
NORTH AYRSHIRE COUNCIL

29 June 2021

Cabinet

Title:	Digital Processing Manufacturing Centre, i3 Irvine
Purpose:	To provide an update on proposals for a Digital Processing Manufacturing Centre based in Irvine.
Recommendation:	<p>That Cabinet agrees to:</p> <ul style="list-style-type: none">a) endorse the launch of the initial phase of the project (Phase 0) in July 2021;b) approve the Memorandum of Understanding;c) approve the allocation of £1M from the Ayrshire Growth Deal for Phase 1, subject to detailed proposals;d) support the Outline Business Case for Phases 1 and 2.

1. Executive Summary

- 1.1 This report provides an update on proposals to establish a nationally significant innovation centre in North Ayrshire at i3 Business Park in Irvine. The Digital Processing Manufacturing Centre (DPMC) will demonstrate, develop, and deliver digital technology to support the UK's process manufacturing sectors to adapt to digital processes. The Centre will support businesses locally, regionally and nationally, helping them to access new technology, products and innovation, improve energy efficiency and productivity and reduce waste, and increase company investment in research. The project will introduce a major academic anchor institution to the local area, offering the opportunity of collaborations with local companies, schools and colleges and creating wealth in the local economy through job opportunities and supply chains. The project is a strategic intervention that will make a significant contribution to transforming the Ayrshire economy, which has struggled to adapt following de-industrialisation and where there is a higher percentage of jobs in manufacturing compared to Scotland generally.
- 1.2 The DPMC has developed from an Ayrshire Growth Deal proposal, to build a centre for digital automation at i3 supported by £6M of investment (£5M from UK Government and £1M from NAC). The project has since expanded through the involvement of partners Strathclyde University, National Manufacturing Institute Scotland (NMIS) and Centre for Process Innovation (CPI). Two earlier phases are now being proposed in order to address concerns around a gap in provision until the Centre is built, to accelerate digital support for businesses as part of COVID Recovery plans and to address concerns regarding the possibility of other areas taking a

strategic lead, to the detriment of our proposals. Phase 0 establishes an on-line presence during 2021/22 and formalises the collaboration between NAC, Strathclyde University and CPI. A Pilot Phase (Phase 1) would then be established in 2022/23 within an existing building at i3, to allow access to some of the technology prior to the Centre (Phase 2) being built and operational by 2025.

- 1.3 An Outline Business Case (OBC), including an operational model, has been developed by NMIS and a Memorandum of Understanding has been agreed. The OBC identifies total revenue and capital funding requirements of £30.69M (£14.95M capital and £15.74M revenue) for Phases 1 and 2. It is anticipated that this will be supported by a combination of funding sources including the Ayrshire Growth Deal, funding bids, research grants and industry membership.
- 1.4 This paper provides an update on proposals to launch the facility virtually (phase 0) in July 2021, in advance of the proposed Phase 1 operation at i3 in 2022 and provides Cabinet with the related Memorandum of Understanding and Outline Business Case Executive Summary.

2. Background

- 2.1 DPMC will be a nationally significant innovation centre, focused on supporting and assisting process manufacturing sectors in the UK. Industries engaging with the DPMC will have the opportunity to hugely improve their efficiency, productivity, and also help with compliance performance and reductions in their carbon footprint. DPMC will facilitate this by demonstrating, developing, and delivering new digital technologies and providing businesses with assistance with strategy, planning, skills and technology selection and acquisition and implementation.
- 2.2 Processing sectors being targetted by the project include high value sectors such as Pharmaceuticals, Oil & Gas, Chemicals and Chemical Products, Agrichemicals, Food & Drink, Fast Moving Commercial Goods, Water (collection, treatment, supply).
- 2.3 DPMC is being led by the National Manufacturing Institute Scotland (NMIS) and supported by the High Value Manufacturing Catapult (HVMC) and University of Strathclyde (UoS), ensuring world leading research expertise. HVMC is a group of manufacturing research centres in the United Kingdom, funded by Innovate UK.
- 2.4 NMIS is a group of industry led manufacturing, research and development facilities that are focussed on making Scotland a global leader in advanced manufacturing. The facilities are operated by the University of Strathclyde and include two specialist technology centres that are now established – the Lightweight Manufacturing Centre and Advanced Forming Research Centre, both in Renfrewshire. It is anticipated that the DPMC would become part of this NMIS network and a Memorandum of Understanding has been agreed to facilitate this process, setting out the various roles and responsibilities of the partners.
- 2.5 To further strengthen industrial ties and research expertise, DPMC will see a strategic partnership with the HVMC's Centre for Process Innovation (CPI) and the Medicines Manufacturing Innovation Centre (MMIC) which bring specific technical and commercial expertise in process and pharmaceutical manufacturing. In addition, the

project has received support in its development through Scottish Enterprise and with Ayrshire College.

- 2.6 The DPMC's vision aligns with North Ayrshire Council's key strategies regarding recovery and renewal and community wealth building – transforming the local economy through encouraging progress towards Industry 4.0 (i.e. smarter factories where manufacturing technologies are focused on automation and data exchange). In particular, it will help achieve one of the Council's Community Wealth Building objectives; to encourage regional and national institutes to invest in our communities and the local economy. The project will also make a strong contribution to the Manufacturing Recovery Plan for Scotland through collaboration, business transformation and skills development.
- 2.7 DPMC is particularly significant for North Ayrshire as the manufacturing sector here has an above average number of employees with an 11.2% share of employment compared to 6.8% in Scotland, and it is by far the most important industry in terms of economic output (27% of GVA). A previous background study commissioned by the Council and Scottish Enterprise outlined the rationale for the project. The project will be complemented by a further £15M of investment through the Ayrshire Growth Deal for the provision of new commercial space at i3 in a variety of floorspace formats. The various phases of the DPMC project are set out below.

Phase Zero (virtual phase)

- 2.8 The project will become operational through the launch of an initial, virtual phase in July 2021, establishing an online presence, delivering modules of training and demonstrations of digital technology, from NMIS's Manufacturing Skills Academy. This will see the signing of a Memorandum of Understanding (see Appendix 1) between the project partners, related funding agreements, and a series of events taking place over a subsequent 12-month period.
- 2.9 The intention with Phase 0 is to provide online support ahead of future phases and as part of COVID recovery. Services, including training modules and demonstrations of digital technologies, will be promoted to businesses and potential funders, building interest and a customer base ahead of Phase 1.
- 2.10 A budget of £60,000 has been set aside for Phase 0, comprising £20,000 from each of the partners (NMIS, CPI and NAC). This will cover training, demonstrations, management and set up costs. The Council's contribution has been funded by the Scottish Government's Regional Recovery Fund. It is hoped that the bid to the UK Government's Community Renewal Fund through NAC will be successful as this will help accelerate the project and support its development.

Phase One

- 2.11 DPMC will then become operational as a pilot project within a physical property at i3. The property will establish a physical space of around 700sq m which can accommodate a range of digital technologies, lab space, training, and office facilities.

It is envisaged that this will be accommodated within an existing building (options for which are currently being considered) allowing the facility to be operational in 2022.

- 2.12 Phase One will test the sustainability, demand, and operational robustness of the project prior to the Phase Two permanent facility and will provide an early demonstrator facility in Scotland with specialist equipment, delivering projects with industry. It will also establish the presence of NMIS and the University of Strathclyde in the area, for Ayrshire's benefit. Its development is crucial prior to Phase 2 and it is anticipated that partners will commit to Phase 1 over a five-year period, subject to their respective Board approvals. This commitment is important to continue the pace of development of a complex and innovative project and to support the delivery of future phases.
- 2.13 Additional sources of funding are still required before Phase 1 can be brought forwards for approval. From a Council perspective, a previous report to Cabinet (August 2019) approved an allocation of £1M from the Council's AGD budget to support a funding bid for the Phase 1. Whilst this particular funding bid was unsuccessful, its development has helped progress the business case and partner commitment for the project. Agreement is now sought from Cabinet to continue to commit £1M to support Phase 1, to help accelerate the project and align with the commitments from the other funding partners. The Council funding is likely to support the purchase of specialist equipment that would form part of the demonstration component of the phase 1 facility. This will be subject to detailed proposals being reported to Cabinet at a future date and as the allocation is from the Council's AGD budget, the AGD Project Management Office has advised that this decision rests with the Council. In addition, Scottish Enterprise is giving consideration to a potential investment, subject to funding being available and to them being satisfied with the Outline Business Case.

Phase Two

- 2.14 The Outline Business Case envisages a new, permanent building for the DPMC project, that is developed and operational within a 3-year period from the launch of Phase 1 and is reflective of a nationally recognised and innovative facility. This will be subject to significant investment to offer expanded capability and services as a demonstrator facility and hub that is part of NMIS network. Phase Two will create a cluster of industry and academia, supported by AGD investment in flexible business space for industry.
- 2.15 AGD funding of £5M is earmarked for Phase 2 but other funding will be required to secure the project and partners are currently seeking additional funding sources.

Memorandum of Understanding

- 2.16 The Memorandum of Understanding attached at Appendix 1, sets out the collaborative aims of the project that are to be delivered for the mutual benefit of the partners. This includes establishing a Phase 0 virtual DPMC offering and developing and seeking approval of a Phase 1 business case and Outline Business Case for Phase 2.

Outline Business Case

- 2.17 An Outline Business Case (OBC) that is being led by NMIS, sets out the detail of Phases 1 and 2 of the DPMC and anticipated sources of income, and capital and revenue costs. The OBC has the support of the partners and the Executive Summary is attached at Appendix 2 and for which agreement is sought from Cabinet to support the OBC. This document provides a level of detail about the proposals and has been key to bring the commitment of the key partners and test the concepts and operating model with other key stakeholders. Further funding commitments are required and there are proactive discussions across the partnership to identify and secure additional capital and revenue contributions.
- 2.18 The OBC will be used as a basis for discussion with UK Government, prior to future approval of a more detailed business case. NAC will bring forward a more specific business case for the Ayrshire Growth Deal investment in consultation with the Ayrshire Growth Deal Project Management Office.

