Witness Name: Richard Davis
Statement No: 1 M5/CERET/01
Exhibits: 82
Dated: 10 December 2024

UK COVID-19 INQUIRY

WITNESS STATEMENT OF RICHARD DAVIS

I, Richard Davis, (known as Dickie Davis), will say as follows: -

Preface

1. I provide this statement in response to a request made by the Chair of the UK Covid-19 Public Inquiry ("the Inquiry") under Rule 9 of the Inquiry Rules 2006 dated 24 July 2024 and referenced M5/CERET/01. The request relates to the work of the Critical Equipment Requirement Engineering Team ("CERET") during the period of time between 1 January 2020 and 28 June 2022 ("the relevant period"). Matters addressed within the statement primarily relate to the relevant period unless otherwise specified.

2. As a member of the Senior Civil Service at the Welsh Government, and the senior Welsh Government representative of the Critical Equipment Requirement Engineering Team, I consider myself to be the appropriate person to assist the Inquiry with this request.

3. As detailed later in this statement, the Critical Equipment Requirement Engineering Team comprised of members both inside and outside the Welsh Government. This statement relates only to the work of the Critical Equipment Requirement Engineering Team which was undertaken collectively as a team. I am unable to provide evidence on any work undertaken by individual member organisations acting in their independent capacity outside the Critical Equipment Requirement Engineering Team.

4. In preparing this statement, I have received support from colleagues from within the Welsh Government who worked as part of the Critical Equipment Requirement Engineering Team during the relevant period.

Professional background

5. I joined the Welsh Government in 2012 after a 30-year career in the British Army. During my military service, which was worldwide, I was awarded an MBE in 1997 for operational service and an OBE after commanding an infantry battalion from 2003 - 2006. I left the British Army in February 2012 with the rank of Lieutenant Colonel and after initially working as a consultant for the Welsh Government moved to a permanent position in the Civil Service in November 2012. My initial appointment was as a Senior Business Manager leading support to the St Athan and Cardiff Airport Enterprise Zone and, on promotion to Senior Civil Servant, I led the Advanced Materials and Manufacturing Sector team supporting manufacturing pan-Wales.

6. After a restructuring within the Welsh Government, I became the Deputy Director for the Industrial Transformation Division. This Division acted as a bridge between regional support to businesses and key UK Government departments, trade bodies and global companies with investment and facilities in Wales. It placed a significant emphasis on the steel, defence, aerospace and automotive sectors in Wales. It was in this appointment that I was a member of the Critical Equipment Requirement Engineering Team until its dissolution in June 2021. In April 2023 I moved to a part-time position and was appointed Deputy Director for Special Projects and Construction.

Industry Wales

Overview of Industry Wales

7. Industry Wales is the trading name of the Sector Development Wales Partnership Limited which is a company established by the Welsh Ministers on 29 January 2013. Industry Wales receives annual funding from the Welsh Government (sponsored by the Industrial Transformation and Foundational Economy Division) and is fully accountable to the Welsh Ministers as a wholly owned subsidiary company limited by guarantee. I exhibit a copy of the Articles of Association for Industry Wales which were adopted on 12 March 2014 at **M5/CERET/001 – INQ000501404.**

8. The role of Industry Wales is to:

    a) Provide unfettered advice to the Welsh Ministers relating to the manufacturing sector.
    b) Support engineering, technology and manufacturing businesses in Wales, set within the context of the Welsh Government's strategic aims for economic development in Wales.
    c) Provide governance and funding to its constituent industry sector forums: Aerospace Wales Forum; Net Zero Industry Wales; Technology Connected and the Welsh Automotive Forum.

9. I exhibit a copy of the management agreement made between the Welsh Ministers and Industry Wales dated 9 April 2013 at **M5/CERET/002 – INQ000501403**, which sets the broad framework within which Industry Wales operates and the terms and conditions under which the Welsh Ministers provide its funding. The provisions relating to funding arrangements were amended in 2014 and I exhibit a copy of the amendments at **M5/CERET/003 – INQ000505385.** The Welsh Government had intended for the management agreement to be replaced by an updated framework agreement so that it reflected the wording used in more recent agreements with other Welsh Government arm's length bodies (for example, up to date Welsh Government department names). However, this has only recently been agreed and was issued in October 2024. For the purposes of the relevant period, the original management agreement (as amended in 2014) applied and remained in place.

