data assessment considered whether secondary data could provide a proportionate means of validating or supplementing information collected directly from participating SMEs, rather than acting as the main source of outcome evidence**.** This revealed the following findings:

- **Public, free datasets with firm-level information:** Business Enterprise Research and Development (BERD) and the UK Innovation Survey (UKIS) contain relevant R&D and innovation measures but are sample based, so FIF participants are unlikely to be included. The Business Structure Database (BSD) offers more complete coverage, capturing businesses registered for VAT or PAYE (which is likely to miss many of the FIF-supported SMEs which may not be VAT-registered). It mainly records business outcomes further along the ToC, such as employment and turnover, which may take time to materialise. The data are released with a lag (which varies per variable but is at least of six months), further limiting their usefulness for assessing these outcomes. Companies House has the broadest coverage but captures a relatively limited set of relevant outcomes, including company accounts and status. It also provides less detailed financial information for many smaller firms which are only required to file simplified accounts.[9]

[9] Companies House reporting varies by company size, with micro companies (10 employees or fewer) and small companies (50 or fewer) generally able to file less detailed accounts than medium-sized companies (250 or fewer) and larger firms.

- **Commercial datasets with firm-level information:** Beauhurst, Crunchbase, PitchBook and The Data City provide richer company-level information than the public sources. This includes measures of employment, financial performance, investment and funding activity, grants, patents and company growth. However, coverage and depth vary across firms and outcomes. Crunchbase and PitchBook are strongest for venture-backed, privately funded and transaction-active companies, which may make them less representative of the full range of FIF SMEs. Beauhurst and The Data City both provide broader UK company coverage, although the completeness of individual financial, employment and funding histories can still vary. Beauhurst combines Companies House information with additional data on funding rounds, grants, patents and growth indicators, making it particularly suitable for targeted validation of reported investment and business growth outcomes for some FIF-supported SMEs.
- **Other datasets:** Gateway to Research (GtR) could provide a targeted cross-check of whether SMEs have received FIF funding, but it does not capture funding from other sources and is not a comprehensive company database. Dimensions and Higher Education Business and Community Interaction (HE-BCI) data are less relevant because their core data are structured around grants, publications or higher education providers rather than SMEs.

Overall, public datasets provide useful information for particular outcomes but are generally constrained by sampling, the range of available variables or access requirements. Commercial datasets offer a broader set of firm-level indicators and could strengthen validation of selected participant outcomes, but their additional cost means that their use needs to be proportionate. **For this reason, commercial secondary data are considered only under Option 2, where the more comprehensive evaluation design provides a stronger justification for the additional cost of validation.** The proposed use of secondary data under each option is set out in the retrospective and forward-looking evaluation design sections.

6 Step 3: Evaluation methodology

This section sets out the principles underpinning a proposed impact evaluation approach, along with the different methods that should be used to assess the impact on the indicators identified and the programme's VfM. The data sources needed are also described. Sections 7 and 8 build on this to provide more detail on the retrospective evaluation methods and the forward-looking evaluation methods (two options are presented).

6.1 Approach

6.1.1 Principles

The methodological approach to delivering the evaluation should be based on the following principles:

- **Robustness**: the methods used to assess the effectiveness of FIF funding on outcomes should be robust. Where the data allow, the evaluation should consider additionality by exploring the impact of FIF funding on outcomes over and above what would have happened in the counterfactual, namely in the absence of FIF funding;
- **Comprehensiveness**: the evaluation should consider the outcomes identified in the ToC and logic models, where these can be assessed in practice. This should include evidence on both the outcomes achieved, the pathways through which FIF funding has helped to generate them, and dependencies on other external factors; and
- **Proportionality**: the evaluation should balance the need for credible and useful evidence with the practical constraints of data collection. This means focusing effort on the indicators and evidence sources most likely to generate meaningful learning, while limiting the burden placed on SMEs, delivery partners and other stakeholders.

The evaluation will draw on best practice guidance for evaluation, including the Magenta Book.[10]

6.1.2 Impact evaluation methods

There are many evaluation methods that could be applied, each has pros and cons and different data requirements. The evaluation approach aims to balance the need for rigour and robustness, with the costs and burdens involved in data collection compared to learning potential (proportionality). The following factors were considered when designing the evaluation approach:

[10] HM Treasury (2026), Magenta Book. Available at: The Magenta Book - GOV.UK

1. **The size of the FIF cohorts**: the different strands of FIF support different numbers and types of businesses and organisations. Some, such as the Accelerator, which typically supports around ten SMEs per year, provide relatively intensive support to small groups. Others, such as FIC/FLIN, engage a much larger number of organisations, but participation varies substantially in intensity and the expected outcomes, such as increased knowledge sharing, collaboration and networking, are less readily captured through standard business performance measures. Small sample sizes reduce the statistical power of quantitative analysis, particularly where cohorts need to be analysed separately or where outcomes vary substantially between work packages.

2. **The availability of data and burden of new data collection**: CPC already collects monitoring information, and this should be used wherever it provides suitable evidence. However, additional data will be required to answer some EQs and assess changes over time. Commercial datasets may help validate self-reported outcomes and provide contextual evidence, but coverage and consistency are likely to vary. Access can involve considerable cost (see Section 5.2). Primary data collection will therefore remain important. There is a trade-off between strengthening the evidence base and the additional burden this places on participating SMEs, industry partners and other stakeholders. This is particularly relevant where comparable longitudinal data would need to be collected from both supported SMEs and unsuccessful applicants.

3. **The timescales over which impacts are likely to be observable**: FIF outcomes vary substantially in the time they are expected to take to emerge. Changes in technological readiness, commercial readiness, knowledge or confidence may be observable during or shortly after programme participation. In contrast, SME growth and productivity, and wider sector outcomes such as improved freight resilience, productivity and decarbonisation, may take longer to materialise. Short follow-up periods therefore limit both the outcomes that can be observed and the usefulness of quantitative comparisons. Longer-term follow-up would strengthen the evaluation.

4. **The ability to isolate what is attributable to FIF compared to other factors**: participating organisations operate within a dynamic environment in which actions and factors that may affect the outcomes of interest for this evaluation interact. For example, an SME may secure investment or a new commercial contract after participating in the programme, but this could also reflect wider market conditions, support received from other programmes or activity that was already underway before FIF. The evaluation therefore needs to assess the extent to which observed outcomes can reasonably be attributed to FIF rather than to these other influences.

5. **The focus on innovation of this intervention**: innovation programmes differ from more established interventions because experimentation and learning are themselves important benefits. Some technologies or projects would be expected not to progress, and failure to commercialise does not necessarily imply that FIF was ineffective. The relevant questions

are whether FIF enabled worthwhile experimentation that would otherwise not have occurred, generated useful evidence on the viability of technologies or approaches, and allowed SMEs, industry partners and the programme itself to learn and adapt. The evaluation therefore needs to examine why projects did or did not achieve their aims, whether useful learning or capability gains were generated, and whether these informed subsequent SME activity, programme design or wider industry decisions.

6. **The extent to which the benefits and value of the programme are monetizable:** some of the benefits of the FIF, such as the benefits of forming connections across the industry or the value of learning, are not likely to be directly monetisable. Yet these are crucial benefits that must be considered in the impact and VfM evaluations.

Balancing these factors and, given the range of EQs and indicators of interest, means that a contribution analysis framework that integrates quantitative evaluation methods is recommended. This aims to build a robust assessment of programme contribution.

The impact evaluation methods considered are described below. Subsequent chapters explain how the suggested methods are applied across the proposed evaluation options, including the indicators that are used to assess impact, and the associated trade-offs in terms of analytical robustness, evidence generated and resource requirements.

Descriptive analysis

The aim of descriptive analysis is to set out the data and information that provide the context to the evaluation findings. For example, this relates to the funding allocated (how much was allocated, to whom and for what innovations); supported SMEs (how many SMEs were supported overall and by each FIF strand and what their key characteristics were); unsuccessful applicants (how many, what innovations they were pursuing and what their key characteristics were); and industry partners (how many and what level of involvement they had); and any other descriptive information relevant.

Before-versus-after analysis

The before-versus-after analysis will assess whether measurable outcomes change following FIF support by comparing participants' position at baseline with their position at the end of the programme and six months after programme closure (i.e. baseline plus 12 months). Indicators could include changes in TRL, commercial readiness level (CRL) and market readiness level (MRL), investment raised, employment and turnover, and the number of investor connections, alongside other quantifiable outcomes where suitable data are available. The exact scope of the before-versus-after analysis is considered under each evaluation option in Section 7.

For each indicator, the analytical sample will comprise all participating SMEs with comparable observations at both time points. Paired statistical tests will be used to assess whether the change between the two time points (i.e. baseline and closure) is statistically significant, as

illustrated in the retrospective evaluation example in Table 14. Where sufficient observations are available across work packages or cohorts, tests of differences in the magnitude of change will also be undertaken to explore whether outcomes vary across groups.

Before-versus-after analysis cannot by itself establish that FIF caused an observed change because outcomes may also be influenced by wider market conditions, other public or private support, or activity that was already underway before FIF support. Its primary role is therefore to establish what changed, by how much and for whom. The analysis will be complemented by benchmarking and qualitative evidence to provide further context on whether observed changes are consistent with a contribution from FIF.

Benchmarking

Benchmarking can be used to compare outcomes with what was anticipated in the business case or in SME applications to the FIF. The aim is to understand whether what was promised has actually been delivered or is on track to be delivered.

A further form of benchmarking was also considered to provide context when interpreting findings from the evaluation. This relates to the potential for the evaluator to look at the final evaluation findings for innovation programmes that have sought to support the TRL and CRL of technologies as a way to provide useful context to the FIF evaluation findings**. This would be for context only and not a benchmark per se**. **This is because comparing evaluations could be misleading.** The comparability is limited by the following factors, which are essential to bear in mind to avoid incorrect conclusions:

- EQs will differ across evaluations, as will the metrics assessed.
- The scales of programmes and support will differ in terms of funding and the numbers of participants supported (this affects whether quasi-experimental analysis is possible, for example).
- The nature of the technologies focused on for each programme will differ (starting point TRL, market uptake potential etc.).
- There will be differences in the nature of support provided in terms of the duration and intensity. Interventions can differ from one-off light-touch webinar engagement, for example, to multi-month or multi-year intense one-on-one support with professional advisors plus large grants, networking events etc.
- The objectives of the interventions and the market failures they are intended to address will differ.
- When the interventions were implemented will differ (the economic context at the time could have a significant impact on how they perform).
- When the evaluation was undertaken post intervention will affect findings (if it is early stage then longer-term effects could be overlooked).

If the evaluator finds it helpful to look at other innovation evaluations, then they may find it helpful to look at the Cabinet Office Evaluation Task Force registry Home - Evaluation Registry - GOV.UK.

As such, contextual benchmarking would not treat other programmes as being directly equivalent to FIF or use their outcomes as a counterfactual. Rather, it would provide a reference point for understanding whether the scale and pattern of outcomes observed for FIF are broadly consistent with those seen elsewhere in innovation support.

The evaluator could identify a small number of outcomes that are commonly reported across innovation programmes and are also relevant to FIF. Where sufficiently comparable evidence is available, these could include follow-on public and private investment, employment and turnover growth, commercialisation or adoption of supported innovations, commercial contracts or customers secured, and other measures of business growth. Where possible, comparisons could be expressed using common measures, for example investment leveraged per £1 of programme funding, outcomes per supported business, or the proportion of supported businesses achieving a particular outcome. The selection of comparator programmes and metrics would depend on the evidence available at the time of the evaluation.

Comparability would need to be assessed explicitly before drawing conclusions from these comparisons. In particular, the evaluator should consider differences in programme objectives, participant characteristics, technology maturity, scale and intensity of support, programme expenditure, economic and market context, and the period over which outcomes were measured. Where material differences exist, these should be reported alongside the comparison and the results interpreted as contextual evidence rather than evidence that one programme has performed better or worse than another.

Used in this way, benchmarking could help the evaluator interpret whether FIF outcomes appear relatively large or small in the context of other innovation support and identify possible explanations for differences between programmes. For example, relatively different levels of follow-on investment could be considered alongside differences in the maturity of supported technologies, grant intensity or the commercialisation support provided. Benchmarking findings would therefore feed into the wider contribution analysis and VfM assessment alongside FIF-specific evidence on additionality, programme mechanisms, costs, non-monetised benefits and wider effects. They would not determine the impact or VfM judgement on their own.

Primary research-based counterfactuals

As noted earlier, quasi-experimental evaluation is not feasible. However, to help build an understanding of what might otherwise have happened without the FIF (i.e. what has FIF delivered that is additional to what would have happened anyway), primary research-based

counterfactuals can be used. Two forms are proposed: participants' own assessment of FIF's contribution to observed outcomes and comparative analysis with unsuccessful applicants.

Participants' own assessment of FIF's contribution to observed outcomes (self-reported attribution)

This approach builds on the before-versus-after analysis. As part of the semi-structured interviews (when asking about quantitative metrics), the participating SMEs will be asked whether they consider an observed change to have occurred as a result of FIF support. For each relevant outcome, participants would provide a self-reported extent of attribution indicating whether, in their view, FIF had contributed to the change 'not at all,' 'a little,' 'a lot' or 'was the only reason'.

These responses can then be aggregated across participating SMEs to show the proportion that reported that a particular outcome was attributable to FIF. For example, the analysis could report the proportion of SMEs that experienced an increase in investment and, among those SMEs, the proportion of SMEs that reported that FIF contributed 'a lot' or 'was the only reason.'

Comparative analysis with unsuccessful applicants

The primary research for the forward-looking evaluation options involves interviewing unsuccessful applicants both at the baseline stage and at follow-up (i.e. six months after cohort closure). This is to generate evidence on what happened to applicants who did not receive FIF support, so that these outcomes can be compared to successful SME applicants. The unsuccessful applicants will first be selected for interview using the approach set out in Section 6.2. Secondary data will be collected, where available, for these selected SMEs to validate a small number of key quantitative outcomes, such as employment, turnover and external funding.[11]

This is intended to provide a comparative perspective rather than a quasi-experimental counterfactual. Where sample sizes and data availability allow, statistical testing will be used to assess whether differences in key outcomes between successful and unsuccessful applicants are statistically significant, including differences observed at the start and end of the programme whenever possible.

A broader firm-level benchmarking exercise using external secondary datasets to construct a comparison group was also considered. However, this was assessed to be unlikely to add value for several reasons. Firstly, FIF applicants are often micro businesses and do not feature in many secondary firm-level datasets (especially where businesses reported are VAT registered only). Secondly, many of the FIF applicants are not working alone (i.e. they will be

[11] Some quantitative data will be captured through the interviews with unsuccessful SMEs. Due to the cost of accessing the external datasets, data validation using external sources is only considered in Option 2 of the forward-looking evaluation design.

part of tech-stacks and SPVs) and would be contributing to the commercialisation of the technology in different ways, so changes in outcomes are likely to vary and make benchmarking difficult to interpret. Thirdly, secondary datasets do not capture important characteristics such as technological maturity, commercial readiness and innovative potential, all of which are important in the context of understanding the impact of FIF on those SMEs.

Contribution analysis

Contribution analysis will provide the overarching framework for the impact evaluation and will bring together all the evidence generated through the methods above, plus additional qualitative evidence (from primary data collection), to assess the contribution of FIF to observed outcomes.

For this, contribution claims will first be developed from the ToC, setting out how particular FIF activities are expected to lead to specific short-term and longer-term outcomes. The analysis will then test these claims in a structured way. It will not be limited to assessing whether an outcome occurred but will also consider whether the expected mechanisms operated as intended, whether FIF plausibly contributed to the observed change and whether other factors provide credible alternative explanations.

For each priority outcome and associated causal pathway, the evaluation will assess:

- **Evidence that the expected outcome occurred.** This will draw primarily on monitoring data and before-versus-after analysis of indicators collected consistently at baseline, closure and follow-up, supplemented by statistical testing where sample sizes allow. Qualitative evidence from semi-structured interviews and case studies will provide additional evidence.
- **Evidence that FIF contributed to the outcome.** The analysis will assess whether the mechanisms anticipated in the ToC operated in practice. This will draw on (i) self-reported attribution of outcomes to the FIF and (ii) comparative analysis with the outcomes reported by unsuccessful applicants. This will be supplemented with qualitative evidence from SMEs, industry partners and freight and logistics ecosystem stakeholders on how FIF support contributed to observed changes. This will also recognise that some outcomes may not be observable within the time period of the evaluation so the evidence will consider whether earlier outcomes in the causal pathway have been observed which indicate that the FIF is on track to deliver longer-term outcomes as anticipated.
- **Evidence on alternative explanations.** The analysis will identify other factors that could have influenced the outcomes. These could include other public or private support received by SMEs, pre-existing commercial or investment activity, wider market conditions, changes in business strategy or other external developments. Evidence will be drawn from primary research with participating SMEs, unsuccessful applicants, industry partners and wider stakeholders, alongside relevant secondary and contextual evidence.

- **The strength of evidence supporting the contribution claim.** The overall strength of evidence supporting, or countering, each contribution claim will be assessed. This will be in line with a structured set of criteria relating to low-, medium-, high- and very high-strength evidence. An illustrative framework is set out below in Table 5 using criteria relating to the method used to generate the evidence, the volume of evidence, the consistency of evidence and the influence of other explanatory factors.

Table 5 Strength of evidence framework

Strength	Methodology	Volume of evidence	Consistency of evidence	Alternative explanations
Very strong	At least one methodology uses a quasi-experimental approach	*And* Multiple different sources that support the same conclusion	*And* All evidence points to the same findings	*And* No alternative explanations of the outcome are identified
Strong	At least one methodology uses a quasi-experimental approach	*Or* Multiple different sources that support the same conclusion	*And* Almost all evidence sources provide consistent findings	*And* Alternative explanations have a minimal effect on the outcome or affect a small portion of participants
Medium	Quantitative analysis based on before-versus-after with non-statistical evidence of attribution[12]	*Or* Multiple sources support the same conclusion, but some links in the pathway are less well evidenced	*And* Most evidence points to the same findings	*And* Other factors are likely to have contributed materially, but less so than the FIF programme
Low	Evidence that the outcome occurred is indicative only; quantitative evidence is absent or qualitative	*Or* One or two indicative sources only	*And* Inconsistent findings (could have multiple conflicting sources)	*And* Other factors more likely to explain impact

[12] This relates to self-reported attribution of the outcomes to FIF by SMEs, or evidence is derived from comparative analysis with unsuccessful applicants.

Strength	Methodology	Volume of evidence	Consistency of evidence	Alternative explanations
	fieldwork inconclusive			

Sections 7 and 8 set out examples of how the contribution analysis would be implemented in the retrospective evaluation and under Options 1 and 2 for the future evaluation.

Alternative methods considered and excluded

Alternative evaluation methods were considered to ensure that the proposed design is proportionate, feasible and capable of providing robust evidence on the programme's contribution. The methods that were assessed but excluded are set out below.

Quasi-experimental methods

Quasi-experimental methods, such as propensity score matching approaches, regression discontinuity and difference-in-differences, can provide stronger evidence of causal impact by comparing outcomes for FIF-supported businesses with what would otherwise have been expected to happen without the FIF (estimated using a sufficiently comparable group that did not receive support). However, the characteristics of FIF create several challenges in implementing these methods robustly and proportionately for several reasons.

Firstly, the sample sizes of supported SMEs in each cohort are small (around ten SMEs for the Accelerator, for example). Pooling across cohorts is not likely to boost numbers of SMEs sufficiently for these statistical methods – small numbers limit statistical power, with estimates likely to have excessive confidence intervals and only relatively large effects being detectable.

Secondly, there are limitations in the administrative datasets in that most only report on PAYE or VAT-registered businesses so many supported SMEs would not feature. In addition, they lack metrics in administrative datasets that relate to the outcomes relevant for FIF, such as commercial readiness, private investment attracted and network benefits arising from collaborative technology development (see Section 5.2).

Thirdly, quasi-experimental methods work best when there is a small number of primary metrics of interest, such as business turnover or employment. The EQs that DfT is interested in result in a very large number of metrics and indicators which do not have large datasets available. Therefore, the applicability of the quasi-experimental method is limited.

A separate primary research-based counterfactual approach, set out above in this section, will compare selected outcomes for successful and unsuccessful applicants and, where sample sizes allow, test whether observed differences are statistically significant using two-sided

tests. Moving from these relatively simple comparisons to quasi-experimental analysis would require controlling for a wider set of characteristics that influence both selection into FIF and subsequent outcomes, which are not available for the cohort of unsuccessful SMEs.[13] A small sample, including additional variables would also reduce the precision of estimates.

On balance, quasi-experimental analysis is therefore not proposed as a core method. The additional data requirements and researcher time are unlikely to be proportionate given the relatively small samples and likely high standard errors in the estimation.

Realist evaluation

Realist evaluation was considered because, like contribution analysis, it is a theory-based approach that can be used where a conventional counterfactual is difficult to construct. However, the two approaches answer somewhat different questions. The Magenta Book describes realist evaluation as focusing on what works, for whom, in what circumstances and how. It does this by developing and testing specific hypotheses about how context, mechanisms and outcomes interact.[14] In realist evaluation, the same intervention may generate different outcomes for different participants because the context affects whether and how the underlying mechanism operates. The focus on the context is useful if there is a strong interest in how outcomes vary across different cohorts. However, the sample of SMEs supported for this evaluation is relatively small, and the focus of the EQs is less on variations across cohort characteristics than on the impact of FIF overall.

Contribution analysis was therefore considered as it has a broader focus on whether an intervention contributed to observed outcomes. It starts from the programme ToC and systematically tests contribution claims relating to whether the expected causal pathways are supported by the available evidence, while also considering alternative explanations. Therefore, contribution analysis produces an evidenced line of reasoning about whether an intervention contributed to an outcome.

The primary objective of this evaluation is to assess the contribution of FIF as a fund-wide intervention against its ToC. Contribution analysis was therefore considered to be the more appropriate and proportionate approach. Differences across beneficiary types and delivery contexts, which are typically included in the realist evaluation, will instead be explored through qualitative interviews and exploratory case studies.

[13] As part of the benchmarking, we only gather basic characteristics of the unsuccessful SMEs and validate them via secondary sources. It is also unlikely that secondary sources would contain a full range of relevant variables (e.g. no TRL/CRL data).

[14] HM Treasury (2026), Magenta Book Annex A, Analytical methods for use within an evaluation. Available at: The Magenta Book - GOV.UK

6.1.3 Process methods

Two qualitative forms of data collection are proposed for the process evaluation: thematic analysis of semi-structured interviews and case studies. These methods are intended to generate evidence on how the FIF has been delivered, how participants and partners have experienced it, and the extent to which delivery processes appear to support or constrain implementation. The approach is consistent with the Magenta Book, which identifies interviews as appropriate for eliciting views on intentions, experiences and self-reported impacts, while case studies provide an in-depth understanding of a phenomenon in its real-world context. [15]

Thematic analysis of semi-structured interviews

Semi-structured interviews gather the views of people involved in a programme, including stakeholders, delivery bodies and beneficiaries. They are used to explore participants' intentions, experiences and self-reported impacts in depth, and are especially valuable for understanding how and why an intervention has worked in a particular way. The main strengths of interviews are that they generate rich, in-depth evidence and can help explain findings from other methods. However, they can be time intensive for both evaluators and participants, and there is a risk of bias as some people may be more willing than others to take part. The data gathered through the interviews will be analysed using thematic analysis.

Thematic analysis is a standard and a robust approach for analysing qualitative data. Braun and Clark (2006)[16] developed a six-phase approach involving familiarisation with the data collected through the interviews, generating initial codes (where codes represent unique concepts, viewpoints or issues), searching for themes (combining codes into themes), reviewing themes (checking they are valid), defining and naming themes (to provide clarity), and writing up. By applying this approach, maximum value can be generated from the interview data.

Other qualitative analysis methods were not considered appropriate in the context of this evaluation. For example, grounded theory seeks to uncover a theory from within the data rather than uncovering the insights about impacts; interpretative phenomenological analysis is also not appropriate as it places attention on the experience of participants and less attention on the observed outcomes needed for the evaluation; and content analysis focuses

[15] HM Treasury (2026), Magenta Book Annex A analytical methods for use within an evaluation. Available at: The Magenta Book - GOV.UK,

[16] V. Braun, V. Clarke, Using thematic analysis in psychology, Qual. Res. Psychol. 3 (2) (2006) 77–101, https://doi.org/10.1191/1478088706qp063oa

mainly on the frequency and categorisation of the data, which again is not the aim of the evaluation .[17]

Case studies

This method will inform both the process evaluation and impact evaluation. The aim of the case studies is to provide evidence of the end-to-end commercialisation journey of some of the FIF-supported innovations.

Four FIF-supported SMEs' innovations per cohort are proposed, collecting interview data from the SMEs and the stakeholders in their ecosystem (industry partners, regulators, investors etc.), with interviews conducted at three points: baseline, end of the programme (after six months), and around six months after programme closure (i.e. baseline plus 12 months).[18] The case studies will track how individual SMEs develop over this period, examining what support they received, the role of the FIF in the commercialisation journey, what changes occurred, and the barriers and enablers.

The case studies will examine the mechanisms through which outcomes are achieved, including the role of specific elements of FIF support such as trial funding, technical and commercial support, introductions to industry partners or investors, and opportunities to test innovations in real-world settings. They will also explore barriers and enablers to progress and the influence of wider business and market conditions.

The case study candidates will be drawn from the pool of successful applicants which have already agreed to be interviewed, along with their industry partners. Case studies will be delivered by extending the SME interview from 45 minutes to 75 minutes to pick up more of the end-to-end journey of the product being commercialised. Desk research would complement by comparing the technology they expected to develop and what actually happened. Candidates for longitudinal case studies should be selected purposively to capture contrasting innovation journeys and will be selected collectively to provide maximum variation. Potential selection criteria include:

- **Work package** (Accelerator, Venture Growth, Unlocking Private Capital);
- **TRL at entry**, ranging from TRL5-TRL9;
- **Technology type:** as with the other research activities, for example digital/data, automation, decarbonisation/energy or infrastructure;
- **Freight mode:** ensuring that the cases are not all drawn from the same part of the freight sector;

[17] Ahmed, S. K., Mohammed, R. A., Nashwan, A., Ibrahim, R., Abdalla, A., Ameen, B., Khdhir, R. (2025). Using thematic analysis in qualitative research. Journal of Medicine, Surgery, and Public Health (6) pp1-6.

