

**USP College
Centre of
Excellence
for Digital
Technologies
and
Immersive
Learning**

**SELEP
Outline
Business
Case
Application
for LGF 3B
Funding
Support**



1. PROJECT OVERVIEW

1.1. Project name:
USP College Centre of Excellence for Digital Technologies and Immersive Learning

1.2. Project type:
Capital (Skills & Innovation)

1.3. Federated Board Area:
Essex

1.4. Lead County Council / Unitary Authority:
Essex

1.5. Development location:
USP College
Seevic Campus
Runnymede Chase
Benfleet SS7 1TW

1.6. Project Summary:
Immersive learning environments place learners at the centre of a full-sensory, simulated learning environment. They use multi-media, digital and IT technologies to create virtual, simulated or augmented learning environments, engaging learners in a completely new, innovative and contemporary teaching and learning environment.

Virtual learning is any learning that is provided using a digital, online or virtual technology. This included the development of online content, which significantly increases efficiency in teaching delivery and in access and flexibility to learners.

The proposed project will deliver a new £1.8m¹ 'state-of-the-art' USP College Centre of Excellence for Digital Technologies and Immersive Learning (CEDTIL), strategically located minutes from the A12 corridor, between Southend and Basildon and less than 15 minutes from the Southend Airport Business Park.

The Centre, which will be comprised of four suites, totalling 600m² of new teaching & learning and business support space, will use cost and time effective pod construction. Each suite will have a full complement of immersive learning, virtual reality and collaborative working environments, will be utilised by:

- USP College learners undertaking new skills training in digital technologies
- USP learners using immersive learning and virtual and collaborative environments pedagogies in existing (and new) foundation skills, work readiness, FE and HE provision
- Other education providers, who will have access to use of facilities through membership of the 'USP Digital skills partnership'
- Local Businesses, especially:
 - Start-ups, as part of incubator and growth accelerator programmes
 - SMEs wanting to participate in remote collaboration
 - Companies with a strong digital skill focus
 - Companies wishing to upskill employees in digital technology applications

¹ Capital expenditure only

CEDTIL will build upon the existing immersive learning provision at USP, expanding the 'pilot project' into a commercial-scale, cutting edge facility, which is fundamental to the roll-out of the use of digital skills, immersive learning and simulated environments (virtual and augmented reality) in the delivery of education, FE and HE provision, vocational skills training and business support across the SE, especially SELEP, in future.

CEDTIL has been developed in direct response to SELEP's explicit prioritisation for skills in the IT, Digital & Creative Sectors. It will meet demand for innovative and cost-effective pedagogy and improve engagement, attainment and skills for SELEP learners, employees and employers.

CEDTIL will optimise:

- The use of Virtual Learning Environments (VLE) and 'Immersive learning' in the delivery of courses across the curriculum
- Enable learners and employers to experience and become familiar with virtual and immersive learning technologies and environments
- Improve skills in IT and digital technologies
- Provide a live environment for the development of IT and digital technology skills, such as coding, online & virtual content development
- Provide a specific pedagogy and simulation environment to support UPC's financial technology (FINTEC) aspirations

The proposed Digital Technology Centre will also act as a transformational learning hub for Essex. It will also be used to demonstrate how access to digital, virtual and immersive technologies will drive change in the perceptions of both learners and employers in how to achieve both qualifications and professional competencies.

The new facilities will be employer-led and will meet all sector industry-based standards. This new facility will ensure an immersive, collaboration experience with high-fidelity audio and multiple video feeds, supported by a suite of rich collaboration tools.

CEDTIL will consist:

- Four virtual and immersive learning suites, containing:
 - Five 84-inch interactive screens
 - Two Sidewall Projectors
 - Follow-me cameras; capturing the immersive experience for distribution on demand
 - Multiplexing equipment to allow up to four channel immersive video and audio
 - Central lectern simple controls and multiple monitors
 - Ability to engage with learners on single or multiple sites within a single large screen
- A Self-study and CPD conference suite, 50 computers
- Break out rooms, each containing:
 - Video conferencing resources
 - Ability to record and disseminate resources on demand
 - Allow for site to site or site to multisite delivery maintaining an immersive and engaging learning experience
 - Procurement of a service allowing site to utilise connectivity and delivering the immersive experience to the desktop
 - The purchase of the on-line VLE to deliver online blended learning and dissemination of recorded resources

1.7. Delivery partners:

Partner	Nature of involvement (financial, operational etc.)
USP College	Lead Applicant USP College is the sole applicant and quantified, direct outputs detailed in this application will be delivered by USP as a result of the investment proposed.

- 1.8. **Promoting Body:**
Opportunity South Essex / Castlepoint Borough Council

- 1.9. **Senior Responsible Owner (SRO):**

Name	Dan Pearson
Organisation	USP College
Job Title	Principal & CEO
Contact number	01268 756111
Email Address	dan.pearson@uspcollege.ac.uk

- 1.10. **Total project value and funding sources:**

Funding source	Amount (£)	Flexibility of funding scale or profile	Constraints, dependencies or risks and mitigation
USP (Capital)	£900,000	USP funding scale has been sanctioned by the USP CEO and VP Finance & Corporate Affairs. USP can put no additional funding (to that proposed here) into the project. A reduction in overall project investment would significantly reduce outputs and value for money.	Funding is set aside in the Colleges forward (2019/20) financial profiling. The project is profiled for delivery in 2019, with the facility opening in April 2020. However, the project could be pushed back to assist in the available cash-flow of LGF funds. However, this would have a significant impact on local employers who need access to virtual and immersive technologies to keep pace with competitors from outside the Essex Region
USP Revenue	£216,000	Revenue costs associated with project management and monitoring only	Costs only accrued by USP if project is delivered
SELEP	£900,000	Scale: Without the level of SELEP funding requested, the College could make minimal investment, which would have significant, negative impact on outputs and therefore value, and significantly reduce the positive impact (GVA) on the local economy. Profile: CEDTIL could be delivered within 6 months of planning approval. As such, the project gives opportunity for expenditure of LGF to be delivered rapidly and with a relatively low construction/programme risk	
	£2,016,000	Total project value	

1.11. SELEP funding request, including type (LGF, GPF etc.):

USP College is seeking £900,000 of SELEP capital grant support. It is the understanding of the College that this contribution will not constitute State Aid. However, a formal opinion can be sought, if SELEP require it.

1.12. Exemptions:

The project is not subject to any exemptions under the SELEP Assurance Framework 2018 (Appendix E)

1.13. Key dates²:

<i>Key Milestones</i>	<i>Description</i>	<i>Indicative Date</i>
SELEP Funding confirmed	Anticipated Funding Approval	Sep 2019
Project Commencement	Mobilisation of project delivery team, procurement of external advisors & contractors etc.	Sep 2019
Design Development & Submission of Planning Application	Programme period based upon utilisation of School Haus – Net Zero Building solution ³ , which allows for rapid delivery and deployment of capital works & outstanding energy & sustainability performance	Dec 2019
Secure Planning Consent	Detailed Planning Approval from Castlepoint Borough Council	Mar 2020
Place order for new buildings	Procurement of Design & Build Contract	Mar 2020
Mobilisation Period	Completion of site works mobilisation	May 2020
Construction period	16 weeks, including localised ground works, building installations, service connections.	Aug 2020
Final Fit out	6 weeks Specialist IT fit out, final user training and occupation	Sep 2020
Project Completion		Sep 2020

² As a consequence of a longer period of SELEP grant determination than anticipated, project milestones have been revised since SOBC. A revised Project Programme is appended to this application.

³ Project programme and delivery assumptions are based on utilisation of a 'pod' (off-site) construction method. USP have used the proprietary SchoolHaus system as a reference but the final construction methodology and contractor will be subject to formal procurement (see Section 4)

1.14. Project development stage:

Project development stages completed to date			
Task	Description	Outputs achieved	Timescale
Design Team Consultants appointed	Professional Service advisors appointed to provide Business Case Development, Project Management and Cost Consultancy support	EOI submission Outline Curriculum & Service model SOBC Submission Outline project Costs Outline Project Programme & milestones	Completed
Curriculum & Services Design	Development of detailed curriculum strategy and broader service design	Outline of Proposed Curriculum & Service Model, including profiled cohorts, class sizes, learner numbers and user groups	Completed
Initial Concept Design (RIBA 0)	Development of summary project brief and cost feasibility	Summary project design brief Cost feasibility Outline Cost Model (elemental Cost breakdown) Outline Expenditure Profile	Completed
Match-funding Secured	USP allocated match-funding	This is the provision of £900,000 cash in the forward accounts of USP and will be formalised upon notification that CEDTIL has progressed to the final DBC stage of LGF application. USP will produce a 3-year (2018-2021) financial plan incorporating project delivery (cash flow) costs – Subject to final Corporation approval at OBC Stage	Completed
Initial Collaborative Scoping	USP, working with partners at Castlepoint and Essex County Council have undertaken an initial exercise to identify potential collaborations with existing programmes, partners and planned activity	Strategic Fit Summary Analysis (Identification & Scope) report	Underway Completed by Dec 2019

Project development stages to be completed		
Task	Description	Timescale
Detailed employer & stakeholder consultation	Future skills & training needs analysis to inform design of employer-responsive curriculum and services offer	Ongoing
Detailed Curriculum & Service Design	Further design of curriculum and service offer to take account of employer & stakeholder consultation	Completed
RIBA Stage 1	Completion of Stage 1 Design (feasibility study) including stage 1 cost report 7 elemental cost breakdown	Completed
Financial Plan	Based on revenue & cost model for Curriculum & Service proposals, including cash-flow for project delivery	Completed
Business Case Application	Preparation and submission of a more detailed Business Case for SELEP	Completed
Detailed timetabling & Space utilisation analysis	Use of timetabling software to plan delivery & service model and ensure optimal utilisation of new facilities by various learner and user groups	Oct 2019
RIBA Stage 2	RIBA Stage 2 report (or equivalent)	Oct 2019
Funding Award	Following announcement of funding allocation, the completion of Funding Agreement between USP & SELEP including any contracted outputs	Sep 2019
Delivery Phase	See milestones table in 1.13 (above)	Sep 2019

1.15. Proposed completion of outputs

The following tables provide detail of outputs for the USP Centre of Excellence for Digital and Immersive Technologies (CEDTIL) for:

- Capital development Phase
- Operational delivery Phase (5 year outputs)

Key Milestones	Description	Indicative Date
SELEP Funding	Anticipated Funding Approval	Sep 2019
Project Commencement	Mobilisation of project delivery team, procurement of external advisors & contractors etc.	Sep 2019
Design Development & Submission of Planning Application	Programme period based upon utilisation of School Haus – Net Zero Building solution, which allows for rapid delivery and deployment of capital works & outstanding energy & sustainability performance	Dec 2019
Secure Planning Consent	Detailed Planning Approval from Castlepoint Borough Council	Mar 2020
Place order for new buildings	Procurement of Design & Build Contract	Mar2020
Mobilisation Period	Completion of site works mobilisation	Aug 2020
Construction period	16 weeks, including localised ground works, building installations, service connections.	Aug 2020
Final Fit out	6 weeks Specialist IT fit out, final user training and occupation	Sep 2020
Project Completion		Sep 2020

Project Outputs (Delivery)	Description	Date for completion
New /additional FE teaching & learning / Business Support Space created	c. 600m²	Sep 2020
Total Learners Supported (Annual)	500+	Sep 2025
Additional New learners (Annual)	235	Sep 2025
Job created (including apprenticeships) (Annual)	192	Sep 2025
Businesses Supported (Annual)	100+	Sep 2025
Other organisations using CEDTIL to deliver business support (Annual)	10+	Sep 2025
Other providers using CEDTIL (Annual)	4+	Sep 2025

2. STRATEGIC CASE

The Strategic Case should present a robust case for intervention, and demonstrate how the scheme contributes to delivering the SELEP Strategic Economic Plan (SEP) and SELEP's wider policy and strategic objectives. It includes a rationale of why the intervention is required, as well as a clear definition of outcomes and the potential scope for what is to be achieved.