10. The payment of funding to Industry Wales is conditional upon the satisfactory performance of the company of all its obligations in the management agreement and a remit letter which is issued by the Minister for Economy outlining the strategic objectives of Industry Wales for the relevant term. Industry Wales is required to produce a business plan setting out how it will achieve these objectives.

11. I exhibit a copy of the remit letter, and the funding letter, sent to Industry Wales for the following periods of time:

Period	Remit letter	Funding letter
2019 - 2020	**M5/CERET/004 – INQ000501409**	*No funding letter issued*
2020 - 2021	**M5/CERET/005 – INQ000501405**	**M5/CERET/009 – INQ000509347** as amended by a letter dated 28 May 2020 exhibited at **M5/CERET/010 - INQ000509340**
2021 - 2022	**M5/CERET/006 – INQ000501407** as varied by a letter dated July 2021 exhibited at **M5/CERET/007 – INQ000501408**	**M5/CERET/011 – INQ000509341**
2022 - 2026	**M5/CERET/008 – INQ000501406**	**M5/CERET/012 – INQ000509344**

12. The strategic objectives of Industry Wales did not explicitly relate to the Covid-19 pandemic. However, in the remit letter for the period 2021 – 2022, the Minister for Economy, Transport and North Wales acknowledged the support provided by Industry Wales in addressing the challenges presented by the Covid-19 pandemic and for establishing and leading the activities of the Critical Equipment Requirement Engineering Team to address the particular Personal Protective Equipment ("PPE") and supply issues faced by the NHS and care sector during this period. Further information on the Critical Equipment Requirement Engineering Team is set out later in this statement.

13. Oversight of Industry Wales is via its own Board, referred to in paragraph 14 below, a management agreement, a term of government remit letter and an annual funding letter, approved by the Minister for Economy. During the relevant period I headed up the oversight team for Industry Wales. It should be noted that Industry Wales' performance is annually reviewed prior to any funding being allocated for the following year.

Organisational structure of Industry Wales

14. The board of Industry Wales has up to seven non-executive directors, including the Chief Executive Officer and the Chair. Although Industry Wales may appoint its own board members, members have to date been appointed by the Welsh Ministers through the public

appointment process. Public appointments are regulated by the Commissioner for Public Appointments, and as such appointments must comply with the Governance Code for Public Appointments, exhibited at **M5/CERET/013 - INQ000509350.** Membership reflects the individual skills, knowledge and expertise of the individual appointed in engineering, technology and manufacturing, as opposed to the individual representing a particular organisation.

15. At the outset of the relevant period, the board members were Prof Keith Ridgway (Chair); James Davies; Mike Evans; Antonio Provini; Ian Watkins; and Tom Whyatt.

16. From 1 April 2021 until 31 March 2024, the board members were: Prof Keith Ridgway (Chair); Dr Jennifer Baxter; Caroline Lewis; Dr Hushmeira Begum; Huw Watkins; James Davies; and Prof Tom Crick.

17. The board provides oversight, governance and direction for Industry Wales' Chief Executive Officer and industry forums. As set out in the management agreement made between the Welsh Ministers and Industry Wales dated 9 April 2013 and exhibited earlier in this statement at **M5/CERET/002 – INQ000501403**, the role of the board is to:
    a) Provide effective leadership, defining and developing strategic direction and setting challenging objectives.
    b) Promote high standards of public finance, upholding the principles of regularity, propriety and value for money.
    c) Ensure that Industry Wales' activities are conducted efficiently and effectively.
    d) Monitor performance to ensure that Industry Wales fully meets its aims, objectives and performance targets.