[18] Case studies are only considered in Option 2 of the forward-looking evaluation design.

- **Type of industry partner:** including different types of partners such as a major logistics operator, infrastructure owner, port/terminal, rail operator or major freight customer;
- **Strength and nature of the SME: industry partner relationship** – for example:
  - a new relationship created through FIF
  - a pre-existing relationship
  - a highly collaborative co-development model
  - a more conventional supplier/customer trial; and
- **Level of delivery risk or challenge:** including some projects expected to face technical, regulatory, operational or commercial barriers rather than selecting only the most obviously promising projects.

The case studies can provide more detailed evidence to complement the quantitative analysis and primary research and strengthen the assessment of how and why FIF contributes to observed outcomes. The particular data proposed for the case studies are in Table 6.

Table 6 Potential case study approaches

Data collection technique	Process evaluation use	Impact evaluation use	Added value beyond SME interviews
Interviews with the industry partner linked to the case	Assess how matching of SMEs to industry partners, trial governance, access to operational environments and CPC support worked from the adopter side.	Assess whether the trial changed confidence, procurement intentions, adoption decisions or future innovation behaviour.	Provides a second perspective on the same trial and reduces reliance on SME self-reporting.
Document review	Review application, assessment feedback, project plans, monitoring reports, milestone records and CPC correspondence.	Compare intended outputs/outcomes with what was actually achieved.	Gives an objective chronology and allows claims made in interviews to be checked against programme records.

Table 7 shows the learnings that can be expected from the case studies. These are additional to those from the interviews with successful SMEs.

Table 7 Possible learnings from case studies

Stage	Process evaluation learning	Impact evaluation learning
Baseline	Expectations: roles of CPC, SME and industry partners; anticipated programme inputs and barriers.	Detailed starting conditions: TRL, CRL, commercial prospects and constraints. ToC for the individual case: views on how FIF is expected to support eventual adoption/scale-up. Milestones: agreed markers against which change can subsequently be tracked.
End of cohort	How delivery actually unfolded: sequencing of support, trial design, relationship management, commercial/specialist support, refinements to product; any implementation issues. Interaction between programme components: e.g. relationship between funding received, partner access, training/technical support received rather than considering each in isolation.	Turning points: decisions/events that altered the delivery trajectory. Alternative explanations: market changes, other funding, management changes etc. Interim outcomes: technical, commercial, organisational and partnership effects.
Follow-up	Continuity and handover: whether the programme successfully connected the SME to the next stage of development and where gaps remained.	Performance after FIF: adoption, receipt of further funding post participation; number of patents lodged; changes in company size; R&D expenditure. Persistence: whether capabilities and relationships persist. Causal judgement: how important FIF was relative to other influences. Counterfactual: what evidence now suggests would have happened without FIF.

6.1.4 VfM evaluation methods

The approach to assessing VfM draws on government guidance, including the HM Treasury Green Book[19] and Magenta Book.[20] The proposed VfM evaluation addresses the two VEQs presented in Section 4.5.2, covering (i) the strategic objectives of FIF and (ii) whether the benefits generated are likely to justify the resources invested.

VEQ1: Assessment of FIF's strategic objectives

The first VEQ considers the extent to which FIF has achieved its strategic objectives. This reflects HM Treasury Green Book guidance that value for money should be considered in relation to the objectives of an intervention. It also emphasises that evaluation should consider whether the intervention's objectives were achieved and whether the anticipated pathways from activities to outcomes materialised in practice. [21]

The assessment will consider the four FIF objectives outlined in Section 3.1. Each objective corresponds to outcomes and indicators examined through the impact evaluation and will be reflected in the contribution claims. For each objective, the VfM assessment will therefore draw together the relevant findings from the impact evaluation to form a structured judgement on the extent to which it has been achieved. As explained in Section 6.1.2, the contribution analysis will assess whether the outcomes associated with relevant contribution claims have occurred, the extent to which FIF contributed to those outcomes and the role of any alternative drivers. This will draw on the full range of evidence, including descriptive analysis, before-versus-after analysis, comparative analysis, primary research-based counterfactuals and case studies.

VEQ2: Assessment of whether FIF benefits justify the resources used

The second VEQ considers whether the benefits generated by FIF are likely to justify the resources invested in the programme. Consistent with HM Treasury Green Book principles,[22] the assessment will consider the full range of relevant costs and benefits rather than relying on a single monetised measure.

This includes benefits that can be monetised, benefits that can be quantified but not robustly expressed in monetary terms and benefits that can only be assessed qualitatively. The assessment will also consider the distribution of benefits, wider spillovers and unintended

[19] HM Treasury (2026), Green Book. Available at: The Green Book - GOV.UK

[20] HM Treasury (2026), Magenta Book. Available at: The Magenta Book - GOV.UK,

[21] HM Treasury (2026), Green Book. Available at: The Green Book - GOV.UK

[22] HM Treasury (2026), Green Book. Available at: The Green Book - GOV.UK

effects, alongside the uncertainty surrounding the estimates. The findings from the VfM assessment will be brought together in a **summary-style VfM synthesis**.

The remainder of this sub-section provides an overview of the available VfM methods that can be used to assess different types of benefits, including scenario-based partial CBA, cost-effectiveness and qualitative frameworks to assess non-monetised non-quantified benefits, as well as considerations on additionality and distributional effects.

Scenario-based partial CBA

Benefits for which a sufficiently robust monetary value can be estimated will be combined with qualitative evidence on non-monetised effects and compared with programme costs.

The scenario-based partial CBA will draw on observed outcomes from the impact evaluation and, where benefits are expected to continue beyond the evaluation period, develop scenarios for their future trajectory over the next five years. Monetisation will use appropriate evidence and assumptions for each benefit to generate an indicative range of benefit cost ratios (BCRs). In addition to this, the analysis will make the necessary assumptions regarding business attrition,[23] decay in the return on R&D investment,[24] the timing of realised benefits, the duration over which benefits are expected to persist and discount rates[25] (in line with Green Book guidance). Monetary estimates will be expressed in present value terms.

The partial CBA and resulting BCR will not be treated as a standalone or determinative VfM measure. It will be combined with evidence on quantified non-monetised benefits and qualitative benefits, including distributional effects, wider spillovers and unintended effects, in the overall VfM synthesis.

The VfM assessment will be in terms of VfM categories: poor (benefits less than costs), low (benefits greater than costs but less than 1.5 times costs), medium (benefits more than 1.5 times costs but less than double the costs), high (benefits greater than double the costs but less than four times costs) and very high (benefits more than four times costs).[26] These categories will be informed by the monetised analysis where robust estimates are available, but the final assessment will also account for quantified benefits and non-monetised non-quantified benefits. Where monetised benefits alone do not meet a given threshold, the

[23] Business attrition could be assumed to be 10%. This is based on the ONS data that business death rates are consistently 10-12% for UK SMEs. See: Business demography, UK - Office for National Statistics

[24] Decay in the return on R&D investment could be assumed to be 15%. This is in line with the rate commonly used in other literature to estimate on returns to private knowledge. See: rate-of-return.pdf

[25] The HM Treasury Green Book recommends a social time preference rate of 3.5% per annum in real terms for years 0-30. See: The Green Book (2026) - GOV.UK

[26] See DfT Value for Money Framework (2025) Value for Money Framework

assessment will consider whether the evidence on non-monetised benefits is sufficiently strong and material to support a different overall VfM judgement.

For the monetised analysis both costs and benefits data are required. Cost data for FIF are expected to be provided by the DfT delivery team. The assessment will consider the overall FIF budget and, if possible, the programme management and administration costs and work package delivery costs. This should be overall and per SME.

The benefits included in the monetised assessment will depend on the evaluation option selected and the availability of monitoring data and primary research evidence. Where evidence is available, the assessment is expected to monetise three types of benefits:[27]

- **Business growth benefits:** FIF support is expected to increase commercial readiness, investment, and customer traction among participating SMEs, contributing to increased economic activity (turnover) and employment for the participating SMEs, while generating returns on investment associated with R&D;
- **Productivity and innovation benefits:** adoption of FIF-supported innovations by industry partners is expected to generate productivity benefits (which are separate to the returns on investment to supported SMEs), such as labour time savings, reduced wastage, improved asset utilisation or reduced operating costs; and
- **Environmental benefits**: FIF-supported innovations may generate wider benefits to society where they reduce emissions.

The remainder of this sub-section provides illustrative examples of how these benefits can be monetised. Sections 7.3, 8.1.4 and 8.2.4 then explain which benefits are monetised under each evaluation option, depending on the strength of the available evidence (to be confirmed over the course of the evaluation).

The business growth benefits will include several measures such as additional full-time equivalent employees (FTE) reported by participating SMEs and returns on investment in R&D.

Example of benefits relating to employment supported

In line with standard Energy Innovation Needs Assessment (EINA) approaches, the additional value for employment (per FTE) supported by FIF can be estimated by firstly matching SMEs to the relevant industries using ONS Annual Business Survey data. Secondly, Standard Industrial Classification (SIC) codes will be used to identify the relevant industries and derive

[27] Benefits are expected to be monetised primarily for the Accelerator and Venture Growth cohorts, where there is likely to be more direct evidence of business growth, adoption and operational impacts. Monetised benefits will be estimated separately for FIF participants and industry partners, with care taken to avoid double-counting. Benefits associated with the FIC/FLIN, such as ecosystem development, collaboration and knowledge exchange, are likely to be assessed as part of the non-monetised benefits.

average gross value added (GVA) per FTE. Thirdly, these estimates will then be applied to FIF-attributable employment to estimate the GVA associated with jobs supported by FIF.

For example, if GVA per FTE for employment supported by FIF is £30,000, and ten FTEs are reported as supported by FIF, the additional GVA would be:

10 FTEs x £30,000 = £300,000 GVA per year[28]

Example of return on R&D investment

The assessment may also include an indicative **return on innovation investment** by applying an assumed R&D rate of return to funding associated with R&D (testing, trialling, validation or development of FIF-supported innovations).

For example, if £1 million of FIF-attributable innovation investment by SMEs is identified and an assumed annual R&D rate of return of 20%[29] is applied, the estimated annual return on investment (ROI) would be:

£1,000,000 x 20% = £200,000 per year[30]

This would need to be modelled compounded annually over the period of the benefits stream. The rate of returns is assumed to decline over time, and therefore a decay factor can be used (15% per year is suggested in the published literature[31]). Care will need to be taken to avoid double-counting with other business growth benefits, for example, if productivity benefits associated with knowledge spillovers are separately estimated (see below).

Productivity and innovation benefits among industry partners will be monetised using the most appropriate method for the type of innovation adopted. The evaluation will convert each estimate into an annual monetary benefit attributable to FIF and aggregate these consistently across cases. For example:[32]

[28] This figure is for illustrative purposes only. More detail on the EINA method and more recent updates can be found here: Net zero transport growth opportunities and impacts programme

[29] This figure is for illustrative purposes. Based on a published study for the UK Government where 20% is the central estimate of average private rate of return to R&D (sensitivities can be undertaken with 14% lower bound and 40% upper bound estimate, reflecting social returns). Source: https://www.frontier-economics.com/media/015adtpq/rate-of-return.pdf

[30] This figure is for illustrative purposes only. The study will also take account of business attrition rate of 10% (based on the ONS data on business deaths: Business demography, UK - Office for National Statistics) and depreciation of 15% per year (consistent with the rate commonly assumed in other studies: rate-of-return.pdf)

[31] Source: https://www.frontier-economics.com/media/015adtpq/rate-of-return.pdf

[32] The examples are for illustrative purposes only. The exact estimation approach, and the assumptions required, will depend on the nature of the innovation adopted and the level and quality of evidence reported by industry partners. If benefits cannot be monetised, these will be considered in the descriptive analysis. Again, the study will also take account of a business attrition rate of 10% (based on the ONS data on business deaths: Business demography, UK - Office for National Statistics)

- Labour time savings could be estimated by multiplying the number of hours saved by the relevant hourly wage. If an industry partner adopted an FIF-supported innovation that saved eight labour hours per week, and the relevant wage was £25 per hour, the annual value of time saved would be: **8 hours × 52 weeks × £25 = £10,400 per year.**[33]
- Energy savings could be estimated by multiplying the change in energy consumption by the relevant energy price. If an FIF-supported innovation reduced electricity consumption by 10,000 kilowatt-hours (kWh) per year, and the electricity price was £0.28 per kWh, the annual energy cost saving would be: **10,000 kWh × £0.28 = £2,800 per year**. [34]

Environmental benefits will be monetised by estimating the emissions avoided as a result of the FIF-supported innovation and applying the relevant carbon value. Where energy savings are used as the basis for estimating emissions reductions, the analysis will apply the relevant emissions factor to convert energy saved into tonnes of carbon dioxide equivalent (CO2e).

For example, if an innovation reduced electricity consumption by 10,000 kWh per year, the relevant emissions factor was 0.13kg CO2e per kWh, and the carbon value was £44 per tonne of CO2e, the annual environmental benefit for a specific adopter would be:

10,000 kWh × 0.13kg CO2e/kWh = 1,300kg CO2e, or 1.3 tonnes CO2e[35]

1.3 tonnes CO2e × £44 = £57.2 per year[36]

Sensitivity testing and switching analysis

Given the uncertainty inherent in estimating the longer-term benefits of innovation support, the analysis will test how the results change under alternative plausible assumptions, including around additionality, timing of benefits, persistence, attrition and other specific assumptions. It will also consider the scale of benefits not captured in the monetised analysis that would be needed to change the overall interpretation of VfM (referred to as switching analysis). This will help identify which assumptions are most important to the results and how robust the overall CBA is to uncertainty.

[33] This figure is for illustrative purposes only.

[34] This is for illustrative purposes only. Assumptions on electricity and gas prices will be verified using the most recent version of: Gas and electricity prices in the non-domestic sector - GOV.UK

[35] This is for illustrative purposes only. Emission conversion factors will be verified for each of the relevant years, current assumption based on: Greenhouse gas reporting: conversion factors 2026 - GOV.UK

[36] This is for illustrative purposes only. Exact pricing for each relevant year is to be confirmed; current assumption based on market traded carbon value per tonne of CO2e for 2025: Traded carbon values used for modelling purposes, 2025 - GOV.UK

Cost-effectiveness analysis

Some benefits can be measured but do not have a sufficiently robust basis for monetary valuation. Cost-effectiveness analysis will assess the cost of achieving key quantifiable (but non-monetised) FIF outputs and outcomes.

Relevant examples include the cost per private and public funding leveraged, cost per trial delivered, cost per commercial contract secured, cost per FTE worker supported, etc. These measures will provide an indication of the resources required to deliver observable programme outcomes and will be interpreted alongside evidence on the nature and quality of those outcomes. These measures will draw primarily on the monitoring indicators and before-versus-after analysis conducted in the impact evaluation.

Qualitative framework to assess non-monetised non-quantified benefits

Other benefits cannot be meaningfully expressed either in monetary terms or through a single quantitative indicator. These will be assessed using evidence from the impact evaluation and drawing on the contribution analysis framework. This will provide a structured judgement on FIF's contribution to each qualitative benefit, rather than assigning an artificial monetary value to it.

As an example, an important non-quantified benefit of FIF is the strengthening of connections, knowledge sharing and collaboration across the freight innovation ecosystem (i.e. **networking benefits**). The ToC identifies a pathway whereby bringing together a diverse range of stakeholders and creating opportunities for interaction and knowledge exchange strengthens collaboration and supports the formation of new partnerships, ultimately contributing to a more connected and better-functioning innovation ecosystem. These effects are expected to arise particularly through FIC/FLIN.

As set out in Table 8, the VfM assessment will draw on the contribution analysis to assess whether this pathway operated in practice, the extent to which these changes occurred and FIF's contribution to them.

Table 8 Example: Assessing the network benefits of collaboration through FIC/FLIN

Assessment step	**Application to FIC/FLIN**	**Potential sources**
Evidence that the benefit occurred	Assess whether participation and growth in FIC/FLIN membership is associated with improved knowledge	Monitoring data on platform engagement, repeat participation, interactions

Assessment step	Application to FIC/FLIN	Potential sources
	sharing and stronger connections, including changes in the frequency and quality of interactions, new collaborations or partnerships, and the perceived value of those relationships.	and partnerships; EQ2 evidence from FIC/FLIN members; interviews and case studies.
Evidence of FIF's contribution	Establish whether particular FIC/FLIN mechanisms, such as existence of the platform, introductions, events, knowledge-sharing sessions or the digital community, led to new contacts, knowledge exchange, joint activity or collaboration.	Member interviews; interviews with the other parties to collaborations; monitoring records on introductions and participation; case studies.
Alternative explanations	Assess whether organisations were already connected, whether the relationship or knowledge exchange would have occurred without FIC/FLIN, and whether other networks, programmes or market developments were more important drivers.	Member and partner interviews; wider stakeholder interviews; case studies.
Reach and persistence	Assess whether effects are experienced across different types of FIC/FLIN members rather than a small number of highly engaged organisations, and whether relationships or knowledge exchange continue beyond the initial interaction.	Membership and engagement data; evidence of repeat interactions and sustained collaborations; follow-up interviews; case studies.
Strength of evidence	Triangulate evidence across sources. Greater confidence would be placed on benefits supported by monitoring evidence, consistent accounts from both sides of a relationship and evidence of subsequent activity than on one-off self-reported perceptions.	All evidence sources above, synthesised using the contribution analysis strength-of-evidence framework.

Considerations on additionality and distributional effects

- **Spillovers**. FIF may generate benefits beyond direct participants, for example where knowledge generated through trials is used by other organisations, supported technologies are adopted in other settings or sectors, or FIC/FLIN connections lead to wider partnerships or innovation activity. Evidence will draw principally on EQ8, supported by interviews with SMEs, partners and other stakeholders. Where spillovers are identified, the assessment will consider, to the extent possible, their type, how and where they arise, who benefits, and their likely scale and persistence. To structure this assessment, the evaluation will distinguish between three broad types of spillover identified in the innovation literature[37] (see Table 9 below).

Table 9 FIF-related spillovers

Type	Nature of spillover	Affected stakeholders
Market	FIF-supported innovations may reduce costs, improve efficiency, reliability or service quality for industry partners and other customers. Some of these gains may be passed through to other firms in the supply chain or to end users. Trials may also reduce the cost or risk of subsequent adoption by other organisations.	SMEs, industry partners, suppliers, and supply-chain partners and end users.
Knowledge	Knowledge generated through trials, technical support and commercialisation activity may be used beyond the directly supported SME. This may include evidence on technology performance, lessons on deployment and procurement, or knowledge shared through FIC/FLIN events and stakeholder interactions.	Other SMEs and innovators, collaborators, industry partners, public-sector organisations.
Network	FIF may strengthen connections between organisations involved in freight innovation. Through FIC/FLIN, Accelerator partnerships and other programme activities, a larger and more connected network may increase opportunities to identify collaborators, customers, investors	FIC/FLIN, members, other SMEs, industry partners, customers, investors, research organisations and wider ecosystem.

[37] Classification based on Jaffe, A.B. (1996) Economic Analysis of Research Spillovers Implications for the Advanced Technology Program. Available at: Economic Analysis of Research Spillovers Implications for the Advanced Technology Program. | National Technical Reports Library - NTIS

Type	Nature of spillover	Affected stakeholders
	and relevant expertise, and may generate further partnerships or innovation activity.	

Source: *Frontier Economics*

Note: *Classification based on Jaffe, A.B. (1996) Economic Analysis of Research Spillovers Implications for the Advanced Technology Program, Brandeis University and National Bureau of Economic Research.*

- **Displacement and other unintended effects.** FIF-supported activity may also replace activity that would otherwise have occurred. This could include displacement, where gains to supported SMEs are offset by losses to other firms, and substitution or crowding out, where public support replaces private investment or innovation activity. These effects will also be assessed primarily through EQ8 and identified through the interviews with SMEs, as well as unsuccessful applicants and wider stakeholders.

- **The distributional assessment.** The distributional assessment will consider who receives the benefits of FIF. This will draw principally on monitoring evidence collected under EQ1 and EQ2 on Accelerator applicants and participants and FIC/FLIN members, including their geographical and technical characteristics and, where available, organisation type and ED&I characteristics. This will allow the VfM assessment to identify whether participation and benefits are concentrated among particular types of organisations, technologies or geographical areas.

Taken together, the considerations on additionality and distributional effects will provide evidence on both the wider reach of FIF's impacts and how those impacts are distributed. Positive spillovers will contribute to the assessment of wider programme benefits, while any material displacement, substitution, leakage or crowding-out effects will reduce the assessment of net benefits. These effects will be assessed qualitatively, drawing on evidence from the impact evaluation, and will be considered alongside the direct monetised and non-monetised benefits in forming the overall VfM judgement.

6.1.5 Limitations of the evaluation approach

The proposed evaluation approach is a contribution analysis framework that integrates several evaluation methods to ensure it is comprehensive and robust.

Attribution is to be assessed at the overall FIF level rather than for individual work packages. This is because of the cohort-based nature of FIF and the overlap between work packages. Participants may receive support across more than one cohort or work package. For example, an organisation supported in one cohort (such as the Accelerator) may successfully apply to a different work package (such as the Venture Growth) in a later cohort or may receive more intensive support by participating in several work packages within the same cohort (Accelerator plus FIC/FLIN, for example).

Interviews and case studies are well suited to understanding participant experiences, delivery pathways, barriers, enablers and the mechanisms through which outcomes may have been achieved. However, they cannot be assumed to be statistically representative of all applicants, participants or partners. Findings may also be affected by self-selection bias, response bias, recall bias, social desirability bias or selective reporting. Qualitative evidence should therefore be used to explain how and why outcomes may have developed, and to test the plausibility of FIF's contribution, rather than as definitive evidence of attribution.

As noted above, quasi-experimental evaluation is not feasible for several reasons stated. The proposed approach is a primary research-based counterfactual of two forms: (i) SME self-reported attribution, and (ii) comparative analysis with outcomes for unsuccessful applicants. This is indicative of additionality but is not able to provide robust estimates of causal impacts.

6.2 Data collection methods for forward-looking evaluation

This section sets out the data collection methods for forward-looking evaluation, including enhanced monitoring and interviews with SMEs (successful and unsuccessful applicants), industry partners, wider stakeholders and case studies.

6.2.1 Monitoring data

Monitoring data for CPC

During each cohort of the FIF the CPC will collect monitoring data across four broad areas: participation and engagement, progression, funding and support provided, and product/business development outcomes. These data will be gathered at different points in the delivery cycle to reflect both implementation and change over time.

At the start of each cohort, monitoring will capture information related to the work package design, application and assessment phases of the project, specifically around demand for and participation in the programme, including applications to the Accelerator and Venture Growth programme, the number of SMEs and industry partners involved, participation from other work packages, FLIN-related applications and success rates, and the level of grant and match funding allocated across programme elements.

At both the start and end of each cohort, data will be collected on indicators related to project mobilisation, delivery and knowledge sharing, which can show change over time, including changes in the size and use of the FLIN and digital platform. At the end of each cohort, monitoring will focus on emerging outcomes from participation and the number of supported products assessed as having strong potential impacts on supply chain resilience, multimodal scalability, cost-efficiency, reliability, digitisation and decarbonisation.

In addition, at the end of individual events and competitions during each cohort, the CPC will record delivery outputs and attendance, including the number of trials, workshops, training sessions, ED&I initiatives, upskilling and knowledge-sharing sessions, and showcasing opportunities delivered, alongside the number of SMEs participating in each. Together, these data provide a structured picture of programme reach, activity, take-up and early progress.

Monitoring data for participating SMEs

In addition to monitoring data provided by the CPC, monitoring data will be collected to capture perceptions, self-reported change and attribution as a result of participation in the programme, and early outcomes that are not observable through programme management information alone. These data will cover participant experience, capability development, collaboration and investment readiness, and perceived progress in addressing sector barriers and supporting innovation.

At the end of each cohort, monitoring will capture participants' views on the usefulness of programme activities and the extent of change arising from support received. This will include evidence on product design modifications resulting from live trials or stakeholder feedback, changes to expected development and commercialisation timelines, the composition of SPVs, and views on the extent to which training and support enhanced commercial and investment capability and readiness, as well as wider financial, strategic, business and marketing skills. It will also capture changes in awareness of available funding options, perceptions of access to partners and finance, and stakeholder views on whether the FIF is addressing the most significant barriers to deployment and commercialisation.

At closure, monitoring will capture whether SMEs had modified product design in response to live trials or stakeholder feedback, changes to expected development or commercialisation timelines with and without FIF support.

At the end of individual events during each cohort, monitoring will focus on immediate participant feedback, including satisfaction with technical and commercial readiness training, upskilling sessions, knowledge-sharing sessions and other training attended, alongside feedback on investor events. This will provide evidence on the quality, relevance and perceived value of specific activities delivered through the FIF.

As part of follow-up engagement after the end of the cohort, monitoring will assess whether early changes had been sustained or developed further. This includes changes in collaboration between FLIN members, investor engagement and connections, increased use of digital technologies, and changes in digital capability and data use among SMEs and stakeholders. Follow-up data will also capture views on where further intervention may be needed to address remaining barriers and perceptions of the UK's position as a leader in freight and logistics innovation. Together, these data will complement CPC monitoring by

providing a fuller picture of participant experience, perceived outcomes and the longer-term effects of programme support.

6.2.2 Interviews

Interviews with participating SMEs

Interviews with participating SMEs will explore how involvement in the FIF has influenced their technical, commercial and organisational development, and how far any observed changes can reasonably be linked to the support received. The discussion will focus on SMEs' experience of progressing innovation from development towards deployment, including perceived changes in technical capability, confidence to advance product development, understanding of operational needs and progress in commercialisation. Interviews would also examine whether and how the FIF has affected firms' readiness to secure private or public funding, their wider business capabilities and their confidence to engage with investors, partners and markets.