The outlook and objectives of the Strategic Case need should, as far as possible, align with the Monitoring and Evaluation and Benefits Realisation Plan in the Management Case.

2.11. Scope / Scheme Description:

The USP Centre of Excellence for Digital and Immersive Learning will deliver:

- 600m² of new/ improved learning/ training and business support floor-space on USPs Seevic Campus.
- The project will see the installation of 4 new immersive learning and collaborative working suites. Each suite will be furnished with technologies for:
 - Immersive and sensory learning
 - Video-conferencing & Collaborative working
 - Virtual & Augmented Reality functionality

The proposed programme will see capital works commence in Spring 2020 with CEDTIL opening in September 2020⁴.

CEDTIL will provide the learners, skills providers and the business community, across SELEP with a state-of-the-art teaching learning and collaborative working hub, located in the heart of South Essex.

It will provide the following benefits:

- New pedagogies in the delivery of existing curriculum covering all aspects of vocational teaching and learning
- Additional support for functional (English & Maths) and employability skills learners
- Additional provision for STEM learners
- Support apprenticeship provision with new opportunities for simulated work environments and off-site skills assessment
- New pedagogies and opportunities for SEND and Learner with Learning Difficulties or Disabilities ("LLDD") learners
- New provision in digital and immersive learning technologies training
- New opportunities for in-work up-skilling and CPD
- Support services for new business start-ups (incubator activity), SMEs and larger employers and supply-chains
- New opportunities for businesses to collaborate with local, national and international partners
- A new connectivity, communications and collaborative working hub for businesses looking to invest in, and relocate to, the South East
- A new resource for stakeholders involved in the delivery of business support services
- A new teaching & learning resource for other regional providers
- Estimated minimum GVA impact of £50m⁵ over its economic lifetime (calculated as 20 years)

⁴CEDTIL is designed to respond to acute and immediate need to immersive learning, collaborative working and virtual/Augmented reality (simulation) environments for access by skills training providers, learners and businesses across SELEP. As such, USP would be reluctant to delay the programme start date. However, if it would assist SELEP in management of programme cash-flow, USP may consider delaying draw-down of SELEP LGF R3 funds.

⁵ A full GVA analysis can be provided upon request

Currently, there is no similar resource available to skills training providers, of the wider business and business support community anywhere in the SELEP region⁶.

Immersive learning is a brand-new pedagogical approach, which has been adopted in schools, College and Universities in other parts of the world, notably in North America, South East Asia and Europe.

Similarly, collaborative and remote co-working environments are rapidly expanding technologies with applications in education, R&D, design engineering & advanced manufacturing and supply-chain management.

Virtual and Augmented Reality technologies combined gaming and virtual architecture technology to create simulated reality environments with a similar set of wide ranging applications.

CEDTIL will bring these technologies together, with superfast, high-bandwidth internet connectivity to create a unique, cutting edge teaching & learning and business support resource that will have significant and far-reaching positive economic, social and cultural benefit to the SELEP region.

2.12. Location description:

Map showing location of CEDTIL @USP Seevic Campus



CEDTIL will be located at USP's Seevic Campus, located in Benfleet. The campus is strategically located between Southend and Basildon, a few minutes from the A12 and less than 15 minutes from the new Southend Airport Business Park

Layout of USP Seevic showing proposed location of CEDTIL



CEDTIL facilities will be in the heart of the USP Seevic Campus. The site has good access and parking facilities and new signage will be added to assist way-finding

⁶ USP is aware of an immersive learning & training centre operated by Essex Police at FELTECH in St. Albans, but it is not used for wider business and FE/HE skills training provision.

2.13. Policy context

The table below identifies the strategic context, with specific examples of how CEDTIL will contribute towards the delivery of national, regional & local strategic objectives⁷.

Strategies & programmes	Relevance to the Immersive Learning Technology Centre	How does ILTC contribute to delivery of outcomes?
National		
UK Digital Strategy	UK Government is committed to keeping UK at the forefront of digital skills and the use of digital applications across government, education & skills, business growth and community	CEDTIL will provide a unique digital collaborative learning & business support environment, enabling users to experience and develop skills in the latest immersive, virtual and augmented reality environments and applications. It will provide learners and businesses with access to cutting edge digital learning & collaborative working environmental and the opportunity to develop new digital skills and become familiar with the opportunities afforded by emerging digital learning, collaborative working & simulated environment technologies. CEDTIL will enable faster progression & upskilling, employing the latest in vocational skills technology and pedagogies. It will also provide a unique opportunity to experience real-work scenarios through the use of simulated/virtual reality applications
UK Digital Skills Strategy	UK Government Strategy estimates 1.2m new (UKCES, 2015) technically & digitally skilled people by 2022. Also calls for a more diverse digital workforce, encourage women in to jobs with higher technical and digital requirements. It identifies a lack of digital skills and access to digital environments as a barrier to economic & social progression. It also identifies use of digital applications in increasing outcomes in literacy, numeracy and employability.	
Regional (SELEP)		
SELEP Growth Strategy	Boosting Productivity	CEDTIL will help increase productivity across the SELEP Economy. It will increase the level and number of skilled people in the region. It will enables businesses, especially start-ups and SMEs to access collaborative working and simulated environments that will allow them to work with partners out-of-area, as well as accessing new applications in manufacturing, engineering, logistics, construction and financial technologies
	Bringing together national & local business start-up & support services (especially Gateway to Growth)	
	Delivering Sector Specific Support Programmes & Projects	
	Helping Businesses to Create Better Links Internationally	

⁷ A full strategic fit assessment, including the potential contribution and additionality provided by CEDTIL to projects and programmes previously funding be SELEP was provided as an appendix to the SOBC application

SELEP Skills Strategy	<i>Improving Our Skills</i>	CEDTIL will accelerate the uptake of skills, increasing the talent pool through enhanced provision of traditional & work-based vocational education. Increase success rates and throughput in functional maths & English, STEM and employability skills, as well as the use of work-place simulation will enable more people to enter training & and accelerate work-readiness. CEDTIL will provide new opportunities for delivery of off-site apprenticeship training, utilising simulated (VR) environments and collaborative & remote learning. CEDTIL will enable increased partnership between FE&HE and businesses, through the new CEDTIL Hub Partnership, which will include HEIs (e.g. University of Essex's Immersive Learning Research Network-ILRN), USP and other FE & vocational skills providers (e.g. FEDEC and ESB (employer) representatives. The CEDTIL Hub Partnership will iteratively review & update the CEDTIL curriculum & services model to meet market needs and explore new opportunities for collaborative exploitation of the facility to improve economic & skills outputs across the region. New immersive and sensory environments provide new opportunities for the provision of SEND and LLDD education, which represents cutting edge pedagogy in this field. CEDTIL will also act as a hub for a new Local Digital skills Partnership, enabled by USP in partnership with key strategic stakeholders, including ESB (employer) representatives
	Increasing the talent pool (L4, Apprenticeships & Traineeships - Progression)	
	Increase proportion of residents with English, Maths & STEM	
	Widening participation 16-24 through work placement, training, traineeships, apprenticeships, enhanced information, advice and guidance	
	Developing partnerships between FE/HE & businesses	
	Improvement of FE estate (new provision & specialist equipment)	
	Supporting delivery of AEB Skills priorities	
	Investment in Skills Infrastructure	
	Supporting LLDD learners	
	Creation of <i>local digital skills partnerships</i>	
SELEP Sector Strategies	Increase % of workforce with higher level & technical skills	CEDTIL provides unique opportunities for specialised vocational skills training and collaborative working a host of priority sectors, namely (Financial technologies, advanced engineering and manufacturing, construction, biotechnology, creative, digital & IT) all of which have digital environment technologies that could be utilised at CEDTIL
Sub-regional		CEDTIL will also support a variety of business support programmes, from start-ups and incubation through growth accelerator programmes, which will use CEDTIL as a specialist training and business support facility, accessing immersive learning, virtual and augmented reality (simulation) technology, remote & collaborative working and video conferencing technologies.
Essex County Growth Deal		

2.14. Need for intervention:

Currently, there is insufficient Digital Skills teaching and vocational training infrastructure in the South East (SELEP region) to deliver a number of key national, regional and local strategies.

UK Government identifies digital skills states:

'Although we live in an increasingly online world, a significant part of the population remains digitally excluded. One in 10 adults have never used the internet and many more are missing out on the opportunities the digital world offers, whether through lack of connectivity, digital skills or motivation. We must continue to address this digital divide between those who have been able to embrace the digital world and those who have not.'

'We also need to turn our attention to those who have basic digital skills and connectivity, but lack the confidence and knowledge to make the most of the digital economy, whether at work or beyond. Many jobs have a digital element, and it is predicted that within 20 years 90% of all jobs will require some element of digital skills. Effective digital skills provision is essential to ensure the workforce is prepared for this and future technological changes.'

To develop and maintain our position as a leading global digital economy, we will also need to develop a range of specialist digital skills to fill specific digital jobs. An estimated 1.2 million new technical and digitally skilled people are needed by 2022 to satisfy future skills need⁸.

SELEP Skill Strategy (2018) states:

'Overall, SELEP has lower than average skills levels and although these are improving, rates of improvement fall behind the national average in all but one level. Generally, SELEP falls within the bottom half of LEPs for skills levels. As a diverse and large area, SELEP has areas well above and well below the national average.'

- Nearly 190,000 (7.5%) adults in the SELEP area have no qualifications, the 3rd highest proportion of any LEP nationally after London and Leeds
- 90,000 people in employment do not have a qualification
- 237,000 have attained level one qualifications only
- Participation in further education has also fallen in recent years
- 33% of people have a degree level qualification compared to 38% nationally
- Nearly 42,000 people are claiming out of work benefits
- 178,400 households are registered as 'workless' across the region

SELEP also identifies the need to increase digital skills⁹ across all sectors but goes on to identify specific requirements in:

- Health & Social Care¹⁰
- Transport & logistics¹¹
- Digital & Creative¹²
- Finance¹³
- Manufacturing & Engineering¹⁴

⁸ Digital skills and inclusion - giving everyone access to the digital skills they need –UK Govt Policy Paper (March 2017)

⁹ P.21 – Chapter 5; Sector growth & business context

¹⁰ (sic.) p.22

¹¹ (sic.) p.22

¹² (sic.) p.23

¹³ (sic.) p.25

¹⁴ (sic.) p.25

SELEP's Skills Strategy (2018-2023) states:

'...SELEP is keen to deliver against the digital ambition set out ranging from ensuring all in society can access digital skills to understanding employment and skills needs of areas like AI & robotics..'

It goes on to state that '...The current 'digital revolution' means skills for this sector applies across all other sectors with digital skills needs growing and the need to:

- Align to government plans for Local Digital Partnerships
- Ensure local communities are aware of the new digital entitlement'

The introduction of T-Levels in digital skills and which require exposure to digital applications and digital learning environments will further compound the need for vocational training, teaching & learning and collaborative working environments that can support digital literacy, as well as improving learner outcomes, and increasing teaching & learning efficiency and learner throughput.

The Skills Strategy also calls for a 'strong digital infrastructure connecting and energising communities. Chapter 6i recognises the scale and nature of the impact of digitalisation on the 'way we work', transforming the work place and the skills and competencies required by our workforce. The same section also recognises that:

*'Technological advances represent huge potential for skills development. Many schools and further and higher educational establishments now use virtual reality, drones and robotics. Virtual reality and simulators mean that people can be now be trained remotely resulting in greater volumes or training opportunities decoupled from the need for onsite training providers and placements.'*¹⁵

The Learning and Work Institute predicts an oversupply of more than six million low skilled and two million intermediate skilled workers by 2024. This highlights the need to improve skills levels across the SELEP area. It is therefore vital to help people in work to upskill, as well as new entrants. The Industrial Strategy included the ambition to create local digital skills partnerships and SELEP is already exploring this.

USP will work with strategic stakeholders to create a local digital skills partnership, centred on activity at CEDTIL. This will act as a hub and focal point for activities around digital skills, the application of digital technologies in teaching & learning (immersive learning, Collaborative working, and virtual / augmented or simulated environments), business support and increasing business productivity (e.g. supply-chain activity, remote collaborative learning, videoconferencing, remote digital engineering etc.)