Masterplan

- 2.19 In parallel to the preparation of the Outline Business Case, the Council has commissioned a masterplan to identify possible locations for the DPMC project and advanced manufacturing space project at i3. This has been the subject of consultation with the project partners, Scottish Enterprise and Skills Development Scotland and industry representation, who are part of a Steering Group for the DPMC project and are supportive of the proposals. The next stage will involve completion of the masterplan and approval of the project's Outline Business Case by UK Government.

3. Proposals

- 3.1 It is proposed that Cabinet agrees to:

- a) endorse the launch of the initial phase of the project (Phase 0) in July 2021;
- b) approve the Memorandum of Understanding;
- c) approve the allocation of £1M from the Ayrshire Growth Deal for Phase 1, subject to detailed proposals; and
- d) support the Outline Business Case for Phases 1 and 2.

4. Implications/Socio-economic Duty

Financial

- 4.1 A budget of £60,000 has been set aside for Phase 0, comprising of £20,000 from each of the partners (NMIS/UoS, CPI and NAC). This will cover training, management and set up costs for Phase 0. The Council's contribution has been supported by a grant from the Regional Recovery Fund. It is hoped that the bid to the UK Government's Community Renewal Fund through NAC will be successful as this will help accelerate the project and support its development. Allocations of £1M and £5M respectively have been allocated to Phases 1 and 2 from the Ayrshire Growth Deal

towards the DMPC project and the detailed Business Cases for these phases and funding allocations will be brought to Cabinet for approval.

Human Resources

- 4.2 None. The initial virtual phase of the project will be led by NMIS and supported by partner funding of £60,000 and possible additional funding sources. Staffing requirements for the subsequent phases have been developed as part of the project's Outline Business Case.

Legal

- 4.3 A Memorandum of Understanding has been agreed with NMIS/UoS as lead partner, NAC with input from Legal Services, CPI and MMIC. Legal requirements as part of subsequent phases such as lease arrangements and ownership and care of equipment will be developed as Phases 1 and 2 progress. The MoU is attached at Appendix 1. It should be noted that partners may wish to make minor changes should these be required.

Equality/Socio-economic

- 4.4 The project will provide much needed services for process industries to help them grow and to attract inward investment to an area of above average unemployment and low business investment. It will provide an important training and development service for businesses in North Ayrshire and beyond, looking to take advantage of emerging technologies. DPMC is a flagship project within a key regeneration area for the Council and should assist in positioning i3 as major employment area attracting good quality sustainable jobs. In particular, the proposal will seek to make the life science and processing industry sectors more attractive and accessible to young people and women – groups that are currently identified as being excluded from economic growth opportunities.

Environmental and Sustainability

- 4.5 The proposal will enable businesses to improve the efficiency of their productivity and adapt their processes to modern technologies. Any environmental implications of the project will be addressed as the project develops and as part of any statutory planning and building warrant applications.

Key Priorities

- 4.6 The DPMC project will strongly support the priority outcome contained in the new Council Plan 2019-2024, for North Ayrshire to have an inclusive, growing, and enterprising economy and will support the aims of the recently published Community Wealth Building Strategy and Recovery and Renewal Plan.

Community Wealth Building

- 4.7 I3 project proposals are supported by wider Ayrshire programme of skills and inclusive growth. This proposal will provide an important service for local businesses and will specifically look to train our youth and existing workers on digital technologies to take advantage of emerging opportunities. The project will support the Council's Recovery

and Renewal Plan and Community Wealth Building Strategy, with the establishment of an anchor institution in the local area that will provide a focal point for attracting business and industry and will encourage businesses to reduce their carbon footprint.

5. Consultation

- 5.1 The University of Strathclyde, National Manufacturing Institute Scotland, Ayrshire College, Scottish Enterprise, Skills Development Scotland, and industry are part of a Steering Group that have informed and guided the development of the DPMC project. Businesses have also been surveyed directly on whether they would use the facility - with a positive response. The next stage of consultation will involve wider consultation including the Locality Planning Partnership as the plans develop in more detail.

Karen Yeomans

Director (Growth and Investment)

For further information please contact **Marnie Ritchie, Regeneration Manager, Growth and Investment**, on **07342 713 349**.

Background Papers

None

DATED _____ 2021

CENTRE FOR PROCESS INNOVATION LIMITED

and

UNIVERSITY OF STRATHCLYDE

and

THE NORTH AYRSHIRE COUNCIL

**MEMORANDUM OF UNDERSTANDING IN
CONNECTION WITH A COLLABORATION
CONCERNING A PROPOSED DIGITAL
PROCESSING MANUFACTURING CENTRE**

MEMORANDUM OF UNDERSTANDING

THIS AGREEMENT is made on the day of 2021

BETWEEN:

1. **Centre for Process Innovation Limited**, a company registered in England and Wales with company number 05002194 whose registered office is at: Wilton Centre, Wilton, Redcar, Teesside, TS10 4RF, England ("**CPI**"),
2. **University of Strathclyde** incorporated by Royal Charter, a charitable body registered in Scotland with registration number SC015263 and having its Principal Office at 16 Richmond Street, Glasgow, G1 1XQ ("**Strathclyde**"),
3. **The North Ayrshire Council**, established by the Local Government etc. (Scotland) Act 1994 and having its principal office at Cunninghame House, Irvine, KA12 8EE ("**NAC**"),

collectively known as the '**Parties**' and '**Party**' shall mean any one of them.

WHEREAS

The Parties wish to collaborate to support the development of the DPMC as part of NMIS, to transform skills and attract investment in the UK's process manufacturing sector to increase productivity and innovation and position the UK as a global leader in advanced process manufacturing.

The Parties intend the initial development of the DPMC to be carried out pursuant to the terms of this Agreement. The Parties intend that, as plans for the DPMC develop, the Parties will enter into a detailed collaborative agreement to govern the DPMC.

NOW IT IS HEREBY AGREED as follows: -

1. DEFINITIONS

Unless the subject matter or context requires otherwise, the terms used in this Agreement (including the recitals) shall have the following meaning:

“Agreement” means this Memorandum of Understanding;

“Business Plan” means the business plan for the Collaboration to be agreed among the Parties;

“Collaboration” means the joint work of the Parties in establishing and developing the DPMC as part of NMIS, as more particularly described in Clause 3;

“Confidential Information” means any non-public and commercially sensitive technical, commercial or proprietary information disclosed by the Provider to the Recipient in connection with the Collaboration;

“Contribution” means each Party’s respective contribution of TWENTY THOUSAND POUNDS (£20,000) STERLING (exclusive of VAT);

“Data Protection Legislation” shall mean while they remain in force the Regulation of Investigatory Powers Act 2000, the Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations 2000, the Electronic Communications Data Protection Directive, the Privacy and Electronic Communications (EC Directive) Regulations 2003, the European General Data Protection Regulation, the UK General Data Protection Regulation the Data Protection Act 2018, , and any other laws and regulations relating to the processing of personal data and privacy which apply to a Party and, if applicable, the guidance and codes of practice issued by the Information Commissioner or other relevant data protection or supervisory authority;

“DPMC” means the Digital Processing and Manufacturing Centre, which is being developed by the Parties pursuant to this Agreement and intended to form part of NMIS;

“Effective Date” means the date on which this Agreement comes into force, being the date stated on page 1 of this Agreement;

“NMIS” means the means the National Manufacturing Institute Scotland, which is an integral part of Strathclyde and consists of a group of industry-led manufacturing research and development facilities which are operated by Strathclyde and supported by Scottish Government, Scottish Enterprise, Highlands and Islands Enterprise, High-Value Manufacturing Catapult, Skills Development Scotland, Scottish Funding Council and Renfrewshire Council;

“Provider” means the Party or Parties providing Confidential Information;

“Recipient” means the Party or Parties receiving Confidential Information;

“Representatives” means the directors, officers, employees and advisors of each of the Parties;

“Supervisory Board” means the advisory body set up in order to progress the Collaboration in accordance with Clause 4;

“Term” means the duration of this Agreement from the Effective Date until the earlier of either (i) the date on which the Parties enter into a collaborative or other agreement replacing this Agreement and governing the development and/ or

operation of the DPMC; or (ii) the date on which this Agreement is terminated by written agreement between the Parties.

2. CONTRIBUTIONS

- 2.1 On the Effective Date each of the Parties will pay their respective Contribution to Strathclyde, following receipt of a valid invoice from Strathclyde in respect of the same, to the following account:

Name: of Account: *not for publication**

Bank: *not for publication**

Sort Code: *not for publication**

Account Number: *not for publication**

**by virtue of paragraph 6 of Part 1 of Schedule 7A to the Local Government (Scotland) Act 1973.*

- 2.2 Strathclyde will hold all Contributions in segregation from their own monies and apply the Contributions solely for the purpose of progressing the Collaboration as directed by the Supervisory Board.
- 2.3 It is intended that the Contributions will allow the Parties to establish the DPMC offering and implement Phase 0 as will be set out in the Business Plan.
- 2.4 It is understood that, beyond its Contribution, no Party is obliged to commit to any further funding or other commitment of resources in support of the Collaboration or DPMC. In the event that they do, such additional contribution will be governed by the terms of this Agreement.
- 2.5 The Parties agree to work together in good faith in the spirit of collaboration to progress the aims contained at Clause 3 of this Agreement and as may be set out in the Business Plan.

3 COLLABORATIVE AIMS

- 3.1 The Parties agree to co-operate and collaborate on the terms of this Agreement to deliver the following aims to their mutual benefit in accordance with the Business Plan when it is agreed:
- 3.1.1 to develop and sustain a collaborative relationship for the benefit of the Parties and the DPMC;
- 3.1.2 to establish a phase 0 virtual DPMC offering, develop and seek approval of a phase 1 business case and outline a business case for phase 2, as follows:
- Phase 0 – Virtual DPMC partnership collaboration and digital service offering, commencing in July 2021;

- Phase 1 - Modification / repurposing of existing infrastructure to create a physical centre at the i3 business park in Irvine, with the aim of commencing in April 2022; and
- Phase 2 – Construction of a dedicated facility at the i3 business park in Irvine;

3.1.3 to clarify and progress the following activities:

- Preparation of all relevant business cases required for DPMC;
- Identification of remaining capital and revenue funding;
- Development of project specifications and costs;
- Agreement on responsibilities for procurement;
- Securing all relevant partner approvals; and
- Securing all relevant statutory approvals;

3.1.4 to broaden and deepen the extent of collaboration between the Parties within the scope of the DPMC's activities;

3.1.5 to strengthen DPMC's links with academic and technology partners through new and existing collaborations with academia, business and industry;

3.1.6 to offer training and education courses, demonstrate digital technology utilising third party facilities and offer a digital consultancy capability for businesses and industry; and

3.1.7 to raise the profile of the Parties capabilities by influencing the adoption of digital technologies within the digital processing and manufacturing industry.

