Appendix A7: Full options approach framework

Summary of Options

Option A – Do minimum, Rely on existing activity/sites.

This option describes no expansion of the existing ecosystem but a small investment into the existing infrastructure on order to reconfigure space to maximise efficiency of existing facilities.

Option B – Dispersed Growth, Investment fund for disparate activities

This option describes the creation of an investment fund to invest in individual opportunities across the region on a competitive basis as they emerge in a portfolio of disparate activities/facilities.

Option C – Intermediate I

This option describes limited investment across 2 sites (Singleton and Morriston) to begin an incremental increase in capacity and capabilities at both development sites in line with the expectations of the SBCR.

Option D – Intermediate II

This option describes a larger investment across 2 sites (Singleton and Morriston) to establish increased capacity in response to need demand and establish at Singleton and establish a footprint at Morriston to support regionalisation and further incremental development.

Option E - Intermediate III

This option describes the creation of a fund as described in **Option B** to invest in small regional opportunities across the region in addition to the expansion of ILS at Singleton and the development of an ILS at Morriston as described in **Option D**.

Option F – Do Maximum

This option describes major investment across 3 sites (Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.

(Note that a workshop to appraise the shortlisted options was held on 03 July 2020. Notes from this workshop are attached as Appendix A7b)

Options

	A - Do Minimum	B – Dispersed Growth	C - Intermediate I	D - Intermediate II	E - Intermediate III	F - Do Maximum
	Rely on existing activity/sites	Investment fund for disparate activities	Incremental increase(s) of existing Ecosystem (ILS1/2) across two sites	Mixed – Dual Site combination: Incremental Development and Focused major development	Mixed – Dual Site Development and fund for disparate activities	Full ARCH Prospectus Expand existing and establish new Campuses
Description	This option describes no expansion of the existing ecosystem small investment into the reconfiguration of existing infrastructure to maximise efficiency of existing facilities.	This option describes the creation of an investment fund to invest in individual opportunities across the region on a competitive basis as they emerge in a portfolio of disparate activities/facilities.	This option describes limited investment across 2 sites (Singleton and Morriston) to begin an incremental increase in capacity and capabilities at both development sites in line with the expectations of the SBCR.	This option describes a larger investment across 2 sites (Singleton and Morriston) to establish increased capacity in response to need demand and establish at Singleton and establish a footprint at Morriston to support regionalisation and further incremental development.	This option describes the creation of a fund with the same intention as Option B to invest in small regional opportunities across the region in addition to the expansion of ILS at Singleton and the development of an ILS at Morriston as described in Option D .	This option describes major investment across 3 sites (Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.
Scope	Utilise current ILS facilities to support growth of existing, and capture of new, opportunities. Capital investment limited to enhancing efficiency of existing facilities. ~500s.m. of mixed facilities^	Develop specialist capabilities / capacities in locations across SBCR with public and private sector in response to emerging opportunities. This would be market-led opportunities developing a portfolio of projects giving Open Access capabilities	Increase capacity/capability of existing ILS through development of new facilities across 2 sites (i.e. Sketty Lane/ Singleton and at Morriston in response to need demand. ~4,500s.m. of mixed facilities (3,000m² at Singleton and 1500m² at Morriston)	Establish significant capacity/capability of existing ILS through development of new facilities in response to need demand, along with initial development at a further site to support regionalisation. ~10,000sqm of mixed facilities over the period to 2032 (2,000sqm at Singleton, 7,700sqm (2 phases) at Morrison)	Providing a combination of B&D approaches with realisation of ARCH Campuses scope; I.e. ILS-scale facilities at two locations and further smaller developments across the region. ~12,000s.m. + 1,000s.m +2000m² of mixed facilities	Expand existing ILS site and establish full ARCH Morriston and Hywel Dda Campus infrastructures. This would realise the original 2014 ARCH ambition across both UHB regions. ~24-30,000s.m. of mixed facilities
Service Solution	Promotion and reconfiguration of existing SU capabilities to maximise capacity of current operations.	Development of facilities across the region through open competition amongst existing ecosystem	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Combination of Implementation Approaches B&D	New-build of major facilities at Singleton, Morriston and Hywel Dda sites.
Service Delivery	Swansea University and partners (inc. Life Sciences Hub Wales)	Diverse (Procured) Ecosystem – portfolio procured/ partnered on individual opportunity basis	Utilisation of existing organisation Frameworks	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership
Implementation	Immediate start as 3/5-year project	3-year project – Competition / procurement of portfolio of investments	5-year project	Phased 3, 5-year project	Phased 5, 8-year project	Immediate start ~7yr project
Funding	~£5m City Deal funding	~£15m City Deal Funding with potential to leverage an additional £15m of public/private investment. Total: ~£30m	~£15m City Deal Funding with the potential to leverage an additional £65m of public/private investment Total: ~£80m	£15m City Deal funding with the potential to leverage an additional £115m public/private capital investment Total: ~£130m	£15m City Deal funding with the potential to leverage an additional £125m public/private investment	£15m City Deal funding with the potential to leverage an additional £200m public/private investment Total: ~£215m
	Total: ~£5m					