USPs digital skills partnership will work with employment & work intermediaries such as DWP and programmes such as *Techmums*¹⁶ to ensure that the opportunities for access that CEDTIL provides are accessible to all, optimising inclusivity in education, skills training and digital literacy.

USP will also work with SELEPs growth programme to ensure that businesses across the region, particularly start-ups, incubators and SMEs have access to CEDTIL to ensure they remain competitive and have access to technologies and skills that they need to both compete and grow.

¹⁵ (sic.) p. 36

¹⁶ <https://techmums.co/>

2.15. Sources of funding:

There are two proposed sources of funding:

1. USP Cash reserves (£1.116m) allocated in forwarded accounts
2. SELEP LGF Grant funding (£900,000) – subject to award

USP is the result of a merger between Seevic College and Palmer's College that completed in August 2017. The merger was the outcome of an Area Based Review and was designed to ensure the long-term financial sustainability, put in place to remedy declining financial performance in both Colleges. It has enabled cost savings that have put the new, combined USP College on a more sustainable financial footing. However, the College has very little in the way of cash reserves (committing up to the limit of what is prudent to this proposal) and does not have the ability to increase its current bank lending.

The College's banking provider (Barclays) has also placed strict performance covenants on the College and has taken security on parts of the College's existing estate. This makes it impossible to seek lending from any other party (secured against assets) without permission from Barclays. However, Barclays are likely to withhold permission, as the College's current loan-to-value (leverage) position against current estate is already too high for them to consider refinancing without significant and punitive restructuring costs.

The College does not have the strength of covenant to seek alternative funding arrangements and so the only viable source of funding is the SELEP LGF.

2.16. Impact of non-intervention (do nothing):

If CEDTIL is not funded, the learners, employers and the business growth of South Essex will continue to be at a disadvantage, not having access to the latest in teaching & learning facilities and pedagogies, collaborative learning facilities or virtual / augmented (simulation) environments. These facilities represent cutting-edge teaching, learning and skills training technologies, contemporaneous with similar facilities in other parts of the UK and international markets.

Without investment, USP will not be able to give learners access to the breadth of digital applications that cut across employment and skills requirements in all SELEPs employment, impairing the delivery of SELEPs Skills Strategy

USP are also committed to using CEDTIL as a 'starting-point' for the establishment for a local digital skills partnership. If CEDTIL does not proceed, USP will not have the facilities, curriculum, or offer to affect this.

USP does not have the teaching & learning technologies that enable use of immersive technology and virtual/augmented (simulated) environments, which represent the cutting edge of vocational skills, FE and SEND provision. Without this investment, the College may become uncompetitive compared to other skills providers, who have more up to date facilities, making them more attractive to learners and employers.

The digital economy is moving at bewildering pace. As such, even a delay in investment will have an exaggerated impact, as the application of these technologies to skills and vocational provision (and business support) continues to increase, leaving USP and local learners and employers further and further behind best practice.

CEDTIL will give USP College differentiation in their curriculum & service offer that would be very appealing to both learners and employers. It will also enable the provision of remote learning and support for employers and apprentices that are not within easy travelling distance. Growth in this provision forms a fundamental part of the restructuring and business development strategy of the College. As such, if this investment is not made, the College will be constrained to operating only in the local (traditional FE) market. By definition this will make USP less competitive, moving forward.

2.17. Objectives of intervention:

- Objective 1: Increase the number of learners with basic digital skills
- Objective 2: Increase the use of digital technologies in the delivery of education and skills training
- Objective 3: Increase accessibility to education and skills training and employment opportunities to people across SELEP
- Objective 4: Optimise the effectiveness of teaching & learning through cutting edge pedagogies
- Objective 5: Ensure that the workforce across SELEP has the exposure to, and skills in, digital technologies and applications that employers need
- Objective 6: Increase levels of learners accessing and attaining functional skills in English & maths
- Objective 7: Establish a new local digital partnership
- Objective 8: Review curriculum in employment priority sectors to establish how CEDTIL can be used to integrate digital skills training in curriculum areas relevant to:
 - Health & Social Care
 - Transport & logistics
 - Digital & Creative Industries
 - Finance
 - Manufacturing & Engineering
 - Education & Training Provision (train the teacher)
- Objective 9: Work with business support programmes and agencies and other stakeholders in supporting 100+ businesses, particularly start-ups, incubators and high-growth SMEs to access immersive learning, collaborative working, virtual and augmented reality environments to increase productivity and competitiveness
- Objective 10: Improve SEND and LLDD provision through the use of immersive technologies and virtual / augmented environments
- Objective 11: Improve functional skills (Maths & English) attainment using immersive learning and virtual and augmented learning environments
- Objective 12: Improve participation and attainment in STEM using immersive learning and virtual and augmented learning environments
- Objective 13: Widen participation in education, training and skills to people of all ages and backgrounds
- Objective 14: Increase the number of women with STEM, IT and digital skills
- Objective 15: Improve numbers of learners with qualifications beyond L1
- Objective 16: Improve numbers of learners with qualifications beyond L3

- Objective 17: Host open days for members of the community to get experience of immersive technologies and virtual / augmented environments
- Objective 18: Increase take-up of work placements, traineeships & apprenticeships through use of CEDTIL in delivering training and assessment

Problems and opportunities the project is seeking to address

- Opportunity 1: Potential for immersive learning, virtual and augmented reality and other digital applications to transform teaching & learning
- Opportunity 2: Potential for immersive learning, virtual and augmented reality and other digital applications to transform work environments
- Opportunity 3: The potential impact of collaborative working & virtual environments to transform the way organisations work on design and project delivery
- Problem 1: Low number of people with basic digital skills
- Problem 2: High Levels of worklessness
- Problem 3: No access to immersive learning, virtual reality or collaborative learning environments for local learners or employers
- Problem 4: Low-skill/low-wage economy

Objectives & Opportunities / Problems table

Problems / opportunities identified in Need for Intervention section							
	Opportunity 1	Opportunity 2	Opportunity 3	Problem 1	Problem 2	Problem 3	Problem 4
Objective 1	✓	✓		✓✓✓	✓	✓✓	✓✓
Objective 2	✓✓✓	✓✓	✓	✓✓	✓	✓	✓✓✓
Objective 3	✓	✓	✓	✓✓	✓✓	✓✓✓	✓✓✓
Objective 4	✓✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓✓
Objective 5	✓✓	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓
Objective 6	✓✓	✓	0	✓✓	✓✓	✓	✓
Objective 7	✓	✓	✓	✓	✓	✓	✓
Objective 8	✓✓✓	✓✓	✓	✓✓✓	0	✓	✓
Objective 9	✓	✓✓✓	✓✓	✓✓	✓	✓	✓
Objective 10	✓✓✓	✓	0	✓	✓	✓	✓
Objective 11	✓✓✓	✓	✓	✓✓✓	✓	✓	✓✓✓
Objective 12	✓	✓	0	✓	✓✓✓	✓	✓✓✓
Objective 13	✓✓✓	✓	✓	✓✓✓	✓	✓✓	✓✓✓
Objective 14	✓✓✓	✓✓✓	0	✓✓	✓	✓✓	✓✓✓
Objective 15	✓✓✓	✓	✓	✓✓✓	✓✓	✓	✓✓
Objective 16	✓✓✓	✓✓	✓	✓✓✓	✓✓	✓	✓✓✓
Objective 17	✓✓	0	0	✓✓✓	✓	✓✓✓	✓✓✓
Objective 18	✓✓	✓✓✓	✓	✓✓	✓✓✓	✓	✓✓✓

2.18. Constraints:

The College is unable to finance the project without the support of SELEP LGF.

The College also has to secure planning permission. The College has been in continuous contact with the Local Authority (Castle Point) who are supportive of the College's proposals. An informal pre-planning meeting is scheduled for late October and a pre-application meeting will be scheduled upon progression of the scheme to allocation of funding. USP anticipate that allocation of funding is conditional on the award of detailed Planning Permission. While some of the costs associated with progressing the project to full planning consent will be eligible expenditure, and would be claimable by USP at some future date, USP accept that costs are at-risk until planning consent is awarded.

It is worth noting that whilst the need to secure planning consent is a potential constraint, the College has an existing planning consent for a two-storey temporary accommodation block, of similar massing, and in the same location within the USP Campus. As such, the proposed development will not benefit from any extant planning permission, but the planning Authority have already provided some degree of precedent for the proposals outlines here. The proposed location in this part of the site is well within the site boundary and therefore there are very limited impacts on neighbouring properties. The risk associated with achieving planning consent is therefore assessed as very low.

2.19. Scheme dependencies:

Other than the need to secure SELEP LGF, there are no scheme dependencies

2.20. Expected benefits:

The Centre of Excellence for Digital Technologies and Immersive Learning (CEDTIL) scheme will deliver the following benefits:

- 600m² of additional educational floor-space
- Over 500 Learners will be supported
- Over 50 new learners will be created
- Over 50 new jobs will be created through new digital apprenticeships
- 600 Business will be supported
- Estimated minimum GVA impact¹⁷ of £50m over 20 years

Utilisation of collaborative working and videoconferencing should reduce the need for travel by users, positively impacting on transport and environmental conditions.

Use of CEDTIL by a range of providers and intermediaries will impact on the level of digital skills attained by a wide range of people in the community as well as College learners and local employers, optimising opportunities for advancement.

Open-days and other community-based activity will provide additional opportunity for College / learner / community interaction, which will make learning and education accessible to more people and improve the social capital delivered by the College.

CEDTIL will be a unique teaching & learning, collaborative working and virtual / augmented reality (simulation) environment, which will have significant, appeal to employers. This will enable the College to engage far more businesses, generating more opportunity for upskilling of the existing workforce, arranging work placements for learners and identifying apprenticeship opportunities.

¹⁷ A GVA analysis can be provided upon request

CEDTIL will enable the College to do far more with curriculum delivery and pedagogies. CEDTIL will open a whole world of pedagogical opportunity as well as enabling new curriculum subjects and qualifications that are simply not available to learners and employers at the moment. For example, simulated emergency rescue/event scenarios could provide a multi-agency training environment that is currently not available. Virtual and Augmented technologies, overlaid with collaborative/remote working/learning platforms mean there is literally an 'endless scope' of this kind of opportunity.

CEDTIL will be unique in the region. This will significantly increase the brand profile of USP, making the College more attractive to learners and employers. CEDTIL will also provide opportunity for research into the impacts and opportunities delivered by this kind of technology driven teaching & learning environment. USP will work with the University of Essex, which is a member of the Immersive Learning Research Network. This will also provide increased opportunities for collaboration between USP and HEIs such as University of Essex, as well as increasing opportunities for learner to progress to higher qualifications and for business to interact with FE/HEIs.

2.21. Key risks:

The key risks to the project are (see risk matrix in Management case for full breakdown):

- **Funding**

Without SELEP LGF support this project would not go ahead

- **Planning**

The College will need to secure planning permission for the scheme. The scheme design is modular construction and the position of CEDTIL at the heart of the campus, with good parking and access and well away from any campus boundaries. CEDTIL will see the construction of a two-storey pod (permanent) building on the same footprint (within the College's Seevic Campus) as a previous two-storey (temporary) facility, which was granted planning permission by the Planning Authority in 2014. This precedent clearly suggests a significant reduction in planning risk associated with the project. As such, no planning issues are foreseen and a planning strategy in place.

However, should planning not be granted, the project will not go ahead. USP anticipate that allocation of funding is conditional on the award of detailed Planning Permission. While some of the costs associated with progressing the project to full planning consent will be eligible expenditure, and would be claimable by USP at some future date, USP accept that costs are at-risk until planning consent is awarded.