3.2 In furtherance of the aims set out in Clause 3.1, the Parties shall work:

3.2.1 collaboratively, openly, and constructively, with mutual trust, respect, integrity and fairness; and

3.2.2 together, so that all Parties benefit mutually, with a focus on strengthening research, innovation, and engagement with businesses in the digital processing and manufacturing industry.

3.3 The Parties acknowledge that their collaboration under this Agreement will be underpinned by the following principles:

3.3.1 It will be flexible and developed in such a way as to facilitate joint activities on specific work programmes;

- 3.3.2 It will place collaborative working at its core, recognising that the key factor for success will be working arrangements based on openness, collaboration, mutual trust and respect, integrity and fairness;
- 3.3.3 It will recognise the ambitions and the requirements of each of the Parties and will seek to ensure that all Parties achieve their reasonable desired outcomes;
- 3.3.4 The Parties will seek in good faith to maximise the utilisation of existing capital investments and avoid the duplication of capability.
- 3.4 Nothing in this Agreement shall restrict any Party's right to continue to conduct its business activities or arrangements that existed on the Effective Date or that otherwise come into being independently of this Collaboration.
- 3.5 The Parties recognise that any action ultimately agreed upon must be compliant with all applicable law, including (but not limited to) state subsidy and procurement rules, and in which respect the Parties shall take independent legal advice as required.
- 3.6 The Parties further recognise and accept that the terms of this Agreement will not impinge or affect the role of NAC as statutory planning authority and that any planning applications in connection with the Collaboration will be considered in accordance with the appropriate statutory tests.

4 SUPERVISORY BOARD

- 4.1 On the Effective Date, the Supervisory Board shall be established. The Supervisory Board will be an advisory body led by representatives of Strathclyde which will determine how the Contributions will be spent, progress the Collaboration in line with the Business Plan and offer guidance to benefit the development of the DPMC. It is agreed between the Parties that any additional external funding required in relation to the DPMC and the terms applicable to such funding will require the written agreement of all Parties. Membership of the Supervisory Board will include representatives from each of the Parties. Each representative on the Supervisory Board shall attend meetings of the Supervisory Board as active voting members.
- 4.2 On establishment of the Supervisory Board, the board members shall agree who the chairperson of the Supervisory Board will be, whether there is a need for the Chairperson to have a casting vote and the period of their tenure. The accountabilities, key activities and governance of the Supervisory Board will be agreed between the Parties in writing.

5 LIABILITY

- 5.1 No Party makes any representation or gives any warranty to the other Parties that any advice or information given by it or any of its Representatives, or the content or use of any materials, works or information

provided in connection with this Agreement, will not constitute or result in any infringement of third party rights.

- 5.2 Subject to Clause 5.3, no Party accepts any liability or responsibility for any use which may be made by another Party of any advice or information given in connection with this Agreement nor for any reliance which may be placed by another Party on that advice or information.
- 5.3 Nothing in this Agreement limits or excludes a Party's liability for:
 - 5.3.1 death or personal injury caused by negligence;
 - 5.3.2 fraud or any other liability which, by law, cannot be limited or excluded; or
 - 5.3.3 any loss or damage caused by a deliberate breach of this Agreement.
- 5.4 All warranties, conditions, terms, undertakings, and obligations, whether express or implied by statute, common law, custom, trade usage, course of dealing or in any other way are excluded to the fullest extent permitted by law.
- 5.5 Each Party's liability in connection with this Agreement shall be capped at TWENTY THOUSAND POUNDS (£20,000) STERLING in respect only of their obligation to pay their Contribution. Otherwise, no Party shall have any further liability under this Agreement except in relation to the provisions of this Clause 5, any breach of the confidentiality provisions at Clause 6 or the data protection provisions in Schedule 1.

6 CONFIDENTIALITY

- 6.1 None of the Parties will:
 - 6.1.1 disclose to any third party, except as expressly permitted by this Agreement; nor
 - 6.1.2 use for any purpose except for the purposes expressly permitted by this Agreement, any other Party's Confidential Information.
- 6.2 The obligations in Clause 6.1 shall not apply to Confidential Information which:
 - 6.2.1 is already known to the Recipient or any of the Recipient's group of companies (demonstrable by written records) before its receipt from the Provider, and is not already subject to any obligation of confidentiality to the Provider;
 - 6.2.2 is or becomes publicly known without any breach of this Agreement or any other undertaking to keep it confidential;

- 6.2.3 has been obtained by the Recipient or any of the Recipient's group companies from a third party in circumstances where the Recipient has no reason to believe that there has been a breach of an obligation of confidentiality to the Provider;
 - 6.2.4 has been developed by the Recipient or any of the Recipient's group companies without reference to the Provider's Confidential Information;
 - 6.2.5 is disclosed pursuant to the requirement of any law or regulation (provided, in the case of a disclosure under the Freedom of Information (Scotland) Act 2002, the Freedom of Information Act 2000, the Environmental Information (Scotland) Regulations 2004 or the Environmental Information Regulations 2004, none of the exceptions to that Act or those Regulations (as the case may be) applies to the information disclosed) or pursuant to the order of any Court of competent jurisdiction or the requirement of any competent regulatory authority and that, in each case where the law permits, the Party required to make that disclosure has informed the Provider, within a reasonable time after being required to make the disclosure, of the requirement to make the disclosure and the information required to be disclosed; or
 - 6.2.6 is approved for release in writing by an authorised representative of the Provider.
- 6.3 Notwithstanding the terms of Clause 6.1, it is expressly agreed that the Recipient may disclose Confidential Information to their Representatives to the extent that their Representatives need to know the Confidential Information for the purpose of advising the Recipient in connection with the Collaboration provided always that the Recipient shall ensure that the Representatives are aware of the confidential nature of the information and shall be responsible for any breach of confidentiality by such Representatives.
- 6.4 None of the Parties will use another Party's name or the name of any of the Parties' representatives, or another Party's logo in any press release or product advertising, or for any other promotional purpose, without first obtaining that other Party's written consent.
- 6.5 The Parties recognise that NAC as a local authority must comply with its reporting, approval, and governance procedures (which may require to be held in public) and agree that doing so will not constitute any breach of the confidentiality obligations in this Agreement.
- 6.6 The obligations in this clause 6 shall remain in force for the Term and five (5) years thereafter, except where the Parties enter into a further agreement in relation to the DPMC containing confidentiality terms, in which case the Confidential Information shall be subject to the terms of that agreement.

7 TERMINATION

- 7.1 Each Party shall be entitled to withdraw their involvement in relation to the DPMC and this Agreement by giving not less than 3 months' prior written notice to the other Parties at any time. In such written notice they shall specify the applicable date of termination relating to their involvement (being a date subsequent to the date of their written notice).
- 7.2 In the event that a Party terminates their involvement under Clause 7.1 above, a calculation shall be undertaken by or on behalf of the remaining Parties as to the amount of the Contributions which have been spent or are otherwise contracted to be spent in relation to matters concerning the DPMC at the date of termination. The terminating party shall be repaid any balance of their Contribution remaining within 90 days of the date of termination applicable to them.

8 GENERAL

- 8.1 Any notice to be given under this Agreement must be in writing, must be delivered to the other Party or Parties at their principal or registered office and will be deemed to be received where delivered by hand or courier on the day of delivery, by pre-paid first-class post on the second business day after posting or by recorded delivery post on the next business day after posting. Any notice to be given to NAC must be marked for the attention of "Senior Manager, Legal Services". Notwithstanding the foregoing, any notice to be given to Strathclyde under this Agreement must be marked for the attention of "Director, RKES" and delivered to the following address: University of Strathclyde, Research and Knowledge Exchange Services, 50 George Street, Glasgow G1 1QE.
- 8.2 No Party may assign or transfer this Agreement as a whole, or any of its rights or obligations under it, without first obtaining the written consent of the other Parties.
- 8.3 This Agreement shall constitute the entire agreement between the Parties relating to its subject matter. Each Party acknowledges that it has not entered into this Agreement on the basis of any warranty, representation, statement, agreement or undertaking except those expressly set out in this Agreement.
- 8.4 No variation or amendment of this Agreement will be effective unless it is made in writing and signed by each Party.
- 8.5 This Agreement and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation are governed by, and this Agreement is to be construed in accordance with, the laws of Scotland. The Scottish Courts will have exclusive jurisdiction to deal with any dispute (including any non-contractual

claim or dispute) which has arisen or may arise out of or in connection with this Agreement.

8.6 Each Party will

8.6.1 comply with all laws, statutes and regulations which apply to it or its activities and which relate to anti-bribery or anti-corruption (or both) including the Bribery Act 2010; and

8.6.2 comply with all laws, statutes and regulations which apply to it or its activities and which relate to anti-slavery and human trafficking, including the Modern Slavery Act 2015; and

8.6.3 comply with the data protection provisions in Schedule 1.

8.7 This Agreement may be executed in any number of counterparts. All the counterparts together will constitute a single agreement. Where executed in counterparts:

8.7.1 this Agreement will not take effect until each of the counterparts have been delivered;

8.7.2 each counterpart will be held as undelivered until the Parties agree a date on which the counterparts are to be treated as delivered; and

8.7.3 the date of delivery may be inserted on page 1 in the blank provided for the Effective Date of this Agreement.