18. The board is responsible for:
    a) Establishing and taking forward the strategic aims and objectives of Industry Wales consistent with its overall purpose and within the policy and resources framework determined by the Minister.
    b) Ensuring that the Minister is kept informed fully of any changes that are likely to impact on the strategic direction of Industry Wales or on the attainability of its targets, and of steps needed to deal with such changes.
    c) Ensuring compliance with any statutory or administrative requirements in respect of the use of public funds; that it operates within the limits of its statutory authority and any delegated authority agreed with the sponsor department, and in accordance with any other conditions relating to the use of public funds; and

that, in reaching decisions, it takes into account guidance issued by the Welsh Government.

d) Ensuring that it receives and reviews regularly, financial information concerning the management of Industry Wales; that it is informed in a timely manner about any concerns as to the activities of Industry Wales; and that, where applicable, it provides positive assurance to the Minister via the Management Division that appropriate remedial action has been taken to address any such concerns.

e) Demonstrating high standards of corporate governance at all times, including by using the audit committee to help the board to address key financial and other risks.

f) Appointing, with the prior approval of the Minister, a Chief Executive Officer.

19. The board of Industry Wales meets on a formal basis four times a year. Welsh Government officials do not sit on the Board but do attend meetings for observation and contribute as necessary as part of an oversight role.

20. During the relevant period, the Chief Executive Officer of Industry Wales was James Davies who was in post from 1 April 2017 until 31 March 2024. The current Chief Executive Officer is Dr Jennifer Baxter. As set out earlier in this statement, the Chief Executive Officer is appointed by the board of Industry Wales. In addition to the Chief Executive Officer, Industry Wales employs two members of staff working on skills and supply chain activities.

21. The Chief Executive Officer of Industry Wales is responsible for the proper stewardship of the public funds of which it has charge, and for the day-to-day operations and management of the organisation. During the Covid-19 pandemic, the Chief Executive Officer of Industry Wales led the activities of the Critical Equipment Requirement Engineering Team. Further information on the Critical Equipment Requirement Engineering Team is set out later in this statement.

Critical Equipment Requirement Engineering Team

Overview of the Critical Equipment Requirement Engineering Team

22. Before the pandemic, the majority of high turnover health equipment and supplies such as PPE for the NHS in Wales was sourced from mass producers in India and China to achieve the best value for money and economies of scale. However, as Covid-19 spread globally

these traditional sources either closed down or dried up for a significant period due to increased global demand or a country's own national lockdown restrictions.

23. The Critical Equipment Requirement Engineering Team was established by the Welsh Government on or around 18 March 2020 in recognition of the need to support matters such as the UK Ventilator Challenge. The UK Ventilator Challenge was an initiative launched by the UK Government on 16 March 2020 calling for manufacturers and medical device companies to step up production of existing designs and design new ventilators from scratch. I exhibit a copy of the media information notice regarding the UK Ventilator Challenge at **M5/CERET/014 –INQ000505243**.

24. Shortly after the launch of the UK Ventilator Challenge, the Chief Executive Officer for Industry Wales, James Davies, put out an 'Urgent Request for Support' to Welsh companies asking for expressions of interest in the Ventilator Challenge and their readiness to support the NHS in Wales in other matters. An example of the email sent and presentation by James Davies dated 18 March 2020 is exhibited at **M5/CERET/015 - INQ000509334**.

25. Although the Critical Equipment Requirement Engineering Team was initially established in response to the UK Ventilator Challenge, and James Davies was instrumental in seeking expressions of interest from businesses in Wales, the Critical Equipment Requirement Engineering Team did not ultimately play any active role in sourcing ventilators in response to this Challenge. Instead, the role of the Critical Equipment Requirement Engineering Team quickly evolved into supporting the NHS in Wales in sourcing new domestic suppliers where existing supply chains for key healthcare resources were under significant pressure and or where such resources were inadequate. Such key healthcare resources encompassed PPE, including hand sanitiser, face visors, face masks (various types), decontamination services, screening and shield manufacture and scrubs. As set out later in this statement, the products which the Critical Equipment Requirement Engineering Team assisted with were not limited to the NHS in Wales; some were also made available to the social care sector in Wales and to the general public.

26. A clear objective of the Critical Equipment Requirement Engineering Team was to support Wales-based manufacturers to repurpose their production facilities to provide key healthcare equipment and supplies and find local solutions to local problems that were immune to the failures of the international supply chain. The phrase finding "local solutions to local problems" was a mantra used by the First Minster and his Cabinet members throughout the pandemic.