- **Programme**

The modular build design allows for a very fast construction & fit out period (less than 9 months). The programme has inbuilt contingencies and an external, experienced capital project management consultant (Fusion) has been appointed by the College. As such, risks associated with programme (& cost) over-run is considered minimal and will have robust management and mitigation in place (see also governance & management section below)

- **Cost Overrun**

The modular design and technology nature of the project suggest that there is less opportunity for programme & cost overrun. USP has built reasonable contingencies in to both the project programme and the project cost breakdown / budgets. The College has appointed an external, experienced cost control (QS) consultancy (Fusion) to ensure the project is brought in on/under budget. The construction methodology (pod) construction also significantly reduces project risk (cost and programme overrun) as the much of the construction is undertaken offsite, in 'factory' conditions. The College also has knowledge of ground conditions on the proposed site, which

significantly reduces the risk of delays or unforeseen costs associated with additional survey or geotechnical preliminaries.

- **Curriculum development & stakeholder consultation**

Key to the impact that CEDTIL will have is the nature, scale, breadth and relevance of the curriculum USP provides. USP has engaged the ESB Sector leads, a number of key employers and other stakeholders to form a nascent *Local Digital Partnership* (LDP), which will inform the USP curriculum team to ensure the offer is relevant, dynamic and challenging and that it meets the needs of employers, learners and the wider community

- **Marketing & Business Development**

The success of CEDTIL will also be dependent on the effectiveness of the marketing & communication efforts of the College. USP will appoint a marketing manager to the project and develop a marketing strategy, which will be overseen by the College executive and the LDP

- **Outreach & partnerships**

USP is committed to forming an inclusive Local Digital Partnership, using the CEDTIL asset and activity as its focal point. The importance of outreach, partnerships and collaborations will be reflected in the CEDTIL marketing & communications strategy and will be overseen by the USP Executive Team and the LDP. While all direct outputs (jobs, learners, apprenticeships etc.) are independent of partner-working and co-delivery by external stakeholders, the project has the potential for significant additional, indirect benefits delivered by other stakeholders, as a consequence of intervention, engagement and/or support from CEDTIL (for example the roll-out, take-up and replication of similar facilities by other service providers whose teaching and/or management staff receive training and/or experiential support at CEDTIL)

- **Delivering Benefits**

The project must deliver the benefits laid out in this proposal. USP will appoint a CEDTIL Hub manager who will have responsibility for managing the delivery of the benefits laid out in this proposal, using a clearly defined benefits management approach. KPIs will be reported monthly to the USP executive team and to the LDP Board. The outputs identified here (section 1.15) will be delivered directly by CEDTIL. However, there is potential for significant indirect benefit derived from investment in CEDTIL (For example, the potential for other training and service providers to become enabled for the roll-out of digital technologies, immersive learning, simulated environments (virtual and augmented reality etc.).

- **Learning from the project**

CEDTIL represents a unique and innovative development in cutting edge, best practice application of digital technology and immersive learning in pedagogical delivery. As such, there will also be many lessons learned that will be valuable to future developments (CEDTIL & elsewhere) and roll-outs. USP will work with the Immersive Learning Research Network¹⁸ (IRLN) at the University of Essex to inform the design of CEDTIL & CEDTILs pedagogies & curriculum and to study impact & outcomes to ensure lessons learners can be captured and shared with the wider teaching & learning community.

¹⁸ <https://immersivelrn.org/>

3. ECONOMIC CASE

This scheme has an investment total of less than £2m

3.11. Options assessment:

Long list of options considered:

USP Seevic considered a long list of options that took account of possible permutations in the delivery of a new Centre of Excellence in Digital Technology and Immersive Learning (CEDTIL) for the SELEP region. The summary table below describes why some were discounted and how the College arrived at its preferred option.

In summary, the long list of options considered included:

- a. USP develops CEDTIL with no LGF support
- b. Locate CEDTIL at USP Seevic with LGF support Refurb existing space
- c. Locate CEDTIL at USP Seevic with LGF support New build (Modular) Preferred Option
- d. Do nothing – Continue to operate without investment
- e. Find a new site for CEDTIL
- f. Locate CEDTIL at USP Palmer's Campus

The College considered the potential location for CEDTIL. Acquisition or leasing of a new site would add considerably to the capital required, so this option was discounted early on. That left two options:

- To locate CEDTIL at USP Palmer's, or;
- Locate CEDTIL at USP Seevic

USP Palmer's campus is GFE campus for 16-19 year-olds set in a 'traditional school' setting in Thurrock. As such, the curriculum, learner cohort and built environment is not commensurate to the kind of higher-level, technology driven, professional environment that CEDTIL will provide. Travel times between the main USP SEEVIC campus and USP Palmer's would severely restrict accessibility and the application of the technologies within CEDTIL in delivering new pedagogies and new vocational skills curriculum, which is the core objective of the investment. Added to this, changes to staffing and safeguarding arrangements would make this option prohibitively expensive. For these reasons USP Palmer's was discounted as a viable option.

In determining the best option for the development of CEDTIL at USP Seevic, the College considered how it could meet the growing demand for digital skills training, as a curriculum area in its own right (STEM, digital operatives, digital technicians, application developers, coders etc), as a requirements for other intermediaries (training teachers, trainers and lecturers in the use of digital and immersive technologies in modern pedagogies) and the application of digital and immersive learning environments and pedagogies to the entirety of the wider vocational curriculum (i.e. how does the digital age impact nurses, construction workers, people in the finance sector). This led to an understanding of not just what technology would be required, but what the space used to deliver that technology needed to look like. How it would be laid out. The adjacencies and flexibility needed to allow the space to be used for a large variety of applications and end users in a manner that could be easily and rapidly reconstituted

The College considered 3 short-listed options:

- Option A:** No LGF investment but USP still investing available funds
- Option B:** LGF supports a refurbishment of existing space
- Option C:** LGF support provision of new and additional / purpose designed space

Short list of options:

Option A would not provide sufficient funding to undertake the capital works (refurb or new build) and purchase the quorum of technologies needed to provide the technologies and digital applications required. To put it simply Option A doesn't provide enough money. The design put forward is the minimum required to meet the brief in a viable way. As such Option A was discounted. Should funding not be awarded, the project will not proceed.

Option B was considered by the layout and build type of existing floor-space renders this option impractical. There is also significant pressure on existing space and the College needs to consider how it can manage future (organic) growth within its existing footprint. Even if enough space was found, the cost of remodelling that space to perform this function, and the disruption it would cause to College operations, would be prohibitive. The College's existing buildings and classroom layout do not suit the functionality that is required by CEDTIL. The central hub space with 4 flexible immersive learning and virtual technology suites, which provide the necessary level of flexibility and scalability would require significant structural remodelling to existing facilities. The College has no existing facilities that would readily fit this function and basic design requirement. As such, the cost of demolition and/or restructuring of existing space would be greater, and significantly more risky (in terms of programme and budget/contingencies) than that a new 'pod'-build on a vacant part of the College's existing site

Option C is the construction of a technology rich, designed and built-for-use teaching & learning centre, which optimises building and digital technology to provide the kind of space required to deliver, and to grow and evolve with, the emerging digital skills agenda. Option C will deliver 600m² of digitally-enabled, technology rich, flexible teaching & learning and business support space. The design uses the latest in off-site construction, employing the proprietary 'School HAUS' modular technology' to provide the building fabric, overlaid with a rich blend of digital and immersive learning technology and virtual and augmented reality environments. The off-site construction and 'SchoolHaus' build method minimises operational disruption to almost zero, with little or no impact on surrounding teaching & learning spaces. The system also allows for optimal flexibility, with the modular system being scalable and interchangeable, should future remodelling or expansion be required. For this reason, this option was selected. Option C also sees construction of a two-storey pod (permanent) building on the same footprint (within the College's Seevic Campus) as a previous two-storey (temporary) facility, which was granted planning permission by the Planning Authority in 2014. This precedent clearly suggests a significant reduction in planning risk associated with Option C

3.12. Preferred option:

The preferred option is Option C, which will see 600m² of newly-built, purpose-designed, technology rich and digitally enabled teaching & learning and business support space created. The project will employ cutting edge off-site, modular construction techniques and have selected the 'SchoolHaus' proprietary construction system. This minimises operational disruption as well as significantly accelerating construction times. It also minimises potential for programme delay and cost over-run giving the College the highest level of confidence in the reliability and deliverability of the project programme and budget. Finally, SchoolHaus is a NetZero carbon build process, which provides BREEAM outstanding and a zero net carbon footprint, delivering outstanding operating cost (energy & maintenance) efficiencies.

3.13. Assessment approach:

A summary table with options and evaluation /assessment methodology is provided below.

In summary, the options considered were:

- a. USP develops CEDTIL with no LGF support
- b. Locate CEDTIL at USP Seevic with LGF support Refurb existing space
- c. Locate CEDTIL at USP Seevic with LGF support New build (Modular) Preferred Option
- d. Do nothing – Continue to operate without investment
- e. Find a new site for CEDTIL
- f. Locate CEDTIL at USP Palmer's

Appraisal Criteria

1. Deliverable
2. Risk profile
3. An offer that meets SELEP's educational and economic needs
4. Sufficient access to high quality and relevant education training for all
5. Builds on the strength of existing provision and reputation
6. Provision which reflects changes in government funding priorities and future demand (E.g., Apprenticeships)
7. Makes the College more financially viable, sustainable, resilient and efficient and deliver maximum value for public investment

Option	Description	Impact	Appraisal Criteria							Total
			1	2	3	4	5	6	7	
Option A	USP develops CEDTIL with no LGF support	USP College is offering the maximum amount of affordable investment £900,000 to the project. Without LGF this sum would not be enough to remodel existing space or pay for the capital build and equipment costs required. Unfortunately, the nature of the space and technology requirement does not allow for CEDTIL to simply be scaled down. The proposed design is the minimum needed to make CEDTIL viable. DISCOUNTED	3	3	1	1	1	1	1	11
Option B	Locate CEDTIL at USP Seevic with LGF support – Refurbishment	Footprint of existing campus, cost of refurbishment v. new build, operational disruption and programme and budget risks render this option undesirable -DISCOUNTED	1	3	1	1	1	1	1	9
Option C <u>Preferred Option</u>	Locate CEDTIL at USP Seevic with LGF support - New Build (Modular)	Allows for a purpose-designed technology rich Immersive learning& digital technology environment with appropriate scale and facilities. Off-site and modular construction minimise operational disruption and de-risks the build programme and cost model -Preferred	3	3	3	3	3	3	3	21
Option D Base Case/ Do Nothing	No SELEP LGF funding provided. USP Do not invest	Existing facilities cannot meet future market demand. Cannot provide FE provision in line with employer requirements or respond to SELEP strategic skills & employment growth requirements. College becomes increasingly uncompetitive. - DISCOUNTED	3	1	1	0	0	0	0	0
Option E	Find a new site for CEDTIL	Requires substantial capital investment to buy/lease new property, in addition to capital and equipment costs, rendering option undeliverable - DISCOUNTED	0	1	1	0	0	0	0	0
Option F	Locate CEDTIL at USP Palmer's	USP Seevic already has a small immersive learning room. Seevic staff are training in immersive learning technology. Seevic is GFE (16-19 plus adult) provision v. Palmer's with is 6 th Form (16-19) only. As such, safeguarding, curriculum coverage etc mean that CEDTIL would only be feasible at Seevic campus - DISCOUNTED	0	1	1	0	0	0	0	0

3.14. Economic appraisal assumptions:

This scheme has an investment total of less than £2m. As such, a detailed investment appraisal is not required.

3.15. Costs:

The gross scheme costs, inclusive of VAT & Fees is £2.16¹⁹m

- £900,000 of this will be SELEP LGF Grant
- £1.116m will be funded by the College (£900,000 capital and £216,000 revenue).

An elemental cost breakdown, using the ESFA's standard elemental cost breakdown model (and tolerances) was provided as an attachment to the SOBC application.