In addition, the interviews will consider the extent to which participation has supported collaboration, knowledge sharing and access to networks through the FIC/FLIN and wider programme activity, including any effects on perceptions of market transparency, innovation risk, and the visibility of freight and logistics innovation solutions. They will also explore changes in awareness and action relating to decarbonisation, digitisation and data use, as well as participants' views on whether the FIF is addressing the most significant barriers to deployment and commercialisation.

The purpose of these interviews is to generate in-depth evidence on the mechanisms through which the FIF may be influencing SME capability, behaviour and outcomes, while also identifying wider contextual factors, unintended effects and areas where further intervention may be required.

We propose to interview ten successful applicants per cohort in both options. SME interviewees will be selected using a purposive sampling approach which will seek maximum variation across the cohort, and which will therefore provide a balanced picture of how the fund operates for different types of participants and reduce the risk of positive selection bias.

Potential selection criteria include:

- **FIF work packages:** capturing SMEs participating in the Accelerator, Venture Growth and Unlocking Private Capital programmes;
- **Freight mode/application area:** in proportion to the overall portfolio where practical;
- **Technology type:** e.g. digital/data/AI (artificial intelligence), automation, alternative fuels/energy, vehicle technology, infrastructure/operations;

- **Stage of innovation at entry:** relatively early-stage prototype versus technology closer to commercial deployment;
- **Size and maturity of the SME:** micro/small versus larger SME; newer start-up versus more established business;
- **Nature of industry partner:** large logistics operator, infrastructure owner/operator, port, rail company, retailer/manufacturer etc.;
- **Trial outcome:** including a spread such as:
    - trial delivered broadly as intended
    - trial successful but with significant challenges
    - technically promising but not yet commercialised
    - limited or disappointing outcomes;
- **Level of engagement with the programme:** for example, firms making extensive use of mentoring/networking support versus those primarily using the funded trial; and
- **Geography**: avoiding over-concentration in London/Southeast or particular freight clusters.

Interviews will take place at baseline stage, capturing learnings from the application and assessment phases of the programme; at closure, to identify learnings from the project mobilisation and delivery phase and some early aspects of knowledge sharing; and six months after closure (i.e.12 months after baseline), which will capture learnings on long-term effects of participation and further learnings on knowledge sharing and wider ecosystem effects. Interviews will cover both process and impact, though the emphasis on process and impact will vary at each timepoint as shown in Table 10 .

Table 10 Learnings from interviews with successful SMEs

Stage	Process evaluation learning	Impact evaluation learning
Baseline	Access and recruitment: motivations for applying; clarity of criteria and requirements; accessibility and proportionality of the application process. Due diligence and early setup: whether checks, baseline and early requirements were proportionate and understood by SMEs. Delivery lessons emerging early: what appears to be working well or less well	Starting position: SMEs' baseline technical, commercial and investment readiness; key barriers to innovation, deployment and growth. Expected outcomes: what they expect FIF to change technically and commercially. Collaboration starting point: existing quality of partnerships, knowledge sharing and market connections before support.

Stage	Process evaluation learning	Impact evaluation learning
	in design, communications and participant experience at the start of delivery.	
Closure	Delivery and support quality: usefulness of guidance, training, communications and responsiveness during participation. Collaboration support: how far the programme helped SMEs form partnerships, access brokering and engage in tech-stacking or wider ecosystem activity. Trial and participation burden: time and effort required for trial setup, reporting and compliance; whether demands were manageable. Implementation lessons: what worked well, what worked less well, and why.	Technical and commercial progress: changes in technical capability, product development trajectory and commercial readiness attributable to support. Training and support benefits: perceived value of technical, commercial and venture-growth support in building capability and confidence. Collaboration and knowledge sharing: changes in the level and quality of collaboration, networking and knowledge exchange between SMEs and partners. Commercialisation and adoption: progress towards product launch, real-world use and adoption by industry partners. Investment readiness and market engagement: changes in confidence to seek public or private finance, investor connections and perceptions of investor interest. Growth and productivity effects: early effects on contracts, customers, turnover, jobs and productivity. Barriers addressed and remaining: whether the fund reduced barriers to innovation and deployment, and which obstacles remain.
Follow-up	Reflections on programme design: with hindsight, which elements mattered and what should change.	Durability of impacts: whether gains in technical, commercial and investment readiness were sustained beyond programme end. Commercial traction: whether products moved further into market adoption,

Stage	Process evaluation learning	Impact evaluation learning
		contracts, customers and commercial use after closure. Persistence of collaboration effects: whether partnerships, knowledge sharing and tech-stacking relationships continued to generate value. Longer-term funding and growth outcomes: whether SMEs secured follow-on investment, repeat business or further growth after support ended. Residual and emerging barriers: which barriers to scaling, deployment or adoption remained unresolved.

Interviews with industry partners

Interviews with up to five industry partners per cohort will examine how FIF is perceived by organisations that support, trial, invest in or otherwise help to enable innovation in the freight and logistics sector, as well as their motivations for becoming (and in some instances, for remaining over repeated cohorts) FIF partners. The interviews will explore partners' views on the quality and value of engagement with participating SMEs, the extent to which the FIF is helping to build effective collaborations, and whether it is improving access to innovation opportunities, knowledge exchange and routes to deployment.

These discussions will also consider partners' perspectives on the commercial and strategic readiness of SMEs, the accessibility of funding and partnership opportunities, and whether the FIF is helping to reduce perceived risks associated with innovation adoption. In addition, interviews would gather views on the extent to which FIF is targeting the most important barriers facing the sector, including those related to decarbonisation, digitisation and commercialisation, and where further support may still be needed. Importantly, these interviews will assess the extent to which adoption of FIF-supported innovations by industry partners is expected to generate productivity benefits, such as labour time savings, reduced wastage, improved asset utilisation or reduced operating costs.

The purpose of these interviews is to provide an industry-level perspective on how the FIF is functioning, how it is influencing relationships between SMEs and the wider market, and what contribution it may be making to innovation capacity and leadership in the UK freight and logistics sector.

Potential selection criteria for these interviews include:

- **Freight sector/mode** – ensuring coverage across the main parts of the freight system represented in the fund, for example road logistics, rail freight, ports/maritime, aviation, warehousing/distribution and major freight-generating businesses;
- **Type of organisation** – including a mix of:
  - freight/logistics operators
  - infrastructure owners/operators
  - ports or terminals
  - retailers/manufacturers with substantial supply chains
  - other major potential technology adopters;
- **Nature of the technology trialled** – balanced across digital/data technologies, automation, decarbonisation technologies, operational/process innovations etc.;
- **Stage or maturity of the technology** – partners testing relatively early-stage technologies versus technologies closer to commercial deployment; and
- **Outcome of the trial** – if information is available at this stage include variation between:
  - technologies taken forward or adopted
  - successful trials where further adoption is still under consideration
  - trials that demonstrated benefits but encountered barriers to scaling
  - trials that did not result in adoption.

Interviews with industry partners will take place once, at closure. Expected learnings from these interviews is shown in Table 11.

Table 11 Learnings from interviews with industry partners

Stage	Process evaluation learning	Impact evaluation learning
Closure	Engagement: why they participated and how easy it was to engage with FIF. Matching: whether CPC identified appropriate SMEs/technologies and how the matching process worked. Trial set-up: clarity of roles, timescales, governance, IP/data issues and administrative requirements. Delivery: adequacy of CPC support and whether programme requirements fitted operational realities.	Adoption and commercial use: whether Accelerator-supported innovations or tech-stacking solutions were adopted, and what enabled or limited real-world uptake. Commercialisation: whether supported products moved into practical use more quickly than they otherwise would have done. Productivity and operational benefits: whether innovative solutions delivered time savings, cost reductions or other productivity gains for partners.

Stage	Process evaluation learning	Impact evaluation learning
	SME collaboration: strengths and difficulties of working with smaller innovators. Programme improvements: what would make participation easier or more valuable for established businesses.	Additionality: whether collaborative tech-stacking or Venture Growth activity enabled solutions that would not otherwise have happened or would have taken longer to emerge. Commercialisation: extent to which Venture Growth helped address barriers that prevent collaborative solutions from being developed. Remaining barriers: whether the fund targeted the right barriers to deployment and commercialisation, and what constraints remain.
Follow up	Lasting value of engagement: whether the programme's engagement, coordination and relationship management continued to support useful collaboration after delivery ended. Partnership quality: whether relationships formed through the fund remained active, constructive and relevant to ongoing innovation. Delivery lessons with hindsight: what industry partners judged, after time had passed, to be the most effective and least effective features of delivery and support.	Persistence of adoption effects: whether supported solutions continued to be used, tested or taken forward after programme closure. Ongoing collaboration value: whether tech-stacking, Venture-Growth or partner relationships continued to generate practical benefits after the funded period. Longer-term ecosystem effects: whether the fund had any lasting influence on innovation confidence, visibility of freight solutions or the wider innovation environment. Remaining barriers to scale-up: what continued to prevent wider deployment, integration or commercialisation six months after closure.

Interviews with unsuccessful SMEs

Engagement with SMEs which applied for FIF, but which were unsuccessful can provide rich insights into the application and assessment stages of the fund, as well as presenting a counterfactual to consider how companies would fare in the absence of FIF. It is proposed to carry out interviews with five unsuccessful SMEs per cohort in Option 1 and interviews with ten unsuccessful SMEs per cohort in Option 2.

For the process evaluation, the interviews will cover the experience of applicants in the application and assessment process, including the clarity and quality of information provided, the accessibility of the process and any barriers encountered in preparing or submitting an application. This would help identify whether there were aspects of programme design or delivery that may have deterred participation or disadvantaged particular types of applicants, and would support the identification of lessons for future fund design and administration.

For the impact evaluation, interviews with unsuccessful applicants will offer insight into how these businesses have progressed in the period since their application, including the subsequent development of their products, access to commercial or funding opportunities, and partnership activity. While this evidence would not provide a formal counterfactual, it would offer a useful point of comparison with participating businesses and help to contextualise outcomes observed among funded SMEs. In this way, the interviews will strengthen understanding of both programme delivery and the extent to which participation in the FIF may have influenced business trajectories.

Potential selection criteria for these interviews include the following:

- **Application outcome:** oversample SMEs which passed the commercial interview but which did not progress to phase 1 or phase 2 funding, given that they are more comparable with successful applicants and therefore provide a stronger counterfactual;
- **Work package:** ensuring that all elements of FIF (Accelerator, Venture Growth and Unlocking Private Capital) are represented;
- **Freight mode/sector:** broadly reflecting the composition of successful applicants and the overall applicant pool;
- **Technology type:** ensuring coverage of the main innovation themes supported by FIF;
- **Business size and maturity:** including micro businesses and more established SMEs, and businesses at different stages of commercial development; and
- **Previous innovation funding experience:** applicants familiar with Innovate UK/DfT-type competitions versus first-time or less experienced applicants. This will help identify whether the application process itself disadvantages particular types of SME.

Table 12 sets out the potential learnings from interviews with unsuccessful applicants.

Table 12 Learnings from interviews with unsuccessful applicants

Step	Process evaluation learning	Impact evaluation learning
Baseline	Access and recruitment: motivations for applying; how unsuccessful applicants heard	Counterfactual intentions: what unsuccessful applicants expected to do without fund support, including

	about the fund; whether outreach reached the right kinds of SMEs. Application clarity: whether eligibility, assessment criteria and programme requirements were easy to understand before applying. Application burden: time, effort and capability required to complete the application; whether the process felt proportionate for SMEs. Perceived fairness: early views on whether the process appeared transparent, consistent and credible, even where the application was unsuccessful. Selection feedback and transparency: how clearly rejection decisions and feedback were communicated; whether unsuccessful applicants understood why they had not been selected.	whether planned innovation, trials or commercial activity would proceed anyway. Need for public intervention: whether firms viewed the fund as filling a genuine gap in finance, market access, trial opportunities or capability-building.
Follow-up	Learning from the competition: whether feedback/application experience affected subsequent applications or development; whether they would apply to FIF again.	Counterfactual outcomes: what happened after rejection, including whether firms progressed, delayed, scaled back or abandoned planned innovation activity. Additionality of fund support: whether the closure-stage evidence suggests fund support would likely have accelerated development, reduced risk or improved commercialisation prospects. Persistence of barriers: which barriers remained without fund support, such as access to finance, partners,

	customers, test environments or commercial capability. Alternative pathways: whether firms secured other support, funding or partnerships instead, and how these compared with the support the fund might have provided. Wider market insight: what unsuccessful applicants reveal about unmet demand for innovation support and gaps in the wider freight innovation ecosystem. Wider consequences of rejection: changes to the business since application; whether funding has been sourced from elsewhere; instances of patents lodged; changes in employment levels; changes in R&D expenditure.

Interviews with wider stakeholders

As part of Option 2, interviews will also be undertaken with wider stakeholders which were involved with the FIF, including civil servants, regulators (for example the Driver and Vehicle Standards Agency (DVSA) or Office of Rail and Road (ORR)), academia (for example, Cranfield University), and other organisations within the industry (for example, Logistics UK, Network Rail, major freight nodes). These interviews will provide particular insights into the knowledge-sharing elements of the fund, and their purpose will be to obtain a wider perspective on the impact of the FIF on the commercial, innovation and regulatory ecosystem, and to capture their views on the extent to which the FIF is supporting the technological and commercial readiness of SMEs, and any remaining barriers.

Interviewees should be selected against a range of criteria to ensure a broad array of perspectives and insights. Potential selection criteria include:

- **Stakeholder type**: ensuring a spread across different types of organisations (seeTable 13);
- **Freight mode/sector coverage**: stakeholders whose expertise collectively spans the main freight modes and markets represented by FIF;
- **Relevance to FIF technology themes:** stakeholders with direct knowledge of the technologies being funded, (e.g. automation, digital, decarbonisation, alternative fuels, logistics optimisation;

- **Degree of independence from FIF**: including organisations with little or no direct involvement in the programme, alongside those that are familiar with it;
- **Level of sector influence:** selecting organisations or individuals able to comment on wider market, regulatory, policy or research developments rather than only a single company or project;
- **Geographical remit:** where appropriate/relevant, balance UK-wide perspectives with organisations familiar with particular freight clusters or regions;
- **Evidence of engagement with freight innovation:** for example, involvement in relevant research, policy development, regulatory activity, standards, industry working groups or innovation programmes; and
- **Avoidance of duplication**: selecting stakeholders who bring a range of perspectives rather than several organisations likely to provide essentially the same view.

Wider industry stakeholders will be interviewed once, at closure stage. Table 13 below breaks down this group into more specific sub-groups and sets out the type of learnings that can be expected from each for both the process and the impact evaluation.

Table 13 Learnings from interviews with wider industry stakeholders

Stakeholder group	Process evaluation learning	Impact evaluation learning
Regulators	Regulatory fit: whether the fund's design and delivery are aligned with regulatory realities, safety requirements and operational constraints. Programme clarity: whether the fund's objectives, delivery model and oversight are coherent and credible from an external perspective.	Barrier relevance: whether the fund addressed regulatory or compliance-related barriers to innovation uptake. System-level effects: whether FIF contributes to safer freight innovation. Unaddressed constraints: which regulatory barriers remain unresolved.
Trade bodies	Sector fit and reach: whether the fund's objectives and delivery model were clear to the wider sector and reached the right audiences. Design strengths and weaknesses: which aspects of programme design and delivery	Ecosystem strengthening: whether the fund improved collaboration, knowledge sharing and visibility of freight innovation across the sector. Spillovers and market signalling: whether the fund generated

	are most and least effective for supporting sector innovation.	wider benefits beyond funded firms. Gap assessment: whether the fund filled a genuine market need or left important sector gaps.
Major freight operators not participating in FIF	Relevance of delivery model: whether the fund was designed in a way that matched real operator needs. Engagement credibility: whether delivery and communication approaches made the programme look accessible, credible and worth engaging with.	Additionality: whether the fund supported innovations that operators would value and that would otherwise have emerged more slowly or not at all. Barriers to deployment: what (if anything) prevents fund-supported innovations from wider take-up in live operating environments.
Major freight generators/ customers	Demand-side relevance: whether the programme design appeared connected to buyer needs, procurement/commercial realities. Visibility: whether the fund was sufficiently visible and well positioned to influence demand-side behaviour.	Commercial potential: whether funded innovation appeared likely to solve real customer problems and stimulate demand. Market effects: whether the fund helped create stronger routes to market, adoption and commercialisation. Remaining market failures: where gaps remain in translating innovation into buyer adoption.
Infrastructure owners/operators	Compatibility: whether the programme appeared to recognise infrastructure constraints, interoperability issues and operational dependencies.	Network/asset impact: whether the fund helped identify innovations relevant to infrastructure performance, capacity, decarbonisation or data use. Deployment feasibility: whether supported solutions looked capable of being integrated into infrastructure.

		Residual barriers: what infrastructure, or procurement barriers still limit impact.
Academia	FIF design rationale: whether the fund's ToC and delivery approach appeared well grounded in innovation practice. Learning value for future programmes: what design and delivery lessons could inform future public innovation support.	Additionality: whether the fund generated innovation activity, collaboration or learning that would not otherwise have happened. Change in innovation environment: whether the fund strengthened the freight innovation ecosystem, reduced perceived risks or increased visibility of solutions. Spillovers and future intervention needed: what wider effects of the fund have been felt, and where further policy or programme support is still justified.

7 Step 4: Retrospective evaluation design

The retrospective evaluation represents a minimum viable evaluation for cohorts already funded and supported through FIF. It comprises an impact evaluation and an indicative VfM assessment, drawing on programme outcomes, benefits and costs. Process evaluation is out of scope.

The approach is designed to make best use of evidence already collected through programme delivery, supplemented by targeted primary research. The section sets out the monitoring data available, the additional primary data collection, the impact and VfM methods, and the expected timetable and costs. Table 19 presents a summary of the retrospective evaluation design, mapping the EQs and indicators with the suggested evaluation and data collection methods.

7.1 Evidence for the retrospective evaluation

7.1.1 Monitoring data

The retrospective evaluation will primarily use monitoring data already collected by CPC for the Accelerator. As discussed in Section 5.2, the review considered both CPC's M&E plans and the participant surveys administered during the programme. The surveys provide the clearest evidence of what was collected in practice, while indicators identified only through the M&E plans will be treated as potentially available until confirmed with CPC during the evaluation inception phase. Based on the surveys reviewed, the main indicators expected to be available, their timeline and evaluation method used are presented in Table 19.

7.1.2 Primary data collection

The monitoring data will be supplemented by semi-structured interviews conducted after programme closure with participating SMEs and industry partners. These will provide evidence on how outcomes arose, FIF's contribution, other factors influencing outcomes, and whether benefits continued after programme support. Interviews will also complement information not covered by the monitoring data, including SMEs' perceptions of their own commercial and financial capabilities.

The proposed primary research comprises:

- **Participating SMEs: ten interviews of around 45 minutes.** Ten SMEs will be selected purposively across retrospective cohorts to provide variation by cohort, sector, trial experience and outcome. Interviews will cover technical, commercial and investment readiness, commercial traction, investment, and business growth, etc.

- **Accelerator industry partners: five interviews of around 60 minutes.** These will explore adoption or commercialisation of FIF-supported solutions, benefits realised by industry partners, including productivity improvements, FIF's contribution and remaining barriers to innovation.

Table 19 sets out the indicators that are expected to be covered through the interviews. For each indicator, the interviews will also explore additionality, including the extent to which observed outcomes would have occurred in the absence of FIF, and will gather more detailed qualitative evidence on participants' experiences and the mechanisms through which FIF may have contributed to outcomes. The detailed interview topic guides will be finalised during the evaluation.

7.2 Impact evaluation

The retrospective impact evaluation will combine monitoring data with qualitative evidence from the SME and industry partner interviews. The findings will be analysed using descriptive analysis, self-reported attribution and, when possible, before-versus-after analysis. The evidence will be triangulated and synthesised through contribution analysis to assess the extent to which FIF is likely to have contributed to observed outcomes.

Descriptive analysis

As set out in Section 6.1.2, descriptive analysis will provide the context for the evaluation findings. This will include the scale and reach of FIF, such as the number and characteristics of applicants, participating SMEs and industry partners; the type and level of support delivered, including trials, training, knowledge-sharing and showcasing activities; and the funding provided, including match funding. It will also summarise engagement with FLIN, participation and progression through Venture Growth, and the development, commercialisation and adoption of supported innovations.

Before-versus-after analysis

Where indicators are available at baseline and closure, the before-versus-after analysis will consider how outcomes have changed over time. This is not intended to assess what was attributable to FIF, but rather to provide an indication of the magnitude and direction of change in key outcomes. For the retrospective evaluation, a more limited set of outcomes may only be available at baseline and closure, without suitable follow-up data (see Table 19). Changes in these indicators will be considered alongside evidence from semi-structured interviews with participating SMEs and industry partners.

As an example, for private investment, the analysis will show how much the average level of public and private funding among participating SMEs increased between baseline and closure. This will be complemented by systematic analysis of interview evidence to explore **what has**

changed. The interviews will also explore other factors that may have influenced investment over the same period, helping to assess the plausibility of FIF's contribution to the observed change.

Statistical testing will assess whether observed changes are statistically significant for a pooled sample of SMEs (see an illustrative example of the outputs in Table 14). This analysis identifies whether outcomes changed but does not on its own establish that FIF caused the change. Table 19 outlines indicators for which before-versus-after analysis can be performed.

Table 14 Illustrative example of before-versus-after analysis

Metric assessed	Baseline	Closure	Change	
Average private investment raised among SMEs	£0.6m	£1.1m	+£0.5m*	Significant difference in the average investment of SMEs before-versus-after FIF

Source: *Frontier Economics*

Note: *Information and quotes are for illustrative purposes only and do not reflect actual data. Statistical significance is shown by asterisks: * p < 0.01*

Primary research-based counterfactuals

The retrospective evaluation will include **participants' own assessments of FIF's contribution to observed outcomes (i.e. self-reported attribution)**. CPC monitoring data ask SMEs to report whether measured outcomes are attributable to FIF. However, the retrospective data do not provide more detailed evidence on the **strength of this contribution**, for example whether FIF contributed 'a lot,' 'a little' or 'not at all' (see example output in Table 15 below).

Semi-structured interviews with SMEs will also explore whether participants consider FIF to have contributed to observed outcomes, and the nature and extent of that contribution. Interviews with industry partners will provide an additional perspective and help to validate or challenge SME accounts. Taken together, this will provide **indicative evidence on additionality**, rather than a causal estimate of FIF's impact.

Table 15 Illustrative example of self-reported attribution

Outcome	SME reporting the outcome	Of those reporting the outcome, number attributing it to FIF	% attributing it to FIF

Increased private investment	18 out of 40	12	67%

Source: *Frontier Economics*

Note: *Information and quotes are for illustrative purposes only and do not reflect actual data. We assume a total sample of 40 across the pooled cohorts 1-4.*

Contribution analysis

The contribution analysis will bring together the three strands of evidence above to test specific contribution claims derived from the ToC.

For example, a contribution claim corresponding to **IEQ6** would be: '*FIF improved participating SMEs' investment readiness by strengthening their commercial and investment capabilities, increasing their confidence and connections with investors, and thereby contributing to increased private investment raised*'.

The evidence supporting this claim would be assessed against the strength-of-evidence framework set out in Section 6.1.2. An illustrative contribution assessment is provided in Table 16 below.

Table 16 Illustrative contribution assessment

Assessment criterion	Illustrative evidence
Contribution claim	FIF improved participating SMEs' investment readiness by strengthening their commercial and investment capabilities, increasing their confidence and connections with investors, and thereby contributing to increased private investment raised.
Methodology	Before-versus-after analysis using statistical testing suggested a significant difference in the average investment of SMEs before and after FIF. Primary research-based counterfactual suggests 67% of participating SMEs considered FIF to have contributed 'a lot' or 'was the only reason' for this outcome. Qualitative evidence from primary research suggests that FIF helped SMEs build their commercial and investment capabilities and attracted private investment.
Volume of evidence	Monitoring data, SME interviews
Consistency of evidence	Evidence is consistent. Private investment increased for a number of SMEs, most of those reporting an increase attributed it to FIF, and interview evidence generally points to improved capabilities and investor engagement.

Assessment criterion	Illustrative evidence
Alternative explanations	Some SMEs had accessed online resources to increase their commercial skills, and the Freight Trade Body had also been providing support for innovation and commercialisation.
Overall strength of evidence	**Medium evidence of FIF contribution.** The evidence supports a plausible FIF contribution to improved investment readiness and private investment, though other factors also played a role.

Source: *Frontier Economics*

Note: *All findings and ratings are for illustrative purposes only. Final judgements will depend on the monitoring data and interview evidence available at the time of the retrospective evaluation. The rating reflects the strength of evidence for FIF's contribution, rather than the size of FIF's causal impact*

Learnings and limitations

Overall, the retrospective impact evaluation is expected to generate evidence on:

- **Changes in key SME outcomes**, such as investment, employment or commercial activity;
- **SMEs' reported attribution of outcomes to FIF**, supplemented by interview evidence on what participants believe would have happened without FIF;
- **How and why outcomes occurred,** drawing on qualitative evidence from SME interviews against the relevant ToC pathways;
- **Adoption and benefits for industry partners,** including evidence on the uptake or commercialisation of FIF-supported solutions and any associated productivity benefits; and
- **FIF's contribution to observed outcomes**, by bringing evidence together through a structured contribution analysis and assessing the strength of evidence for individual contribution claims.

The retrospective approach has several limitations that should be recognised:

- **Monitoring coverage is incomplete.** As shown in Table 19, existing data do not cover all EQs or indicators, particularly FIC outcomes and wider ecosystem effects.
- **Interviews will be conducted at a single retrospective point in time.** It is no longer possible to collect interview evidence before FIF support or immediately after programme completion. The interviews will therefore rely partly on participants' retrospective accounts of change and FIF's contribution, which may be affected by recall biases.
- **Before-versus-after analysis is possible only for a subset of indicators.** As shown in Table 19, some outcomes were collected only at programme closure, limiting the scope for quantitative assessment of change over time.