27. I exhibit a copy of the Critical Equipment Requirement Engineering Team's terms of reference at **M5/CERET/016 – INQ000321202** which were published in or around November 2020 following a recommendation in an internal audit service report. These were the final version which evolved from an initial draft which was produced in or around May 2020. The pace of the pandemic and the demands on the Critical Equipment Requirement Engineering Team during the initial period of the pandemic led to the delay in finalising and publishing the terms of reference, but these were ultimately the basis on which we worked between May and November 2020. As set out in the terms of reference, the remit of the Critical Equipment Requirement Engineering Team was:

    a) Working within a framework of four procurement routes:
        i. Route 1: existing supplier base, straightforward procurement.
        ii. Route 2: existing supplier base, some minor restrictions on supply.
        iii. Route 3: supply limitations, requires manufacturers to adapt processes.
        iv. Route 4: supply does not exist.

        The Critical Equipment Requirement Engineering Team's focus was on developing and delivering Route 3 and 4 solutions.
    b) Leading and managing a co-ordinated response to Covid-19 in relation to engineered solutions within the manufacturing base pan-Wales.
    c) Supporting the NHS Wales Shared Services Partnership ("NWSSP") to develop and deliver its response to Covid-19 in key areas such as PPE, clinical equipment such as ventilators, and any other items identified as essential by the NHS Wales Shared Services Partnership.
    d) Co-ordination and reporting of information and activity with wider Covid-19 response structures such as the Emergency Control Centre Wales (ECCW), including actions, information and escalation.
    e) Rapid response to Ministerial requests and informed proactive input into Welsh Government and UK Government discussions and decisions.
    f) Proposing and supporting medium and longer term Covid-19 recovery options as the UK Government and the Welsh Government response evolved.

28. Members of the Critical Equipment Requirement Engineering Team had an individual and collective responsibility to act in the best interests of the public and the NHS in Wales, including:

    a) Representing the views and concerns of their individual organisations and teams.

b) Proactively identifying emerging issues, resource requirements, risks and opportunities, in their own areas.
c) Communicating the Critical Equipment Requirement Engineering Team's activity and decisions to their organisations and teams.
d) Implementing the Critical Equipment Requirement Engineering Team's decisions in areas of activity for which they were responsible.

The Critical Equipment Requirement Engineering Team's role during the Covid-19 pandemic

29. As set out in the witness statement of Andrew Slade (reference **WG/CPD/01**), distribution of key healthcare equipment and supplies before and during the pandemic was the responsibility of the NHS Wales Shared Services Partnership. The remit of the NHS Wales Shared Services Partnership expanded during the pandemic to include the distribution of PPE supplies to the social care sector (excluding the private social care sector), and independent contractors in primary care (GPs, dentists, pharmacies and optometrists).

30. The focus of the Critical Equipment Requirement Engineering Team was on supporting the NHS Wales Shared Services Partnership to ensure high demand healthcare equipment and supplies such as PPE and cleaning supplies were sourced as safely and quickly as possible. Where the NHS Wales Shared Services Partnership identified that there was an urgent need for critical items within the NHS in Wales, for example, because the traditional routes for PPE were either exhausted, closed or too slow, the role of the Critical Equipment Requirement Engineering Team was to establish alternative supply routes in order to maintain a robust local supply chain to meet the needs of the NHS in Wales. This involved a range of approaches including exploring, and where appropriate, supporting manufacturers in Wales who were outside the existing framework agreements and whose products or materials could be repurposed to meet a gap in the supply chain. Where the Critical Equipment Requirement Engineering Team supported manufacturers in Wales in repurposing its products or materials, the distribution of such products was not necessarily confined to the health and social care sector in Wales. For example, the Critical Equipment Requirement Engineering Team provided advice to Penderyn Whisky to amend its whisky production to produce hand sanitiser, which subsequently became commercially available to the wider public.

31. The Critical Equipment Requirement Engineering Team's activities during the pandemic highlighted issues in the supply chain. From a personal perspective, and based on my experience working in other sectors, the main issue seemed to be the reliance of the NHS

Wales Shared Services Partnership on a global supply chain which, as a result of the pandemic, was struggling to provide critical equipment and supplies. This issue was thrown into sharp focus during the pandemic with the demand for key healthcare equipment and supplies, such as PPE, escalating worldwide, and suppliers and businesses struggling to keep up and meet the needs of every country they supplied to. Establishing a strong domestic supply, which did not need to rely solely on international sources, was key to our resilience.