- The build will provide a Gross Internal Area of 600m².
- The Gross project capital costs (inclusive of VAT & fees) are estimated to be £1.8m.
- This equates to £3,000/m²²⁰.
- The AoC/SFA Standard (2015) Cost model²¹ for major capital projects suggests a cost allowance of £3,537/m²²²
- This project will deliver new FE/HE vocational skills space with a higher than average technical equipment specification at 16% below the average cost allowance set out by the AoC/SFA cost model

3.16. Benefits:

The project has a number of benefits, including significant quantifiable outputs (see table below)

In general terms, the project will provide added benefit in the following ways:

- Provision of a new technology rich teaching & learning environment that will be made available to a number of teaching and training providers (schools, private training providers and other FE/HE providers)
- Provision of the same, made available to a number of strategic stakeholders & partners involved in business support
- Provision of the same, made available to a number of public service delivery partners (Castlepoint council, DWP, NHS etc)
- Provision of the same, made available to members of the local community for training & education taster days
- Provision of the same for use by learners, and community members with Special Educational Needs (SEN) and/or Learners with Learning Difficulties or Disabilities (LLDD)
- Provision of the same, made available to members of the local community for training & education taster days
- Provision of the same, made available to members of the local community for community events & activities (civic amenity)
- Improved civic sense created by investment in Castlepoint
- Reduced transport cost, traffic & environmental impact associated with remote working and videoconferencing technologies

¹⁹ £1.8m Capital Costs plus £216,000 management and monitoring (revenue) costs)

²⁰ This assumes 4.9% inflation with a mid-point of September 2019

²¹ The SFA/AoC Costs Model 2015 is the sector standard for ensuring value for money in capital allowances for FE Capital projects <http://www.building-knowledge.info/wp-content/uploads/2016/11/SFA-AoC-Cost-Models-JULY-2015-v03.16.pdf>

²² Same mid-point and inflation assumption applied to the 2015 cost allowance

- Demonstration of environmental benefits of Zero Carbon building to community and building users
- Associated environmental and energy performance of CEDTIL (Zero net carbon plus BREEAM outstanding)

In addition, the project will also contribute the following benefits:

- Air and environmental quality will be positively impacted due to reduced transport requirements that will result because of the use of CEDTIL for collaborative working, videoconference and remote, simulated training
- Transport will be positively impacted due to reduced transport requirements that will result because of the use of CEDTIL for collaborative working, videoconference and remote, simulated training
- CEDTIL will contribute to Public Service Transformation through the upskilling of Public Sector services providers in the use, application and operation of Digital technologies, Immersive learning and simulated environments in the delivery of services. It will also enable the roll-out of the Digital Strategy and create a new Local Digital Partnership
- CEDTIL will contribute positively to the competitiveness of businesses, particularly start-ups, SME's and accelerated growth businesses across the SE. Businesses that currently don't have access to the digital and collaborative working technologies provided by CEDTIL be able to operate in a global market, using the very latest in collaborative working and simulated environments.
- Energy use and greenhouse gas emissions will be positively impacted due to reduced transport requirements that will result because of the use of CEDTIL for collaborative working, videoconference and remote, simulated training

3.17. Local impact:

- CEDTIL will provide significant benefits to the local economy of Essex and Castlepoint through:
- Significantly increased participation in further and higher levels of education and skills training
- Increasing the local skilled talent pool
- Increasing employment and employment opportunities through new employer relationships, work placements and apprenticeships
- Reduced NEETS
- Increase in local population with functional English & maths and employability skills
- Improved facilities for local SMEs
- Creation of a Local Digital Partnership
- Improved collaborative working between business support agencies
- Improved collaborative working between FE & HE Vocational Skills, Training & Education providers
- Improved collaboration between public services providers
- Improvement in services associated with new digital applications

3.18. Economic appraisal results:

Value for money assessment will be provided in two ways:

- i. GVA Assessment
- ii. Cost per output comparison with Education and Skills projects supported by SELEP to date

GVA Assessment

While a full GVA assessment will be undertaken as part of the five year post project evaluation report²³, a summary of headline economic benefit associated with additional learners and job creation (Apprenticeships) is provided in the table below. This should not be viewed as a statement of anticipated GVA, as it takes no account of displacement, additionality, leakage etc.

Simple Economic impact calculator				
	Per year outputs (Year 5) (a)	Ave annual earnings (lifetime) (b)	Ave years working (Years) (c)	Lifetime impact (a x b x c)
Additional Learners FTE	24	30000	20	£ 14,400,000
New Apprenticeships	45	40000	20	£ 36,000,000
				£ 50,400,000

The table below provides the cost per output and comparison between cost per output of this project and the average cost per output delivered by education & skills projects previously funded by SELEP, which suggests provided significantly higher benefit per £ invested than the SELEP previous skills programme average

SELEP Programme v. CEDTIL Project Costs / Output				
<i>SELEP programme investment total</i>	£ 130,000,000			
<i>CEDTIL</i>	£ 2,016,000			
Averaged Costs per output ²⁴	SELEP programme	SELEP Ave Cost per output	CEDTIL	CEDTIL Cost per output
New Jobs created	7,300	£ 17,808	192	£10,500
Learners supported (assumed FTE)	15,000 ²⁵	£ 8,667	235 ²⁶	£8,578
Cost per m² ²⁷	21,527m ²	£ 6,039	600m ²	£3,000

²³ It is anticipated that the lifetime (20 year) GVA impact of CEDTIL on the regional economy will exceed £50m

²⁴ Output metrics used in this table are key economic outputs provided in table 1.15 and are used by SELEP to report headline impact of previous employment and skills investment in the region <https://www.southeastlep.com/our-delivery/skills/>

²⁵ It is unclear whether this figure is actually FTE and takes account of issues such as displacement, leakage etc.

²⁶ FTE new and additional learners. Actual learners supported (headcount not FTE) will be in excess of 5,000

²⁷ Cost per m² is calculated against capital expenditure (£1.8m only)

4. COMMERCIAL CASE

4.11. Procurement options:

The professional services team has been procured based on prior working relationships and understanding of the requirement and the bespoke technological solution (SchoolHaus) that the College would like to employ to deliver the project. The current project team are contracted to support the College up to award of funding. Upon funding approval the College will procure a traditional Design & Build contract.

The procurement route is likely (due to the relatively small size of the capital scheme) run on a selected/restricted tender basis, with proposals and quotes requested from 5 bidders.

Proposals will be independently evaluated by the College's design Team and the College Corporation will have final approval of the selected contractor. The contractor will be selected based on a number of criteria, including:

1. Price certainty (fixed budget)
2. Programme certainty (fixed programme)
3. Experience in delivering education & skills projects
4. Life-cycle costs (25-year) for building
5. Energy & Carbon performance of the building
6. Experience in delivering pod construction buildings
7. Provision of local employment benefits through apprenticeships and local supply-chain etc.

Based upon the nature of the project it is proposed that the following strategy is pursued:

1. **Procurement Stage 1** - Further Competition – Whilst many frameworks enable a 'direct award' approach, it is proposed that an element of competition is maintained with a Further Competition (based upon a Client Brief / Tender Document) to enable the preferred design and delivery contractor to be selected based upon a combination of Cost and Quality criteria to enable the most economically advantageous provider to be established.
2. **Procurement Stage 2** – Tender Submission - Based upon the contractors developed OSM design upon which Planning Consent has been secured.
3. **JCT Design & Build form of contract** – Utilise a common form of construction contract which has the ability to provide clear contract responsibilities based upon detailed design information and enable risk transfer to the contractor thereby providing cost certainty at the point of contract award.
4. **Timing and Basis of Contract Award** – RIBA Stage 5 technical information including detailed room data sheets will form the basis of the tender information.

A detailed procurement strategy and methodology was provided as an appendix to the SOBC application

4.12. Preferred procurement and contracting strategy:

Design & Build, fixed price contract with early contractor involvement in pre-planning design. As contractor value is below OJEU, USP will seek to use an appropriate framework or limited tender process to ensure best value.

4.13. Procurement experience:

The College has only procured one Capital Scheme in the last 5 years:

- i. £4m for the NCB Studio School & Merger of Seevic and Palmer's College

However, the Senior Management team have procured over £50m of capital projects between them in previous Further Education roles (at other FE Colleges), over that timeframe.

In addition, the College has appointed a professional Project Management Advisor (Fusion) and Pre-design Strategic Project Advisor (Just Ask Scarlett). Both have significant experience (over £300m between them) in procurement and delivery of FE capital projects across the UK. Mark O'Reilly of Just Ask Scarlett has 10 years of public procurement experience and has worked on major national frameworks for public sector capital investment as well as single action contract awards

4.14. Competition issues:

The CEDTIL project concerns the provision of educational infrastructure. The CEDTIL facility will be made available to a number of training providers and strategic stakeholders. Where the facility is used by 3rd parties, an appropriate charging structure will be employed to ensure benefits accruing are compliant with State Aid regulations.

Due to the scale and nature of the proposals, it is not foreseen that there will be any State Aid compliance issues, or related management requirements. Moreover, as the project describes the provision of educational (training) infrastructure, provision of an 'Innovation Cluster', and 'SME service support', it is considered likely that the project would satisfy the requirements of the General Block Exemption Regulation (GBER).

However, at this stage, a formal state aid assessment has not been sought. USP College will instruct a formal state aid opinion, should SELEP require it.

4.15 Human resources issues:

The nature of the CEDTIL project is to optimise the impact of new vocational training pedagogies and digital technologies on the skills base in the SELEP region. As such, the CEDTIL project will have a very significant, positive impact on Human Resources across the South East

With regard to the HR issues created by the delivery and operation of the CEDTIL project, the following provision has been made to ensure CEDTIL is appropriately resourced, in order to deliver projected outputs.

Project Delivery

For the purposes of the delivery of the CEDTIL project, USP College has made the following provision:

- USP College has appointed an internal Project Director (John Revill, Deputy Principal) for the CEDTIL project
- Financial control will be overseen by Steve Hendy (USP Director of Finance)
- USP College has also appointed external Project Management consultancy through Fusion, specialist project management consultancy with extensive experience in the FE Sector

Operational

As described elsewhere in this application, CEDTIL will create c.10 teaching and administrative jobs. Those jobs will be advertised internally and externally to ensure the most appropriate candidates are identified.

The roles are likely to include:

- CEDTIL Manager
- CEDTIL Administrator
- CEDTIL Specialist Teaching Staff

4.16. Risks and mitigation:

USP has developed a costed risk register that looks at all aspects of the project, such as:

- **Funding**

Without SELEP LGF support this project would not go ahead

- **Planning**

The College will need to secure planning permission for the scheme. The scheme design is modular construction and the position of CEDTIL at the heart of the campus, with good parking and access and well away from any campus boundaries. CEDTIL will see the construction of a two-storey pod (permanent) building on the same footprint (within the College's Seevic Campus) as a previous two-storey (temporary) facility, which was granted planning permission by the Planning Authority in 2014. This precedent clearly suggests a significant reduction in planning risk associated with the project. As such, no planning issues are foreseen and a planning strategy in place.

However, should planning not be granted, the project will not go ahead. USP anticipate that allocation of funding is conditional on the award of detailed Planning Permission. While some of the costs associated with progressing the project to full planning consent will be eligible expenditure, and would be claimable by USP at some future date, USP accept that costs are at-risk until planning consent is awarded.

- **Programme**

The modular build design allows for a very fast construction & fit out period (less than 9 months). The programme has inbuilt contingencies and an external, experienced capital project management consultant (Fusion) has been appointed by the College. As such, risks associated with programme (& cost) over-run is considered minimal and will have robust management and mitigation in place (see also governance & management section below)

- **Cost Overrun**

The modular design and technology nature of the project suggest that there is less opportunity for programme & cost overrun. USP has built reasonable contingencies in to both the project programme and the project cost breakdown / budgets. The College has appointed an external, experienced cost control (QS) consultancy (Fusion) to ensure the project is brought in on/under budget. The construction methodology (pod) construction also significantly reduces project risk (cost and programme overrun) as the much of the construction is undertaken offsite, in 'factory conditions'. The College also has knowledge of ground conditions on the proposed site, which significantly reduces the risk of delays or unforeseen costs associated with additional survey or geotechnical preliminaries.

- **Curriculum development & stakeholder consultation**

Key to the impact that CEDTIL will have is the nature, scale, breadth and relevance of the curriculum USP provides. USP has engaged the ESB Sector leads, a number of key employers and other stakeholders to form a nascent *Local Digital Partnership* (LDP), which will inform the USP curriculum team to ensure the offer is relevant, dynamic and challenging and that it meets the needs of employers, learners and the wider community.