8.8 A Party's failure to exercise or delay in exercising any of their rights or remedies under this Agreement shall not constitute a waiver of that right or remedy, and no waiver by a Party of any breach of this Agreement shall constitute a waiver of any subsequent breach of the same or any other provision. Each right or remedy of a Party under this Agreement is without prejudice to any other right or remedy of that Party under this Agreement or at law.

8.9 If any provision or part-provision of this Agreement is or becomes invalid, illegal or unenforceable, it shall be deemed deleted, but that shall not affect the validity and enforceability of the rest of this Agreement. If any provision of part-provision of this Agreement is deemed deleted under the previous sentence, the Parties shall negotiate in good faith to agree a replacement provision that, to the greatest extent possible, achieves the intended commercial result of the original provision.

8.10 With the exception of Clause 6 (Confidentiality) and the data protection provisions in Schedule 1, which shall be legally binding on the Parties in accordance with Clause 8.5, the Parties do not intend to be legally bound by any other provision of this Agreement.

8.11 This Agreement does not confer on any person who is not a Party any right to enforce or invoke any term of this Agreement under the Contracts (Third Party Rights) (Scotland) Act 2017 or otherwise.

IN WITNESS WHEREOF these presents consisting of this and the preceding ten pages are executed as follows and, if executed in counterpart, are delivered for the purposes of the Legal Writings (Counterparts and Delivery) (Scotland) Act 2015 on the date agreed between the Parties as evidenced by the date stated on page 1 of this Agreement:

Signed by and on behalf of **Centre for Process Innovation Limited**

At:

On:

.....
Authorised Signatory

By:

Signed by and on behalf of **University of Strathclyde**

At:

.....
Authorised Signatory

On:

By

Sealed with the Common Seal of **the North Ayrshire Council** and signed on its behalf

At:

.....
Proper Officer

On:

.....
Position

By:

THIS IS THE SCHEDULE REFERRED TO IN THE FOREGOING
MEMORANDUM OF UNDERSTANDING AMONG CENTRE FOR PROCESS
INNOVATION LIMITED, THE UNIVERSITY OF STRATHCLYDE AND THE
NORTH AYRSHIRE COUNCIL

Schedule 1 – Data Protection

Where a Party (the Data Processor) Processes any Personal Data on behalf of any other Party (the Data Controller), the provisions of this Schedule will apply.

1. The Party which carries out the Processing will be the Data Processor and the Party which determines the purpose of the Processing will be the Data Controller in relation to that Personal Data, and the Data Processor will:
 - 1.1 Process that Personal Data in accordance with the Data Protection Legislation, affording to Data Subjects such rights and protections as they would have were their Personal Data being Processed by the Data Controller;
 - 1.2 Process that Personal Data only in accordance with the Data Controller's instructions from time to time and only for the purpose of carrying out the Collaboration;
 - 1.3 Take such technical and organisational measures as may be appropriate to ensure the security of that Personal Data and the reliability of its employees, staff, officers and agents who may have access to, or be involved in, the Processing of that Personal Data. Without prejudice to the generality of the foregoing, it will keep that Personal Data secure from any unauthorised or accidental use, access, disclosure, damage, loss or destruction;
 - 1.4 Give the Data Controller such information and assistance as the Data Controller reasonably requires in order to enable the Data Controller to meet its obligations to Data Subjects, in particular, complying with Data Subjects' requests for access to, information about, and the rectification of their Personal Data;
 - 1.5 Notify the Data Controller promptly should it receive any request or enquiry from any Data Subject in relation to the Personal Data being Processed for the Data Controller, give the Data Controller such assistance in dealing with that request or enquiry as the Data Controller may reasonably request, and not respond to any such request or enquiry without first obtaining the Data Controller's written consent (such consent not to be unreasonably withheld or delayed);

- 1.6 Notify the Data Controller promptly of any actual or suspected breach of security which involves that Personal Data or breach of this paragraph 1; and
 - 1.7 Not transfer that Personal Data outside the European Economic Area without first obtaining the Data Controller's written consent.
2. The Data Processor will allow the Data Controller at all reasonable times to inspect and review the steps being taken by the Data Processor to comply with paragraph 1 above, and will give the Data Controller any assistance which the Data Controller reasonably requires with that inspection and review.
3. All expressions used in paragraph 1, 2, 4, 5 or 6 beginning with a capital letter (and not defined elsewhere in this Agreement) have the meaning given to them in the Data Protection Legislation.
4. The Parties will agree to any reasonable amendment to this Schedule to bring it into line with any amendment to or re-enactment of any Data Protection Legislation and to allow each of the Parties to comply with any requirement or recommendation of the Information Commissioner or any other data protection or supervisory authority in relation to the Processing of Personal Data.
5. Paragraphs 1 – 4 (both paragraphs inclusive) will continue in full force and effect for so long as a Data Processor Processes any Personal Data on behalf of the Data Controller, notwithstanding the termination of this Agreement or the completion of the Collaboration.

DIGITAL PROCESS MANUFACTURING CENTRE EXECUTIVE SUMMARY DRAFT V.03

23rd of June 2021

Authors: Christine Dent (NMIS), David Hernandez (NMIS)

Owner: Keith Ridgeway (NMIS)

Revision history

Issue	Date	Detail of Changes
DRAFT V0.1	10/12/2020	Outline Business Case draft shared with DPMC Steering Group.
V0.2	17/05/2021	Inclusion of Phase 0 and revised costs
V0.3	28/05/2021	Updated Economic Case

Approvals

This document requires the following approvals. A fully signed copy should be saved in project files.

Name	Signature	Organisation	Date	Issue

1. Executive summary

1.1 Introduction

The Digital Process Manufacturing Centre (DPMC) will be a nationally significant innovation centre created at i3 in North Ayrshire, Scotland using the Ayrshire Growth Deal funding as a catalyst for its creation. The focus of the DPMC will be to demonstrate, develop and deliver digital technology to support the UK's process manufacturing sectors' digital challenges. Industry engaging with the DPMC will have the opportunity to improve their productivity gains of up to 30%¹, to improve their compliance performance and reduce their carbon footprint.

The DPMC will be developed in three phases:

- Phase 0: Delivering modules of training and demonstrations of digital technology, from the National Manufacturing Institute Scotland (NMIS) Manufacturing Skills Academy.
- Phase 1: Open pilot facility in North Ayrshire, delivering projects with industry.
- Phase 2: Launch dedicated DPMC facility with expanded capability and services for industry.

Phase 0 will focus on launching in July 2021 under NMIS Manufacturing Skills Academy, delivering packages of key training services and demonstrations of digital technology delivered in response to the Covid-19 impact on UK's manufacturing industry. Phase 0 to be funded from NMIS's National Transition Training Fund (NTTF).

Phase 1 to be launched by 2022 quarter 1 as the DPMC pilot. The phase 1 pilot will make use of existing infrastructure in North Ayrshire and offer services to industry. Phase 1 will run over a 5 year period to establish the pilot facility, and build on the industry engagement generated from phase 0 to establish a community of process manufacturing industries.

Phase 2 will be a dedicated building and complement on the services provided within phase 1. Phase 2 will be opened in early 2025.

Funding required

The key funding being sought for this project is for DPMC phase 1 and 2.

Phase 1 will run over a 5 year period from early 2022. The total cost of phase 1 is **£12.6M**, this will enable the pilot facility to be established, and R&D projects to be initiated from phase 0 engagements to create a community of process manufacturing industries. Phase 2 will run as a permanent facility from 2025 with an initial cost of £18M covering building, services, staff, and running costs. Phase 2 income will be based on further development of industrial relationships through Phase 1. Currently funding for Phase 1 and 2 is divided into three categories; £6M committed funds, £17.6M under discussion, and £8.5M assumed.

Sector focus

The DPMC will transform the industrial landscape of the Ayrshire region through a blended approach of upgrading existing infrastructure and development of a new state of the art digital innovation space to create a critical mass of activity becoming a national centre of excellence in process manufacturing technology for key process sub-sectors including:

¹ <https://www.gov.uk/government/publications/made-smarter-review>

- Pharmaceuticals
- Oil & Gas
- Chemicals and Chemical Products
- Agrichemicals
- Food & Drink
- Fast Moving Commercial Goods
- Water (collection, treatment, supply)

DPMC Partners

DPMC project is led by the National Manufacturing Institute Scotland (NMIS) and supported by the High Value Manufacturing Catapult (HVMC) and University of Strathclyde (UoS), ensuring world leading research expertise.

The DPMC's other lead partners include the North Ayrshire Council (NAC), positioned to attract further investment in Scotland by combining the ambitious economic growth incentives of the Ayrshire Growth Deal (AGD), strong regional industrial presence of global companies including GSK and Booth Welsh. Strategic partnership with the HVMC's Centre for Process Innovation (CPI) and the Medicines Manufacturing Innovation Centre (MMIC) combined to bring specific technical and commercial expertise in process and pharmaceutical manufacturing, and strengthen industrial ties and research expertise. Further, Ayrshire College as a partner will ensure close connections with Further Education, building on existing educational links and supporting SME growth. A Steering Group was established by the partners in 2020 to guide the project and includes representation from the partner organisations, Scottish Enterprise, Skills Development Scotland and industry.

The project will complement North Ayrshire Council's advanced manufacturing space project at i3 which is also being funded by the Ayrshire Growth Deal. This will provide approximately 97,000 sq feet of industrial and office space over three phases. It is anticipated that some of the space may be incorporated as part of the DPMC facility to support business start-ups and business growth.

1.1.1 Project Aims & Objectives

The DPMC overall aim is aligned with NMIS's vision to be an industry-led international centre of manufacturing expertise where research, industry and the public sector work together to transform skills, productivity and innovation to attract investment.

DPMC's focus for delivering NMIS's vision will be to transform the UK's process manufacturing sector to increase productivity and innovation to attract investment, and position the UK as a global leader in advanced process manufacturing.

DPMC's objectives for the process manufacturing sector are reflected in NMIS's five core objectives:

1. Increase the productivity and innovation performance of process manufacturing businesses and reduce the perceived individual company risk associated with innovation.
2. Stimulate manufacturing investment, both inward and from businesses already located in the UK, to increase the competitiveness of the UK's process manufacturing base over the medium to longer term in a highly advanced process manufacturing environment.