32. The Critical Equipment Requirement Engineering Team is best described as a "facilitating" body. Its main function was to invite offers of supply from the wider market, marshal those offers of support and approach companies across the Welsh manufacturing base who we believed could have the capability to adapt their production lines. Those approaches were based on mine, and other members of the Critical Equipment Requirement Engineering Team's, knowledge of the industrial sector in Wales. If a company or organisation was interested in producing a piece of equipment that was identified by the NHS Wales Shared Services Partnership as being in need, then that company or organisation would be triaged by the Life Sciences Hub and subject to a due diligence process before contracts were entered into. As described elsewhere in this statement, the Critical Equipment Requirement Engineering Team was not involved in the granting of those contracts, as this was the responsibility of the NHS Wales Shared Services Partnership. The Critical Equipment Requirement Engineering Team also acted as a "signposting" body in that it provided guidance to businesses and organisations in Wales on the steps to be taken to enable its products to reach the market.

33. The Critical Equipment Requirement Engineering Team would contribute to briefings which were provided to the First Minister between April and July 2020. These set out the latest position with regard to offers of help from Welsh manufacturers and the number of Welsh companies supporting the NHS with their products. The PPE briefings are exhibited at **M5/CERET/017 - INQ000507396, M5/CERET/018 - INQ000505026, M5/CERET/019 - INQ000198310, M5/CERET/020 - INQ000198315, M5/CERET/021 - INQ000198340, M5/CERET/022 - INQ000198343, M5/CERET/023 - INQ000228025, M5/CERET/024 - INQ000198376, M5/CERET/025 - INQ000198380, M5/CERET/026 - INQ000198406, M5/CERET/027 - INQ000198409, M5/CERET/028 - INQ000198414, , M5/CERET/029 - INQ000198418, M5/CERET/030 - INQ000505130, M5/CERET/031 - INQ000198428, M5/CERET/032 - INQ000198629, M5/CERET/033 - INQ000509329.**

34. The Critical Equipment Requirement Engineering Team was not involved in procurement either for the NHS or for use in other environments (that responsibility sat with the NHS Wales Shared Services Partnership which was the body which undertook the procurement and entered into the contracts) except for a handful of matters, including the components for a Continuous Positive Airway Pressure (CPAP) device and the purchase of materials to enable volunteers to make scrubs for the NHS in Wales. Further information on the Critical Equipment Requirement Engineering Team's role with respect to the procurement of a small number of products and services is set out in detail later in this statement.

Leadership of the Critical Equipment Requirement Engineering Team

35. The Inquiry has asked how James Davies (Chief Executive Officer of Industry Wales) came to lead the Critical Equipment Requirement Engineering Team. As is set out earlier in this statement, Industry Wales is an arm's length body of the Welsh Government and part of its role is to provide unfettered advice to the Welsh Ministers relating to the manufacturing sector and to support engineering, technology and manufacturing businesses in Wales. Accordingly, in view of its established role as an arm's length body of the Welsh Government it seemed appropriate that Industry Wales should play a key role in the Critical Equipment Requirement Engineering Team.

36. Having worked alongside James Davies for several years I was aware that he had a thorough understanding of the manufacturing supply chain in Wales and indeed across the UK. He also had firsthand knowledge of the potential problems faced by companies within any supply chain. I was aware that he had significant standing within the manufacturing sector at both the national and international level and was particularly highly respected within the high value manufacturing sector due to his previous appointments. I considered him then, and still do, to be a global captain of industry who one ignores at one's peril. He was a natural choice to lead the Critical Equipment Requirement Engineering Team.

37. James Davies chaired the majority of meetings of the Critical Equipment Engineering Requirement Team from its inception on 18 March 2020 until its final meeting on 22 June 2021. If James was unable to chair the meetings, I would chair them as the senior lead on behalf of the Welsh Government. In my role, I would also be responsible for providing briefings to the Welsh Ministers and representing the Welsh Government during meetings with the UK Government including the Chancellor of the Duchy of Lancaster. James and I worked extremely well together and would discuss and debate many issues before

meetings of the Critical Equipment Engineering Requirement Team. As a rule of thumb, I would deal with any internal (within Welsh Government) or political issues, and he would deal with the companies or supply chain issues. On a number of occasions James would support me on Cabinet briefings or I would join him when he was talking to companies or trade bodies.