[^] Balance of facility provision reflects Need/Demand section: See also Report - Life Sciences & Health in south west Wales

Spending Objectives and Critical Success Factors

	A - Do Minimum	B – Dispersed Growth	C- Intermediate I	D - Intermediate II	E - Intermediate III	F - Do Maximum
	Rely on existing activity/sites	Investment fund for disparate activities	Incremental Modest increase(s) of existing Ecosystem (ILS1/2) across two sites	Mixed – Dual Site Incremental Development and Focused major development	Mixed – Dual Site Development and fund for disparate activities	Full ARCH Prospectus Expand existing and establish new Campuses
Description	This option describes no expansion of the existing ecosystem small investment into the reconfiguration of existing infrastructure to maximise efficiency of existing facilities.	This option describes the creation of an investment fund to invest in individual opportunities across the region on a competitive basis as they emerge in a portfolio of disparate activities/facilities.	1 .	This option describes a larger investment across 2 sites (Singleton and Morriston) to establish increased capacity in response to need demand and establish at	regional opportunities across the	This option describes major investment across 3 sites (Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.
Spending Objectives	:			X///		
New regional employment	Limited additionality	Market-led, potential for distributed if limited growth	Only delivers capacity for existing demand	Aligns with identified market- need/opportunity	Aligns with identified market- need/opportunity	Would maximise capacity to support employment growth
High GVA Sector growth	Limited additionality	Lacks potential agglomeration and other benefits	Limited capacity to support significant growth long-term	Aligns with identified market- need/opportunity	Aligns with identified market- need/opportunity	Would maximise capacity to support activity growth
Regionalisation	Limited beyond existing ecosystem engagement	Wide, though potentially low impact	Limited beyond existing ecosystem engagement	Expands beyond initial ILS to deliver regional activity	Expands beyond initial ILS to deliver regional activity	Greatest ensured regional footprint
Network/ Ecosystem	Limited additionality, though with robust/extensive existing ecosystem	Potential to engage broadly across ecosystem, though challenge for linkages	Effective platform for collaboration/orchestration with Open Access approach	Effective platform for collaboration/orchestration with Open Access approach	Potential to engage broadly across ecosystem and create systematic linkages	Effective platform for collaboration/orchestration with Open Access approach
Expanded Commercialisation	Limited potential to expand commercialisation activity	Market-led though without systematic sector approach	Modest potential to expand commercialisation activity	Strong alignment with ACCELERATE/AgorIP potential	Strong alignment with ACCELERATE/AgorIP potential	Strong alignment with ACCELERATE/AgorIP potential
Critical Success Factor	s					
Strategic Fit	Limited contribution to ambitions	Weak – due to lack of systematic approach (except variant)	Limited delivery against policy and market drivers	Delivers against policy and market drivers	Delivers against policy and market drivers	Delivers against policy and market drivers
Business Needs	Minimal impact upon needs	Market-led approach gives potential for alignment	Supports only existing requirements	Aligns broadly with identified requirements	Aligns broadly with identified requirements	Potential to be overly in advance of market needs
ARCH Integration	Cornerstone of existing ARCH RE&I programme	Aligns with ACCELERATE / AgorIP elements only	Cornerstone of existing ARCH RE&I programme	Works towards realising ARCH programme ambitions	Works towards realising ARCH programme ambitions	Fulfils ARCH ambitions
Internet Coast Integration	Existing integration, though delivers limited additionality	Initially weak – though with potential for development	Aligns with infrastructure/skills growth sectors approach	Aligns with infrastructure/skills growth sectors approach	Aligns with infrastructure/skills growth sectors approach	Aligns with infrastructure/skills growth sectors approach
Potential Value for Money	Diminishing returns on existing at capacity infrastructure	Relatively unknown/untested	Good value, though without performance step-change	Co-investment opportunity to optimise value and scale	Core robust, though with unknown element	Potential to be overly in advance of market needs
Potential Achievability	Viable	Procurement / management complexities / risks	Proven model – based upon ILS Phases 1 & 2	Proven model – both operationa and commercial	Procurement / management complexities / risks	Availability of sites and wider programme challenges
Supply-side Capacity	Viable	Relatively unknown/untested	Proven model – based uponILS Phases 1 & 2	Co-investment model proven in similar context	Relatively unknown/untested	Availability of sites and wider programme challenges
Potential Affordability	Challenge to sustainably develop revenue, though relatively limited requirement	Relatively unknown/untested, though commitment only with market response	Public partnership potential to realise development	Requires market testing to provide confidence for co-investment opportunity	Dispersed investment(s) nature may lack mass to develop private sector interest	Level of co-investment may be challenging spread across three locations