3. Catalyse job creation and strengthen supply chain linkages, increasing the relative process manufacturing contribution to UK's overall economy.
4. Inspire and attract a diverse talent pool to work in process manufacturing, equipping existing and future employees with the digital technology skills, both technical and practical, to prosper in an increasingly digital and automated manufacturing environment.
5. Minimise displacement of companies and jobs.

Additional objectives included:

6. Supporting the Scottish Government's Making Scotland's Future - recovery plan for manufacturing², in relation to the impact of Covid-19 on the UK.
7. The project also aligns with the objectives and priorities of North Ayrshire Council in relation to the Ayrshire Growth Deal, Recovery and Renewal, Community Wealth Building and Inclusive Growth.

1.1.2 Project Scope

The scope of DPMC will be focused on supporting and assisting the UK's process manufacturing sector. The DPMC will be an extension of NMIS's Digital Factory 2050, through strategic partnership with CPI and MMIC, recognising the unique challenges facing the UK's process manufacturing industry. The DPMC will build and utilise NMIS's established approaches in assisting Scottish, UK based and international process manufacturing industries. With support through strategic partnership with CPI and MMIC, benefiting from their experience working with the processing sectors.

To note, the following scope changes have been made between North Ayrshire Council's (NAC) Strategic Outline Case (SOC) document and this Outline Business Case (OBC) document, these include:

Detail to the concept but the fundamentals of the project as set out in the North Ayrshire Head of Term's and SOC are unchanged and provide for:

- A Digital Automation & Innovation Centre (DigiLab) now working titled Digital Process Manufacturing Centre or DPMC.
- A partnership for delivery and management between NAC / University of Strathclyde / NMIS.

1.1.3 Project Phases

The DPMC project will be delivered in three phases.

Phase 0: NMIS Training and Demonstration

In response to Covid-19, and in agreement with partners, NMIS has included phase 0 for the DPMC project, to address the immediate needs of industry in adopting and understanding digital technologies. This phase is aligned with Scottish Government's Making Scotland's Future - recovery plan for manufacturing, with key focus being to support the manufacturing sector to become more flexible, responsive and able to embrace digital solutions.

Training topic areas to include:

- Demystifying Digital

² <https://www.gov.scot/publications/making-scotlands-future-recovery-plan-manufacturing-draft-consultation/>

- Industrial Cyber Security
- Digital data analytics
- Digital leadership

Phase 0 will be led by NMIS and funded through NMIS's National Transition Training Fund (NTTF), and to be launched in September 2021. This will enable process manufacturing industry to pay and access digital technology focused training materials and time with digital technology experts. The training and demonstration services will support companies to ensure the process manufacturing industry are moving forward with digital adoption and with support to recover from the impact of Covid-19. As part being able to deploy without delay, all phase 0 training and demonstrations will be delivered digitally to industry, making use of current NMIS infrastructure to support this.

Phase 1: DPMC Pilot

Phase 1 will be an initial pilot for the DPMC, to be hosted within an established building located in i3 Enterprise Area, Irvine in North Ayrshire. North Ayrshire are considering site options for phase 1.

The project partners North Ayrshire Council and NMIS, will commission a refit of an established building, making the site operationally ready for the needs of DPMC phase 1 and will agree arrangements for and funding of the phase 1 lease costs for a minimum of a 5 year period. An early stage concept design of DPMC phase 1 is shown in the figure 1.

Phase 1 will be used to further establish process manufacturing industry R&D interaction with the DPMC, and enable initial projects to be delivered by a small team of staff employed by UoS and located within the DPMC, with support from Ayrshire College. DPMC phase 1 will be used to develop and strengthen DPMC's reputation and relationship with the process manufacturing sector. As a pilot, phase 1 will determine ability for the DPMC project to progress to phase 2.



Figure 1: Image of potential building refit for phase 1

Phase 2: DPMC main facility

During phase 2, DPMC will expand to a permanent facility within a bespoke building. The bespoke building will be built and owned by North Ayrshire Council, NAC will lease space within the building to NMIS for a nominal rent, subject to Council approvals.

The DPMC dedicated area for the main facility footprint will be approximately 1100m². It will have reconfigurable space to maximise the potential of the assets used to support the processing sector by demonstrating, developing and delivering digital technology.

1.1.4 Structure and content

This Outline Business Case (OBC) sets out options for the development of the DPMC project. The format used is the Five Case Model, and follows the AGD Project Management Office (PMO) template. This OBC also takes account of the recent OBC Guidance Note issued by UK Government.

The structure comprises of the following key components:

- **Strategic Case** sets out the strategic context and the case for change, together with the supporting investment objectives for the project.
- **Economic Case** demonstrates that the organisation has selected a preferred way forward, which best meets the existing and future needs of the service and is likely to optimise value for money (VFM).
- **Commercial Case** outlines what any potential deal might look like.
- **Financial Case** highlights likely funding and affordability issues and the potential balance sheet treatment of the scheme.
- **Management Case** demonstrates that the scheme is achievable and can be delivered successfully in accordance with accepted best practice.

1.2 Strategic Case

1.2.1 Why change is needed

The Digital Processing Manufacturing Centre (DPMC) will address a number of specific issues:

- Supporting the UK's process manufacturing sector and encouraging the establishment of further process manufacturing industry in the UK;
- Supporting the development of digital technologies in the process manufacturing sectors by providing high quality and safe testing facilities for digital sensing and monitoring, process control and asset management technologies;
- Delivering a flexible and adaptable manufacturing environment that can be used to prototype and test new process plants and technologies, and potentially attracting customers from around the World.
- Removing risk from the introduction of digital technologies to process manufacturing industries.

With training services, process plant prototype, and testing in a single location, more robust systems integration testing can be conducted by;

- Closing the STEM skills gap and provide training on rapidly evolving I4.0 technologies.
- Tackling ever-rising costs by allowing new digital and process technologies to be effectively tested and commissioned rather than committing them to operations before they are fully developed;
- Generating high quality employment and economic opportunities for communities in North Ayrshire, Scotland.

The application of digital solutions within manufacturing has been identified as a key enabler for growth in key Scottish sectors. However, a large number of companies are still unsure how to implement digital technologies and require support.

There is a particular need to support change in Ayrshire where the economy has struggled to adapt following de-industrialisation and where there is a higher percentage of jobs in manufacturing compared to Scotland generally. SCDI and the OECD have warned that automation could impact post-industrial regions disproportionately and that there is a need for preventative action in traditional sectors such as manufacturing and engineering, to counteract the potential impacts of automation and to ensure these sectors can adapt for Industry 4.0. The DPMC provides a strategic intervention to help address these issues and create higher value productivity.

North Ayrshire is poorly served in terms of access to academic institutions, research organisations and innovation centres. The project will enable local access to new technology, products and innovation, help improve energy efficiency and reduce waste and increase company investment in research and development through engagement with the DPMC. The project will also assist with improving the North Ayrshire's economic performance which is currently in the bottom quartile for most measures of economic performance compared to the rest of the Scottish and UK economies.

1.2.2 Driving policy and economic regeneration

The DPMC project has the potential to deliver against the policy objectives of key strategies set out both at a UK and Scottish national level and for the local Ayrshire region. The DPMC will build on the recognised strengths and opportunities, primarily relating to supporting the growth and competitiveness of the process manufacturing sectors in the UK by creating the infrastructure to conduct digital technology research and development in this sector, to accelerate innovation adoption and attract inward investment.

UK and Scottish Policy Alignment

The DPMC project is also aligned with the UK Government and Scottish Government's inclusive growth agenda, targeting regional imbalances in economic activity.

Examples of further strategies which the DPMC will support, include:

- Innovate UK Five-Point Plan for Economic Growth. The DPMC will assist to reposition the regional economy (in alignment with the national economy) to be more resilient and attractive for investment, improving workforce skills and employment opportunities. The DPMC will also position the UK as a global leader in advanced process manufacturing.
- A Manufacturing Future for Scotland. The DPMC as part of NMIS will ensure linking up with other centres of excellence across the NMIS group and Catapult networks. Creating opportunities for collaborations between businesses, research technology organisations and academia by providing a focal point and promoting an open innovation ethos.
- Making Scotland's Future: A Recovery Plan for Manufacturing. The DPMC will add to the existing network of support for manufacturing companies in Scotland and the UK, helping deliver the Scottish Government's Action Plan.
- Scotland's Future Skills Action Plan. The DPMC will strengthen Scotland's labour market by providing training and upskilling through NMIS's National Transition Training Fund (NTTF).

Ayrshire Growth Deal

The Ayrshire Growth Deal (AGD) programme links to Governments' objectives of increased growth and prosperity. Post the development of NAC's Strategic Outline Case, NAC have been working closely with the other Ayrshire Councils and has coordinated activity through the Ayrshire Growth Deal Leadership Group and Project Management Office (PMO). The project continues to focus on the high growth, high value process manufacturing sectors that can build on Ayrshire's general manufacturing strength. The partnership with University of Strathclyde and NMIS now offers the potential to build a national level facility in Ayrshire based on the NMIS 'hub and spoke' model.

North Ayrshire Council, who have as part of a wider programme of investment secured funds for the project through the Ayrshire Growth Deal (AGD). AGD is a £250M infrastructure programme funding 21 projects to unlock an estimated £300M of private investment and deliver around 7,000 new jobs across a wide range of sectors. The DPMC project will leverage £6M of AGD funding to allow the DPMC to provide the technical expertise necessary to attract industrial commitment and provide value for money for this significant investment.

Regional Policy Context

The DPMC project has the potential to support two of North Ayrshire's economic development objectives: creating employment opportunities and positioning the area as a leading location for business within the Glasgow city region.

The four key local strategies are the Ayrshire Economic Strategy, North Ayrshire Council Plan, North Ayrshire Council's Community Wealth Building Strategy and the North Ayrshire Local Development Plan (LDP). These set out a long-term vision for growth and provides a policy framework for determining planning applications and policy context for Ayrshire Growth Deal projects.