Overview of the organisational structure, composition and day-to-day operations of the Critical Equipment Requirement Engineering Team

38. The membership of the Critical Equipment Requirement Engineering Team is represented in the organogram exhibited at **M5/CERET/034 - INQ000321203**. As set out in the organogram, the membership of the Critical Equipment Requirement Engineering Team included officials from the Health, Commercial & Procurement, Finance and Economy (including Innovation) departments of the Welsh Government, as well as individuals from the following arm's-length bodies and external groups:
    a) Industry Wales which is responsible for providing specialist advice and working directly with industry to support technology and manufacturing businesses in Wales to thrive on a global stage.
    b) The NHS Wales Shared Services Partnership which delivers a range of professional, technical and administrative services, including procurement services, on behalf of all Local Health Boards and Trusts in NHS in Wales.
    c) The Surgical Materials Testing Laboratory which is part of the NHS Wales Shared Services Partnership providing testing and technical services regarding medical devices to the NHS in Wales, enabling procurement services for the NHS in Wales and others in the NHS in Wales to undertake evidence-based purchasing.
    d) The Life Sciences Hub which provides support and guidance to propel life sciences innovations into frontline use in health and social care in Wales.

39. Industry Wales and the Life Sciences Hub are arm's length bodies of the Welsh Government, both of which were managed, and part-funded during the relevant period by the Industrial Transformation Division within the Welsh Government of which I was the Deputy Director. Both these organisations brought extensive and detailed sectoral knowledge which was invaluable and complemented the support already given by officials from the Welsh Government. It was also necessary that the NHS Wales Shared Services Partnership and its Surgical Materials Testing Laboratory joined the Team. This ensured that the Critical Equipment Requirement Engineering Team received precise demand

priorities for PPE and other equipment from the NHS in Wales whilst ensuring technical and quality specifications and standards respectively.

40. As set out earlier in this statement, meetings of the Critical Equipment Requirement Engineering Team were mainly chaired by the Chief Executive of Industry Wales, James Davies. The Secretariat was provided by the Industrial Transformation Division of the Welsh Government.

41. From its inception in March 2020, the Critical Equipment Requirement Engineering Team met formally via teleconference twice a day at 09:00 and 16:00 five days a week and would also often meet on the weekends (albeit not as a full team). After June 2020, the team's role had developed from a reactive crisis management model to proactive planning for potential further waves. Although it continued to meet over the summer of 2020, meetings become less frequent and by October 2020 it became clear that the NHS Wales Shared Services Partnership had sufficient reserves of equipment or orders in place and therefore did not need further support. The final formal meeting of the Critical Equipment Requirement Engineering Team was held on 29 June 2021.

42. During the Critical Equipment Requirement Engineering Team's meetings, the NHS Wales Shared Services Partnership informed those present of high demand critical items and any equipment shortfalls. The Team's role was then to explore alternative potential suppliers to fulfil or at least reduce the risk to supply. Officials from the Welsh Government, forming part of the membership of the Critical Equipment Requirement Engineering Team, were informally assigned responsibility for high demand critical items (such as visors, face masks, scrubs, gowns, hand sanitiser and aprons) and progress was coordinated through the meetings of the Team. The purpose of having two meetings per day was to track progress and flag risk issues with sourcing supplies of key components and other items which were discussed collectively. The frequency of meetings reflected the urgency within which the Critical Equipment Requirement Engineering Team operated so as to ensure that any gaps in the supply chain were rectified as quickly as possible. Issues were escalated back to the NHS Wales Shared Services Partnership, the Welsh Government's Health and Social Services Group, the Economy, Skills and Natural Resources' Group which included our parent directorate Business and Regions and the Innovation team via these meetings.

43. The meetings of the Critical Equipment Requirement Engineering Team also provided the Life Sciences Hub with an opportunity to provide an update to the Team on its activities. As a member of the Critical Equipment Requirement Engineering Team, the Life Sciences Hub

acted as the primary point of contact for industry engagement and would be responsible for triaging any offers of support that were received in order to accelerate the adoption of critical products and services. During the meetings, the Life Sciences Hub would provide details of the number of businesses and organisations which had been in contact with offers of support.