Preferred Approach

	A - Do Minimum	B – Dispersed Growth	C - Intermediate I	D - Intermediate II	E - Intermediate III	F - Do Maximum
	Rely on existing activity/sites	Investment fund for disparate activities	Incremental increase(s) of existing Ecosystem (ILS1/2) across two sites	Mixed – Dual Site combination: Incremental Development and Focused major development	Mixed – Dual Site Development and fund for disparate activities	Full ARCH Prospectus Expand existing and establish new Campuses
Description	infrastructure to maximise efficiency of existing facilities.	opportunities across the region on a competitive basis as they	This option describes limited investment across 2 sites (Singleton and Morriston) to begin an incremental increase in capacity and capabilities at both development sites in line with the expectations of the SBCR.	response to need demand and establish at Singleton and	This option describes the creation of a fund with the same intention Option B to invest in small regional opportunities across the region in addition to the expansion of ILS at Singleton and the development of an ILS at Morriston as described in Option D .	(Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.
Scope	capture of new, opportunities. Capital investment limited to enhancing efficiency of existing facilities. ~500s.m. of mixed facilities^	SBCR with public and private	Increase capacity/capability of existing ILS1/2 through development of new facilities across 2 sites (i.e. ILS3 at Singleton and ILS at Morristonin response to need demand. ~4,500s.m. of mixed facilities (3,000m² at Singleton and 1500m² at Morriston)	Establish significant capacity/capability of existing ILS through development of new facilities in response to need demand, along with initial development at a further site to support regionalisation. ~10,000sqm of mixed facilities over the period to 2032 (2,000sqm at Singleton, 7,700sqm (2 phases) at Morrison)	Providing a combination of B&D approaches with realisation of ARCH Campuses scope; I.e. ILS-scale facilities at two locations and further smaller developments across the region. ~12,000 + 1,000s.m. of mixed facilities^ over the period to 2032	Expand existing ILS site and establish full ARCH Morriston and Hywel Dda Campus infrastructures. This would realise the original 2014 ARCH ambition across both UHB regions. ~24,000-30,000.m. of mixed facilities^
Service Solution	of existing SU capabilities to maximise capacity of current	the region through open	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Combination of Implementation Approaches B&D	New-build of major facilities at Singleton, Morriston and Hywel Dda sites.
Service Delivery	Swansea University and partners (inc. Life Sciences Hub Wales)		Utilisation of existing organisation Frameworks	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership
Implementation	-	3-year project – Competition / procurement of portfolio of investments	5-year project	Phased 3, 5-year project	Phased 5, 8-year project	Immediate start ~7yr project
Funding		additional £15m of	~£15m City Deal Funding with the potential to leverage an additional £15m of public/private investment	£15m City Deal funding with the potential to leverage an additional £115m public/private capital investment	£15m City Deal funding with the potential to leverage an additional £60m public/private investment	£15m City Deal funding with the potential to leverage an additional £80m public/private investment
	Total : ~£5m	Total: ~£30m	Total : ~£30m	Total: ~£130m	Total : ~£75m	Total : ~£95m