The DPMC project has the potential to deliver against the policy objectives of key strategies set out at both the Scottish and regional levels. The proposition is also in line with the Scottish Government's inclusive growth agenda, targeting regional imbalances in economic activity.

1.2.3 Site and timing opportunity

Manufacturing is a key strength of the North Ayrshire economy, particularly around life sciences and engineering. However the area has been identified as underperforming economically and has some serious challenges around depopulation, productivity, and economic growth rates and skills levels.

Market research conducted by North Ayrshire Council shows a lack of modern office, manufacturing and business space in North Ayrshire, and significant market failures, which prevents market condition addressing provision of space. In spite of manufacturing strengths in Ayrshire, there is a lack of allied academic footprint, which hinders attracting research and development activity to Ayrshire and this translates to a lack of opportunities for supply chain and local business development opportunities.

North Ayrshire's i3 Campus is the biggest of the four Enterprise Areas (EA) in Scotland and meets the foundational success criteria by providing the largest fully-serviced land and buildings site in Scotland (326 acres) currently hosting 39 companies in new and refurbished space. With over 2,000 staff based on the site, it is North Ayrshire's principal employment location.

1.2.4 Impact of not changing and need for government intervention

Without the investment of the DPMC, the process manufacturing sector for Scotland and the UK would continue at a slow pace for adoption and integration of digital technologies. This slow pace would put the UK in a poor competitive position versus neighbouring and further afield countries, and more process manufacturing would be offshored outside of the UK, reducing processing sector exports and associated jobs and skills.

There is also a significant risk in not supporting the development of the DPMC, from a local perspective for the area of North Ayrshire. This area will continue to suffer and not regenerate without the presence of this innovation centre. In particular, there is a risk that manufacturing sectors will struggle to adapt to digital without the support of the DPMC project which could have an inflated negative impact on the area, given North Ayrshire's above average number of manufacturing jobs.

1.2.5 Benefits

National benefits

The UK does not possess anything approaching such a high-quality facility as planned at DPMC. Both public and private sector organisations frequently use test facilities in Europe, supporting jobs and building competing expertise in other countries. As technology develops within DPMC, the supply chain required to ultimately exploit this technology will grow as opportunities for SMEs to design, install, service, and supply these innovations to the various processing industries will require a mix of national talent and inward investment. This aligns with UK Industrial Strategy of making the UK attractive to start or grow a businesses. DPMC will also close the gap between the UK's most productive companies, industries, places and people, and the rest of the country by providing a cross-sectoral focus for the process manufacturing sector.

Local benefits

Between 2006 and 2016 total GVA in North Ayrshire fell by 7%, in stark contrast to the 12% growth in GVA in Scotland and 13% growth in the UK over the same period. DPMC will combine the growth in varied processing sectors across Scotland such as food & drink and medicines manufacturing, with the existing and planned infrastructure of i3. This will allow DPMC to play a large part in i3 delivering an estimated cumulative gross GVA impact of £168m by 2029. As a whole, i3 is estimated to create 176 net additional jobs in Scotland and 139 net additional jobs for the Ayrshire economy.

The preferred option of a phased approach based at i3 will ensure DPMC delivers value for money, meets strategic goals, and minimises risk. As advancements in Industry 4.0 are continuously pushing the art of the possible, a phased hub will future-proof the workforce in phase 0, and allow projects, innovation, revenue, and engagement to begin on completion of phase 1 while providing critical time to develop regional support and strength which will ultimately dictate the capital intensive technologies most relevant to be installed in the phase 2 hub. Industry engagement from phases 0-1 can then be leveraged using a funding model, such as NMIS's membership model, to reduce government grant requirements and attract further investment.

The cumulative effect of these benefits will lead to national impact which will see UK R&D in the processing industry complete at a global scale through the commitments of multinational companies working with world leading UK research institutes in a state of the art facility.

1.2.6 Risks, constraints and dependencies

Digital Process Manufacturing Centre, Executive Summary – DRAFT V0.3

Risks

The nature and importance of DPMC will mean that the full risk management process cannot be fully addressed in this document. Key socio-economic, business, political, financial, regulatory, environmental, and operational risks are provided in section 2.10, with a short overview below. The full process will be directly aligned to the risk process for NMIS as a whole with a direct escalation route to university executive risk management. The project risks will be managed in line with established best practice with the University of Strathclyde, and with support and advice from DPMC partners.

Key Risks and mitigations:

1. Political - DPMC outline business case (OBC) fails to progress: OBC to be developed in accordance with UK Government Green Book guidance including full review of risks, market, costs, and governance. This may include adjustments to scope specifications at phases 1, 2, 3 to meet changing demands.
2. Financial - Slippage / delay in the programme incurs additional costs: Instruct appointed project team to address this within Risk Register. Select procurement route to ensure contract type has less risk.
3. Delays in partner approval: Seek early conclusion in advance of full business case (FBC) with regular status reviews with partners.
4. Delays to procurement processes: Seek early agreement on appropriate procurement routes and early notification of contract opportunities.
5. Failure to deliver anticipated outputs and outcomes: Ensure DPMC business case addresses sensitivity of outcomes with clear Evaluation & Monitoring Framework.

Constraints and Dependencies

The main dependencies and constraints include:

- Commercial viability including assessment of market conditions.
- Site conditions for phase 1 and 2 of the DPMC project.
- Capital and revenue budgets to be secured.

1.3 Economic Case

1.3.1 The long list

Within the DPMC scope, the following options were considered using the options framework. Options included other partners or stakeholder owning the DPMC instead of NMIS, changing the method of delivery services e.g. through a trade association model, and considering other locations and impact in meeting the criteria. The options were evaluated in accordance with how well each option met the investment objectives, critical success factors, and other specified criteria.

The long-list options are focused on the DPMC project phases 1 and 2, phase 0 will not affect the option selected, as it is part of the fast response to Covid-19 and the impact on UK manufacturing.

The summary tables of the long-list 9 options has been included in the two tables below for reference, within the tables the following ratings have been applied:

- 0: The option does not meet the criteria
- 2: The option partially meets the criteria
- 3: The option satisfies the criteria

Table 1: Long-list summary options 1-4

	Option #	Option 1: Do nothing / baseline	Option 2: NMIS undertake a reduced scope	Option 3: NMIS own DPMC, locate in Irvine	Option 4: Ayrshire College own the DPMC with a reduced scope
Ref	Investment Objectives (IO)				
IO1	Establish the Digital Process Manufacturing Centre's facility infrastructure and ensure operational readiness	0	2	3	0
IO2	Create digital process manufacturing partnerships, and establish new collaborations and supply chains	0	3	3	2
IO3	Develop a national digital process manufacturing research agenda	0	3	3	0
IO4	Build a digital manufacturing training and skills programme tailored to the process manufacturing sector	0	3	3	3
	Critical Success Factors (CSF)				
CSF01	Increased productivity through innovation of digital technology	0	3	3	2
CSF02	Stimulate the process manufacturing sector to adopt digital technology to increase competitiveness and help attract attract foreign and inward investment and reduce carbon footprint.	0	3	3	2
CSF03	Catalyse job creation and strengthen supply chain links for the processing sector through digital technology	0	3	3	3
CSF04	Skills and workforce development for the process manufacturing sector	0	3	3	2
CSF05	Maintain and increase digital manufacturing capabilities in North Ayrshire without displacing or removing jobs/companies	0	0	3	3
CSF06	Ensure the project is affordable using AGD sources matched against other sources.	0	0	2	3
CSF07	Ensure the project is deliverable by NMIS / University of Strathclyde in partnership with North Ayrshire Council and Ayrshire College.	0	0	3	0
	Other criteria (OC)				
OC1	Impact for industry	0	2	3	2
OC2	Cost to deliver option	0	3	2	2
OC3	Risk to deliver option	0	3	2	2
OC4	Length of time to deliver option	0	3	3	2
OC5	Jobs created	0	2	3	0
OC6	How easy to secure funding (Initially and on-going)	0	3	2	0
	Reasons for rejection	Does not meet criteria.	Carry forward.	Preferred option.	AC has insufficient experience to operate an innovation centre.
	Summary	0	39	47	28
	Outcome	Discounted option.	Carry forward.	Preferred option.	Discounted option.

Table 2: Long-list summary options 5-9

	Option #	Option 5: NAC own DPMC, tender for operator	Option 6: Trade Association	Option 7: CPI own DPMC, locate in Irvine	Option 8: Other locations for NMIS owned DPMC, e.g.	Option 9: DPMC phase 1 only
Ref	Investment Objectives (IO)					
IO1	Establish the Digital Process Manufacturing Centre's facility infrastructure and ensure operational readiness	3	0	3	3	2
IO2	Create digital process manufacturing partnerships, and establish new collaborations and supply chains	3	3	2	3	2
IO3	Develop a national digital process manufacturing research agenda	0	0	2	3	2
IO4	Build a digital manufacturing training and skills programme tailored to the process manufacturing sector	2	0	3	3	2
Critical Success Factors (CSF)						
CSF01	Increased productivity through innovation of digital technology	0	2	3	3	3
CSF02	Stimulate the process manufacturing sector to adopt digital technology to increase competitiveness and help attract attract foreign and inward investment and reduce carbon footprint.	0	0	3	3	3
CSF03	Catalyse job creation and strengthen supply chain links for the processing sector through digital technology	2	2	3	3	3
CSF04	Skills and workforce development for the process manufacturing sector	2	0	3	3	3
CSF05	Maintain and increase digital manufacturing capabilities in North Ayrshire without displacing or removing jobs/companies	3	0	3	0	3
CSF06	Ensure the project is affordable using AGD sources matched against other sources.	2	0	3	0	3
CSF07	Ensure the project is deliverable by NMIS / University of Strathclyde in partnership with North Ayrshire Council and Ayrshire College.	0	0	0	0	3
Other criteria (OC)						
OC1	Impact for industry	0	0	3	3	3
OC2	Cost to deliver option	2	3	2	2	3
OC3	Risk to deliver option	2	3	0	0	3
OC4	Length of time to deliver option	2	2	0	3	3
OC5	Jobs created	2	2	3	3	3
OC6	How easy to secure funding (Initially and on-going)	0	0	2	0	3
	Reasons for rejection	NAC has insufficient experience to operate an innovation centre.	Will not drive innovation or research, will not create impact for industry.	Not a strategic priority for CPI to lead the development of the DPMC, instead positioned as a strategic partner with NMIS	Not in line with key partners strategic priorities to establish a North Ayrshire located innovation centre.	Carry forward.
	Summary	25	17	38	35	47
	Outcome	Discounted option.	Discounted option.	Discounted option.	Discounted option.	Carry forward.