44. The 09:00 meetings of the Critical Equipment Requirement Engineering Team were facilitated by a slide deck put together by its chair, James Davies, and provided information on the updates to be provided at the meetings. Notes from the meetings (including actions arising) would sometimes (but not always) be produced. I exhibit a chronology of the meetings at **M5/CERET/035 – INQ000477077.** All slides and meeting notes have been disclosed to the Inquiry. The 16:00 meetings would serve as an opportunity for members to "check in" on progress and to ask for any support or help if required.

45. Further information on the day-to-day operations of the Critical Equipment Requirement Engineering Team during the Covid-19 pandemic is set out later in this statement.

Governance arrangements of the Critical Equipment Requirement Engineering Team

46. The Critical Equipment Requirement Engineering Team fell within the remit of the Economy, Skills and Natural Resources Group in the Welsh Government and was ultimately accountable to the Minister for the Economy. However, each individual member continued to be subject to their own organisation's governance arrangements.

47. The Critical Equipment Requirement Engineering Team itself did not receive any direct funding but I had delegated authority to utilise a budget of up to £5 million. These funds were administered by the Industrial Transformation Division (known at that time as the Thematic Division) of the Welsh Government and used if and when necessary for the purposes of supporting the NHS in Wales. This included the sourcing of new suppliers where existing provision was insufficient, help develop and manufacture new products and secure components / raw materials / services to meet the needs of the pandemic response. I exhibit a copy of the Ministerial Advice seeking approval for that funding from the Minister for the Economy at **M5/CERET/036 - INQ000145345.** Further information on the scrutiny as regards expenditure of the £5 million budget is set out later in this statement.

48. Decisions of the Critical Equipment Requirement Engineering Team (including when to spend funding and on what) were discussed amongst members and agreed collectively. If

a need for funding was confirmed a decision was then made whether to support directly from the Critical Equipment Requirement Engineering Team funding or Welsh Government Innovation Funds. I provided final approval for any purchase orders against the £5m Critical Equipment Requirement Engineering Team budget but not the innovation budget, which was approved via their own processes. I exhibit a copy of an email with the Welsh Government's Procurement Team dated 26 March 2020 at **M5/CERET/037 – INQ000504949** in which it was agreed that they would only progress items which I had specifically approved.

49. Of the £5 million budget allocated to the Critical Equipment Requirement Engineering Team, approximately:
    a) £632,302.81 plus VAT was used on purchasing components for the Continuous Positive Airway Pressure (CPAP) devices, of which £565,197.84 was written off.
    b) £3,793.80 plus VAT was used for purchasing supplies for volunteers to make scrubs for the NHS in Wales.
    c) £4881.36 plus VAT was used for funding transport to deliver the materials in (b).
    d) £4,550 plus VAT was paid to Orchard Media and Events Ltd to create a Back to Work video which, as far as I can recall, reminded people to wear masks, social distance and to take care when returning to work for use by businesses in Wales.
    e) An additional £100,000 was given to Industry Wales to support the Critical Equipment Requirement Engineering Team and to reimburse Industry Wales for the Team's related purchases including Continuous Positive Airway Pressure (CPAP) and oximeters.

50. I exhibit examples of the purchase orders which I approved for the above expenditure at **M5/CERET/038 – INQ000505368**, **M5/CERET/039 – INQ000505370**, **M5/CERET/040 – INQ000505388** and **M5/CERET/041 – INQ000505373**.

51. Additional funding in support of the role of the Critical Equipment Requirement Engineering Team also came from a £6 million Welsh Government innovation fund to support rapid innovation grants, the Ministerial Advice for which is exhibited at **M5/CERET/042 – INQ000103898**. This funding was administered by the Welsh Government's Innovation Team, a number of whom were members of the Critical Equipment Requirement Engineering Team.