Alternative Approach 1

	A - Do Minimum	B – Dispersed Growth	C - Intermediate I	D - Intermediate II	E - Intermediate III	F - Do Maximum
	Rely on existing activity/sites	Investment fund for disparate activities	Incremental increase(s) of existing Ecosystem (ILS1/2) across two sites	Mixed – Dual Site combination: Incremental Development and Focused major development	Mixed – Dual Site Development and fund for disparate activities	Expand existing and establish new Campuses
Description	This option describes no expansion of the existing ecosystem small investment into the reconfiguration of existing infrastructure to maximise efficiency of existing facilities.	This option describes the creation of an investment fund to invest in individual opportunities across the region on a competitive basis as they emerge in a portfolio of disparate activities/facilities.	1	establish increased capacity in response to need demand and establish at Singleton and establish a footprint at Morristor	small regional opportunities across the region in addition to	(Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.
Scope		Develop specialist capabilities / capacities in locations across SBCR with public and private sector in response to emerging opportunities. This would be market-led opportunities developing a portfolio of projects giving Open Access capabilities	existing ILS1/2 through	Establish significant capacity/capability of existing ILS through development of new facilities in response to need demand, along with initial development at a further site to support regionalisation. ~10,000sqm of mixed facilities over the period to 2032 (2,000sqm at Singleton, 7,700sqm (2 phases) at Morrison)	approaches with realisation of ARCH Campuses scope; I.e. ILS-scale facilities at two locations and further smaller developments across the region. ~12,000 + 1,000s.m. of mixed	Expand existing ILS site and establish full ARCH Morriston and Hywel Dda Campus infrastructures. This would realise the original 2014 ARCH ambition across both UHB regions. ~24,000-30,000s.m. of mixed facilities^
Service Solution	Promotion and reconfiguration of existing SU capabilities to maximise capacity of current operations.	Development of facilities across the region through open competition amongst existing ecosystem	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Approaches B&D	New-build of major facilities at Singleton, Morriston and Hywel Dda sites.
Service Delivery	Swansea University and partners (inc. Life Sciences Hub Wales)	Diverse (Procured) Ecosystem – portfolio procured/ partnered on individual opportunity basis		Mixed: Public/Private Partnership: Procured development co-investment partnership	Partnership: Procured development co-investment	Mixed: Public/Private Partnership: Procured development co-investment partnership
Implementation	Immediate start as 3/5-year project	3-year project – Competition / procurement of portfolio of investments	5-year project	Phased 3, 5-year project	Phased 5, 8-year project	Immediate start ~7yr project
Funding		~£15m City Deal Funding with potential to leverage an additional £15m of public/private investment.		potential to leverage an	additional £60m public/private	£15m City Deal funding with the potential to leverage an additional £80m public/private investment
	Total : ~£5m	Total : ~£30m	Total : ~£30m	Total : ~£60m	Total : ~£75m	Total : ~£95m