- **Marketing & Business Development**

The success of CEDTIL will also be dependent on the effectiveness of the marketing & communication efforts of the College. USP will appoint a marketing manager to the project and develop a marketing strategy, which will be overseen by the College executive and the LDP.

- ***Outreach & partnerships***

USP is committed to forming an inclusive Local Digital Partnership, using the CEDTIL asset and activity as its focal point. The importance of outreach, partnerships and collaborations will be reflected in the CEDTIL marketing & communications strategy and will be overseen by the USP Executive Team and the LDP.

- ***Delivering Benefits***

The project must deliver the benefits laid out in this proposal. USP will appoint a CEDTIL Hub manager who will have responsibility for managing the delivery of the benefits laid out in this proposal, using a clearly defined benefits management approach. KPIs will be reported monthly to the USP executive team and to the LDP Board.

- ***Learning from the project***

CEDTIL represents a unique and innovative development in cutting edge, best practice application of digital technology and immersive learning in pedagogical delivery. As such, there will also be many lessons learned that will be valuable to future developments (CEDTIL & elsewhere) and roll-outs. USP will work with the Immersive Learning Research Network²⁸ (IRLN) at the University of Essex to inform the design of CEDTIL & CEDTILs pedagogies & curriculum and to study impact & outcomes to ensure lessons learners can be captured and shared with the wider teaching & learning community.

A costed risk register is provided as an appendix to this application.

Commercial risk will be managed through contract form, possible a JCT contract approach. The project will be procured fixed cost with contractor penalties for over-runs and snagging requirement.

4.17. Maximising social value:

The project is concerned with the delivery of new technology-rich, immersive learning environments and new pathways to higher levels of employment & education for learners from across the South East.

USP will engage with the UK Social Value Hub to identify the most appropriate opportunities for optimising SROI & develop a case study on optimising social value in FE capital projects.

Social value will be optimised in 3 phases of the project:

- Design & Procurement
- Build
- Operational

²⁸ <https://immersivelrn.org/>

Social Inclusion	<p>Design – Ensuring the CEDTIL building and curriculum is designed to optimise social inclusion. This is particularly focussed on pathways from early stage (functional skills, access and early STEM) levels of skills and attainment to higher levels of vocational skills and education, ensuring opportunities are optimised for all learners</p> <p>Build – Considered design to ensure the CEDTIL building, facilities and access are appropriately inclusive</p> <p>Operational – Ensure the curriculum is accessible to learners from all backgrounds and to ensure the operational team is focussed on optimising social value (i.e. this is a guiding principle of both USP's and CEDTIL's core objectives)</p>
Improvement in Local Services	<p>Design –The CEDTIL curriculum is designed to create significantly improved access to cutting edge learning technologies & pedagogies to significant numbers of local people. This will improve the economic and health outputs across South East but particularly in Bolton and Farnworth.</p> <p>Build – During the build phase, emphasis will be placed upon contractors employing the construction workforce locally, optimising local economic and employment impact</p> <p>Operational – Once operational CEDTIL will provide South East with a significantly improved pool of digitally enabled, more employable people, who will bring benefit to employer organisations across the region.</p>
Apprenticeships	<p>CEDTIL will transform the way that vocational and educational training is delivered across the South East.</p> <p>The CEDTIL curriculum will transition from the current traditional FE qualification and HE (degree) based system to a vocational skills based system based on T-Levels (with work-placement based study programmes), Apprenticeships, higher and degree-level apprenticeships and even postgraduate apprenticeships at L7 in some key curriculum areas. This model will also support the application, by education and training and public services employers, through the use of their Apprenticeship Levy in helping to improve teaching and learning and business support skills using the technology CEDTIL provides</p> <p>CEDTIL will see the creation of over 1,000 new apprenticeships for local people</p>

The core of the project is the development of skills and employment provision. This has, at its heart, the delivery of social capital. USP works extensively with learners from very diverse backgrounds, some of whom come from extremely challenging circumstances. CEDTIL will also work with employers and other partners to optimise the social capital created by the project.

Social Value metrics will also be reported in quarterly progress reports, as well as in Post-Occupancy Evaluation and Post Project Evaluation reports. (See appendix D)

5. FINANCIAL CASE

5.16. Total project value and funding sources:

Total project Value is £2,016,000. Capital cost is £1.8m. Revenue costs associated with Project delivery, monitoring and reporting are £216,000. USP seeks £900,000 of LGF grant support from SELEP. The funding and expenditure profile is provided in tables 5.3 & 5.5. below

5.17. SELEP funding request, including type (LGF, GPF, etc.):

USP requests SELEP LGF contribution of £900,000

5.18. Costs by type:

Cost type	Expenditure Forecast			
	18/19	19/20	20/21	Total
Capital Expenditure (USP/SELEP)				
Capital USP	100,000	700,000	100,000	900,000
Capital SELEP Funding profile		800,000	100,000	900,000
Total Capital Expenditure (A)	100,000	1,500,000	200,000	1,800,000
Total (LGF) funding requirement	0	800,000	100,000	900,000
Non-capital (Revenue) Expenditure (USP only)				
Salaries & other	40,000	40,000	120,000	200,000
QRA	2,000	2,000	4,000	8,000
Monitoring and Evaluation	2,000	2,000	4,000	8,000
Total revenue expenditure -USP only (B)	44,000	44,000	128,000	216,000
Total Project Expenditure – Capital (a) + Revenue (b)	144,000	1,544,000	328,000	2,016,000

A full elemental (capital) cost breakdown was appended to the SOBC application. All capital expenditure is compliant with the College's own capital expenditure procedures and follows CIPFA and UK Government guidance on public sector capital expenditure^{29,30}

5.19. Quantitative risk assessment (QRA):

A Costed Risk Register is provided as an Appendix to this submission. The aggregated adjusted, costed impact is equivalent to the contingency allowances provided for in the CEDTIL elemental cost-plan

²⁹ A supplementary note on capital expenditure (FFE and ICT) was appended to the SOBC application

³⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/225290/Capitalisation_directions_2013-14.pdf

5.20. Funding profile (capital and non-capital):

The nature of the building technology and the extremely rapid (16 weeks) construction programme make the project timeline very flexible. The College could, if required delay the start of the project, or alter the funding drawdown profile to assist SELEP in cash-flowing wider LGF programme commitments

Cost type	Expenditure Forecast			
	18/19	19/20	20/21	Total
Capital Expenditure (USP/SELEP)				
Capital USP	100,000	700,000	100,000	900,000
Capital SELEP Funding profile		800,000	100,000	900,000
Total Capital Expenditure	100,000	1,500,000	200,000	1,800,000
Total (LGF) funding requirement	0	800,000	100,000	900,000
Non-capital (Revenue) Expenditure (USP only)				
Salaries & other	40,000	40,000	120,000	200,000
QRA	2,000	2,000	4,000	8,000
Monitoring and Evaluation	2,000	2,000	4,000	8,000
Total revenue expenditure (USP only)	44,000	44,000	128,000	216,000

A full monthly capital expenditure profile³¹ is appended to this proposal

5.21. Funding commitment:

Co-funding is set-aside in USPs forward management accounts and will be signed-off by the College Corporation, subject to grant award by SELEP. Minutes of this Corporation decision can be provided upon request.

5.22. Risk and constraints:

Quantified risks, constraints and mitigation is provided in the risk register in appendix B

³¹ Elemental (capital) expenditure was provided at SOBC. A revised monthly (capital) expenditure profile is provided as an appendix to this application (in line with revised programme) Revenue costs have been estimated for management and monitoring of the project delivery, management of benefits and outputs and post project revenue and out-turn reporting.

6. MANAGEMENT CASE

6.16. Governance:

USP Have appointed Dan Pearson (CEO) as Senior Responsible Officer for the project. Under the College's own Regulations, the College must have ownership and control of project Governance.

As such, the College Corporation will appoint a Project Board, who will be granted delegated responsibility for the day-to-day delivery of the project and ongoing management of outputs and benefits, for the life time of the project.

The Project Board will be Chaired by a member of the College Corporation and will include:

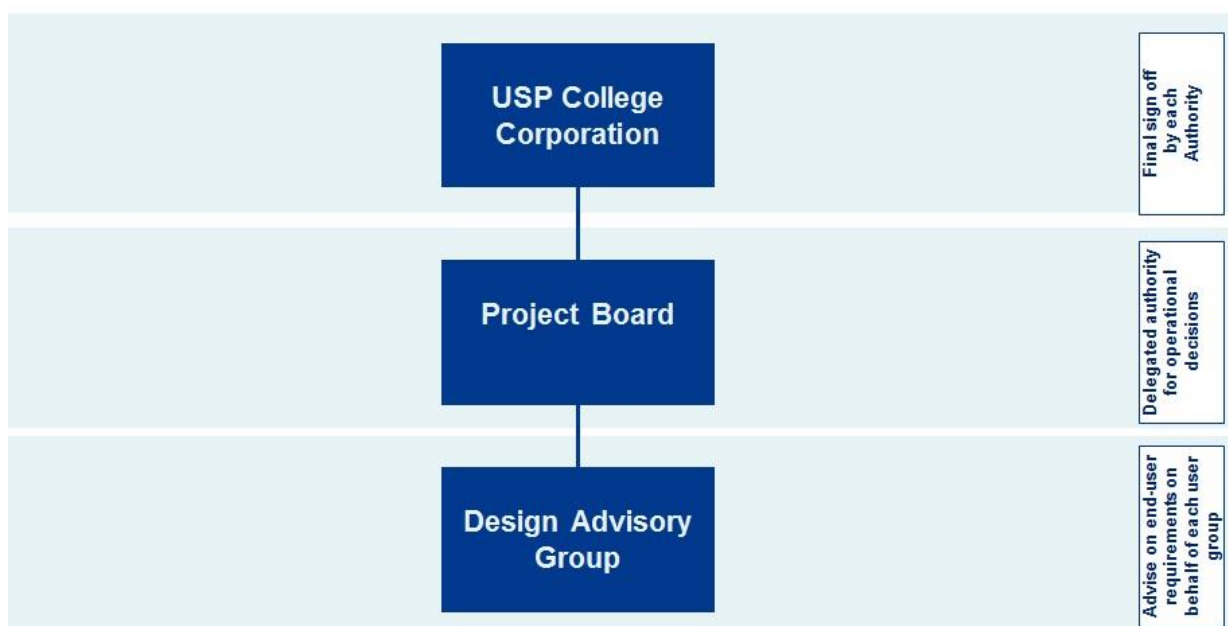
- College Principal and CEO
- Vice Principal: Partnerships, Funding & Business Planning
- Chief Operating Officer
- Professional Services Advisors

The Project Board will meet once a month and will invite key stakeholders, advisers, contractors or others, to input or observe, as appropriate.

The College will also establish a Project Advisory Group, which is likely to form the quorum of the Local Digital Partnership. This Group, made up of employers, learners, local stakeholders and digital learning experts, will provide advice and input in end-user design and operational requirements, which will be fed back to the Project Board for consideration/adoption into the project programme/brief. The Project Board may elect to report project progress and any performance metrics to the Project Advisory Group, as appropriate.

The Project Advisory Group has not governance authority over the project but will act simply in a consultative and advisory role.

The table below sets-out these Governance arrangements:



6.17. Approvals and escalation procedures:

The Costed Risk Register (provided as an appendix to this submission will be reviewed by the Project Board on a monthly basis. Risks that are coded Amber will be considered and appropriate management action assigned. Risks that are coded Red will be discussed in detail and appropriate management action assigned.

The Risk Register will be managed day-to-day by the College's appointed Employer's Agent in liaison with the appointed external Project Manager and the College's Internal Project Director.

Where risks are coded amber or red, they will be captured on a bi-weekly management report that will be considered by the College's Senior Management Team as a formal item at SMT meetings. Any appropriate changes or escalation or risk management on issues captured in the SMT report will be formally minuted and the Risk Register will be updated accordingly.

The College's Employer's Agent and Project Manager will receive written confirmation of any agreed escalation and/or changes, captured in the Risk Register.