1.3.2 The short list

The following options from the long-list are being considered to be carried forward for further analysis as part of the short-list options:

Option 2: NMIS undertake a reduced scope

NMIS recruit additional staff, with processing sector experience/skills and invest in equipment that aligned with processing sector / sub sectors, then utilise current and planned building and facilities to locate new staff and equipment.

Option 3: DPMC owned by NMIS as Specialist Technology Centre, locate in Irvine

NMIS own the DPMC, the DPMC will be a NMIS specialist technology centre, located in Irvine, North Ayrshire. NMIS will rent building from North Ayrshire Council. The NMIS DPMC would have a strategic partnership with CPI/MMIC.

Option 9: Deliver Phase 1 only

Undertake the DPMC as outlined in option 3, but only complete phase 1, do not initiate phase 2.

1.3.3 Economic appraisal

DPMC partners appointed economic consultants Stantec UK Ltd to develop an economic impact model for assessing the economic benefits associated with each short-listed option. The key findings from this analysis are presented below, while details of the key underlying assumptions that informed this analysis are presented in appendix G. All the figures presented are assessments of net, discounted, Gross Value Added (GVA), based on a 3.5% discount rate and a 30-year appraisal period.

1.3.4 Key findings

Option Appraisal - results

The results are summarised in the table below:

Table 3: Option Rankings (£ million)

Option	Description	Ranking				
		NPC	Cash Benefit	Non-Cash Benefit	Cost net cash savings	Costs net all savings
-	Do nothing	1	4	4	1	1
2	Reduced scope	2	3	3	2	2
3	NMIS owned, in Irvine	4	1	1	4	4
9	Phase 1 only	3	2	2	3	3

The key findings from the options appraisal are as follows:

Do nothing: This option ranks fourth out of four.

It provides no net additional benefits at any of the spatial levels. The ‘Do Nothing’ option naturally comes with the lowest financial cost, however there is significant opportunity cost associated with this option. There is a very real risk that without action a similar facility will be developed elsewhere and capture the potential market value and opportunities.

Option 2 – Reduced scope: This option ranks third out of four.

It provides a low level of benefits, however only a small proportion would be realised within the Ayrshire Growth Deal area. This option would see the DPMC operate out of existing NMIS premises, resulting in minimal construction benefits. While the conversion of the facility to suit DPMC uses, the lack new and bespoke high-quality facilities will not support the level of industry and research community engagement to enable sustainable growth and development of the facility and its capabilities.

Option 3 – NMIS owned, in Irvine: This option ranks first out of four.

It provides the greatest level of benefits across all of the spatial areas in both the construction and operation phases of the project. This option establishes a purpose-built facility in Irvine to house the DPMC which will enable the greatest level of engagement with industry and research partners, and will benefit from proximity to the flexible space on the i3 campus. This option will have facilities and infrastructure required to support the transformation of process manufacturing in Scotland and the UK while bringing high value employment and skills to the Ayrshire economy.

Option 9 – Phase 1 only: This option ranks third out of four.

It provides a moderate level of benefits but falls short of realising the full potential of the DPMC. This option delivers only the phase 1 element, which would create a purpose-built facility and establish some of the infrastructure required for the DPMC, but would be constrained in terms of floorspace. This would limit the level of engagement and interaction possible between industry and research partners, and would not allow for significant levels of growth.

Benefits Appraisal - results

The results of the benefits appraisal process are shown in the table below:

Table 4: Analysis of Qualitative Benefits

Benefit Criteria & Weight	Do nothing		Option 2 Reduced scope		Option 3 NMIS owned, in Irvine		Option 9 Phase 1 only	
	R	W	R	W	R	W	R	W
Raw (R) and Weighted (W) scores								
Investment Objective 1	0	0	4	1	9	2.25	6	1.5
Investment Objective 2	0	0	6	1.5	8	2	6	1.5
Investment Objective 3	0	0	6	1.5	9	2.25	4	1
Investment Objective 4	0	0	6	1.5	9	2.25	4	1
Total	0	0	22	5.5	35	8.75	20	5
Rank	4		2		1		3	

Key considerations which influenced the scores achieved by the various options are as follows:

Do nothing: This option ranks fourth out of four.

Key considerations influencing this option's score are that does not deliver against none of the investment objectives and will not contribute to new economic opportunities within the Ayrshire Growth Deal area.

Option 2 – Reduced scope: This option ranks 2nd out of four.

It provides a home for digital process manufacturing in Scotland. However, by operating out of existing NMIS premises it lacks the dedicated and specialised facility required to deliver the greatest level of benefits to the regional and national economy.

Key considerations influencing this option's score are the lack of new, purpose-built premises to house the Digital Process Manufacturing Centre. This in turn may limit the extent to which new manufacturing partnerships and supply chains can be established. Additionally, the lack of purpose-built facilities may not support the full range of innovation and research & development opportunities. Furthermore, any training and skills programme tied to the DPMC through this option may lack the space and resources to grow to the scale required to meet market demand and facilitate the transformation to industry 4.0.

The reduced scope may not support the level organic growth required to establish a strong presence for process manufacturing and position Scotland as a leader in industry 4.0 technologies and processes.

Option 3 – NMIS owned, in Irvine: This option ranks first out of four.

It provides the greatest level of qualitative benefits out of all the options. The dedicated DPMC facility will be a crucial component of the national innovation network to support the transformation of manufacturing.

Key considerations influencing this option's score include the delivery of a purpose-built facility to develop process manufacturing capability and knowledge within North Ayrshire and across Scotland. The facility will reinforce existing strategic partnerships and lead to the development of new collaborations between industry and research, forming a unique and valuable part of the innovation network across the country. The purpose-built facility will expand pathways to industry, particularly in the North Ayrshire economy, by supporting digital manufacturing skills and training programmes to accelerate the transition of local people into high value employment.

This option will deliver the infrastructure and dedicated facility required to support growth and establish a new high value centre for manufacturing innovation. This will place Scotland at the forefront of the transition to industry 4.0 and attract additional investment in manufacturing and related supply chains to North Ayrshire.

Option 9 – Phase 1 only: This option ranks third out of four.

It provides a range of benefits along the same line as Option 3, but at significantly reduced scales.

Key considerations influencing this option's score are the reduced capacity. The delivery of only a fraction of the floorspace as Option 3 will constrain the level of engagement possible with research and industry partners, and will in turn diminish the amount growth potential which is realisable. This option will deliver some infrastructure and facilities to house new research & development and innovation activities, but may not enable the level of expansion required to satisfy market demand.

Risk Appraisal – results

A workshop session was held virtually and attended by project partners to evaluate the risks associated with each option and ensure that a consistent approach to risk evaluation was applied across all options considered.

The risk scores shown in the table below were assigned to the options on the basis of professional judgement and the assessment of previous projects and procurements. An in-depth assessment of the individual risks is contained within the Risk Register.

For ease of interpretation, the range of scales used to quantify risk impacts has been divided in the following manner:

- Low impact = score of 0-2
- Medium impact = score of 3 or 4
- High impact = score of 5

Table 5: Risk Appraisal Assessment

Summary of Risk Appraisal Results (pr = probability)	Risk Category Number	Impact	Do nothing		Option 2 Reduced scope		Option 3 NMIS owned, in Irvine		Option 9 Phase 1 only	
			Pr	T	Pr	T	Pr	T	Pr	T
Failure to commit to the project by all project partners	R2	3	50%	1.5	25%	0.75	10%	0.3	15%	.45
Similar facilities are developed which reduces demand for DPMC	R6	5	75%	3.75	50%	2.5	10%	0.5	40%	2
DPMC fails to attract enough of its target audience to generate	R26	4	100%	4	60%	2.4	15%	0.6	40%	1.6

sufficient income										
Insufficient capital and revenue funding to deliver and operate the project	R22	3	5%	0.15	20%	0.6	33%	1	20%	0.6
Total				9.4		6.25		2.4		4.65
Rank				4 th		3 rd		1 st		2 nd

The lowest overall risk score represents the best performing option, i.e. it represents the option which is least likely to be impacted by the risk factors.

1.3.5 Overall findings: the preferred option

The results of the economic appraisal process are as follows:

Table 6: The Preferred Option

Evaluation Results	Do nothing	Option 2 Reduced scope	Option 3 NMIS owned, in Irvine	Option 9 Phase 1 only
Economic Appraisal	4	3	1	2
Benefits Appraisal	4	3	1	2
Risk Appraisal	2	4	1	3
Overall Ranking	3 rd =	3 rd =	1 st	2 nd

The conclusion of the economic appraisal is that Option 3 is the preferred option. Option 3 had the highest aggregate score, which means that it performed well with respect to its ability to deliver economic benefits, be within manageable risk tolerances, and support each of the project's investment objectives.

1.4 Commercial Case

To ensure this site delivers value for money, meets strategic goals, and minimises risk, a phased approach will be adopted to future-proof benefits of DPMC. This will allow the project to develop industrial direction which will dictate capital spend of phase 2.

Phase 0 will be delivered virtually using NMIS's digital infrastructure, to enable immediate support and training to be offered to the process manufacturing sector. Phase 0 will be supported through the use of external consultants to develop and deliver training materials. External consultant services will be procured following University of Strathclyde procurement processes.

Phase 1 will be hosted within an operational building located in i3 Business Park in North Ayrshire, rough space assumed for phase 1 as 645m².

Phase 2 will be a dedicated 1100m² DPMC hub with reconfigurable space for demonstrating, developing and delivering digital technology.