- **There is no formal counterfactual.** A feasible comparison group could not be constructed using secondary data, and retrospective evaluation design does not include interviews with unsuccessful SME applicants due to potential difficulties with engagement as well as timings and budget requirements. This limits exploration of 'alternative explanations' for the contribution analysis to participants' own assessment of FIF's contribution to observed outcomes.
- **Triangulation within the contribution analysis will be relatively limited.** Primary research is restricted to a small sample of participating SMEs and industry partners. While this will provide additional evidence on causal mechanisms and alternative explanations, the contribution assessment will draw on a narrower range of stakeholder perspectives than the forward-looking evaluation options (see Section 7).

7.3 VfM evaluation

As set out in Section 6.1.4, the VfM assessment will use the impact evaluation findings alongside programme cost data to provide an indicative assessment of whether FIF has represented VfM. It will consider both the extent to which FIF has met its strategic objectives and whether the benefits generated are likely to justify the resources invested. The assessment will combine cost-effectiveness analysis, a partial scenario-based CBA, and assessment of non-monetised benefits and wider effects.

Partial scenario-based CBA

A smaller subset of outcomes can be given a credible monetary value and will therefore feed into the partial scenario-based CBA. Based on the current evidence, these are expected to include number of additional **FTEs** employed by supported SMEs, **productivity** benefits experienced by industry partners and **returns to R&D investment**. These monetised benefits will be compared with programme costs, with scenarios used where assumptions are required about the persistence or future development of benefits. See Table 17 (with more detail in Section 6.1.4 on VfM methodology) for illustration of how the benefits will be monetised.

Cost-effectiveness

A limited set of indicators will inform the cost-effectiveness analysis, including public and private funding secured, follow-on R&D investment, commercial contracts, patents and IP, new customers, investor connections, turnover and employment. Depending on the indicator, results could be expressed as, for example, **cost per £1 of investment leveraged, cost per commercial contract secured or cost per additional FTE supported**. Attribution evidence from the impact evaluation will be applied where available.

Qualitative framework to assess non-monetised non-quantified benefits

Non-quantified non-monetised benefits will be assessed using evidence from the impact evaluation (including SME and partner interviews) and drawing on the contribution analysis framework (see for example Table 16 above). This framework will consider (i) evidence that the benefit occurred, (ii) evidence of FIF's contribution, (iii) alternative explanations, (iv) reach and persistence of the benefit, and (v) overall strength of evidence.

For SMEs, these benefits may include improved confidence and capabilities, stronger investor and industry connections, and evidence that FIF accelerated innovation or commercialisation. For industry partners, the benefits may include reduced perceived adoption risk, increased confidence in innovative solutions, and operational or productivity benefits associated with adopting FIF-supported technologies.

Spillovers and distributional effects

The VfM assessment will also draw on the impact evaluation evidence, alongside an assessment of the relevant theoretical links identified in the literature, to consider **spillovers, displacement effects and distributional impacts**. Where these effects are identified and supported by evidence in the retrospective evaluation, the assessment will consider the nature of the effect, how and where it arises, who benefits or is affected, and its likely scale and persistence.

Evidence on **positive spillovers** is expected to be feasible to identify in the retrospective evaluation, as relevant evidence can be collected directly through SME and industry partner interviews. This could include **market spillovers**, for example where FIF-supported technologies are subsequently adopted by other organisations or where learning from trials reduces the cost or risk of later adoption; **knowledge spillovers**, where technical or commercial learning generated through FIF is shared or applied beyond the directly supported SME; and **network spillovers**, where connections created through FIF lead to further partnerships, customers, investors or innovation activity. The assessment will consider whether there is credible evidence that these effects occurred and whether FIF contributed to them, rather than seeking to quantify their overall scale where the available evidence does not support this. However, the evidence is likely to remain partial in the absence of wider engagement with external stakeholders, such as investors, academic institutions and other organisations that may have benefited indirectly from FIF-supported activity.

Displacement effects could arise where gains to FIF-supported SMEs reflect activity or market share shifting away from other firms rather than a net increase in economic activity. However, evidence on displacement is expected to be limited in the retrospective evaluation, as this is primarily explored through EQ8 and is not systematically captured in the available retrospective data. In particular, the retrospective evaluation does not include engagement with unsuccessful SMEs, which could otherwise provide useful evidence on whether FIF-

supported activity displaced investment, customers or commercial opportunities from firms that did not receive support. Any assessment will therefore be proportionate to the evidence available and will make clear where robust conclusions cannot be drawn.

Similarly, **distributional effects** will consider how programme benefits are distributed across different groups, for example across different types of SMEs, industry partners or locations. The retrospective monitoring data do not provide sufficient information to assess these effects systematically. Any evidence identified is therefore expected to be limited and largely descriptive, rather than supporting a comprehensive assessment of distributional impacts.

Overall VfM assessment

Table 17 summarises how each type of benefit is expected to be assessed, along with a summary column integrating various sources.

Table 17 Retrospective VfM approach summary

Method	Approach to assess benefits	Limitations
Cost-effectiveness analysis	Cost per £1 public/private investment leveraged. Cost per £1 private R&D investment leveraged. Cost per commercial contract secured. Cost per additional FTE supported. Cost per £1 revenue from the commercial sale of the technology to industry partners.	Attribution based on self-reported evidence.[38]
Partial scenario-based CBA[39]	**Business growth** = additional FTEs of the participating SMEs x sector GVA per FTE relative to typical GVA per UK FTE.[40]	Attribution based on self-reported evidence. Sector-level GVA may not be representative of the participating SMEs.

[38] Monitoring data capture some attributed outcomes directly. For example, SMEs are asked: 'How many employees have you hired as a result of the FIF Accelerator? (FTE)'.

[39] Assumptions will also be made on business attrition (10%) and depreciation (15%) where required as per Section 6.1.4.

[40] See Section 6.1.4 for more detail on business growth monetisation. If sufficient evidence is available on the productivity benefits accruing to industry partners, the benefits will also be monetised, as per Section 6.1.4. Evidence might draw on industry partners' interviews as well as desk research on previous CPC documentation.

Method	Approach to assess benefits	Limitations
	ROI on R&D = £ value of R&D-related funding x assumed ROI on capital investment.[41]	
Quantitative non-monetised benefits	Drawing on self-reported attribution and before-versus-after analysis*:* Changes in outcomes such as technical capability, commercial capability, confidence to raise investment and investor connections, where these can be measured but not robustly monetised.	Some indicators are available only at closure and therefore cannot be assessed through before-versus-after analysis.
Qualitative non-monetised benefits	Drawing on contribution analysis*:* Qualitative evidence on industry partner productivity, improved capabilities, accelerated commercialisation, reduced adoption risk, stronger connections and other programme benefits.	Evidence is based on a relatively small number of SME and industry partner interviews and is largely self-reported.
Spillovers, displacement effects, and distributional impacts	Drawing on contribution analysis*:* Qualitative evidence on positive spillovers including wider use of trial knowledge, adoption beyond directly supported organisations, new partnerships or other wider effects identified through SME and industry partner interviews.	Evidence is expected to be limited, especially on displacement, and distributional impacts because the retrospective research does not include wider stakeholders and does not systematically collect unintended effects through EQ8.
Overall assessment	Test how robust the VfM conclusion is to changes in key assumptions. For example, if the central BCR is **2.0**, assess how far attribution or estimated benefits would need to fall before the BCR drops below **1.0**, and whether non-monetised benefits and wider effects strengthen the overall VfM judgement.	Non-monetised benefits and wider effects would only be considered qualitatively when assessing whether they strengthen or weaken the VfM conclusion.

[41] 20% based on a published study for the UK Government: https://www.frontier-economics.com/media/015adtpq/rate-of-return.pdf

Learnings and limitations

Overall, the VfM assessment is expected to generate evidence on:

- **The extent to which FIF has met its strategic objectives**, drawing on the impact evaluation to assess whether the programme has supported outcomes such as improved innovation readiness, commercialisation, investment and business growth;
- **The cost-effectiveness of the programme across a range of outcomes**, using measures such as cost per £1 of investment leveraged, cost per commercial contract secured and cost per additional FTE supported;
- **Indicative evidence on whether monetised programme benefits are likely to outweigh programme costs**, through the partial scenario-based CBA. This will focus on the subset of benefits that can be credibly monetised, such as business growth associated with additional employment and returns to follow-on R&D investment;
- **The scale and significance of benefits that cannot be robustly monetised or quantified**, including benefits to SMEs and industry partners such as increased confidence and capability, reduced adoption risk, stronger connections and accelerated innovation or commercialisation;
- **The extent to which these benefits can reasonably be attributed to FIF**, using the contribution analysis to bring together the descriptive analysis, before-versus-after evidence, self-reported attribution and interview evidence, and to consider the role of other factors; and
- **Evidence on wider programme effects**, including spillovers and, where evidence allows, displacement and distributional effects. Evidence is likely to be stronger on positive spillovers, gathered through the interviews with SMEs and industry partners.

The VfM assessment will inherit several limitations from the impact evaluation, including gaps in evidence coverage, indicators collected only at programme closure, interviews conducted at a single retrospective point in time, and the absence of a robust counterfactual. Additional limitations specific to the VfM assessment are:

- **Only a subset of benefits can be monetised**. The CBA will therefore be partial, with other benefits incorporated through cost-effectiveness measures and non-monetised evidence.
- **Non-monetised benefits will draw on limited impact evaluation evidence.** The assessment will combine monitoring data with SME and industry partner interviews, but the relatively narrow retrospective evidence base means that some benefits may be supported by only one or two sources.
- **Evidence on displacement and distributional effects will be particularly weak.** The retrospective evaluation does not include interviews with unsuccessful applicants or wider stakeholders, and relevant information is not systematically captured in the available

monitoring data or retrospective interview indicators. These effects can therefore only be considered where credible evidence emerges, rather than assessed comprehensively.

Overall, the findings should therefore be interpreted as indicative estimates of programme value rather than definitive estimates of causal impact.

If interview response rates are low, the retrospective VfM assessment could still draw on existing monitoring data and programme costs, but the quality of the findings would be materially weaker. Interviews are particularly important for assessing additionality and FIF's contribution to observed outcomes, testing alternative explanations and capturing benefits that are not observable in existing datasets, including accelerated commercialisation, reduced adoption risk, stronger industry connections and productivity benefits for industry partners. Secondary data could help validate a limited number of outcomes, such as investment, employment or patents, and commercial sources may also help identify potential company contacts. However, secondary datasets are expected to have incomplete coverage of FIF SMEs, may not identify the individuals involved in FIF, and do not capture many of the outcomes or attribution evidence required for the VfM assessment. They should therefore be treated as a supplementary triangulation source rather than a substitute for interviews and would not on their own provide a sufficient basis for a meaningful minimum viable retrospective VfM assessment.

7.3.1 Expected timelines for the retrospective evaluation

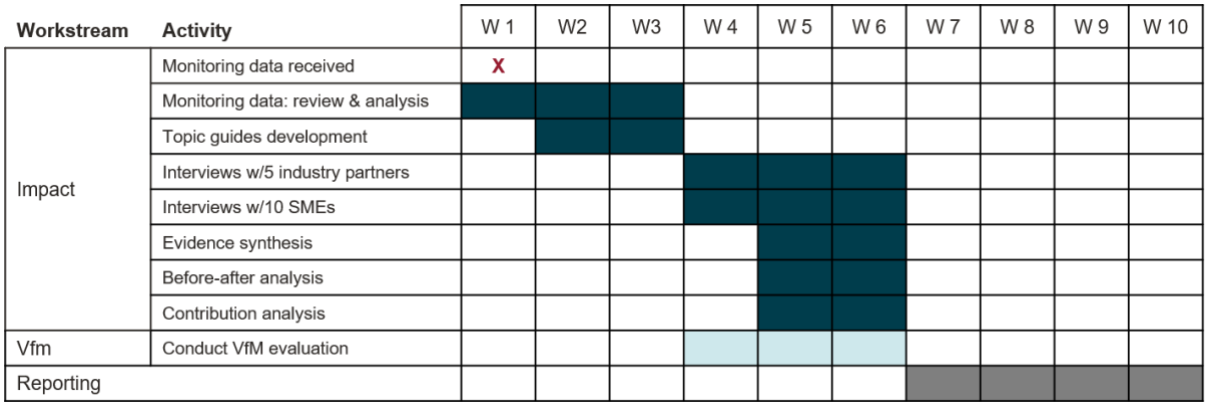
Evaluation activity is expected to begin in autumn 2026 and take two to three months (see Figure 3). The evaluation will primarily draw on monitoring data collected by CPC, with around three weeks allocated to reviewing and analysing this data.

In parallel, topic guides will be developed for five 60-minute interviews with industry stakeholders and ten 45-minute interviews with ten participating SMEs. These interviews are expected to take place over two to three weeks.

The evidence will then be triangulated and synthesised over two weeks to inform the impact evaluation. The VfM assessment will be undertaken over three weeks once the monitoring data have been reviewed and analysed.

Reporting is expected to take around one month, allowing for one round of comments.

Figure 3 Expected timelines for retrospective evaluation



Source: Frontier Economics

7.3.2 Expected budget for the retrospective evaluation

A breakdown of potential costs by workstream is provided in Table 18. These costs are preliminary and subject to change. Upper and lower bounds are provided for most workstreams. These costs do not include VAT.

Table 18 Indicative resource requirement for retrospective evaluation

Workstream	Estimated cost range
Inception	£6-9k
Monitoring data collection and analysis	£5-7k
Primary data collection: interviews with industry partners (n=5)	£4k
Primary data collection: interviews with successful SMEs (n=10)	£7 k
VfM analysis	£18-20k
Impact evaluation analysis	£20-25k
Quality assurance	£2-4k
Reporting (draft, final and presentation)	£18-20k
Total	**£80-96k**

Table 19 Retrospective evaluation design

Indicator	Collection method	Source	Survey timeline	Interview timeline	Impact method	VfM method
IEQ1: To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?						
1.13 Number of Accelerator-supported innovations adopted by industry partners	Interview & Monitoring	Accelerator SMEs, industry partners	Closure (related question)	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
1.14 Number of Accelerator-supported products commercialised	Interview & Monitoring	Accelerator SMEs, industry partners	Closure (related question)	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
1.15 Change in the expected timeline to product development/commercialisation	Interview	Accelerator SMEs	-	Closure	Descriptive analysis; self-reported attribution	-
1.16 Change in SMEs' TRL	Interview & Monitoring	Accelerator SMEs	Closure	Closure	Descriptive analysis; self-reported attribution	-
1.17 SMEs' satisfaction with training received (e.g. technical, commercial readiness)	Interview & Monitoring	Accelerator SMEs	Closure	Closure	Descriptive analysis	-

Indicator	Collection method	Source	Survey timeline	Interview timeline	Impact method	VfM method
IEQ2: To what extent and how has the FIC (and its successor the FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector and with other sectors in the supply chain?						
2.19 SMEs' satisfaction with sessions attended (e.g. upskilling, ED&I, knowledge sharing, showcasing)	Interview	FIC SMEs	-	Closure	Descriptive analysis	-
2.20 Change in the level and quality of collaborations between FIC members	Interview & Monitoring	FIC SMEs	-	Closure	Descriptive analysis; self-reported attribution	Non-monetised benefits/costs
2.21 Change in the level and quality of knowledge sharing between the FIC members	Interview & Monitoring	FIC SMEs	-	Closure	Descriptive analysis; self-reported attribution	Non-monetised benefits/costs
IEQ4: To what extent is FIF strengthening the UK freight innovation ecosystem and contributing to R&D growth?						
4.3 SMEs' R&D expenditure	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
4.4 Change in follow-on private R&D investment	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness, partial CBA
4.5 Number of patents or other IP generated by participating or engaging SMEs	Interview & Monitoring	SMEs	Closure	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
IEQ5: To what extent has the FIF improved SMEs' commercial readiness?						

Indicator	Collection method	Source	Survey timeline	Interview timeline	Impact method	VfM method
5.1 Change in CRL of the SMEs	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	-
5.2 Change in MRL of the SMEs	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	-
5.3 Change in the number of commercial contracts secured	Interview & Monitoring	SMEs, industry partners	Closure	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
5.4 Number of repeat and follow-on contracts secured	Interview	SMEs, industry partners	-	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
5.5 Change in the level of financial, strategic, business, and marketing skills of the SMEs	Interview	SMEs	Closure (related question)	Closure	Descriptive analysis; self-reported attribution	-
5.6 Change in confidence in the commercial capabilities of the participating SMEs	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	-
IEQ6: To what extent has the FIF improved SMEs' investment readiness?						
6.1 Change in the level of public funding secured by the participating SMEs	Interview & Monitoring	SMEs	Baseline, closure	Closure	Descriptive analysis, before-versus-after, self-reported attribution	Cost-effectiveness
6.2 Change in the level of private funding secured by the participating SMEs	Interview & Monitoring	SMEs	Baseline, closure	Closure	Descriptive analysis, before-versus-after, self-reported attribution	Cost-effectiveness

Indicator	Collection method	Source	Survey timeline	Interview timeline	Impact method	VfM method
6.3 Number of repeat funding rounds secured by the participating SMES	Interview & Monitoring	SMEs	Closure	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
6.4 Number of new customers acquired	Interview	SMEs	-	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness
6.5 Change in SMEs' confidence to leverage private investment	Interview	SMEs	-	Closure	Descriptive analysis	-
6.6 Change in SMEs' confidence to apply for public funding	Interview	SMEs	-	Closure	Descriptive analysis	-
6.7 Change in perception of investor engagement with sector	Interview	SMEs, industry partners	-	Closure	Descriptive analysis	-
6.8 Change in the number of connections with investors	Interview	SMEs	Closure	Closure	Descriptive analysis; self-reported attribution	Non-monetised benefits
IEQ7: To what extent has the FIF supported growth and productivity improvements among participating SMEs?						
7.1 Change in SMEs' turnover	Monitoring, Interview	SMEs	Baseline	Closure	Descriptive analysis, before-versus-after, self-reported attribution	Cost-effectiveness
7.2 Value of commercial contracts secured by SMEs	Monitoring, Interview	SMEs	Closure	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness

Indicator	Collection method	Source	Survey timeline	Interview timeline	Impact method	VfM method
7.3 Change in the number of FTEs of participating SMEs	Monitoring, Interview	SMEs	Baseline, closure	Closure	Descriptive analysis, before-versus-after, self-reported attribution	Cost-effectiveness, partial CBA
7.4 Change in the productivity of industry partners uptaking the innovative solution (e.g. time savings, cost reduction)	Interview	Industry partners	-	Closure	Descriptive analysis; self-reported attribution	Cost-effectiveness, partial CBA

8 Step 5: Forward-looking evaluation design options

As set out in Section 5.1, there are important gaps in the current accelerator survey data collected by CPC for the retrospective cohorts. Indicator coverage is insufficient to address all relevant EQs, and evidence is not consistently collected at both baseline and closure. A 'do nothing' option, which would retain broadly the existing evidence base, is therefore not considered sufficient.

This section sets out two options for the forward-looking evaluation of FIF. Building on the retrospective evaluation, both options introduce enhanced monitoring and primary data collection at baseline, closure and follow-up timepoints. This would strengthen the evidence available to assess FIF's contribution to observed outcomes and impacts.

The options differ primarily in the breadth and depth of the primary research and triangulation. Option 1 focuses on participating SMEs, unsuccessful applicants and industry partners, providing a proportionate approach to forward-looking evaluation. Option 2 expands the evidence base by including evidence from a larger sample of unsuccessful applicants, wider stakeholders from across the freight and logistics innovation ecosystem (investors, regulators, etc.) and longitudinal case studies. It also triangulates the primary evidence with additional secondary data on successful and unsuccessful SMEs, strengthening the primary research-based counterfactual analysis.

Option 2 would therefore provide stronger evidence on additionality, the counterfactual and wider system-level effects. The longitudinal case studies would also provide a richer understanding of the end-to-end commercialisation supported by FIF by allowing barriers, enabling factors and participants' experiences to be understood in context and followed over time.

Table 20 summarises the two forward-looking evaluation options. The table is intended to provide a high-level comparison of the additional learning generated by each option and the main limitations that would remain. Further detail on the implications for the impact, process and VfM evaluations is provided in the sub-sections below.

Table 20 Overview of the forward-looking evaluation design options

	Option 1	Option 2
Data collection method and stakeholders	**Monitoring data**	**Monitoring data** **Semi-structured interviews** with successful and unsuccessful

	Option 1	Option 2
	Semi structured interviews with successful SMEs, unsuccessful applicants and industry partners.	SMEs, industry partners and wider stakeholders, including academia, trade bodies and regulators. **Secondary company-level data** on key indicators for successful and unsuccessful SMEs. **Longitudinal in-depth case studies** with successful SMEs.
Learning potential	Provides evidence on changes in key indicators over time, how FIF was intended to operate versus how it was delivered, how FIF has contributed to participant outcomes, and the assumptions needed to assess whether benefits are likely to exceed programme costs.	Provides richer and more comprehensive learning than Option 1, with stronger triangulation and greater depth across several areas. Wider stakeholder interviews provide additional evidence on spillovers and wider system-level effects. Secondary data provide an independent source to validate the collected indicators for successful and unsuccessful applicants. Longitudinal case studies provide richer evidence on end-to-end commercialisation including how and why outcomes arise, the barriers and enablers affecting them, and whether outcomes and benefits persist over time.
Limitations	Relies on minimal primary research-based counterfactuals, has limited evidence on ecosystem-level effects, and does not provide evidence on the full end-to-end commercialisation journey. Findings may be affected by response rates, recall issues and sampling bias. Small sample	Evidence on the primary research-based counterfactual and additionality will be stronger than under Option 1 through triangulation with secondary data and expanded primary research but will remain indicative rather than causal.

	Option 1	Option 2
	sizes limit the scope for quasi-experimental analysis.	Secondary data coverage will depend on successful matching and the availability of relevant indicators. Case studies and wider stakeholder interviews remain subject to selection, recall and response biases. Small sample sizes continue to limit the scope for quasi-experimental analysis.
Robustness	Proportionate theory-based assessment.	**More robust theory-based assessment**, with wider triangulation across monitoring data, primary research and independent secondary data. This strengthens judgements on additionality, causal mechanisms, wider effects and the persistence of outcomes.
Timelines and budget	Between 2026 and 2032. Estimated cost: £288,000 to £345,000.	Between 2026 and 2032. Estimated cost: £427,000 to £502,000.

8.1 Forward-looking evaluation: Option 1

Option 1 combines enhanced monitoring data with targeted primary research. It improves coverage of the evaluation framework while keeping the approach proportionate to the scale and maturity of the programme.

The section sets out the suggested monitoring and primary data collection approach, the impact and VfM methods, and the expected timetable and costs. Table 24 presents a summary of the evaluation design for Option 1, mapping the EQs and indicators with the suggested evaluation and data collection methods.

8.1.1 Evidence for forward-looking evaluation Option 1

Monitoring data

The suggested monitoring data approach for Option 1 expands the range of data collected for the previous FIF cohorts and will provide a broader and more systematic evidence base for the evaluation. Enhanced monitoring data will ensure more consistent collection at baseline, closure, follow up (i.e. six months after closure) and, where relevant, post event. Monitoring data will also be targeted at SMEs participating in other work packages beyond the Accelerator (i.e. FLIN and the new Venture Growth and Unlocking Private Capital work packages). The list of indicators suggested to be covered by monitoring data for Option 1 is presented in Table 24.

Primary data collection

The monitoring data will be supplemented by a set of semi-structured interviews with participating SMEs (participating in the Accelerator, Venture Growth and Unlocking Private Capital work packages),[42] unsuccessful applicants and industry partners.

Interviews with successful and unsuccessful applicants are anticipated to last around 45 minutes, although this will depend on the judgement of the evaluators and the recognition that some business leaders are time constrained. Interviews with industry partners are likely to take up to one hour.

Participating SMEs

Option 1 includes **interviews with ten SMEs per cohort** (40 SMEs in total). SMEs will be selected across the Accelerator, Venture Growth and Unlocking Private Capital work packages, with some variation by freight mode, technology type, business maturity and geography.

Qualitative evidence from participating SMEs will be gathered at different stages of their involvement in the programme **at baseline, closure and follow-up** (i.e. six months after cohort closure). In total 120 interviews of 45 minutes each are expected.

Baseline interviews will focus primarily on the process evaluation, exploring participants' needs, expectations and organisational context prior to engagement. A small number of questions will also capture participants' expectations of the likely effects of participation, which can subsequently be revisited at closure.

[42] FIC/FLIN will be implicitly captured in the sample as Accelerator and Venture Growth SMEs also take part in FIC/FLIN. The Unlocking Private Capital work package is still under development and exact interview questions and selection criteria will be confirmed during the evaluation.

Closure interviews will focus primarily on the impact evaluation, including changes in technological, commercial and market readiness, the development of new partnerships, exposure to potential investors and identification of new use cases for supported technologies. They will also cover relevant process evaluation issues, including changes in knowledge, behaviours and organisational practice, alongside participants' reflections on the barriers, enablers and perceived value of the programme.

Follow-up interviews will assess whether outcomes observed at closure have been sustained or developed further.

Industry partners

Option 1 includes interviews with **five industry partners per cohort** (20 industry partners in total). Engagement with industry stakeholders will take place **at closure and follow-up** (i.e. six months after cohort closure). In total, 40 interviews of 60 minutes each are expected.

Industry partner interviews will focus on the implementation of FIF-supported solutions, benefits realised and any evidence of longer-term operational or productivity improvements. They will also gather views on the delivery of FIF, its contribution to increasing innovation in the freight and logistics sector, and remaining barriers to commercialising innovation.

Unsuccessful applicants

Option 1 includes interviews with **five unsuccessful SMEs per cohort** (20 SMEs in total). As set out in Section 6.2.2, the selection criteria will prioritise applicants that progressed furthest through the application process, while maintaining some variation across work packages, freight modes, technology types and business maturity.

Qualitative evidence from unsuccessful SMEs will be gathered **at baseline and follow-up** (i.e. six months after cohort closure) to maximise learnings around how these businesses have progressed in the period since their application, including the subsequent development of their products, access to commercial or funding opportunities, and partnership activity. In total 40 interviews of 45 minutes are expected.