Alternative Approach 2

	A - Do Minimum	B – Dispersed Growth	C - Intermediate I	D - Intermediate II	E - Intermediate III	F - Do Maximum
	Rely on existing activity/sites	Investment fund for disparate activities	Incremental increase(s) of existing Ecosystem (ILS1/2) across two sites	Mixed – Dual Site combination: Incremental Development and Focused major development	Mixed – Dual Site Development and fund for disparate activities	Expand existing and establish new Campuses
Description	This option describes no expansion of the existing ecosystem small investment into the reconfiguration of existing infrastructure to maximise efficiency of existing facilities.	This option describes the creation of an investment fund to invest in individual opportunities across the region on a competitive basis as they emerge in a portfolio of disparate activities/facilities.	This option describes limited investment across 2 sites (Singleton and Morriston) to begin an incremental increase in capacity and capabilities at both development sites in line with the expectations of the SBCR.	investment across 2 sites (Singleton and Morriston) to establish increased capacity in response to need demand and establish at Singleton and	This option describes the creation of a fund with the same intention Option B to invest in small regional opportunities across the region in addition to the expansion of ILS at Singleton and the development of an ILS at Morriston as described in Option D .	(Singleton, Morriston and Hywel Dda) to realise the ARCH vision to create Campuses at all sites through new build developments.
Scope	Utilise current ILS facilities to support growth of existing, and capture of new, opportunities. Capital investment limited to enhancing efficiency of existing facilities. ~500s.m. of mixed facilities^	Develop specialist capabilities / capacities in locations across SBCR with public and private sector in response to emerging opportunities. This would be market-led opportunities developing a portfolio of projects giving Open Access capabilities	Increase capacity/capability of existing ILS1/2 through development of new facilities across 2 sites (i.e. ILS3 at Singleton and ILS at Morriston in response to need demand. ~4,500s.m. of mixed facilities^ (3,000m² at Singleton and 1500m² at Morriston)	Establish significant capacity/capability of existing ILS through development of new facilities in response to need demand, along with initial development at a further site to support regionalisation. ~10,000sqm of mixed facilities over the period to 2032 (2,000sqm at Singleton, 7,700sqm (2 phases) at Morrison)	Providing a combination of B&D approaches with realisation of ARCH Campuses scope; I.e. ILS-scale facilities at two locations and further smaller developments across the region. ~12,000 + 1,000s.m. of mixed facilities^ over the period to 2032	Expand existing ILS site and establish full ARCH Morriston and Hywel Dda Campus infrastructures. This would realise the original 2014 ARCH ambition across both UHB regions. ~24,000s.m. of mixed facilities^
Service Solution	Promotion and reconfiguration of existing SU capabilities to maximise capacity of current operations.	Development of facilities across the region through open competition amongst existing ecosystem	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Mixed Refurbishment / New- build of facilities, with delivery through existing ILS initiative	Combination of Implementation Approaches B&D	New-build of major facilities at Singleton, Morriston and Hywel Dda sites.
Service Delivery	Swansea University and partners (inc. Life Sciences Hub Wales)	Diverse (Procured) Ecosystem – portfolio procured/ partnered on individual opportunity basis	Utilisation of existing organisation Frameworks	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership	Mixed: Public/Private Partnership: Procured development co-investment partnership
Implementation	Immediate start as 3/5-year project	3-year project – Competition / procurement of portfolio of investments	5-year project	Phased 3, 5-year project	Phased 5, 8-year project	Immediate start ~7yr project
Funding	~£5m City Deal funding Total: ~£5m	~£15m City Deal Funding with potential to leverage an additional £15m public/ private investment. Total: ~£30m	~£15m City Deal Funding with the potential to leverage an additional £15m of public/private investment. Total ~£30m	potential to leverage an additional £45m public/private	£15m City Deal funding with the potential to leverage an additional £60m public/private investment. Total: ~£75m	£15m City Deal funding with the potential to leverage an additional £80m public/private investment. Total: ~£95m