The College will report progress, including key risks, to the College Board of Governors as a regular agenda item, for the duration of the CEDTIL project, to ensure a final layer of oversight.

6.18. Contract management:

It is anticipated that the contract will be managed through a JCP fixed price contract award.

Contractors will be overseen by the Project Director (John Revill, USP Deputy Principal) in association with Steve Hendy (USP Director of Finance). Day-to-day contractor management will also be managed by the College's appointed external Project Management, Fusion.

USP will agree change control procedure, as part of the contract T&C's, with contractors. Any changes to programme and/or specification will be managed by the College's appointed Employer's Agent and Project Manager (Fusion).

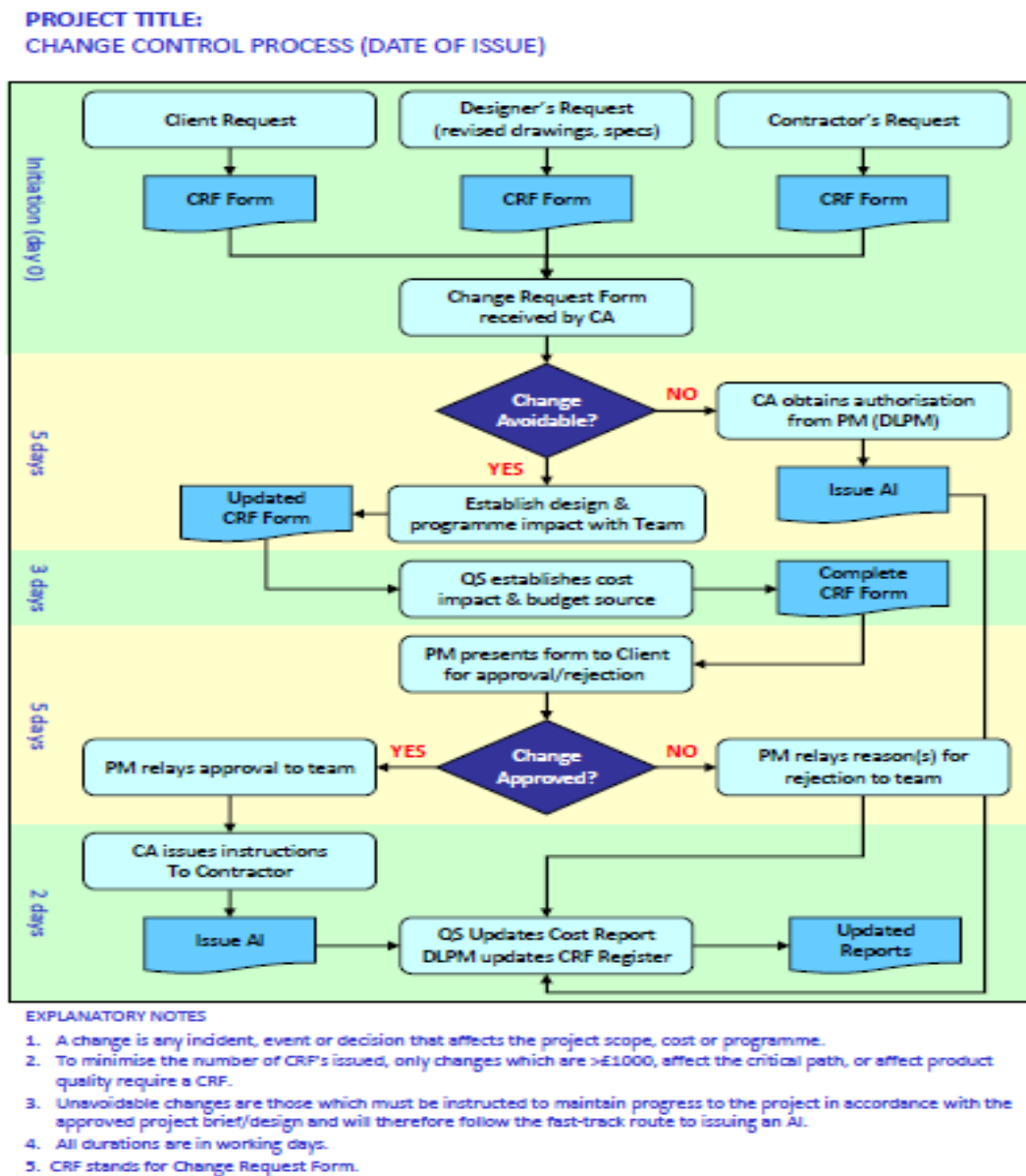
Formal change control procedures will be implemented from the outset of the project, following (RIBA) Stage-2 sign-off by all the key stakeholders. There are four key stages to effective change control:

1. Identification – change is monitored against a baseline, normally the last RIBA Stage approval. A change is anything which affects cost, time, quality, health & safety, environment or risk profile compared to the baseline, and can be positive change as well as negative. Verbal instructions and design development are two areas of common change which often fail to get captured, but with good discipline from the design team and cost consultant, should be captured.
2. Impact Assessment – the impact assessment requires a holistic assessment of the cost, time, quality, health & safety, environmental or risk impact of the change by the widest practical team, but as a minimum by the project team. For example, it may only be by consulting with a technical end-user that a small change to the corridor layout is identified as preventing access for specialist medical equipment in the future.



3. Approval – approval must be formally given (normally in writing on a change control form) by one or more stakeholders with authority to approve such changes. These approvers must also recognise that certain changes will require consultation with other stakeholders before considered and binding approval can be given.
4. Implementation – once a change has been documented as approved, it is important that the revised information or contract documents fully and clearly capture the extent of the change. For example, additional electrical services for new equipment may necessitate a larger distribution board in another part of the building.

The diagram below details a typical change control procedure, that USP's appointed Employer's Agent will employ:



6.19. Key stakeholders:

The table below identifies key stakeholders, describes their relevance to, or interest in, the CEDTIL project and describes activity undertaken and/or planned:

Stakeholder Group	Relevance to the project	Description of consultation undertaken	Description of consultation planned	Due date
Castle Point Council	Developing CPD opportunities and upskilling of local workforce	Initial discussion at Castel Point Regeneration committee	To consult at the next Castle Point Business meeting	Sep 2019
Essex Skills Board - Logistics	Use of Digital technology	Scoping meeting and initial consultation	Virtual Reality equipment already procured through SELEP can be repackaged and disseminated through the immersive room technology	Sep 2019
Essex Skills Board - Engineering	Use of Digital Technology	Currently working on projects to increase the number of women in engineering,	Opportunities to develop the use of immersive learning technologies	Sep 2019
SELEP	Meeting the SELEP Priorities	Initial discussions with SELEP	Presentation to the board	TBC
Careers College	Specifically set up to optimise job creation and work with employers	Ongoing dialogue and partnership	Optimising employer dialogues	Ongoing
Docklands Academy	Delivery of Business and finance Courses through the use of Digital Technology	The College are currently in talks to install an immersive room at the Docklands Academy	Next step is installation of the Immersive room at Docklands	Sep 2019
The Skills Network	Tutor lead blended learning for CPD activities within the workforce	Agreed in principle	Ensuring use of desktop Digital immersion will meet the needs of the CPD within the workplace	Sep 2019
Essex Provider Network (EPN)	Use of Digital Technology to support Apprenticeship and CPD opportunities for Private Training Providers and Colleges	Initial discussions with EPN	Presentation at the next EPN networking event to engage with over 40 Private Training Providers. Working with the Providers to help meet their training and delivery needs	Sep 2019
Seymore House	Use of Digital Technologies to support CPD Developments and Apprenticeships within the nursery sector	Initial discussions	Consultation how this can be used to deliver 20% off the job training.	Sep 2019
Huawei	Digital and Computing Technologies	College has already been successful in becoming a Huawei Academy	Development of core programmes for Cyber Security and systems maintenance	Ongoing
AAT	Use of Digital technology to support the remote delivery and 20% of the job training	Initial discussions already had, significant interest from AAT	Develop a proof of concept and working model for delivery	Ongoing
Federation of Essex	Use of Digital technologies to support niche courses	Initial discussions have taken place	Detailed curriculum scheduling and planning is being developed	Ongoing

Colleges (FEDEC)	or courses with difficult to find tutors		to ensure financially viable and coherent delivery model	
<ul style="list-style-type: none"> • Anglia Ruskin University • Writtle University College • University of Hertfordshire 	All of our HEI delivery partners have expertise on delivery through the use of Digital Technology and this would be expanded through the CEDTIL	Initial discussions and opportunities explored	Further consultation of how this can develop into the CPD for all students	Ongoing
<ul style="list-style-type: none"> • Luton Sixth Form College; • South Essex College • The King John School • The Deanes Academy • The Challenger Multi Academy Trust 	To support the pooling of expert resources to ensure a cost effective, viable curriculum, which meets the skills requirements of the local economy	Initial contact made do discuss the vision of sharing resources through the use the digital technology rooms. Initial Business proposal is currently being constructed.	Detailed curriculum scheduling and planning is being developed to ensure financially viable and coherent delivery model	Sep 2019
Ajenta	Technology Partner – supplier and installer	Detailed discussions, demonstrations and detailed cost plan already produced	The College has worked extensively with Ajenta to develop a cost-effective solution to meet the needs of the project	Sep 2019
Railscape	Employer – looking at developing CPD for disparate workforce	Initial Discussions		Ongoing
Diverse Interactive	VR Development organisation	Initial discussions regarding development of interactive resources for employers		Ongoing
Immersive Learning Research Network (ILRN)	Based at UoE. Global network of academics and researchers concerned with Immersive Learning technology, environments, applications and impact/outcome	Initial Contact made	USP has already made contact with ILRN. A meeting is planned to agree their input and potential for use of CEDTIL as a case study in impact of II, VR, AR etc on FE and business outcomes. Will be invited to join Design Advisory Group and to advise project board on design and monitoring of outputs/benefits	Sep 2019

6.20. Equality Impact:

An equality impact Assessment will be undertaken and submitted as part of the final stage assessment. The methodology used will follow the structure set out in the table below:

<p>Equality & Diversity</p>	<p>CEDTIL will deliver SELEP equality, fairness & inclusivity objectives: Building designs based on appropriate SPG, and utilise BS8300-1:2018 & BS8300-2:201 to ensure:</p> <ul style="list-style-type: none"> - More accessible FE, HE & vocational skills provision to people of all ages & backgrounds - A completely revised curriculum, that meets needs of the community, employers & aligned with SELEP priorities - Significantly improved routes to employment via increases in work placements & apprenticeship provision - Extended operating hours, including evening, weekend & summer provision (40hr to a 48hr week) to make learning & acquisition of functional, employability & vocational skills (& employment) far more accessible to members of the community - New civic & amenity space - A new focal point for the community & a new public asset that drives aspiration, increases sense of place & engenders pride in the local community - Additional facilities accessible by community groups & local residents (business incubator space, video-conferencing, event, and collaborative working space etc) - A lifelong learning curriculum - learners of all ages & backgrounds supported with teaching & learning, life & employment skills needed to reach their full potential - Building on USPs best-practice in social integration for students with a very diverse set of age, cultural, ethnic & ability profiles - Strong focus on equality, diversity & inclusion - actively recruiting learners in subject areas where learner/employer representation is not reflective of the population of the South East <p>Design & Procurement – Design of the curriculum, access, pathways and learner recruitment to ensure equality and diversity Procurement has equality requirements for contractors and service providers.</p> <p>Build – Identify opportunities for new employment with contractors and services providers that optimise equality & diversity</p> <p>Operational – CEDTIL working proactively to recruit new learners and employers from disadvantaged backgrounds and to improve progression to Higher levels of academic and vocational attainment through proactive promotion of STEM to young learners, through USPs existing STEM pathways</p> <p>Note: CEDTIL will use USPs ‘Single Equality’ programme as a reference for project design, procurement build and operational phases, as well as curriculum design (e.g. access for disadvantaged students, hard to reach communities etc.)</p>
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6.21. Risk management strategy:

USP has developed a detailed risk register, setting out identified risks and appropriate mitigation and management. This risk register is appended to this application.