Although Option 1 has a higher data collection burden than the retrospective evaluation, the burden will be managed by keeping interviews proportionate, using individual interviews to cover both process and IEQs, and integrating data collection with existing monitoring activities.

The list of indicators suggested to be covered by primary data collection for Option 1 is presented in Table 24 at the end of this section. The interviews will also examine additionality for each relevant outcome, including participants' views on what would likely have happened without FIF support. An overview of topics per stakeholder type (i.e. participating SMEs, industry partners and unsuccessful SMEs) is also presented in Section 6.2.2. These topics

should be treated as indicative areas of enquiry rather than a fixed interview questionnaire. The precise questions, sequencing and level of detail will be refined during the evaluation design stage and tailored to the relevant stakeholder and interview stage.

8.1.2 Process evaluation

Option 1 is intended to be a relatively low burden option which makes use of monitoring data collected by CPC and from FIF participants, with the addition of semi-structured interviews with SMEs and industry partners. Using both evidence sources allows evaluators to understand how the FIF was delivered and how this may have varied from the original plan and the reasons for this, as well as providing descriptions and understandings of the interactions between different strands of FIF.

The indicators which will be used to inform the evaluation are provided in the Annex C , Table 32. The data will be collected from the following three sources:

- Programme-generated **monitoring data**. These are data generated as a result of the delivery of the FIF, and include programme plans, terms of reference (ToR) and meeting minutes, as well as application data, assessment guidance, website analytics and risk registers;
- **Participant feedback data**. These are data captured from participants or attendees throughout the programme and include feedback forms completed at the end of particular events or at particular points in the programme's lifecycle; and
- **Interview data**. These data will be captured by the evaluators during semi-structured interviews. These indicators will form the basis of the topic guides which will be produced in advance of the interviews at baseline, closure and follow-up stages.

Learnings and limitations

The Option 1 process evaluation is expected to provide:

- Insight into how the FIF was intended to operate at the outset, including whether, when and why changes were made to the programme over time;
- Insights on levels of reach, participation and intensity, the outputs of the programme and how particular events, activities and initiatives were received by participants at the time;
- Evidence on the mechanisms of change. In particular, which elements of the programme made the biggest difference and why they were useful, and the elements of the programme which were less useful; and
- Any behavioural changes, as well as barriers, enablers and any unintended consequences of the programme.

By triangulating data from all three sources to compare implementation, participant experience, and mechanism and context, evaluators can obtain a robust understanding of not just how implementation varied across streams and cohorts and how participants experienced this, but also the factors that enabled or constrained the change and which elements are most likely to be transferable to future cohorts or other programmes.

Limitations of this option are linked to the tendency of monitoring data to focus on outputs rather than the quality of implementation. It can also be inconsistent across work packages or cohorts. The data can also be missing or incomplete and, even if complete, they have limited ability to explain why some activities succeeded or failed. This limitation will be addressed in part by complementing the monitoring data with primary data collection.

Data from participants can also suffer from bias, and participants can overestimate how much they have learned or how likely they are to change their behaviour as a result. Furthermore, satisfaction does not necessarily equate to effectiveness – an enjoyable programme may not necessarily have a lasting influence, while demanding events may be more effective in the long term.

Interviews provide depth at the expense of breadth; the samples will be small in absolute terms and findings will be based on self-reported experiences and recollections. Participants may also attribute changes to the programme when other factors also played a role.

8.1.3 Impact evaluation

The impact evaluation will use contribution analysis to bring together insights from monitoring data and semi-structured interviews.

Descriptive analysis

The descriptive analysis will consider how outcomes changed over time, including at baseline, closure and follow-up (6 months post programme closure). Compared with the retrospective evaluation, Option 1 will provide more consistent data across these timepoints and a broader set of relevant indicators, supporting a more complete assessment of how outcomes develop during and after participation in FIF (see Table 24 for a list of indicators). In addition, the analysis will be supported by stronger primary research, including not only participating SME and industry partner views but also the unsuccessful applicants' interviews.

Before-versus-after analysis

The before-versus-after analysis will be undertaken as explained in Section 6.1.2 (see Table 14 for an illustrative example of outputs). Under Option 1, the enhanced availability of baseline and closure data will enable changes to be assessed across a broader range of indicators

than is possible for the retrospective evaluation.[43] Where appropriate, data from multiple cohorts may also be pooled at the end of the programme to increase the available sample and support statistical testing.

Follow-up interviews conducted after programme closure will complement this analysis by providing evidence on longer-term effects that may not have materialised by the point of closure, including whether outcomes achieved during the programme have been sustained or have led to further outcomes.

Primary research-based counterfactuals

The assessment of self-reported attribution will be undertaken as explained in Section 6.1.2, with an illustrative example of the outputs provided in Table 15. Under Option 1, attribution data will be collected in greater detail than for the retrospective evaluation, capturing the reported strength of FIF's contribution to each outcome, for example from 'not at all' to 'a lot', rather than only a binary attribution measure. This will provide a more nuanced indication of participants' views on the extent to which FIF contributed to observed outcomes.

Option 1 will also supplement self-reported attribution with evidence from unsuccessful applicants. Interviews with unsuccessful applicants will collect a selected set of quantitative indicators, alongside qualitative evidence on how the business and its innovation developed over the same period. Indicators will focus on outcomes, such as private investment, turnover, employment, commercial contracts and customers, that can be measured consistently across successful and unsuccessful applicants.

The analysis will then compare changes among unsuccessful applicants against those observed among successful FIF applicants. For comparable indicators, we will test whether changes between baseline and follow-up differ significantly between the two groups. This will provide an indication of whether participating SMEs experienced stronger or weaker development over the period. However, it will not be interpreted as a causal counterfactual, as successful and unsuccessful applicants may differ systematically in characteristics that also influence their subsequent outcomes (see Table 21 for an illustrative output).

[43] For example, additional indicators may include changes in CRL, MRL, and IP and patents generated.

Table 21 Illustrative example of comparative analysis against unsuccessful applicant

Metric assessed	Successful: baseline	Successful: follow-up	Change	Unsuccessful: baseline	Unsuccessful: follow-up	Change
Average private investment raised	£0.6m	£1.1m	+£0.5m*	£0.4m	£0.6m	+£0.2m

Source: *Frontier Economics*

Note: *Information and quotes are for illustrative purposes only and do not reflect actual data. Statistical significance is shown by asterisks: * p < 0.01*

The quantitative findings on self-reported attribution and the comparative analysis against unsuccessful applicants will be considered alongside qualitative interview evidence to help explain observed differences and the factors that may have contributed to them. Under Option 1, no independent validation of outcomes reported by unsuccessful applicants is proposed. The comparative analysis will therefore rely on self-reported data, which may be subject to reporting and recall bias.

Contribution analysis

The contribution analysis will bring together all the evidence to test specific contribution claims derived from the ToC. Compared to retrospective evaluation, the assessment will draw on a stronger and more diverse evidence base, combining quantitative changes over time for a broader set of indicators with enhanced monitoring and additional primary research evidence from participating SMEs, unsuccessful applicants and industry partners.

The contribution assessment will consider the consistency of evidence across sources, whether the expected ToC mechanisms are observed, and the extent to which plausible alternative explanations can be ruled out or remain important, as set out in Section 6.1.2 (with an example presented in Table 16).

Compared with the retrospective evaluation, there will be greater scope to test alternative explanations. Evidence from unsuccessful applicants will help assess whether similar changes occurred without FIF support, while evidence from industry partners will provide an additional external perspective on observed changes. Taken together, the broader evidence base will also allow stronger triangulation across methods and stakeholder groups.

Learnings and limitations

To summarise, the Option 1 impact evaluation is expected to provide:

- Changes in the full set of SME outcomes, across EQs, using descriptive and before-versus-after analysis;
- SMEs' reported attribution of outcomes to FIF, supplemented by interview evidence on what participants believe would have happened in the absence of FIF;
- Comparison with unsuccessful applicants, using statistical analysis of changes in comparable outcomes for successful and unsuccessful applicants (when feasible), alongside qualitative interview evidence to help interpret observed differences;
- How and why outcomes occurred, drawing on qualitative evidence from interviews with successful and unsuccessful SMEs and industry partners; and
- FIF's contribution to observed outcomes, by bringing the evidence together through a structured contribution analysis.

Compared with the retrospective evaluation, Option 1 will provide a stronger basis for assessing FIF's contribution to observed outcomes. This reflects the more consistent availability of baseline, closure and follow-up data across a broader set of indicators, the inclusion of unsuccessful applicants as a comparison group, and the wider set of primary research evidence from successful SMEs and industry partners. Together, this will strengthen triangulation across methods and stakeholder groups and provide greater scope to test alternative explanations for observed changes.

However, important limitations will remain. The analysis will still rely substantially on self-reported data and participant engagement, with response rates potentially affecting the completeness of follow-up evidence. Outcomes reported by unsuccessful applicants will not be independently validated using secondary data, which will limit the robustness of the comparison group evidence. The unsuccessful applicant group will also not constitute a causal counterfactual, as successful and unsuccessful applicants may differ systematically in ways that affect outcomes. In addition, the relatively small number of participating SMEs will limit the scope for quasi-experimental analysis.

8.1.4 VfM evaluation

The VfM assessment will build on the findings of the impact evaluation. Option 1 will adopt the same overall framework as the retrospective evaluation, comprising cost-effectiveness analysis, a partial scenario-based CBA, and an assessment of non-monetised benefits and wider effects. Compared with the retrospective evaluation, more consistent monitoring data and additional primary research will strengthen the evidence available across each part of the assessment.

Cost-effectiveness

For the cost-effectiveness analysis, the enhanced monitoring data and additional evidence collected through primary research will allow programme costs to be assessed against a broader set of outputs and outcomes than under the retrospective evaluation. Depending on data availability, this could include the cost per innovation adopted or commercialised, SPV created, patent or other IP generated, R&D project or business plan developed, commercial contract or new customer secured, and increases in R&D expenditure, investment, turnover or employment. This will provide a more complete picture of what has been achieved for the resources invested.

Partial scenario-based CBA

For the partial CBA, Option 1 will strengthen the evidence available for monetising the benefits identified under the retrospective evaluation and expand the range of benefits that can potentially be monetised. The analysis will continue to consider benefits associated with SME business growth and additional investment, with improved baseline, closure and follow-up data providing a stronger basis for estimating changes over time and the extent to which these are attributable to FIF.

In addition, interviews with industry partners will seek evidence on benefits arising from adopting or trialling FIF-supported technologies, including reductions in operating costs, staff time or other efficiency gains. Where sufficiently robust data are available, the assessment will also seek to monetise environmental benefits, for example where a supported innovation generates measurable reductions in fuel use or emissions. The approach to monetisation is shown in Table 22 below.

As under the retrospective evaluation, the CBA will remain partial and scenario based. Monetised benefits will therefore be considered alongside, rather than given greater weight than, the wider evidence on non-monetised benefits. Where material benefits cannot robustly be monetised, the assessment will consider the scale those benefits would need to reach for total benefits to exceed programme costs or achieve alternative BCR thresholds.

Non-monetised benefits

Compared with the retrospective evaluation, Option 1 will provide a stronger and more systematic assessment of non-monetised non-quantifiable benefits, drawing on expanded primary data collection. These benefits will be assessed using the contribution analysis framework, considering (i) whether there is evidence that the benefit occurred, (ii) the strength of evidence that FIF contributed to it, (iii) plausible alternative explanations, (iv) its reach and persistence, and (v) the overall strength of the evidence.

Compared with the retrospective evaluation, evidence from unsuccessful applicants will strengthen the assessment of additionality and alternative explanations, while evidence collected at baseline, closure and follow-up will allow the evaluation to examine how outcomes develop and whether benefits persist beyond programme participation. Together, this will provide a stronger basis for assessing the scale and significance of non-monetised non-quantified benefits and incorporating them into the overall VfM judgement.

Spillovers and distributional effects

Option 1 will also strengthen the assessment of spillovers, displacement and distributional effects relative to the retrospective evaluation. Interviews with participating SMEs and industry partners will provide more systematic evidence on positive spillovers, including whether FIF-supported technologies have subsequently been adopted elsewhere, knowledge generated through trials has been used beyond the directly supported organisations, or FIF-generated relationships have led to further partnerships or commercial activity.

Interviews with unsuccessful applicants will provide additional evidence relevant to displacement, including whether they subsequently pursued similar commercial opportunities and whether FIF-supported businesses gained investment, contracts or customers that might otherwise have gone to other firms.

Option 1 will also provide additional evidence on distributional effects through monitoring data on the characteristics of applicants and supported businesses, including geography, business size and business type, allowing the evaluation to examine how programme participation, support and outcomes are distributed across different groups.

However, evidence on wider effects will remain more limited than under an evaluation specifically designed around EQ8. In particular, the absence of interviews with wider stakeholders will limit the ability to assess spillovers and displacement occurring beyond participating SMEs, unsuccessful applicants and industry partners.

Overall VfM assessment

The enhancements relative to the retrospective VfM are highlighted in **bold** in Table 22.

Table 22 Option 1 VfM approach

Method	**Approach to assess benefits**	**Limitations**
Cost-effectiveness analysis	Cost per £1 public/private investment leveraged. Cost per commercial contract secured.	Attribution based on self-reported evidence.

Method	Approach to assess benefits	Limitations
	Cost per additional FTE supported. Cost per £1 revenue from commercialised technology. **Alongside measures such as cost per SME supported and additional investment secured, this could include the cost associated with outcomes such as securing R&D funding or registering a patent, where these are measured consistently.**	
Partial scenario-based CBA[44]	Business growth impact = additional FTEs of the participating SMEs x sector GVA per FTE relative to typical GVA per UK FTE x attribution. ROI on R&D = £ value of R&D-related funding x assumed ROI on capital investment.[45] **Productivity impact = £ saved per annum x attribution.[46]** **Environmental impact = tonnes CO2e saved x carbon value x attribution.** **Sensitivity analysis (drawing on expanded impact analysis evidence).**	Attribution based on self-reported evidence. Sector-level GVA estimates may not be representative for the participating SMEs or industry partners. Assumptions may be required to estimate productivity and environmental impact (e.g. on carbon prices, energy prices, wages, etc.)**.**[47] Assumptions may be required to identify the proportion of private capital used for innovative activities as compared to commercialisation activities.
Qualitative non-monetised benefits	Drawing on contribution analysis*:* Draw on the contribution analysis, combining evidence from participating SMEs, industry partners and **unsuccessful applicants.**	Wider stakeholder perspectives will not be collected, which will limit the evidence available on some system-level benefits.

[44] Assumptions will also be made on business attrition (10%), and depreciation (15%) where required as per Section 6.1.4.

[45] 20% based on a published study for the UK Government: https://www.frontier-economics.com/media/015adtpq/rate-of-return.pdf

[46] Exact productivity benefits will be verified through the industry partner interviews and quantified accordingly. Examples are set out in Section 6.1.4.

[47] Examples of some assumptions are set out in Section 6.1.4.

Method	Approach to assess benefits	Limitations
	Qualitative evidence on improved capabilities, accelerated commercialisation, reduced adoption risk, stronger connections and other programme benefits. **A more systematic consideration of alternative explanations and triangulation across stakeholder groups.**	
Spillovers, displacement effects, and distributional impacts	Drawing on contribution analysis*:* SME and industry partner interviews will provide evidence on market, knowledge and network spillovers; **unsuccessful applicant interviews will provide additional evidence on potential displacement; and monitoring data on applicant characteristics such as geography, business size and business type will inform the assessment of distributional effects.**	Evidence on wider effects will remain incomplete. Wider stakeholder interviews will not be undertaken, so spillovers and displacement beyond participating SMEs, unsuccessful applicants and industry partners may not be captured systematically.
Overall assessment	Test how robust the VfM conclusion is to changes in key assumptions. For example, if the central BCR is **2.0**, assess how far attribution or estimated benefits would need to fall before the BCR drops below **1.0**, and whether non-monetised benefits and wider effects strengthen the overall VfM judgement.	Non-monetised benefits and wider effects would only be considered qualitatively when assessing whether they strengthen or weaken the VfM conclusion.

Source: Frontier Economics.

Learnings and limitations

To summarise, compared to retrospective evaluation, Option 1 VfM evaluation is expected to generate:

- Stronger evidence on productivity benefits realised by industry partners, including opportunities to monetise productivity and environmental benefits where appropriate;

- Richer evidence on non-monetised and longer-term benefits, such as collaboration, knowledge sharing and ecosystem development, assessed using the structured contribution analysis framework;
- Stronger evidence on the counterfactual and alternative explanations when assessing non-monetised benefits, drawing on evidence from unsuccessful applicants and industry partners; and
- Stronger evidence on wider effects, including spillovers, displacement and distributional effects, through triangulation of evidence from the impact assessment.

The forward-looking VfM assessment has several limitations that should be recognised, and as such the resulting CBA should be interpreted as indicative rather than definitive assessment of the programme's VfM. In particular:

- Attribution will continue to rely on theory-based contribution analysis and self-reported evidence, rather than a measured counterfactual;
- Evidence on displacement, leakage, substitution and wider spillover effects will remain limited, given that there is no engagement with wider stakeholders such as academia, investors or the broader SME landscape;
- Monetisation of productivity, environmental and other operational benefits will depend on the availability and quality of evidence provided by participating industry partners; and
- The benefits captured through the evaluation are not intended to represent an exhaustive assessment of all programme impacts.

8.1.5 Expected timelines for Option 1

The evaluation activity is expected to be conducted over the course of the programme (four more cohorts are assumed) and to conclude 18 months after programme completion. This timing will allow the evaluators to collect evidence on potential medium- to longer-term impacts, which are unlikely to be fully realised shortly after each cohort closes.

For each cohort, most evaluation activity is expected to take place at cohort closure. However, CPC should aim to collect baseline monitoring data at the start of each cohort. The evaluators should also prepare the baseline topic guides and conduct baseline interviews either soon after successful applications have been confirmed or during the first month of the programme.

During the first few months after cohort closure, the evaluators will review and analyse baseline and closure monitoring data, prepare closure topic guides and conduct closure interviews with SMEs and industry stakeholders.

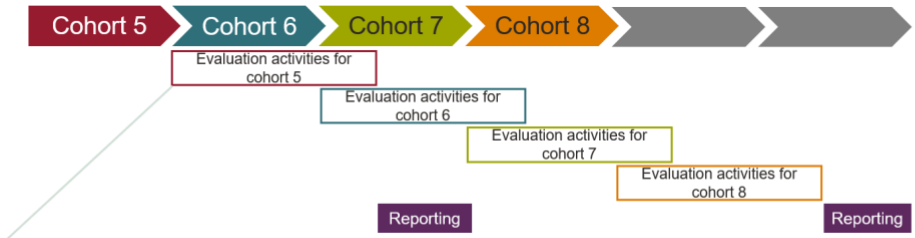
Findings from the process evaluation will be analysed, synthesised and reported immediately after the second wave of primary research activity at cohort closure.

Follow-up evaluation activity will be undertaken six months after cohort closure. This evaluation activity will mainly focus on the impact evaluation. During this period, the evaluators will conduct follow-up interviews and develop a contribution analysis (identifying evidence of the change in the outcomes of interest, other factors that may have contributed and an overall assessment of the evidence of FIF contribution). The VfM assessment will also be undertaken during this period, to maximise the evidence available on the duration of benefits over time.

For the process evaluation, baseline data will be collected in month one in order to understand participants' perspectives on the application, selection and baseline processes. During month seven (i.e. at cohort closure) the CPC is expected to provide the monitoring and participant feedback data, with a two-month period assumed for the analysis of this data (months seven and eight) and a similar timeframe. Follow-up interviews with participants will be held in months eight and nine, with analysis, synthesis and reporting assumed for months ten and eleven.

Reporting activity will take place twice during the evaluation period. First, an interim impact and process evaluation report will be developed mid-programme, covering cohort 5 and, in part, cohort 6. This report will provide early findings on the programme and offer insights to inform programme design for the latest cohorts. Second, a final impact, process and VfM evaluation report will be developed at the end of the programme, covering all cohorts.

Figure 4 Expected timelines for forward-looking evaluation – Option 1



Evaluation activities for cohort 5 (example)	During cohort						Post cohort										
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17
Prepare baseline interview topic guide																	
Conduct baseline interviews																	
Prepare closure interview topic guide																	
Monitoring data received																	
Monitoring data, review and analysis																	
Conduct closure interviews																	
Analyse & synthesise findings (process)																	
Conduct follow up interviews																	
Develop contribution analysis - impact																	
Conduct VfM evaluation																	

Source: Frontier Economics & SYSTRA

8.1.6 Expected budget for Option 1

A breakdown of potential costs by workstream is provided below. These costs are preliminary and subject to change. Upper and lower bounds have been provided for each workstream.

This assumes an extensive primary research programme involving multiple round interviews with each stakeholder group (including SMEs, industry partners) and across all four cohorts. These costs are scalable and therefore, to minimise costs, options include reducing the number of cohorts evaluated and scaling back the stakeholder groups engaged.

These costs do not include VAT.

Table 23 Indicative resource requirement for Option 1 assuming four cohorts are evaluated

Workstream	Estimated cost range
Inception	£6-9k
Monitoring data collection, review, and analysis – budget for cohort 1	£8-10k
Monitoring data collection, review, and analysis – budget for cohorts 2 to 4*	£15-21k
Primary data collection: interviews with industry partners (n=5) at closure and follow-up – budget for cohort 1	£12-15k
Primary data collection: interviews with industry partners (n=5) at closure and follow-up – budget for cohorts 2 to 4*	£25-30k
Primary data collection: interviews with participant SMEs (n=10) at baseline, closure, and follow-up – budget for cohort 1	£25k-30k
Primary data collection: interviews with participant SMEs (n=10) at baseline, closure, and follow-up – budget for cohorts 2 to 4*	£55k-60k
Primary data collection: interviews with unsuccessful SMEs (n=5) at baseline, and follow-up – budget for cohort 1	£8k-10k
Primary data collection: interviews with unsuccessful SMEs (n=5) at baseline, and follow-up – budget for cohorts 2 to 4	£16k -21k
VfM analysis	£25-30k

Workstream	Estimated cost range
Evaluation analysis for interim and final reports	£50-60k
Quality assurance	£3-5k
Interim report	£18-20k
Final report and presentation	£22-24k
Total	**£288-345k**

*Note: *Budgets for cohorts 2-4 are reduced considering that preparation activities (e.g. topic guide development) can be leveraged from cohort 1.*

Table 24 Option 1: Indicators, and data collection methodology

Indicator	Collection method	Source	Timeline	Impact method	VfM method
IEQ1: To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?					
1.1 Number of applications received for the Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	Distributional analysis
1.2 Number of SMEs participating in the Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	Distributional analysis
1.3 Number of industry partners taking part in Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	-
1.4 Number of participants drawn from other parts of the programme (e.g. FLIN, Venture Growth work package)	Monitoring	CPC	Baseline	Descriptive analysis	-
1.5 Number of trials delivered	Monitoring	CPC	Closure	Descriptive analysis	-
1.6 Number of SMEs participating in the trials	Monitoring	CPC	Closure	Descriptive analysis	-
1.7 £ of funding provided for the trials	Monitoring	CPC	Closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
1.8 £ of match funding for the trials (or estimated value of match funding if in-kind)	Monitoring	CPC	Closure	Descriptive analysis	Cost-effectiveness
1.9 Number of technical workshops and events	Monitoring	CPC	Closure	Descriptive analysis	-
1.10 Number of SMEs attending technical readiness training	Monitoring	CPC	Post event	Descriptive analysis	-
1.11 Number of commercial readiness trainings/range of workshops	Monitoring	CPC	Closure	Descriptive analysis	-
1.12 Number of SMEs attending commercial readiness training/ workshops	Monitoring	CPC	Post event	Descriptive analysis	-
1.13 Number of Accelerator-supported innovations adopted by industry partners	Monitoring; Interview	Accelerator SMEs, industry partners	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution	Cost-effectiveness
1.14 Number of products commercialised	Monitoring; Interview	Accelerator SMEs and unsuccessful applicants, industry partners	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
1.15 Change in the expected timeline to product development/commercialisation	Interview	Accelerator SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; before-versus-after; self-reported attribution; comparative analysis	-
1.16 Change in SMEs' TRL	Interview	Accelerator SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
1.17 SMEs' satisfaction with training received (e.g. technical, commercial readiness)	Interview	Accelerator SMEs	Closure	Descriptive analysis	-
IEQ2: To what extent and how has the FIC (and its successor the FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector and with other sectors in the supply chain?					
2.1 Number of FLIN members	Monitoring	CPC	Baseline, closure	Descriptive analysis	Distributional analysis
2.2 Number of registered users on the digital platform	Monitoring	CPC	Baseline, closure	Descriptive analysis	Distributional analysis
2.3 Proportion of active users (i.e. users interacting with the content)	Monitoring	CPC	Baseline, closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
2.4 Proportion of contributing users (i.e. users making posts)	Monitoring	CPC	Baseline, closure	Descriptive analysis	-
2.5 Proportion of repeat active users (i.e. SMEs using platform both in year 1 and year 2 …)	Monitoring	CPC	Closure	Descriptive analysis	-
2.6 Average number of likes, shares, comments and replies per post	Monitoring	CPC	Closure	Descriptive analysis	-
2.7 Average number of direct member-to-member messages per user	Monitoring	CPC	Closure	Descriptive analysis	-
2.8 Number of ED&I initiatives organised	Monitoring	CPC	Closure	Descriptive analysis	-
2.9 Number of SMEs attending ED&I initiatives	Monitoring	CPC	Post event	Descriptive analysis	-
2.10 Number of upskilling sessions delivered	Monitoring	CPC	Closure	Descriptive analysis	-
2.11 Number of SMEs attending upskilling sessions	Monitoring	CPC	Post event	Descriptive analysis	-
2.12 Number of knowledge-sharing sessions delivered	Monitoring	CPC	Closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
2.13 Number of SMEs attending knowledge-sharing sessions	Monitoring	CPC	Post event	Descriptive analysis	-
2.14 Number of showcasing opportunities delivered (e.g. investor days)	Monitoring	CPC	Closure	Descriptive analysis	-
2.15 Number of SMEs participating in showcasing events	Monitoring	CPC	Post event	Descriptive analysis	-
2.16 £ of funding provided to FLIN members	Monitoring	CPC	Closure	Descriptive analysis	-
2.17 Number of FLIN members applying to the Accelerator programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
2.18 Success rate of applications to Accelerator from FLIN members	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
2.19 SMEs' satisfaction with sessions attended (e.g. upskilling, ED&I, knowledge sharing, showcasing)	Interview	FLIN SMEs	Closure	Descriptive analysis	-
2.20 Change in the level and quality of collaborations between FLIN members	Monitoring; Interview	FLIN SMEs; unsuccessful applicants; industry partners	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported	Non-monetised benefits/costs