DPMC's focus is to align industry 4.0 technology to the process manufacturing through:

- Digital Strategy Development
- Data Mining
- Automation
- Digital Enhancement of Capital Equipment
- Computer based tools including artificial intelligence and visualization
- Training and Education
- Connectivity
- Gamification
- Cybersecurity

Partners North Ayrshire Council and NMIS will agree arrangements for the lease for the Phase 1 location, over a minimum 5 year period.. On successful completion of phase 1, phase 2 is scheduled to deliver a reconfigurable space featuring lab, office, demonstrator and training space by 2025.

1.4.1 Procurement strategy for Operation

DPMC will follow the University of Strathclyde Procurement Strategy in compliance with the Procurement Reform (Scotland) Act 2014. This Strategy contains 11 specific policy areas which focus on community benefit consultation, living wage commitments, and compliance to health and safety of contractors and sub-contractors. The University complies with Late Payment legislation and takes environmental, social and economic care in its procurement activity.

1.4.2 Required services

Phase 0 will deliver training and demonstration services using NMIS's current digital infrastructure. Phase 1 will be hosted within an existing building located in i3 Enterprise Area in North Ayrshire. This space is an operational warehouse, which is surplus to the occupier's current requirements. Phase 2 will be a bespoke facility built and owned by North Ayrshire Council, NAC will seek approval to lease the building to NMIS as an established location for the DPMC.

Phase 0: Required services:

- Demystifying Digital
- Industrial Cyber Security
- Digital data analytics
- Digital leadership

Phase 1 & 2: Required services for use and procurement of DPMC will include:

- Demonstration laboratory
- VR/AR suite
- Open plan office space for staff
- Training/lecture space
- Flexible meeting rooms/space
- Kitchen
- Centre hub and service desk

- Flexible/incubator space

1.4.3 Potential for risk transfer and potential payment mechanisms

Risks that could affect the successful implementation of the project have been identified and are set out in detail in the Risk Register attached as appendix E. This includes details of risk owners, risk evaluation and mitigation measures. The Risk Register is a dynamic document that provides a tool to manage and control risks in an open, accountable and auditable manner. The Risk Register is owned, reviewed and approved by the DPMC Project Board.

1.5 Financial Case

Indicative cost estimates (capital and revenue operating costs) have been outlined for DPMC and discussions are ongoing in several areas. The financial case addresses the costs required for phase 1 and phase 2. Demand for the DPMC project is expected to exceed capacity of phase 1 by 2025, requiring a final investment decision by 2023. This decision will take into account delivery of forecast income, ensuring an adequate pipeline of activity upon completion of Phase 2.

1.5.1 Financial expenditure

Indicative cost estimates (capital and revenue operating costs) have been outlined for the preferred option of the DPMC project. The total cost of phase 1 and 2 is **£30.69M**.

- Capital cost estimates have been produced for the project, the preferred option has a total cost for phase 1 and 2 of **£14.95M (2021 prices)**. Capital costs include building fit-out and equipment procurement costs for the DPMC.
- Revenue operating costs for phase 1 and 2 have an estimated total of **£15.74M over the 5 year period**.

1.5.2 Income forecast

The income forecast is split across the three income stream types, for forecasting purposes both phase 1 and phase 2 forecasts have been included here to show the intended growth of the centre.

The forecasted income for Commercial Membership is based on the assumption that by year 1 of the DPMC, Phase 0 will have generated a critical mass of support to have commitment from companies to join as NMIS members. Securing membership will create additional opportunities with those specific member companies to develop commercial and collaborative projects.

1.5.3 Impact on the Balance Sheet

The following table describes the current investment requirement and funding balance of based on fund status.

Table 9: Investment required and funding gap

	Investment required	Committed funds	Funds Under Discussion	Revenue Assumptions	Funding Balance
CAPITAL	£14,950,902	£6,000,000	£8,950,000		-£902
REVENUE	£15,743,240		£8,686,012	£8,550,000	£1,492,773
Total DPMC	£30,694,142	£6,000,000	£17,636,012	£8,550,000	£1,491,871

1.5.4 Overall Affordability

The total cost of the project phase 1 and 2 is **£30.69M** (including both capital and revenue operating costs), over the initial 5 years of DPMC, The DPMC project forecasts a surplus of £1.5M by the end of 2026.

1.6 Management Case

The Management Case outlines the deliverability of DPMC including proposed arrangements for managing and delivering the programme, overall programme plan, governance arrangements, how performance and success will be monitored and benefits realised, and the management of stakeholders. Monitoring of the programme will be done through quality procedures established, documented and implemented across NMIS satisfying the requirements of BS EN ISO 9001:2008.

The identification, allocation and management of resources (both human and physical) required for the delivery of DPMC will be managed by NMIS in consultation with the DPMC Board. Successful delivery will be in accordance with Strathclyde and NMIS best practice of project management strategy. Project reporting arrangements will be established as details of the commercial and funding model for programme delivery are finalised. These will include programme and project organisation and mandates. This will also include contractual, financial, reporting and assurance arrangements.

1.6.1 Delivering the DPMC

Phase 0 will enable the DPMC to be able to start offering training and digital demonstrations under the banner of NMIS. External consultants will be subcontracted to develop and deliver the training. It is anticipated that during phase 0, the DPMC will secure funding for phase 1.

Once funding is secure the recruitment of phase 1 staff can commence. Technical staff will then be able to carry out specification and procurement of phase 1 equipment. Phase 1 will include a go/no-go decision to progress to phase 2.

1.6.2 Current project arrangements

NMIS will project manage DPMC using University of Strathclyde and NMIS best practice project management methodologies in order to maintain control over a multiple project environment.

DPMC Project management arrangement will:

- Communicate the management framework for the successful delivery of all programmes and projects undertaken within DPMC.
- Provide templates and guidance for appropriate use.

- Identify and link other business management system processes.
- Provide guidance and good practice to be followed when planning and delivering programmes and projects.

Responsibility for the delivery of the construction of the Phase 2 building will rest with North Ayrshire Council and will be led by the Council's Growth and Investment Team, overseen by the Council's Director of Growth and Investment, reporting to the Council's Chief Executive. The project will be managed in accordance with NAC project management procedures. North Ayrshire Council will procure and appoint a full multi-disciplinary and experienced design team to advance the project to completion. A detailed project plan and detailed risk management system will be prepared for the Full Business Case. Current summaries of both are provided below.

1.6.3 Project plan

The table below contains estimated timescales and these will be reviewed and finalised in the Full Business Case.

Table 7: DPMC project milestone activity

Milestone Activity	Est Date	Quarter
NAC/NMIS identify funding sources	End Jan 2021	Q4 20/21, Year 1
Submit OBC to SE for endorsement and capital investment for Phase 1 Pilot	Mid Jun 2021	Q1 21/22, Year 1
Complete DPMC OBC & submit to PMO	End Jun 2021	Q1 21/22, Year 1
NAC obtain Cabinet endorsement for OBC, MOU.	End Jun 2021	Q1 21/22, Year 1
NMIS & CPI obtain Board endorsement for project	End Jun 2021	Q1 21/22, Year 1
Procurement and appointment of consultants to develop detailed Ph1 specifications.	End Jun 2021	Q1 21/22, Year 1
Development of Phase 0	End Jun 2021	Q1 21/22, Year 1
NAC undertake SIs for project site	End Jun 2021	Q1 21/22, Year 1
Partners agree equipment spec and its procurement.	End Jun 2021	Q1 21/22, Year 1
NAC/NMIS/Ayr Col agree services for Ph1	End Aug 2021	Q2 21/22, Year 1
Government approval of OBC via PMO	End Aug 2021	Q2 21/22, Year 1
Ph0 commencement	End Sep 2021	Q2 21/22, Year 1
Partners conclude land assembly requirements and lease agreements	End Oct 2021	Q2 21/22, Year 1
NAC/NMIS begin preparation of Full Business Case work	End Oct 2021	Q3 21/22, Year 1
Appoint contractor for Ph 1 Refurb Works	End Nov 2021	Q3 21/22, Year 1
Commence refurb works to Ph1 space	End Jan 2022	Q4 20/21, Year 2
NAC appoint design team for DPMC Ph2 facility	End Jan 2022	Q4 20/21, Year 2
Complete refurb works to Ph1 space	End Mar 2022	Q4 20/21, Year 2
NMIS install and test equipment in Ph1 location	End Apr 2022	Q1 22/23, Year 2
NMIS commence operation of Ph1(5 years)	End Apr 2022	Q1 22/23, Year 2
Ph1 Staffing	End Apr 2022	Q1 22/23, Year 2
Submit statutory applications for DPMC Ph2 facility	End Jul 2022	Q2 22/23, Year 2
NAC obtains statutory approvals	End Nov 2022	Q3 22/23, Year 2

NAC procures construction works for DPMC Ph2 facility	End Mar 2023	Q4 22/23, Year 2
NAC evaluates tenders and seeks Cabinet approval to award	End May 2023	Q1 23/24, Year 3
Completion of DPMC Full Business Case and approval	End Jun 2023	Q1 23/24, Year 3
NMIS confirm commitment to DPMC Ph 2 based on Pilot's performance	End Jun 2023	Q1 23/24, Year 3
NAC awards contract for construction of DPMC facility	End Jul 2023	Q2 23/24, Year 3
Construction works commence on site for DPMC facility	End Aug 2023	Q2 23/24, Year 3
Contractor completion and handover of DPMC facility	End Dec 2024	Q3 24/25, Year 3
NMIS commence operation of DPMC Ph2 facility	End Apr 2025	Q1 25/26 Year 3
NMIS completes operations at Ph1 facility	End Apr 2027	Q1 27/28 Year 5

These will be reviewed and finalised in the Full Business Case. Project plans will include post project evaluation to improving future project performance, achieving best value for money from public resources, improving decision-making and learning lessons for all stakeholders.

1.7 Recommendation

As mentioned previously further steps for the DPMC project include engagement with industry via DPMC partner organisations, and launching phase 0 to initiate training and demonstration services to support the UK's process manufacturing industry. A key next step is securing funding to support progressing arrangements to initiate phase 1 of the DPMC.