The College will appoint a Project Board, which will meet monthly to review progress with the Project Director (John Revill, Vice-Principal) and professional service providers. Part of that monthly meeting will be a review of project risk (register).

Any changes to Project Risk and any changes to management strategy or overall risk profile will be captured in the Project Register. An updated project register will form part of USPs quarterly progress report, which will be submitted to SELEP with each quarterly claim.

Should any risk associated with the CEDTIL project escalate to the extent that it could be reasonable foreseen as prejudicial to the outputs agreed in the Funding Agreement, USP will inform SELEP project officers with immediate effect.

6.22. Work programme:

A revised CEDTIL work programme and key milestones are appended to this application³².

Headline milestones are:

Key Milestones	Description	Indicative Date
SELEP Funding confirmed	Anticipated Funding Approval	Oct 2019
Project Commencement	Mobilisation of project delivery team, procurement of external advisors & contractors etc.	Oct 2019
Design Development & Submission of Planning Application	Programme period based upon utilisation of School Haus – Net Zero Building solution ³³ , which allows for rapid delivery and deployment of capital works & outstanding energy & sustainability performance	Dec 2019
Secure Planning Consent	Detailed Planning Approval from Castlepoint Borough Council	Mar 2020
Place order for new buildings	Procurement of Design & Build Contract	Mar 2020
Mobilisation Period	Completion of site works mobilisation	May 2020
Construction period	16 weeks, including localised ground works, building installations, service connections.	Aug 2020
Final Fit out	6 weeks Specialist IT fit out, final user training and occupation	Sep 2020
Project Completion		Sep 2020

³² Due to changes to assumptions made at SOBC with regard to date of funding allocation and mobilisation, a revised Project Programme is appended to this application.

³³ Project programme and delivery assumptions are based on utilisation of a 'pod' (off-site) construction method. USP have used the proprietary SchoolHaus system as a reference but the final construction methodology and contractor will be subject to formal procurement (see Section 4)

6.23. Previous project experience:

Name	Role	Previous project Experience
Dan Pearson	Principal and CEO	Capital Build at Redbridge (circa £8,000,000)
John Revill	Vice Principal Partnerships, Funding and Business Planning	Experience of significant capital builds within Seevic College; (circa £4,000,000) NCB Studio School Merger of Seevic and Palmer's College
Steve Hendy	Chief Operating Officer	Capital Build at Redbridge (circa £8,000,000) Land sale Redbridge (circa £8,000,000) Merger at Redbridge and Seevic College
Stuart Markham	Project Manager	Stuart has worked in the FE Sector for the last 18 years delivering strategic and construction project management service to over 50 Colleges and delivering schemes ranging in value up to £100M
Mark O'Reilly	Strategic Development Adviser – Mark will help consult stakeholders, design curriculum and	Mark is the author of RBIA/AoC best practice of delivery of FE Capital projects, stakeholder engagement and employer engagement and has worked on over £400m of publicly funded capital projects, over £200m in the FE sector
Murray Higgs	Head of Facilities and Estates USP College	32 years within the industry, with significant experience in capita builds and project management (circa £500,000 to £8,000,000).

6.24. Monitoring and evaluation:

A Monitoring Evaluation Plan, and a final baseline report template are provided as appendices to this application

USP will submit a quarterly Project Monitoring Report to the S.151 Officer of the Accountable Body (Essex County Council) and any appointed SELEP Project officer, or other required stakeholders. USP anticipate that this commitment will form part of the contractual obligations of any funding agreement.

A Project Board will be established to oversee project progress and provide quarterly Project Monitoring Reports

The Project Monitoring Report will include (but is not limited to):

Inputs

- Project & Curriculum Design
- Design development & Planning
- Stakeholder Consultation & Engagement
- Procurement & Contractor Appointments
- Construction Phase
- Operational Phase and Delivery of Outputs and Benefits

Outputs (delivering the scheme/project)

- USP will create a Project Board to oversee delivery of the project, both in the construction and delivery phase.
- USP will appoint a Project Director to manage day-to-day delivery of the project ensuring outputs and benefits are delivered
- The Project Director will report output and benefit delivery performance as part of a monthly Project Monitoring Report that will be presented to the Project Board

Outcomes (monitoring)

- USP will collate KPIs against an agreed matrix of performance metrics (see Appendix D)
- USP anticipate that these outputs (and associated and agreed KPIs) will form a part of any Funding Agreement with SELEP
- Progress against each KPI will be collated and reported as part of each quarterly Project Monitoring Report
- USP will keep auditable records of data evidencing progress against each agreed output (KPI)
- The Project Board will monitor the profile/run-rate of each agreed output to ensure outputs are delivered by the project
- In the event that an output or outcome, which forms part of any funding agreement) is unlikely to be delivered, this will be reported to the SELEP Project Officer immediately and will be detailed within the Monthly Progress Report

Impacts (evaluation)

- USP will conduct a Post Occupancy Evaluation (POE) within 12 months of opening of CEDTIL
- A copy of the POE report will be forwarded to both the S.151 of the Accountable Body and to the appointed SELEP Project Officer

- USP will conduct a Project Evaluation with 5 years of the opening of CEDTIL which will review the final out-turned outputs and outcomes delivered by the project³⁴.
- A list of anticipated metrics, which will be used to monitor delivery of benefits and reporting of outputs and outcomes is provided in the Monitoring and Evaluation Plan, and Baseline Reporting Template, which are appended to this application

6.25. Benefits realisation plan:

USP will establish a Project Board to oversee project progress, to agree any required resource input to ensure outputs are delivered and to provide strategic support in optimising the benefit of the project (via partnership working with external stakeholders etc.)

USP will appoint a Project Director to oversee day-to-day delivery of benefits and outputs and each stage of the project. The Project Director will report Project Progress (using agreed KPIs) to the Project Board

The Project Director will collate data to monitor progress in delivering benefits and any agreed outputs (KPIs). The information will form the basis of a monthly progress report to the Project Board. Any revision of allocation of resources and/or focus will be agreed at that monthly Project Board, in order to ensure optimal delivery of benefits and outputs.

This information will be summarised to form the basis of the quarterly Project Monitoring Reports that will be submitted, by the Project Board to the S.151 Officer of the Accountable Authority and the appointed SELEP Project Officer.

³⁴ This will include a full GVA impact assessment report

7. DECLARATIONS

<i>Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?</i>	No
<i>Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors</i>	No
<i>Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?</i>	No


I am content for information supplied here to be stored electronically, shared with the South East Local Enterprise Partnerships Independent Technical Evaluator, Steer Davies Gleave, and other public sector bodies who may be involved in considering the business case.

I understand that a copy of the main Business Case document will be made available on the South East Local Enterprise Partnership website one month in advance of the funding decision by SELEP Accountability Board. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption, as stated in Appendix E.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix E) they should provide a separate version of the main Business Case document to SELEP 6 weeks in advance of the SELEP Accountability Board meeting at which the funding decision is being taken, which highlights the proposed Business Case redactions.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend of Local Growth Fund must be compliant with the Grant Conditions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Signature of applicant	
Print full name	Dan Pearson
Designation	USP College Principal and CEO
Date	21/06/19

8. APPENDIX A - FUNDING COMMITMENT

Draft S151 Officer Letter to support Business Case submission

Dear Colleague

In submitting this project Business Case, I confirm on behalf of [Insert name of County or Unitary Authority] that:

- The information presented in this Business Case is accurate and correct as at the time of writing.*
- The funding has been identified to deliver the project and project benefits, as specified within the Business Case. Where sufficient funding has not been identified to deliver the project, this risk has been identified within the Business Case and brought to the attention of the SELEP Secretariat through the SELEP quarterly reporting process.*
- The risk assessment included in the project Business Case identifies all substantial project risks known at the time of Business Case submission.*
- The delivery body has considered the public-sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision-making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.*
- The delivery body has access to the skills, expertise and resource to support the delivery of the project*
- Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting*
- The project will be delivered under the conditions in the signed LGF Service Level Agreement with the SELEP Accountable Body.*

I note that the Business Case will be made available on the SELEP website one month in advance of the funding decision being taken, subject to the removal of those parts of the Business Case which are commercially sensitive and confidential as agreed with the SELEP Accountable Body.

Yours Sincerely,

SRO (Director Level)

S151 Officer

9. APPENDIX B – RISK MANAGEMENT STRATEGY

A full risk register is provided in the supporting information submitted with this application

10. APPENDIX C – GANTT CHART

A full Project Management Plan (Gantt Chart) is provided in the supporting information submitted with this application

Tasks	Start date	Finish date	2019					2020								
			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Ap	May	Jun	Jul	Aug	Sep
Funding Agreement	Sep 2019															
Design Development	Mar 19	Dec 2019														
Planning Application		Dec 2019														
Planning secured	Mar 2020															
Procure build solution	Aug 2019	May 2020														
Mobilisation	Sep 2019	May 2020														
Start on Site	Oct 2019															
Building Construction	May 2020	Sep 2020														
Fit out & installation	Aug 2020	Sep 2020														
Practical Completion	Sep 2020															
CEDTIL opens	Sep 2020															

11. APPENDIX D – MONITORING AND EVALUATIONS METRICS

Category	Key Performance Indicators	Description
High-level outcomes	Jobs created (permanent, paid FTE) – CEDTIL staff	<p><i>All Metrics will be reported in quarterly Project Monitoring Report.</i></p> <p><i>A further project report (Post Occupation Evaluation) will be undertaken 12 months after practical completion of the CEDTIL build programme.</i></p> <p><i>A final out-turn report (Post Project Evaluation) will be undertaken on the 5th anniversary of the Post Occupancy Evaluation</i></p>
	Anticipated Jobs created (apprenticeships)	
	Actual Jobs created (apprenticeships)	
	Educational floors pace planned – 600m ²	
	Educational floors pace constructed to date	
Business, Support & partner provision	Anticipated number of enterprises receiving non-financial support	
	Actual number of enterprises receiving non-financial support	
	Anticipated number of new enterprises supported	
	Actual number of new enterprises supported	
	Anticipated number of potential entrepreneurs assisted to be enterprise ready	
	Actual number of potential entrepreneurs assisted to be enterprise ready	
	Anticipated number of partner intermediaries using CEDTIL to provide business support	
	Actual number of partner intermediaries using CEDTIL to provide business support	
	Anticipated number of partners using CEDTIL to deliver training	
	Actual number of partners using CEDTIL to deliver training	
Learner Outcomes	Anticipated total learners supported (Total)	
	Actual number of learners supported (Total)	
	Anticipated number of new learners supported (FTE)	
	Actual number of new learners supported (FTE)	
	Anticipated number of New Apprenticeships	
	Actual number of New Apprenticeships	
	Anticipated SEND/LLDD learners supported	
	Actual SEND/LLDD learners supported	

12. APPENDIX E – ECONOMIC APPRAISAL ASSUMPTIONS

BCR is not required as project is below £2m

13. APPENDIX F - CATEGORIES OF EXEMPT INFORMATION

There is a clear public interest in publishing information and being open and transparent. But sometimes there is information which we can't publish because it would cause significant harm to the Council - for example by damaging a commercial deal or harming our position in a court case. Equally sometimes publishing information can harm someone who receives a service from us or one of our partners.

The law recognises this and allows us to place information in a confidential appendix if:

*(a) it falls within any of paragraphs 1 to 7 below; and
(b) in all the circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information.*

- 1. Information relating to any individual.*
- 2. Information which is likely to reveal the identity of an individual.*
- 3. Information relating to the financial or business affairs of any particular person (including the authority holding that information)*
- 4. Information relating to any consultations or negotiations, or contemplated consultations or negotiations, in connection with any labour relations matter arising between the authority or a Minister of the Crown and employees of, or office holders under, the authority.*
- 5. Information in respect of which a claim to legal professional privilege could be maintained in legal proceedings.*
- 6. Information which reveals that the authority proposes— (a) to give under any enactment a notice under or by virtue of which requirements are imposed on a person; or (b) to make an order or direction under any enactment.*
- 7. Information relating to any action taken or to be taken in connection with the prevention, investigation or prosecution of crime.*