Indicator	Collection method	Source	Timeline	Impact method	VfM method
				attribution; comparative analysis	
2.21 Change in the level and quality of knowledge sharing between the FLIN members	Monitoring; Interview	FLIN SMEs; unsuccessful applicants; industry partners	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits/costs
IEQ3: To what extent and how has the Venture Growth strand enabled collaborative tech-stacking solutions in freight and logistics that would not have otherwise been possible, or would have taken longer?					
3.1 Number of training and support sessions delivered as part of the Venture Growth work package	Monitoring	CPC	Closure	Descriptive analysis	-
3.2 Number of SMEs attending the training and support sessions	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.3 Number of SMEs applying for the tech-stacking programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.4 Number of SMEs selected for the tech-stacking programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.5 £ of funding provided for the tech-stacking and scale-up programme	Monitoring	CPC	Closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
3.6 Number of investor events organised	Monitoring	CPC	Closure	Descriptive analysis	-
3.7 Number of SMEs/investors attending the events	Monitoring	CPC	Post event	Descriptive analysis	-
3.8 Number of SMEs progressing between work packages (tech-stacking, scale-up and Accelerator)	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.9 Number of SPVs created	Monitoring	CPC	Closure	Descriptive analysis	Cost-effectiveness
3.10 Composition of the SPVs	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.11 Number of SPVs registering patents	Monitoring	CPC	Baseline, closure	Descriptive analysis; before-versus-after	Cost-effectiveness
3.12 Participants' satisfaction with the training sessions attended e.g. participant's perception of the extent to which training sessions enhanced commercial/investment capabilities	Interview	Venture Growth SMEs/tech-stacks	Closure	Descriptive analysis	-
3.13 Number of business plans developed	Monitoring; Interview	Venture Growth SMEs/tech-stacks and unsuccessful applicants	Closure	Descriptive analysis; comparative analysis; self-reported attribution	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
3.14 Number of products developed	Monitoring; Interview	Venture Growth SMEs/tech-stacks and unsuccessful applicants	Closure	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness
3.15 Number of products commercialised (i.e. used in real-world environment)	Monitoring; Interview	Venture Growth SMEs/tech-stacks and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness
3.16 Number of solutions adopted in real-world environment	Monitoring; Interview	Venture Growth SMEs/tech-stacks and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness
IEQ4: To what extent is FIF strengthening the UK freight innovation ecosystem and contributing to R&D growth?					
4.1 Number of R&D projects leading to new innovative product developed	Monitoring	Participating SMEs; unsuccessful applicants	Baseline, closure	Descriptive analysis	Cost-effectiveness
4.2 Number of R&D projects leading to improvements in product design	Monitoring	SMEs	Baseline, closure	Descriptive analysis	Cost-effectiveness
4.3 SMEs' R&D expenditure	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
				attribution; comparative analysis	
4.4 Change in follow-on private R&D investment	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness, partial CBA
4.5 Number of patents or other IP generated by participating or engaging SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
IEQ5: To what extent has the FIF improved SMEs' commercial readiness?					
5.1 Change in CRL of the SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
5.2 Change in MRL of the SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
5.3 Change in the number of commercial contracts secured	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
5.4 Number of repeat and follow-on contracts secured by the participating SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
5.5 Change in the level of financial, strategic, business, and marketing skills of the SMEs	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
5.6 Change in confidence in the commercial capabilities of the participating SMEs	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
IEQ6: To what extent has the FIF improved SMEs' investment readiness?					

Indicator	Collection method	Source	Timeline	Impact method	VfM method
6.1 Change in the level of public funding secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
6.2 Change in the level of private funding secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
6.3 Number of repeat funding rounds secured by SMES	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after	Cost-effectiveness
6.4 Number of new customers acquired	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
6.5 Change in SMEs' confidence to leverage private investment	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
6.6 Change in SMEs' confidence to apply for public funding	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis	-
6.7 Change in perception of investor engagement with sector	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits
6.8 Change in the number of connections with investors	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits
IEQ7: To what extent has the FIF supported growth and productivity improvements among participating SMEs?					
7.1 Change in SMEs' turnover	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
7.2 Value of commercial contracts secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
				attribution; comparative analysis	
7.3 Change in the number of FTEs of participating SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness, partial CBA
7.4 Change in the productivity of industry partners uptaking the innovative solution (e.g. time savings, cost reduction)	Interview	Industry partners	Closure, follow-up	Descriptive analysis, before-versus-after	Cost-effectiveness, partial CBA
IEQ8: To what extent has the FIF addressed key barriers and challenges in the freight and logistics sector?					
8.1 Breakdown of innovative projects funded by challenge	Monitoring	CPC	Closure	Descriptive analysis	-

8.2 Forward-looking evaluation: Option 2

Option 2 builds on Option 1 by introducing longitudinal case studies and broadening the primary research to include a wider range of stakeholders. This makes it more resource intensive, but provides stronger qualitative evidence on additionality, delivery pathways and wider ecosystem effects. Table 26 presents a summary of the evaluation design for Option 2, mapping the EQs and indicators with the suggested evaluation and data collection methods.

8.2.1 Additional evidence for forward-looking evaluation Option 2

Option 2 will collect the same monitoring data and undertake the same core primary data collection as Option 1. It will supplement this evidence base through wider stakeholder interviews, longitudinal case studies and targeted secondary data analysis. These additions are intended to provide stronger evidence on the mechanisms through which outcomes arise, alternative explanations, the persistence of outcomes and wider effects across the freight innovation ecosystem.

Unsuccessful applicants

Option 2 includes interviews with a larger sample of unsuccessful SMEs: ten per cohort instead of five (40 SMEs in total). Qualitative evidence from unsuccessful SMEs will be gathered at baseline and follow-up (i.e. six months after cohort closure), in line with the approach suggested for Option 1. In total, 80 interviews of 45 minutes are expected.

Wider stakeholder interviews

Option 2 includes interviews with wider stakeholders not directly supported by FIF, such as regulators, trade bodies, investors and major freight operators. Five interviews per cohort are suggested. Interviews are expected to last around 60 minutes and will be undertaken at programme closure. In total, 20 interviews with wider stakeholders are expected.

Stakeholders will be purposively selected to provide variation across organisation type, freight mode and sector, relevance to FIF-supported technologies, geographical remit and level of sector influence. Selection will also seek organisations with sufficient knowledge of freight innovation to comment on wider market developments, while avoiding over-representation of organisations closely involved in FIF.

The interviews will provide an independent perspective on wider effects that participating SMEs and industry partners may be less well placed to assess. This includes the visibility and adoption of FIF-supported technologies, changes in regulatory or procurement barriers, dissemination of programme learning, and FIF's influence on wider collaboration and investment. They will also provide evidence on alternative explanations, including wider regulatory, technological and market developments occurring alongside FIF.

Longitudinal case studies

Option 2 will also include longitudinal case studies with a small, purposively selected group of participating SMEs, followed from baseline to programme closure and follow-up (i.e. six months after cohort closure). These will build on the SME interviews undertaken under Option 1, with interviews for selected case studies extended from around 45 to 75 minutes to allow more detailed exploration of how outcomes develop over time.

Cases will be selected to capture variation across FIF work packages, technology readiness at entry, technology type, freight mode and type of industry partner. Selection will also consider the nature and strength of the SME–industry partner relationship and whether the innovation faces particular technical, regulatory, operational or commercial barriers.

The case studies will provide richer evidence on how and why outcomes arise and develop over time. Baseline engagement will establish starting conditions, commercial prospects and the expected trajectory without FIF support. At cohort closure, the case studies will examine how support was delivered, how the technology and SME–industry partner relationship developed, and the contribution of FIF relative to other influences. The engagement six months after cohort closure will assess the persistence and further development of outcomes, including technology adoption, commercial traction, investment, partnerships and R&D activity.

Secondary data

Option 2 will use targeted secondary company-level data to strengthen and validate the comparative analysis of successful and unsuccessful applicants. In particular, the evaluation will use Beauhurst, which combines Companies House information with data on company activity, including equity investment and funding rounds, grants, patents, financial performance, hiring and other growth indicators.

Successful and unsuccessful applicants will be matched to Beauhurst and relevant indicators extracted for periods corresponding as closely as possible to the evaluation's baseline and follow-up points. This will allow selected self-reported outcomes, such as private investment, grant funding, patents, employment and financial performance, to be cross-checked against an independent data source where coverage permits.

The secondary data will therefore provide an independent validation check on selected outcomes and may improve the completeness and consistency of the benchmarking dataset. The comparative analysis will otherwise follow the approach set out under Option 1.

Taken together, these additions will provide Option 2 with a stronger basis than Option 1 for validating reported outcomes, assessing alternative explanations, understanding causal mechanisms, examining the persistence of effects and assessing FIF's wider influence on the freight innovation ecosystem.

8.2.2 Process evaluation

Option 2 builds on Option 1 by including case studies, in addition to interviews with unsuccessful participants, and interviews with wider industry stakeholders, including other industry representatives, regulators and academia.

As the option is additive, it will assess the same EQs as in Option 1 and use the same indicators and evidence sources with regards to the monitoring data. Additional interviews with unsuccessful applicants will provide additional data on the application process, including the campaign's reach, support provided and the value of participating in the due diligence and interview processes. Interviews with wider industry stakeholders can provide useful evidence on the visibility and impact of FIF outside of the immediate network, perceptions of the programme as addressing industry gaps, and practical barriers to adopting or scaling technologies in real-word environments.

Longitudinal case studies provide an opportunity to engage more closely with SMEs and to observe their experience of FIF throughout the programme. This will provide additional detail on how different elements of the fund – for example funding, partner access, technical support and additional training – all interacted to support development, and how the sequencing of this support was delivered.

Learnings and limitations

Compared with Option 1, this approach would provide:

- A richer understanding of programme implementation by drawing on a wider range of perspectives and evidence sources;
- Strengthened insights into implementation unfolded in different organisational contexts, and detailed accounts of implementation journeys, highlighting contextual factors, examples of good practice, challenges encountered and the combinations of support that proved most effective;
- Evidence of barriers to participation, perceptions of the application and selection process, unmet demand, and whether particular sectors, organisation types or geographic areas were excluded;
- An external perspective on the programme's strategic relevance and wider system effects;
- Stronger triangulation of findings across participants, non-participants and external stakeholders, resulting in a more comprehensive understanding of how the programme operated, the contexts in which it was most effective and the lessons that should inform future delivery; and
- More practical, transferable lessons for the design of future programmes.

As for the limitations of the approach, much of the evidence would still be based on participants' and stakeholders' perceptions rather than independently verified outcomes, meaning findings would remain vulnerable to recall, social desirability and attribution bias.

Case studies would provide rich, contextual insights but would be purposively selected and therefore illustrative rather than representative of the programme as a whole. Similarly, participant interviews, unsuccessful applicant interviews and wider stakeholder interviews would involve relatively small samples, limiting the extent to which findings could be generalised.

Interviews with unsuccessful applicants may also over-represent individuals with negative experiences of the application process, while wider stakeholders may have only partial visibility of programme delivery or bring their own organisational perspectives and priorities.

8.2.3 Impact evaluation

Option 2 will use the same overall impact evaluation approach as Option 1, combining descriptive and before-versus-after analysis, primary research-based counterfactual evidence and contribution analysis. The main differences under Option 2 are the greater use of secondary data to validate selected outcomes and an expanded evidence base for assessing wider programme and ecosystem effects.

Secondary-data validation

For selected outcomes reported by participating SMEs and unsuccessful applicants, Option 2 will supplement monitoring and interview evidence with relevant secondary data. This will focus on outcomes for which sufficiently consistent external data are expected to be available, including R&D expenditure and investment, patents and other IP, public and private funding, commercial contracts, turnover and employment.

Where possible, secondary data will be used to corroborate the levels and changes reported by SMEs and unsuccessful applicants before these are used in the comparative analysis. This will strengthen the robustness of the analysis by reducing reliance on self-reported information and providing an additional source against which reported outcomes can be cross-checked.

Expanded primary research and attribution evidence

Option 2 will also broaden the qualitative evidence used to understand how and why outcomes have occurred. In particular, additional evidence from Venture Growth participants, industry partners and wider stakeholders will explore whether the work package is addressing commercialisation and investment market failures, the extent to which FIF influenced tech-stacking outcomes, and the role of other factors in bringing those outcomes about.

The assessment will also draw more extensively on wider stakeholder and industry partner perspectives to examine changes in the freight innovation ecosystem, including perceived innovation risk, the visibility of freight innovation solutions, and changes in the wider innovation environment. For industry partners adopting FIF-supported innovations, evidence on changes in productivity, such as cost or time savings, will also include self-reported attribution to assess the extent to which these changes are considered to result from the supported innovation.

Contribution analysis

The contribution analysis will be undertaken as described for Option 1. Under Option 2, however, the assessment will draw on the additional validation and stakeholder evidence described above. Secondary-data checks will provide stronger evidence on whether reported SME outcomes occurred, while the expanded primary research will provide greater scope to test programme mechanisms and alternative explanations, particularly for Venture Growth and wider ecosystem effects.

This will strengthen triangulation across monitoring data, primary research and external evidence, and increase confidence in the overall assessment of FIF's contribution to observed outcomes.

Learnings and limitations

Overall, relative to Option 1, the Option 2 impact evaluation is expected to provide:

- Stronger contribution analysis through triangulation of evidence from participating SMEs, unsuccessful SMEs, industry partners and wider stakeholders;
- Deeper insight into additionality and what may have happened without FIF support, drawing on additional interviews with unsuccessful SME applicants;
- Stronger evidence on the persistence of longer-term outcomes and contextual factors, through longitudinal case studies; and
- Richer evidence on wider system-level impacts, barriers and enablers, and non-quantified outcomes, informed by industry partners and wider stakeholders.

The main limitations are that findings will still depend on participant engagement and response rates, particularly across multiple waves of data collection for the longitudinal case studies. The evidence may also be affected by response bias, recall bias and optimism bias associated with qualitative research, limiting the generalisability of the findings. While Option 2 will strengthen evidence on the counterfactual, additionality and wider system-level effects by including unsuccessful applicants and wider stakeholders, this evidence will remain qualitative rather than providing a measured estimate of causal impact.

8.2.4 VfM evaluation

The VfM assessment for Option 2 will adopt the same overall methodology as Option 1, comprising cost-effectiveness analysis, a partial CBA and an assessment of non-monetised benefits and wider effects. The main difference will therefore be the breadth and robustness of the evidence informing these analyses.

Option 2 will provide stronger evidence to test the assumptions underpinning the VfM assessment. Evidence from unsuccessful applicants will strengthen assessment of additionality, while selected quantitative outcomes, including R&D expenditure and investment, employment and turnover, will be triangulated against secondary data where possible. Longitudinal evidence will also provide greater insight into whether benefits are sustained over time.

Option 2 will also broaden the assessment of benefits that cannot readily be monetised. Wider stakeholder evidence will support assessment of effects on the freight innovation ecosystem, including the visibility of freight innovation solutions and changes in the wider innovation environment, while the assessment will give greater consideration to spillovers and unintended impacts.

Nevertheless, the VfM assessment will remain indicative. The CBA will not be based on a measured counterfactual, and some important benefits, costs and wider effects will continue to be assessed qualitatively. Evidence on displacement, leakage and spillovers is also likely to remain primarily qualitative. The additional evidence under Option 2 should therefore improve the robustness and transparency of the assumptions used in the VfM assessment, rather than fundamentally change the nature of the analysis.

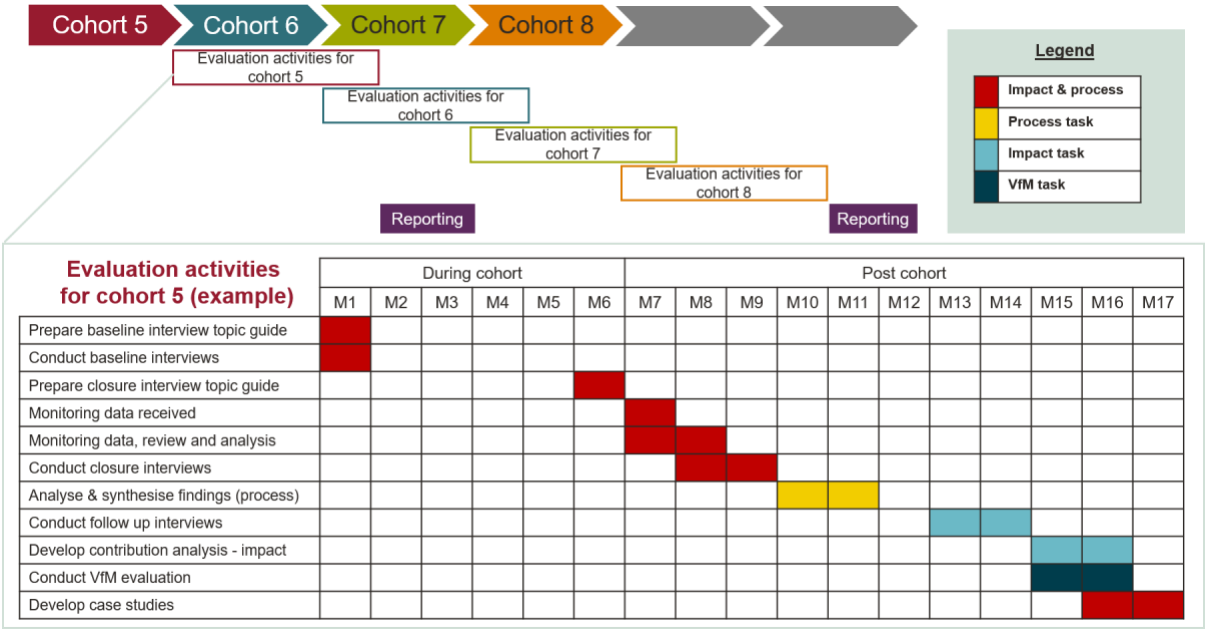
8.2.5 Expected timelines for Option 2

The evaluation timelines for Option 2 are very similar to the expected timelines for Option 1. One additional month has been provided to develop the case studies and interviews with unsuccessful applicants and wider stakeholders.

The primary research activities of Option 2 follow a similar timeframe to Option 1, with the additional interviews with unsuccessful applicants taking place in month one and those with wider stakeholders taking place in months nine and ten. Case studies will be delivered in conjunction with the impact evaluation with an assumption that case study engagement will happen alongside the stakeholder interviews.

The evaluator should consider including additional resource and capacity to account for additional interviews at closure and follow-up and support the development of the case studies.

Figure 5 Expected timelines for forward-looking evaluation – Option 2



Source: Frontier Economics & SYSTRA

8.2.6 Expected budget for Option 2

A breakdown of potential costs by workstream is provided below. These costs are preliminary and subject to change. Upper and lower bounds are provided in Table 25 for most workstreams.

This assumes an extensive primary research programme involving multiple round interviews with each stakeholder group (including SMEs, industry partners) and across all four cohorts. These costs are scalable therefore to minimise costs options include reducing the number of cohorts evaluated and scaling back the stakeholder groups engaged.

These costs do not include VAT.

Table 25 Indicative resource requirement for Option 2 assuming all cohorts are evaluated

Workstream	Estimated cost range
Inception	£6-9k
Monitoring data collection, review, and analysis – budget for cohort 1	£8-10k

Workstream	Estimated cost range
Monitoring data collection, review, and analysis – budget for cohorts 2 to 4*	£15-21k
Secondary data matching for successful and unsuccessful SMEs (all cohorts) **	£27k
Primary data collection: interviews with industry partners (n=5) at closure and follow-up – budget for cohort 1	£12-15k
Primary data collection: interviews with industry partners (n=5) at closure and follow-up – budget for cohorts 2 to 4	£25-30k
Primary data collection: interviews with participant SMEs (n=10) at baseline, closure, and follow-up – budget for cohort 1	£25k-30k
Primary data collection: interviews with participant SMEs (n=10) at baseline, closure, and follow-up – budget for cohorts 2 to 4*	£55k-60k
Primary data collection: interviews with unsuccessful SMEs (n=10) at baseline and follow-up – budget for cohort 1	£25k-30k
Primary data collection: interviews with unsuccessful SMEs (n=10) at baseline and follow-up – budget for cohorts 2 to 4*	£55k-60k
Primary data collection: interviews with wider stakeholders (n=5) at closure – budget for cohort 1	£6-7k
Primary data collection: interviews with wider stakeholders (n=5) at closure – budget for cohorts 2 to 4*	£12-15k
Primary data collection: extended interviews with SMEs for case studies (n=4) at baseline, closure, and follow-up – budget for cohort 1	£4k-6k
Primary data collection: extended interviews with SMEs for case studies (n=4) at baseline, closure, and follow-up – budget for cohorts 2 to 4	£12k-18k
VfM analysis	£25-30k
Process and impact evaluation analysis for interim and final reports	£55-65k
Case studies (lengthening interviews above plus document review)	£12-15k
Quality assurance	£3-5k

Workstream	Estimated cost range
Interim report	£20-22k
Final report and presentation	£25-27k
Total	**£427k-502k**

*Note: (i) *Budgets for cohorts 2-4 are reduced considering that preparation activities (e.g. topic guide development) can be leveraged from cohort 1. (ii) **Secondary data matching for successful and unsuccessful SMEs includes £15k for the commercial data purchase plus £3k per cohort for the analysis.*

Table 26 Option 2 evaluation design

Indicator	Collection method	Source	Timeline	Impact method	VfM method
IEQ1: To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?					
1.1 Number of applications received for the Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	Distributional analysis
1.2 Number of SMEs participating in the Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	Distributional analysis
1.3 Number of industry partners taking part in Accelerator	Monitoring	CPC	Baseline	Descriptive analysis	-
1.4 Number of participants drawn from other parts of the programme (e.g. FLIN, Venture Growth work package)	Monitoring	CPC	Baseline	Descriptive analysis	-
1.5 Number of trials delivered	Monitoring	CPC	Closure	Descriptive analysis	-
1.6 Number of SMEs participating in the trials	Monitoring	CPC	Closure	Descriptive analysis	-
1.7 £ of funding provided for the trials	Monitoring	CPC	Closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
1.8 £ of match funding for the trials (or estimated value of match funding if in-kind)	Monitoring	CPC	Closure	Descriptive analysis	Cost-effectiveness
1.9 Number of technical workshops and events	Monitoring	CPC	Closure	Descriptive analysis	-
1.10 Number of SMEs attending technical readiness training	Monitoring	CPC	Post event	Descriptive analysis	-
1.11 Number of commercial readiness trainings/range of workshops	Monitoring	CPC	Closure	Descriptive analysis	-
1.12 Number of SMEs attending commercial readiness training/workshops	Monitoring	CPC	Post event	Descriptive analysis	-
1.13 Number of Accelerator-supported innovations adopted by industry partners	Monitoring; Interview	Accelerator SMEs, industry partners	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution	Cost-effectiveness
1.14 Number of products commercialised	Monitoring; Interview	Accelerator SMEs and unsuccessful applicants, industry partners	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
1.15 Change in the expected timeline to product development/ commercialisation	Interview	Accelerator SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; before-versus-after; self-reported attribution; comparative analysis	-
1.16 Change in SMEs' TRL	Interview	Accelerator SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
1.17 SMEs' satisfaction with training received (e.g. technical, commercial readiness)	Interview	Accelerator SMEs	Closure	Descriptive analysis	-
IEQ2: To what extent and how has the FIC (and its successor the FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector and with other sectors in the supply chain?					
2.1 Number of FLIN members	Monitoring	CPC	Baseline, closure	Descriptive analysis	Distributional analysis
2.2 Number of registered users on the digital platform	Monitoring	CPC	Baseline, closure	Descriptive analysis	Distributional analysis
2.3 Proportion of active users (i.e. users interacting with the content)	Monitoring	CPC	Baseline, closure	Descriptive analysis	-
2.4 Proportion of contributing users (i.e. users making posts)	Monitoring	CPC	Baseline, closure	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
2.5 Proportion of repeat active users (i.e. SMEs using platform both in year 1 and year 2 …)	Monitoring	CPC	Closure	Descriptive analysis	-
2.6 Average number of likes, shares, comments and replies per post	Monitoring	CPC	Closure	Descriptive analysis	-
2.7 Average number of direct member-to-member messages per user	Monitoring	CPC	Closure	Descriptive analysis	-
2.8 Number of ED&I initiatives organised	Monitoring	CPC	Closure	Descriptive analysis	-
2.9 Number of SMEs attending ED&I initiatives	Monitoring	CPC	Post event	Descriptive analysis	-
2.10 Number of upskilling sessions delivered	Monitoring	CPC	Closure	Descriptive analysis	-
2.11 Number of SMEs attending upskilling sessions	Monitoring	CPC	Post event	Descriptive analysis	-
2.12 Number of knowledge-sharing sessions delivered	Monitoring	CPC	Closure	Descriptive analysis	-
2.13 Number of SMEs attending knowledge-sharing sessions	Monitoring	CPC	Post event	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
2.14 Number of showcasing opportunities delivered (e.g. investor days)	Monitoring	CPC	Closure	Descriptive analysis	-
2.15 Number of SMEs participating in showcasing events	Monitoring	CPC	Post event	Descriptive analysis	-
2.16 £ of funding provided to FLIN members	Monitoring	CPC	Closure	Descriptive analysis	-
2.17 Number of FLIN members applying to the Accelerator programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
2.18 Success rate of applications to Accelerator from FLIN members	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
2.19 SMEs' satisfaction with sessions attended (e.g. upskilling, ED&I, knowledge sharing, showcasing)	Interview	FLIN SMEs	Closure	Descriptive analysis	-
2.20 Change in the level and quality of collaborations between FLIN members	Monitoring; Interview	FLIN SMEs; unsuccessful applicants; industry partners	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits/costs
2.21 Change in the level and quality of knowledge sharing between the FLIN members	Monitoring; Interview	FLIN SMEs; unsuccessful	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported	Non-monetised benefits/costs

Indicator	Collection method	Source	Timeline	Impact method	VfM method
		applicants; industry partners		attribution; comparative analysis	
IEQ3: To what extent and how has the Venture Growth strand enabled collaborative tech-stacking solutions in freight and logistics that would not have otherwise been possible, or would have taken longer?					
3.1 Number of training and support sessions delivered as part of the Venture Growth work package	Monitoring	CPC	Closure	Descriptive analysis	-
3.2 Number of SMEs attending the training and support sessions	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.3 Number of SMEs applying for the tech-stacking programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.4 Number of SMEs selected for the tech-stacking programme	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.5 £ of funding provided for the tech-stacking and scale-up programme	Monitoring	CPC	Closure	Descriptive analysis	-
3.6 Number of investor events organised	Monitoring	CPC	Closure	Descriptive analysis	-
3.7 Number of SMEs/investors attending the events	Monitoring	CPC	Post event	Descriptive analysis	-
3.8 Number of SMEs progressing between work packages (tech-stacking, scale-up and Accelerator)	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis

Indicator	Collection method	Source	Timeline	Impact method	VfM method
3.9 Number of SPVs created	Monitoring	CPC	Closure	Descriptive analysis	Cost-effectiveness
3.10 Composition of the SPVs	Monitoring	CPC	Closure	Descriptive analysis	Distributional analysis
3.11 Number of SPVs registering patents	Monitoring	CPC	Baseline, closure	Descriptive analysis; before-versus-after	Cost-effectiveness
3.12 Participants' satisfaction with the training sessions attended e.g. participants' perception of the extent to which training sessions enhanced commercial/investment capabilities	Interview	Venture Growth SMEs/ tech-stacks	Closure	Descriptive analysis	-
3.13 Number of business plans developed	Monitoring; Interview	Venture Growth SMEs/ tech-stacks and unsuccessful applicants	Closure	Descriptive analysis; comparative analysis; self-reported attribution	Cost-effectiveness
3.14 Number of products developed	Monitoring; Interview	Venture Growth SMEs/ tech-stacks and unsuccessful applicants	Closure	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness
3.15 Number of products commercialised (i.e. used in real-world environment)	Monitoring; Interview	Venture Growth SMEs/ tech-stacks and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
3.16 Number of solutions adopted in real-world environment	Monitoring; Interview	Venture Growth SMEs/ tech-stacks and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	Cost-effectiveness
3.17 Perceptions around the Venture Growth work package's usefulness for addressing the existing commercialisation and investment market failures	Interview	Venture Growth SMEs/ tech-stacks, industry partners and wider stakeholders	Closure	Descriptive analysis; self-reported attribution	Non-monetised benefits/costs
3.18 Perceptions of the influence of FIF on tech-stacking outcomes and what other factors influenced these outcomes	Interview	Venture Growth SMEs/ tech-stacks, industry partners and wider stakeholders	Closure	Descriptive analysis; self-reported attribution	Non-monetised benefits/costs
IEQ4: To what extent is FIF strengthening the UK freight innovation ecosystem and contributing to R&D growth?					
4.1 Number of R&D projects leading to new innovative product developed	Monitoring	Participating SMEs; unsuccessful applicants	Baseline, closure	Descriptive analysis	Cost-effectiveness
4.2 Number of R&D projects leading to improvements in product design	Monitoring	SMEs	Baseline, closure	Descriptive analysis	Cost-effectiveness
4.3 SMEs' R&D expenditure	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
				analysis (verified using secondary data)	
4.4 Change in follow-on private R&D investment	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness, partial CBA
4.5 Number of patents or other IP generated by participating or engaging SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness
4.6 Changes in the perceived risk of innovation	Interview	Participating SMEs and unsuccessful applicants; wider stakeholders	Baseline, closure, follow-up	Descriptive analysis; self-reported attribution; comparative analysis	-
4.7 Change in visibility of freight innovation solutions	Interview	Wider stakeholders	Closure	Descriptive analysis	Non-monetised benefits/costs
4.8 Change in the freight innovation environment	Interview	Industry partners	Closure, follow-up	Descriptive analysis	Non-monetised benefits/costs
IEQ5: To what extent has the FIF improved SMEs' commercial readiness?					

Indicator	Collection method	Source	Timeline	Impact method	VfM method
5.1 Change in CRL of the SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
5.2 Change in MRL of the SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
5.3 Change in the number of commercial contracts secured	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
5.4 Number of repeat and follow-on contracts secured by the participating SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness
5.5 Change in the level of financial, strategic, business and marketing skills of the SMEs	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
5.6 Change in confidence in the commercial capabilities of the participating SMEs	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	-
IEQ6: To what extent has the FIF improved SMEs' investment readiness?					
6.1 Change in the level of public funding secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness
6.2 Change in the level of private funding secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness
6.3 Number of repeat funding rounds secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness
6.4 Number of new customers acquired	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
6.5 Change in SMEs' confidence to leverage private investment	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis	-
6.6 Change in SMEs' confidence to apply for public funding	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis	-
6.7 Change in perception of investor engagement with sector	Interview	SMEs; industry stakeholders; wider stakeholders	Closure	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits
6.8 Change in the number of connections with investors	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis	Non-monetised benefits
IEQ7: To what extent has the FIF supported growth and productivity improvements among participating SMEs?					
7.1 Change in SMEs' turnover	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness
7.2 Value of commercial contracts secured by SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported	Cost-effectiveness

Indicator	Collection method	Source	Timeline	Impact method	VfM method
				attribution; comparative analysis	
7.3 Change in the number of FTEs of participating SMEs	Monitoring; Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution; comparative analysis (verified using secondary data)	Cost-effectiveness, partial CBA
7.4 Change in the productivity of industry partners uptaking the innovative solution (e.g. time savings, cost reduction)	Interview	Industry partners	Closure, follow-up	Descriptive analysis, before-versus-after, self-reported attribution	Cost-effectiveness, partial CBA
IEQ8: To what extent has the FIF addressed key barriers and challenges in the freight and logistics sector?					
8.1 Breakdown of innovative projects funded by challenge	Monitoring	CPC	Closure	Descriptive analysis	-
8.2 Change in awareness and understanding of decarbonisation opportunities	Interview	Participating SMEs and unsuccessful applicants	Baseline, closure, follow-up	Descriptive analysis, self-reported attribution; comparative analysis	-
8.3 Evidence of reduced barriers to adopting low-carbon solutions (e.g. cost, risk, knowledge)	Interview	Participating SMEs; industry partners; wider stakeholders	Closure, follow-up	Descriptive analysis	-
8.4 Evidence of increased adoption of digital technologies	Interview	Participating SMEs; industry partners; wider stakeholders	Closure, follow-up	Descriptive analysis	-

Indicator	Collection method	Source	Timeline	Impact method	VfM method
8.5 Change in digital capability and data use among SMEs and stakeholders	Interview	Participating SMEs; industry partners; wider stakeholders	Closure, follow-up	Descriptive analysis	-
8.6 Stakeholder views on whether FIF is targeting the most critical barriers	Interview	Participating SMEs; industry partners; wider stakeholders	Closure	Descriptive analysis	-
8.7 Perceptions on whether the FIF addressed barriers to deployment and commercialisation	Interview	Participating SMEs; industry partners; wider stakeholders	Closure	Descriptive analysis	-
8.8 Stakeholder views on barriers that remain unaddressed or new barriers arising in the sector	Interview	Participating SMEs; industry partners; wider stakeholders	Closure	Descriptive analysis	-
8.9 Stakeholder views on where further intervention is needed to address remaining barriers	Interview	Participating SMEs; industry partners; wider stakeholders	Closure	Descriptive analysis	.
8.10 Spillovers and unintended impacts generated by FIF	Interview	Participating SMEs; industry partners; wider stakeholders	Closure	Descriptive analysis	Spillovers and additionality considerations

9 Step 6: Recommendations for forward-looking evaluation

Two options have been presented for the FIF's forward-looking evaluation. In line with the Magenta Book[48] the evaluation design selected by DfT of the options offered must be proportionate to the profile, risk, scale and learning potential for DfT and future delivery partners.

As set out in section 5.1, a 'do nothing' approach retaining broadly the existing evidence base, is not considered sufficient to evaluate future cohorts. Additional data collection is required, including enhanced CPC monitoring and targeted primary research.

9.1 Proportionality assessment

A key dimension of any evaluation to be in line with the Magenta Book is proportionality.[49] There are four proportionality factors noted by the Magenta Book that inform a reasoned judgement about whether the resources required for carrying out an evaluation are justified. These are:

- The profile of the policy or intervention;
- The level of uncertainty or risk (including possible negative consequences) associated with the policy or intervention;
- The cost of the policy or intervention; and
- The learning potential of the evaluation (low-priority interventions on other criteria can have a high potential for filling strategically important evidence gaps).

Learning potential can be considered across two dimensions. The first is the need for learning, i.e. whether there are important gaps in the evidence or understanding of an intervention's impacts, including how these vary across different groups or places; whether decisions about future funding or delivery need to be informed; whether there is a need to understand risks, unintended consequences or wider impacts beyond the intervention's main objectives; and whether a novel or innovative intervention is being delivered as a test case from which lessons can be learned. The second is the potential strength of the evidence generated, i.e. whether the evaluation is likely to generate robust evidence on the intervention's effects, for example

[48] HM Treasury (2026), Magenta Book: Central Government Guidance on evaluation. Available at: The Magenta Book - GOV.UK,

[49] HM Treasury (2026), Magenta Book: Central Government Guidance on evaluation. Available at: The Magenta Book - GOV.UK,

through causal analysis that can assess whether observed impacts are attributable and additional to the intervention.

A proportionality assessment for the FIF has been undertaken against each of these factors, as presented in the Table 27. This relates to the retrospective evaluation of previous years' rounds of the FIF, and the two options for a forward-looking evaluation which accounts for the new strands of the FIF. The assessment of learning potential is considered in further detail in Section 9.3, which compares directly what each option would and would not allow DfT to learn.

Table 27 Proportionality assessment of evaluation options

Criterion	Future option 1	Future option 2
Scale of evaluation cost (over 5 years)	£288,000 to £345,000	£427,000 to £502,000
Profile of the policy or intervention	The FIF continues to evolve, and additional strands added to recognise the importance of the dynamics of the innovation ecosystem. Venture Growth and Unlocking Private Capital are novel and aim to attract wider participation.	The FIF continues to evolve, and additional strands added to recognise the importance of the dynamics of the innovation ecosystem. Venture Growth and Unlocking Private Capital are novel and aim to attract wider participation.
The level of uncertainty or risk	Uncertainty about the likelihood of success of FIF's new strands (Venture Growth and Unlocking Private Capital) is high. This is the first time this form of support has been offered for freight and logistics innovation.	Uncertainty about the likelihood of success of FIF's new strands (Venture Growth and Unlocking Private Capital) is high. This is the first time this form of support has been offered for freight and logistics innovation.
The learning potential of the evaluation	**Moderate** Provides substantially stronger evidence than the retrospective evaluation on what happened to participating SMEs, how FIF was delivered, how and why participant outcomes arose, and FIF's likely contribution to those outcomes. Evidence on wider	**Moderate/high** Provides stronger evidence than Option 1, particularly on additionality, causal mechanisms, the persistence of outcomes and wider ecosystem effects. However, the evidence would rely on primary research-

Criterion	Future option 1	Future option 2
	ecosystem effects remains limited.	based counterfactuals and not quasi-experimental analysis.

Source: Frontier Economics

9.2 Risk assessment

The risk register for the evaluation of FIF is below. Where the risk differs between the two future options, this is reflected in the mitigation.

Overall, the phased approach of data collection opens the opportunity for decisions to be made about the next stage of the evaluation before it is undertaken. For example, if, at the baseline stage, it is determined that unsuccessful applicants are not responsive and do not engage, then a decision could be made about whether to include this stakeholder group in later stages or re-direct resources. Those resources could be used, for example, to increase the number of case studies or to increase the number of SMEs or ecosystem stakeholders interviewed.

Table 28 Risk assessment for the forward-looking evaluation of FIF

Risk	Likelihood	Impact	Mitigation
Successful SMEs difficult to engage	M	H	SME evaluation engagement could be made a condition of receiving support. Recruitment will accommodate SME schedules to the degree feasible, and interviews no more than 45 mins. Provide questions in advance to make interviews more time-efficient and use Teams to minimise intrusion.
Unsuccessful SMEs difficult to engage	H	H	There are no requirements for these applicants to engage so care will be needed to minimise calls on their time, provide questions in advance to make interviews more time efficient and use Teams to minimise intrusion. Engagement rates should be reviewed after the first baseline wave. If response rates or evidence quality are low, later data collection can be

Risk	Likelihood	Impact	Mitigation
			scaled back and resources redirected towards other evidence sources, such as case studies or wider stakeholder interviews.
Secondary data not useful given the sample sizes	H	H	Secondary data are not relied on under Option 1. Under Option 2, company-level secondary data are intended to complement rather than replace primary research. Matching rates and indicator coverage should be reviewed for the first cohort before committing the full resource for subsequent cohorts. Where coverage is weak, the analysis should rely more heavily on monitoring and primary research and avoid giving undue weight to incomplete secondary-data comparisons.
Evidence of additionality challenging to develop	H	M	Both future options include self-reported counterfactual evidence and comparisons with unsuccessful applicants. Option 2 strengthens this compared to option 1 through a larger unsuccessful applicant sample, secondary-data validation of selected outcomes and wider stakeholder evidence on alternative explanations. However, neither option should interpret the unsuccessful applicant comparison as a causal counterfactual.
Monitoring data are limited and not comprehensive	M	M	Monitoring data have been reviewed, with additions suggested to cover the new FIF strands and a wider set of outcomes. They will be supplemented with primary data. Completeness and consistency should be reviewed after the first cohort so that data

Risk	Likelihood	Impact	Mitigation
			requirements can be refined for subsequent cohorts.
Primary data collected are not useful	M	M	Primary data are an important data source and will be undertaken by cohort. This enables the first cohort to be a test bed for how to collect the data effectively and determine if future cohort sample selection is likely to be useful or if a change in approach is needed.
The level of learning is not sufficiently rigorous	M	L	The design deliberately includes a range of different methods under the overarching contribution analysis. This makes use of methods in the Magenta Book and, by integrating methods, rigour is generated. Two primary research-based counterfactuals are proposed.
VfM is difficult to determine	M	M	Robust methods have been proposed including cost-effectiveness, scenario-based CBA and sensitivity testing/ switching analysis.

Source: Frontier Economics

9.3 Comparative assessment of the evaluation options

Table 29 provides a more explicit assessment of the learning that is expected to be generated by each option. Dimensions of learning potential are listed in the left-hand column, with a subjective assessment of the relative strength of learning potential for each of the future Options 1 and 2 and where important gaps remain. This complements the proportionality assessment above, which focuses on whether the evaluation resource is justified.

Table 29 Evaluation learnings

Criterion	Option 1	Option 2	What the difference means in practice

How did relevant outcomes change? Can the evaluation identify changes in participant outcomes and how these vary across work packages and cohorts?	Strong	Strong	Both options provide baseline, closure and follow-up evidence across a broad set of outcomes. Option 2 provides an additional validation check for selected SME outcomes using secondary data but does not fundamentally expand the participant outcomes measured.
How and why did outcomes happen? Can the evaluation explain the mechanisms, barriers, enablers and contextual factors behind observed changes?	Moderate	Strong	Option 1 draws on participant, unsuccessful applicant and industry partner interviews. Option 2 adds longitudinal case studies and wider stakeholder perspectives, allowing the interaction and sequencing of different elements of FIF support and external influences to be examined across the end-to-end commercialisation journey. Case studies will be illustrative examples rather than representative.
To what extent are outcomes attributable to FIF? Can the evaluation assess the extent to which FIF contributed to observed outcomes rather than other factors?	Moderate	Moderate to strong	Both options collect self-reported attribution evidence and use contribution analysis. Option 2 draws on a larger evidence base than Option 1, plus independent validation of selected outcomes, case studies and wider stakeholder evidence on alternative explanations. Neither option provides a definitive causal attribution estimate.
Has FIF delivered outcomes additional to what otherwise would have happened?	Moderate	Moderate to strong	Both options rely on primary research-based counterfactuals in two forms – self-reported and comparison with unsuccessful applicants.

Can a credible counterfactual be developed?			Compared to Option 1, Option 2 doubles the unsuccessful applicant sample and validates selected quantitative outcomes using secondary data where possible. Quasi-experimental analysis is not feasible, and this is the only way to deliver robust causal analysis.
Can persistence and longer-term outcomes be assessed? Can the evaluation assess whether early outcomes are sustained or lead to further benefits?	Moderate	Strong	Both options include follow-up evidence six months after cohort closure. Option 2 provides greater longitudinal depth through case studies, allowing the evaluation to examine how early changes in readiness, relationships and investment progress into adoption, commercial traction and other subsequent outcomes. The follow-up period will still limit the assessment of impacts that take several years to materialise.
Can wider ecosystem and system effects be assessed? Can the evaluation identify effects beyond directly supported organisations, including spillovers, wider barriers and unintended impacts?	Limited	Moderate to strong	Option 1 focuses mainly on outcomes for participating SMEs, unsuccessful applicants and industry partners. Option 2 adds investors, regulators, trade bodies, major freight operators and other wider stakeholders, providing substantially stronger evidence on spillovers, network effects, market and regulatory barriers, visibility of freight innovation and FIF's influence on the wider innovation ecosystem. Evidence is qualitative.
Can learnings from process (design,	Strong	Very strong	Option 1 provides strong evidence on implementation,

implementation and delivery) be assessed? Can the evaluation inform future programme design?			participant experience, programme barriers and enablers. Option 2 expands on this through case studies.
Can VfM be assessed? Can the evaluation support credible judgements on whether benefits justify programme costs?	Moderate	Moderate to strong	The same overall VfM framework is used under both options. Option 2 provides stronger evidence for assumptions on additionality and persistence and broader evidence on non-monetised benefits, spillovers and unintended effects. Several important benefits will not be possible to monetise, and no evidence will be available on long-term outcomes.
Is the evaluation affordable? What is the cost likely to be over the 5-year evaluation?	-	-	Option 1 could cost around £288,000 to £345,000 and is less burdensome. Option 2 could cost around £427,000 to £502,000.
Overall learning potential	Moderate	Strong	Option 1 provides a proportionate basis for understanding participant outcomes, programme delivery and FIF's likely contribution. Option 2 provides materially stronger evidence in the areas where the greatest uncertainties remain, particularly why outcomes arise, additionality, persistence and effects across the wider freight innovation ecosystem.

9.4 Recommended evaluation option

On balance, Future Option 2 is recommended.

While it is more resource-intensive than Option 1, the additional data collection effort is likely to be proportionate given the small sample sizes that require primary research to collate the necessary evidence, the importance of understanding additionality as the new FIF strands (Venture Growth and Unlocking Private Capital) are a novel approach to supporting innovation in freight and logistics, and DfT's need for learning that can inform future rounds of the FIF. Further reasons for the recommendation for Option 2 are:

- Given the relatively small sample sizes involved, longitudinal case studies provide a more nuanced and detailed understanding of how outcomes are achieved and experienced throughout the commercialisation journey. By focusing on end-to-end commercialisation of the innovations, this provides deeper learning on how different elements of FIF support interact, the barriers and enablers that affect progress, and how SMEs and industry partners interact and benefit from the innovations. This is particularly important given the new work packages for which there is little current evidence of effectiveness.

- Option 2 strengthens the assessment of additionality through the inclusion of a larger number of unsuccessful applicants than under Option 1, supported by secondary data validation of selected outcomes where possible. This provides a stronger evidence base on what could otherwise have happened without FIF, although it will not provide a causal counterfactual.

- The longitudinal element of the case studies means that the evaluation is not limited to outcomes observed at programme closure. Instead, it provides evidence on how outcomes develop and persist over time, including the commercialisation of innovations and impacts on industry partners using them operationally. This will help assess whether early changes in collaboration, commercial readiness and investment readiness lead to subsequent business growth, innovation adoption and wider benefits.

- Wider stakeholder interviews will provide additional evidence on FIF's effects beyond directly supported organisations, including spillovers, network effects, wider barriers to innovation and commercialisation, and changes across the freight innovation ecosystem.

Important limitations will nevertheless remain. Neither option will provide a measured causal counterfactual, and evidence on wider system effects will remain primarily qualitative. Option 2 should therefore be viewed as providing a robust contribution analysis underpinned by several data sources and quantitative evaluation methods, rather than a causal impact estimate.

Annex A Mapping of existing evidence

A.1 At the time the feasibility study was developed, there was some uncertainty around the type and quality of data that has been collected by the CPC. Table 30 maps the proposed indicators against monitoring and evaluation information that CPC had either planned to collect (M&E plans) or collected (Accelerator survey template), with a particular focus on evidence relating to the Accelerator and FIC work packages, as well as the wider impacts of FIF.[50]

A.2 The **'M&E plans'** column captures evidence identified in CPC's monitoring and evaluation plans and indicates whether CPC intended to collect information relevant to each indicator. However, the available documentation does not always make clear whether the data were collected in practice and, if so, at what point (e.g. baseline, closure, post FIF). The mapping should therefore be interpreted as evidence of planned data collection rather than confirmation that a complete dataset exists for each indicator.

A.3 The **'Accelerator survey'** column provides a more direct indication of the evidence collected in practice by CPC, based on the survey material prepared for the Accelerator. Where the survey identifies when information was collected, the table also records the relevant timing (e.g. baseline, closure, post FIF). Since the survey provides a clearer indication of the information collected in practice, the feasibility study assumes that information collected as part of the accelerator survey would be available for the evaluation. The quality and completeness of the data should be confirmed during the evaluation.

A.4 The colour coding indicates the strength of the match between each proposed indicator and the available evidence:

(a) Green indicates that the indicator, or a close equivalent, was directly captured.

(b) Yellow indicates that related evidence was collected but might not fully correspond to the proposed indicator.

(c) Red indicates that it is unclear from the available documentation whether evidence around the indicator was collected.

[50] IEQ3, which asks 'To what extent and how has the Venture Growth strand enabled collaborative tech-stacking solutions in freight and logistics that would not otherwise have been possible, or would have taken longer?', has been excluded from this mapping as Venture Growth is a new work package introduced for future FIF cohorts.

Table 30 Data mapping note

Indicator	M&E plans	Accelerator survey
IEQ1: To what extent and how has the FIF Accelerator contributed to an increase in technological readiness and the deployment of new innovative technologies of the SMEs involved in the programme?		
1.1 Number of applications received for the Accelerator	Yes	Unclear
1.2 Number of SMEs participating in the Accelerator	Yes	Unclear
1.3 Number of industry partners taking part in Accelerator	Yes	Unclear
1.4 Number of participants drawn from other parts of the programme (e.g. FIC, Venture Growth work packages)	Yes	Unclear
1.5 Number of trials delivered	Yes	Unclear
1.6 Number of SMEs participating in the trials	Yes	Unclear
1.7 £ of funding provided for the trials	Yes	Unclear
1.8 £ of match funding for the trials (or estimated value of match funding if in-kind)	Yes	Unclear
1.9 Number of technical workshops and events	Yes	Unclear
1.10 Number of SMEs attending technical readiness training	Yes	Unclear

1.11 Number of commercial readiness trainings/range of workshops	Yes	Unclear
1.12 Number of SMEs attending commercial readiness training/workshops	Yes	Unclear
1.13 Number of Accelerator-supported innovations adopted by industry partners	Related – # of innovations adopted; # of new industry collaborations, potential qualitative evidence	Related – Closure survey (plans for collaboration/letters of intent, rather than confirmed adoption)
1.14 Number of Accelerator-supported products commercialised (i.e. used in real-world environment)	Related – # of commercial contracts/commercial development	Related – Closure survey (plans for collaboration/letters of intent, rather than confirmed commercialisation)
1.15 Change in the expected timeline to product development/commercialisation (with/without FIF)	Yes	Unclear
1.16 Change in SMEs' perceived technical capabilities	Related – # of SMEs reporting increased technical understanding, product modifications and upskilling	Yes – Closure survey
1.17 SMEs' satisfaction with training received (e.g. technical readiness, commercial readiness)	Related – Qualitative feedback/satisfaction with support	Yes – Closure survey
IEQ2: To what extent and how has the FIC (and its successor the FLIN) contributed to the level and quality of collaboration and knowledge sharing within the freight and logistics sector and with other sectors in the supply chain?		
2.1 Number of FIC members	Yes	Unclear
2.2 Number of registered users on the digital platform	Yes	Unclear
2.3 Proportion of active users (i.e. users interacting with the content)	Unclear	Unclear

2.4 Proportion of contributing users (i.e. users making posts)	Unclear	Unclear
2.5 Proportion of repeat active users (i.e. SMEs using platform both in year 1 and year 2 …)	Unclear	Unclear
2.6 Average number of likes, shares, comments and replies per post	Unclear	Unclear
2.7 Average number of direct member-to-member messages per user	Unclear	Unclear
2.8 Number of ED&I initiatives organised	Yes	Unclear
2.9 Number of SMEs attending ED&I initiatives	Yes	Unclear
2.10 Number of upskilling sessions delivered	Yes	Unclear
2.11 Number of SMEs attending upskilling sessions	Yes	Unclear
2.12 Number of knowledge-sharing sessions delivered	Yes	Unclear
2.13 Number of SMEs attending knowledge sharing sessions	Yes	Unclear
2.14 Number of showcasing opportunities delivered (e.g. investor days)	Yes	Unclear
2.15 Number of SMEs participating in showcasing events	Yes	Unclear
2.16 £ of funding provided to FIC members	Yes	Unclear
2.17 Number of FIC members applying to the Accelerator programme	Yes	Unclear

2.18 Success rate of applications to Accelerator from FIC members	Unclear	Unclear
2.19 SMEs' satisfaction with sessions attended (e.g. upskilling, ED&I, knowledge sharing, showcasing)	Yes	Unclear
2.20 Change in the level and quality of collaborations between FIC members	Related – # of stakeholders reporting new collaborations/connections and type of connection	Unclear
2.21 Change in the level and quality of knowledge sharing between the FIC members	Related – # of networking sessions, number of connections, changes in market awareness/other knowledge gathered	Unclear
IEQ4: To what extent is FIF strengthening the UK freight innovation ecosystem and contributing to R&D growth?		
4.1 Number of R&D projects leading to new innovative product developed	Unclear	Unclear
4.2 Number of R&D projects leading to improvements in product design	Unclear	Unclear
4.3 SMEs' R&D expenditure	Unclear	Unclear
4.4 Change in follow-on private R&D investment	Unclear	Unclear
4.5 Number of patents or other IP generated by participating or engaging SMEs	Yes	Yes – Closure survey
4.6 Changes in the perceived risk of innovation	Unclear	Unclear
4.7 Change in visibility of freight innovation solutions	Yes	Unclear
4.8 Change in the freight innovation environment	Unclear	Unclear
IEQ5: To what extent has the FIF improved SMEs' commercial readiness?		

5.1 Change in CRL of the SMEs which received FIF funding and support from one of the work packages	Unclear	Unclear
5.2 Change in MRL of the SMEs which received FIF funding and support from one of the work packages	Unclear	Unclear
5.3 Change in the number of commercial contracts secured by the participating SMEs/SPVs	Yes	Yes – Closure survey
5.4 Number of repeat and follow-on contracts secured by the participating SMEs	Yes	Unclear
5.5 Change in the level of financial, strategic, business, and marketing skills of the SMEs	Related – # of innovators reporting technical/non-technical upskilling and increased business capacity	Related questions – Closure survey
5.6 Change in confidence in the commercial capabilities of the participating SMEs	Related – Changes in general knowledge/skills attributed to FIF	Unclear
IEQ6: To what extent has the FIF improved SMEs' investment readiness?		
6.1 Change in the level of public funding secured by the participating SMEs	Yes	Yes – Baseline and closure surveys
6.2 Change in the level of private funding secured by the participating SMEs	Yes	Yes – Baseline and closure surveys
6.3 Number of repeat funding rounds secured by the participating SMES	Yes	Yes – Closure survey
6.4 Number of new customers acquired	Unclear	Unclear
6.5 Change in SMEs' confidence to leverage private investment	Unclear	Unclear

6.6 Change in SMEs' confidence to apply for public funding	Yes	Unclear
6.7 Change in perception of investor engagement with sector	Related – Potential qualitative feedback on investor engagement/financial confidence	Unclear
6.8 Change in the number of connections with investors	Yes	Yes – Closure survey
IEQ7: To what extent has the FIF supported growth and productivity improvements among participating SMEs?		
7.1 Change in SMEs' turnover	Yes	Yes – Baseline survey only
7.2 Value of commercial contracts secured by SMEs	Yes	Yes – Closure survey
7.3 Change in the number of FTEs of participating SMEs	Yes	Yes – Baseline and closure surveys
7.4 Change in the productivity of industry partners uptaking the innovative solution (e.g. time savings, cost reduction)	Related – Metrics gathered for specific businesses related to their projects	Unclear
IEQ8: To what extent has the FIF addressed key barriers and challenges in the freight and logistics sector?		
8.1 Breakdown of innovative projects funded by challenge	Yes	Unclear
8.2 Change in awareness and understanding of decarbonisation opportunities	Unclear	Unclear
8.3 Evidence of reduced barriers to adopting low-carbon solutions (e.g. cost, risk, knowledge)	Unclear	Unclear

8.4 Evidence of increased adoption of digital technologies	Unclear	Unclear
8.5 Change in digital capability and data use among SMEs and stakeholders	Unclear	Unclear
8.6 Stakeholder views on whether FIF is targeting the most critical barriers	Related – Some qualitative information available on whether Accelerator 'challenges' target critical barriers	Unclear
8.7 Perceptions on whether the FIF addressed barriers to deployment and commercialisation	Unclear	Unclear
8.8 Stakeholder views on barriers that remain unaddressed or new barriers arising in the sector	Unclear	Unclear
8.9 Stakeholder views on where further intervention is needed to address remaining barriers	Unclear	Unclear
8.10 Spillovers and unintended impacts generated by FIF	Related – Some qualitative information on additionality and externalities gathered	Unclear

Source: CPC Accelerator Survey, CPC M&E plans for the retrospective evaluation

Annex B Secondary sources

B.1 This annex provides further detail on the secondary data sources considered as part of the feasibility assessment. Table 31 summarises the variables available in each source, the level of granularity and frequency of the data, estimated coverage, and associated access requirements and costs. It also provides the basis for assessing the extent to which each source could be used to supplement or validate evidence collected through programme monitoring and primary research.

Table 31 Secondary data availability

Data source	Variables available	Granularity	Periodicity	Coverage	Cost/access
BERD (Business Enterprise Research and Development)	ONS annual survey of **R&D carried out by UK businesses**. It covers in house R&D expenditure, broken down by product group, purpose, funding sources, etc; R&D commissioned outside the company; and number of employees working on R&D.	Aggregated, firm level	Annual	UK organisations that contributed to overall R&D activity and that were **registered for VAT and/or PAYE Sample**: approximately 20,500 businesses. Around 800 major known R&D performers; the rest are selected using systematic random sampling.	Free. Firm-level data require accredited-researcher approval through ONS SRS or UK Data Service SecureLab.
UKIS (UK Innovation Survey)	UKIS is the main **UK survey of business innovation**. It covers new or improved products and processes, ongoing or abandoned innovation projects, R&D and other innovation expenditure, collaboration and knowledge sources, barriers and drivers, IP, technologies used, environmental innovation, turnover from innovative products, etc.	Aggregated, firm level	Biennial	UK businesses with 10 or more employees registered for VAT and/or PAYE. Sample: around 32,000 businesses, stratified random sample.	Free. Firm-level data require accredited-researcher approval through ONS SRS or UK Data Service SecureLab.
BSD	BSD contains a handful of variables for almost all businesses in the UK.	Aggregated, firm-level	Annual	Businesses in the UK registered for VAT and/or PAYE.	Free. Firm-level data require

(Business Structure Database)	It covers employment, turnover, SIC industry, legal status, foreign ownership/business-group structure, business birth and death, activity status and geography.			Units: up to approximately 4 million enterprises, and up to approximately 5.5 million local units.	accredited-researcher approval through ONS SRS or UK Data Service SecureLab.
Companies House	Companies House is the public register of UK incorporated companies and other registered entities. It includes company name/number, status, incorporation and dissolution dates, registered address, SIC codes, accounts and confirmation-statement dates, filing history, officers, people with significant control, charges, insolvency information and filed accounts.	Company-level identifiable data	Near-live through the website and API (application programming interface)	All registered corporate entities, including active and dissolved. It does not cover sole traders or other unincorporated businesses. Units: approximately 5.5 million registered companies on 31 March 2026. Companies House reporting varies by company size, with micro companies (10 employees or fewer) and small companies (50 or fewer) generally able to file less detailed accounts than medium-sized companies (250 or fewer) and larger firms.	Free access
GtR (Gateway to Research)	GtR is UK Research and Innovation's (UKRI's) public database of funded research and innovation projects. It includes amount of UKRI funding provided, project value, whether project is active, organisation funded, etc.	Project-level records. Organisations can be searched by name	Quarterly	Approximately 170,000 UKRI-funded research and innovation projects. GtR is not comprehensive for UK businesses or all public funding. A company appears only where it participates in a published UKRI-funded project.	Free access

Dimensions.AI	Dimensions.AI is a research intelligence database used to **search, link and analyse global research activity**. It covers publications, grants, patents, clinical trials, policy documents and datasets, including details such as authors, organisations, funders, award values, citations, topics and links between records.	Record level data (publications)	Regular/ near live	Covers research publications and datasets worldwide, grants from around 700 funders, patents from more than 100 countries/patent offices, and clinical trials from major international registries. Does not provide firm-level information.	Free version covers publications and datasets. Grants, patents, trials and advanced analytics require a tailored subscription; no current public list price is available.
HE-BCI (HESA)	HE-BCI is HESA's (Higher Education Statistics Agency's) annual collection on how UK higher education providers interact with businesses and wider communities. Examples of indicators covered by the dataset are income generated from research activities, types of research undertaken; income from business and community service, types of services provided; IP licence numbers and disclosures, IP income, IP spin-off activities and community engagement.	Higher-education provider data	Annual	It is not a database of UK businesses or SMEs. Businesses appear mainly as aggregated categories of external partner or through the spin-out register. The register covers companies linked to UK higher education providers, not the wider company population.	Free access

Beauhurst	Beauhurst is a commercial database for researching and monitoring UK private companies. It combines Companies House information with business descriptions, sectors, people and ownership, financials, equity investment and valuations, grants, patents, trade, ESG, credit/risk signals, hiring and company news. It offers searchable company profiles, alerts, exports and API access.	Company level data	Regular/ near live	High-growth subset: 30-40,000+ high-growth UK companies, identified through specific growth triggers. Beauhurst provides detailed coverage of these companies, including funding rounds, grants, patents, financials, growth indicators and key people. All-company universe: contains every registered UK company. Supplements Companies House information with targeted validation and additional sources. Data availability and depth vary across companies, particularly where information is not publicly reported.	Paid subscription; no free trial and standard commercial prices are quote-based. Our previous experience indicates ~£15,500 per year cost.
Crunchbase	Crunchbase is a global private-market and company-intelligence database. It includes company and investor profiles, firmographics, funding rounds and investors, acquisitions and IPOs, key people, employee counts, revenue ranges, news, growth and market-interest scores, and selected technology, patent and contact data.	Company level data	Regular/ near live	Captures predominantly firms active in the private and innovation markets, including start-ups, scale-ups, venture-backed businesses and other companies with observable funding, investment or growth activity. It does not publish a clear UK-specific coverage rate, and it should not be treated as comprehensive coverage of the UK business population. Our previous work suggests that some of the information (e.g. on employment,	Paid subscription. Crunchbase Pro is advertised at US$49 per month when billed annually (US$588 per year) or US$99 on a monthly plan, with a seven-day free trial.

	Detailed fields and predictive insights vary by subscription and company.			revenues) might be incomplete or missing.	
PitchBook	PitchBook is a global private-capital and financial-markets database. It covers private and public companies, investors, funds, financing rounds, M&A, valuations, ownership, financial statements, revenue and earnings before interest, tax, depreciation and amortisation (EBITDA) estimates, employee counts, debt, grants, patents, key people, advisers and market research. Data depth varies by company and subscription.	Company level data	Regular/ near live	Captures predominantly backed private companies that are requested by clients or interact with its data offerings. It is also expanding its coverage to include non-backed companies that clients search for. However, PitchBook does not currently track all non-backed private companies comprehensively across all regions. Our previous work suggests that some of the information (e.g. on employment, revenues) might be incomplete or missing.	Paid subscription with quote-based pricing. PitchBook does not publish standard prices; costs vary according to the number of users, type of organisation and additional products.
The Data City	The Data City is a UK company and sector intelligence platform. It combines company descriptions and AI-based sector classifications with financials, turnover and EBITDA estimates, GVA, employment estimates, growth indicators, ownership and group structures, investment rounds, grants, patents, trade, locations, directors and jobs and skills data. It also supports	Company level data	Bi-monthly	Reports more than 9 million UK company records, including over 4.5 million active companies. Its core UK dataset starts with Companies House and is enriched using company websites, Creditsafe and other public and commercial sources. Our previous work suggests that some of the information (e.g. on funding) might be incomplete or missing.	Paid subscription with a seven-day free trial. Published annual prices are £10,000 for one user, £22,000 for five users and £35,000 for 15 users. Single user licence might be sufficient

	regional cluster mapping and custom company-list classification.	for the purpose of the project.

Annex C EQ, indicators and data collection methods for process evaluation

Table 32 Indicators which will be used to inform the process evaluation (gathered in both Option 1 and Option 2)

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
PEQ1: Was FIF implemented as intended across its different work packages?	Delivery against original design	Planned vs actual activities by work package	Programme generated monitoring data	CPC	Baseline, closure
	Delivery milestones and timing	Milestones achieved, slippage, rephasing, delivery changes	Programme generated monitoring data	CPC	Baseline, closure
	Task-level delivery performance	Delivery dates achieved by discrete task, not only by work package; delays, accelerations, incomplete tasks	Programme generated monitoring data	CPC	Closure
	Adaptations and reasons	Documented delivery changes and rationale	Programme generated monitoring data	CPC	Closure
	Barriers to delivery	Resourcing, approvals, partner availability, procurement, contracting,	Interviews/programme generated monitoring data	CPC	Closure

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
		scheduling, data access, SME readiness			
	Integration across work packages	Evidence of coordination between accelerator, FLIN, Venture Growth, private capital	Interviews/programme generated monitoring data	CPC	Closure
PEQ2: Were application and selection processes clear, fair, and proportionate?	Transparency and fairness of assessment	Clear criteria, scoring consistency, moderation approach	Programme generated monitoring data	CPC	Baseline
	Clarity of criteria and requirements	Volume and type of applicant queries; evidence of confusion	Interviews/programme generated monitoring data	CPC, SMEs	Baseline
	Burden on applicants	Length/complexity of forms, reporting of time burden, dropout rates	Interviews/programme generated monitoring data	CPC, SMEs	Baseline, closure
	Industrial partner experience	Industrial partner views on delivery and engagement	Interviews only	Industry partners	Closure
	Trial setup effectiveness	Time and effort needed to establish trials, secure testbed access, confirm	Participant feedback data/interviews/programme generated monitoring data	SMEs, industry partners	Closure, follow-up

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
		roles, data sharing, and practical arrangements			(Option 2 only)
	Consistency across cohorts and work packages	Similarity of criteria, decisions, communication, timelines	Programme generated monitoring data	CPC	Baseline
PEQ3: How well was FIF delivered and supported in practice?	Quality of support to funded SMEs	Type, frequency and usefulness of support	Interviews/programme generated monitoring data	CPC, SMEs	Closure, follow-up (Option 2 only)
	Support for collaboration and tech-stacking	Evidence of brokering, partnership support, ecosystem facilitation	Interviews/programme generated monitoring data	SMEs	Closure, follow-up (Option 2 only)
	Experience of delivery and engagement	Perceptions of guidance, communications, responsiveness	Participant feedback data/interviews/programme generated monitoring data	SMEs	Closure, follow-up (Option 2 only)
PEQ4: How effective were governance, reporting and	Reporting effectiveness	Timeliness, completeness, usability of reports	Programme generated monitoring data	CPC	Closure

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
risk management arrangements?	and proportionality				
	Risk management and mitigation	Use of risk registers, mitigation actions	Programme generated monitoring data	CPC	Closure
	Governance effectiveness	Meeting minutes, decision routes, escalation and oversight processes, meeting attendance, timeliness	Interviews/programme generated monitoring data	CPC	Closure
	Due diligence effectiveness	Checks undertaken, proportionality, issues identified and resolved	Interviews/programme generated monitoring data	CPC	Baseline, closure
PEQ5: Did FIF's monitoring provide useful, high quality and complete data for tracking progress and improving delivery, without	Coverage and completeness of monitoring	Outputs/outcomes captured, by work package	Programme generated monitoring data	CPC	Closure
	Data quality and validation	Validation checks, consistency over time	Programme generated monitoring data	CPC	Closure

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
placing too much burden on participants and delivery staff?	Alignment to ToC and evaluation needs	Whether metrics map to process and impact EQs	Programme generated monitoring data	CPC	Closure
	Venture-growth metrics integration	Whether venture-growth can be integrated into FIF monitoring without duplication	Interviews/programme generated monitoring data	CPC	Closure
	Burden and duplication	Duplicate fields, frequency of requests, burden on SMEs/CPC	Participant feedback data/interviews/programme generated monitoring data	CPC, SMEs	Closure
PEQ6: Did programme marketing, communications and outreach effectively support delivery?	Reach into priority audiences	Geographic spread, organisation type, sectoral spread, diversity proxies where available	Programme generated monitoring data	CPC	Baseline
	Website engagement	Unique visitors, page views, dwell time, downloads, referral sources	Programme generated monitoring data	CPC	Baseline

PEQ	EQ sub-theme	Indicator	Data source	Data provider	Collection Point
	Conversion to applications/ participation	Enquiries, registrations, applications, cluster sign-ups, event bookings resulting from communications activity	Programme generated monitoring data	CPC	Baseline
PEQ7: What lessons (stratified by participant type, sector, maturity and work packages) should inform future rounds of FIF?	What worked well	Cross-cutting strengths in design and delivery	Participant feedback data/interviews/programme generated monitoring data	CPC, SMEs, industry partners	Baseline, closure, follow-up (Option 2 only)
	What worked less well and why	Recurring weaknesses	Participant feedback data/interviews/programme generated monitoring data	CPC, SMEs, industry partners	Baseline, closure, follow-up (Option 2 only)

Table 33 Indicators which will be used to inform the process evaluation (gathered only in Option 2)

EQ	EQ sub-theme	Indicator	Additional data source	Collection point
PEQ1: Was FIF implemented as intended across its different work packages?	Adaptations and reasons	Documented delivery changes and rationale	Interview for the case study	Baseline, closure
	Barriers to delivery	Resourcing, approvals, partner availability, procurement, contracting, scheduling, data access, SME readiness	Interview for the case study	Closure
	Integration across work packages	Evidence of coordination between accelerator, FLIN, Venture Growth, private capital	Interview for the case study, interview with wider stakeholders	Closure
PEQ2: Were application and selection processes clear, fair and proportionate?	Transparency and fairness of assessment	Clear criteria, scoring consistency, moderation approach	Interview with unsuccessful applicant	Baseline
	Clarity of criteria and requirements	Volume and type of applicant queries; evidence of confusion	Interview for the case study, interview with unsuccessful participant	Baseline

EQ	EQ sub-theme	Indicator	Additional data source	Collection point
	Burden on applicants	Length/complexity of forms, reporting of time burden, dropout rates	Interview for the case study, interview with unsuccessful participant	Baseline
	Industrial partner experience	Industrial partner views on delivery and engagement	Interview with industry partners	Closure
	Trial setup effectiveness	Time and effort needed to establish trials, secure testbed access, confirm roles, data sharing and practical arrangements	Interview for the case study	Baseline, closure, follow-up
	Consistency across cohorts and work packages	Similarity of criteria, decisions, communication, timelines	Interview with unsuccessful applicant	Baseline
PEQ3: How well was FIF delivered and supported in practice?	Quality of support to funded SMEs	Type, frequency and usefulness of support	Interview for the case study	Baseline, closure, follow-up
	Support for collaboration and tech-stacking	Evidence of brokering, partnership support, ecosystem facilitation	Interview for the case study, interview with wider stakeholders	Baseline, closure, follow-up
	Experience of delivery and engagement	Perceptions of guidance, communications, responsiveness	Interview for the case study	Baseline, closure, follow-up

EQ	EQ sub-theme	Indicator	Additional data source	Collection point
	Venture-growth metrics integration	Whether venture-growth can be integrated into FIF monitoring without duplication	Interview for the case study	Baseline, closure, follow-up
	Burden and duplication	Duplicate fields, frequency of requests, burden on SMEs/CPC	Interview for the case study	Baseline, closure
PEQ6: Did programme marketing, communications and outreach effectively support delivery?	Reach into priority audiences	Geographic spread, organisation type, sectoral spread, diversity proxies where available	Interview with unsuccessful applicant, interview with wider industry stakeholder	Baseline
	Conversion to applications/participation	Enquiries, registrations, applications, cluster sign-ups, event bookings resulting from communications activity	Interview with unsuccessful applicant	Baseline
PEQ7: What lessons (stratified by participant type, sector, maturity and work package) should	What worked well	Cross-cutting strengths in design and delivery	Interview for the case study, interview with unsuccessful applicant, interview with wider industry stakeholder	Baseline, closure, follow-up

EQ	EQ sub-theme	Indicator	Additional data source	Collection point
inform future rounds of FIF?	What worked less well and why	Recurring weaknesses	Interview for the case study, interview with unsuccessful applicant, interview with wider industry stakeholder	Baseline, closure, follow-up

Annex D Process maps

Below are process maps for each work package within the Freight Innovation Fund. They break down the various steps taken by each involved party (CPC, DfT, SMEs, industry partners and investors as appropriate) and show the actions taken by each during the various phases of the lifecycle of the programme's development and delivery (shown here as work package design, the application phase, assessment phase, project mobilisation, project delivery and knowledge sharing).

Table 34 Accelerator process map

	Work package design	Application phase	Assessment phase	Project mobilisation	Project delivery	Knowledge sharing
DfT	- Confirm funding available, timescales and resources - Define challenges for round	N/A	- Participation at commercial interviews - Participation at Phase 1 SME final deliberation - Sign off Phase 1 cohort - Review and score Phase 1 SME trial plans - Participation at Phase 2 SME trial deliberation - Sign off Phase 2 cohort	- Ongoing involvement as part of project mobilisation	- Receive regular updates on development of trials	N/A
CPC	- Confirm funding available, timescales and resources - Define challenges for round	- Launch Open Call - Promotion through FIC/FLIN, database of SMEs and partner working	- Conduct initial review as applications submitted - Shortlisting of applicants - Conduct due diligence - Select final SMEs	- Baseline of successful cohort - Sign pre-commercial pilot and trials contract - Provide trial design support sessions	- Milestone payment at start of trial - Deliver tailored support to cohort/industry partner - Review/action monthly reporting	- Review/action final report - Issue participant survey - Conduct exit interviews and issue final payment

		- Host applicant support webinar	- Feedback to unsuccessful applicants	- Milestone payment at trial plan stage	- Ongoing engagement/support as required	- Showcase delivery at end of programme
SMEs	N/A	- Develop trial proposal - Complete application - Identify/select trial partner	- Shortlisted applicants to present to programme - Feedback to unsuccessful applicants	- Baseline for successful applicants - Sign pre-commercial pilot and trials contract - Submit invoicing - Months 1-2 develop trial plan	- Months 3-6 execute trial plan - Provide monthly progress reports highlighting opportunities, issues, and risks	- Produce final report with outcomes, impact and future exploitation plans - Complete participant survey
Industry partners	N/A	- Confirm participation as potential trial partners	N/A	- Engagement with SME through trial development	- Engagement with SME through trial delivery	- Participation at shortlisting presentation

Table 35 FLIN process map (this is the successor to FIC)

	Work package design	Application phase	Assessment phase	Project delivery	Knowledge sharing
DfT	- Confirm funding available, timescales and resources - Confirm eligibility	N/A	N/A	- Participation in programme of activities as appropriate	N/A

	- Define Freight Industry Board and terms of reference (ToR)				
CPC	- Confirm funding available, timescales and resources - Confirm eligibility - Define Freight Industry Board and terms of reference (ToR)	- Host application portal online	- Conduct diagnostic call and pre-participation questionnaire	- Deliver programme of activities - Issue monthly newsletter - Maintain Freight Innovation community - Manage Freight Industry Board	- Monitoring and evaluation
SMEs	N/A	- Complete application	- Respond to diagnostic call and pre-programme questionnaire	- Participate in programme of activities - Participate in FLIN	- Greater collaboration between SME, larger businesses, academia, and investors
Industry partners	N/A	- Complete application	- Respond to diagnostic call and pre-programme questionnaire	- Participate in programme of activities - Maintain the FLIN	- Greater collaboration between SME, larger businesses, academia, and investors

Table 36 Venture Growth process map

	Work package design	Application phase	Assessment phase	Project mobilisation	Project delivery	Knowledge sharing

DfT	- Co-design Venture Growth proposition - Confirm funding, timescales, resources, and eligibility - Agree reporting requirements				- Receive regular reporting on programme progress	- Receive final reporting on outcomes, lessons learned, and recommendations - Use evidence to inform future programme design and broader freight and logistics innovation policy.
CPC	- Design the Venture Growth pilot structure - Develop the support offer - Establish the use of external entrepreneurs and specialist advisors -Align Venture Growth with investor needs	- Launch Open Call - Promotion through FLIN, database of SMEs and partner working	- Shortlisting of bids - Assess proposed consortium or SPVs - Invite shortlisted bidders to pitch day	- Onboard selected SME/SPVs - Match participants with experts and specialists - Confirm delivery plans - Set up investor engagement. - Establish M&E baselines	- Deliver the scale-up stream - Deliver the technology stacking stream - Support SPV development - Monitor SME/SPV progress - Organise investor-focused showcase activity	- Produce annual final report activities, outcomes, impact, and lessons learned. - Incorporate learning into the Venture Growth design

	and the wider FIF programme					
SMEs		- Identify consortia of parties for SPV - Develop proposal - Develop business case	- Take part in interviews, pitching, or clarification discussions if requested by CPC - Participation at pitch day	- Undertake baseline activities - Share business information needed for tailored support	- Participate actively in the scale-up or technology stacking programme - Engage with advisors - Develop investment propositions and routes to market	- Programme feedback - Share outcomes relating to commercial progress, investment readiness, contracts, and partnerships
Industry partners/investors	- Provide investor and market input on what makes SMEs/SPVs investable and scalable	- Express interest in participating as commercial partners - Support applicants with partnership discussions - Develop business case	- Support due diligence input on proposals - Shortlisted bidders develop pitch deck - Participation at pitch day	- Confirm participation in advisory, mentoring, or SPV roles - Engage in early-stage discussions on commercial needs and investment propositions	- Provide mentoring, advice, and market feedback - Participate in investor-focused events - Engage on potential investment and commercial opportunities	- Provide feedback from investor events, roundtables, bilateral meetings, and mentoring interactions - Share perspectives on investability, delivery quality, and market relevance

Frontier Economics Ltd is a member of the Frontier Economics network, which consists of two separate companies based in Europe (Frontier Economics Ltd) and Australia (Frontier Economics Pty Ltd). Both companies are independently owned, and legal commitments entered into by one company do not impose any obligations on the other company in the network. All views expressed in this document are the views of Frontier Economics Ltd.