52. Decisions about which key healthcare equipment and supplies required further manufacturing or sourcing, and in which order of priority that equipment was needed, were made by the NHS Wales Shared Services Partnership. The Critical Equipment Requirement Engineering Team was not a decision-making body in that regard and did not make any decisions in relation to what health equipment or supplies were needed. As referred to earlier in this statement, the NHS Wales Shared Services Partnership communicated its instructions on the need for key healthcare equipment and supplies during the meetings of the Critical Equipment Requirement Engineering Team. I exhibit an email from the NHS Wales Shared Services Partnership dated 26 March 2020 at **M5/CERET/043 – INQ000504950** which refers to a list of critical items which the NHS Wales Shared Services Partnership believed were in worldwide shortage at that time and the areas in which we needed to focus our efforts on possible alternative manufacturing. I exhibit a copy of the list at **M5/CERET/044 – INQ000504961.** It must be remembered that the role of the Critical Equipment Requirement Engineering Team was to support or facilitate the NHS in Wales in sourcing alternative suppliers where usual resources were not sufficient.

53. As far as I am aware the Welsh Government does not hold any specific information on the way in which the NHS Wales Shared Services Partnership calculated or predicted its demand for specific goods and products or whether it liaised with the health and social care sector in Wales in that regard. That said, I am aware that the NHS Wales Shared Services Partnership worked with Deloitte on modelling and is referred to in the PowerPoint presentation dated 15 May 2020 which I exhibit at **M5/CERET/045 – INQ000505074**. The NHS Wales Shared Services Partnership would be better placed to provide information to the Inquiry on what modelling, estimates and instructions were used by it to decide which key healthcare equipment and supplies were critical, including how demand for specific goods and products was calculated and predicted.

54. As exhibited earlier in this statement at **M5/CERET/016 – INQ000321202**, the terms of reference set out the remit, roles and responsibilities of the Critical Equipment Requirement Engineering Team. These terms of reference were formally published in November 2020, but we had been acting under the governance procedures of the Welsh Government and informal terms of reference. As mentioned earlier, James Davies's remit was to give unfettered advice to the Minister for Economy. In his letter of 19 March, exhibited at **M5/CERET/046 - INQ000509338,** he refers to the critical shortage list from the NHS Wales Shared Services Partnership which was fundamental to the formation of the Critical

Equipment Requirement Engineering Team. In the letter he goes on to state the willingness of Welsh manufacturers wishing to support the Welsh Government and the NHS in Wales

55. As stated above, the NHS Wales Shared Services Partnership's critical equipment shortage list drove the agenda for the Critical Equipment Requirement Engineering Team. The slide pack for meetings was collated by James Davies and discussions centred around updates on the actions taken by the Critical Equipment Requirement Engineering Team and communications with the manufacturing sector. These discussions did include the demand of PPE more generally across public services in Wales.

56. During those frantic early days of the pandemic, I received verbal confirmation from the Minister for Economy to bring industry and the NHS Wales Shared Services Partnership together to support their supply chain and acted immediately. The first formally recorded meeting with the NHS Wales Shared Services Partnership was on 20 March 2020 which I exhibit at **M5/CERET/047 – INQ000504948**.

Winding down of the Critical Equipment Requirement Engineering Team

57. As set out earlier in this statement, the meetings of the Critical Equipment Engineering Team became less frequent from October 2020 as it became clear that the NHS Wales Shared Services Partnership had sufficient reserves of equipment or orders in place and therefore the Critical Equipment Requirement Engineering Team services were not needed.

58. I would describe the Critical Equipment Requirement Engineering Team as being most active between March 2020 and June 2020. After June 2020, the Critical Equipment Requirement Engineering Team was only reporting by exception, but it continued to meet and provide support in relation to the supply of PPE. By June 2020, the planning and procurement advice had moved from a reactive crisis management model to proactive planning. By 23 June 2020, as set out in the First Minister's PPE briefing exhibited at **M5/CERET/028 – INQ000198414**, the Critical Equipment Requirement Engineering Team's role was described as continuing in its current format and supporting the NHS Wales Shared Services Partnership to move towards non-clinical demand – primarily face coverings. It must be noted that the Life Sciences Hub triaged all offers of supply and production of PPE and essential medical equipment. By the end of June 2020, the number of enquiries to the Life Sciences Hub fell drastically and continued to do so. The final meeting of the Critical

Equipment Requirement Engineering Team was on 29 June 2021 following which the Critical Equipment Requirement Engineering Team was wound down.

The Critical Equipment Requirement Engineering Team and NHS Wales Shared Services Partnership

59. The NHS Wales Shared Services Partnership was a member of the Critical Equipment Requirement Engineering Team and attended its meetings. Given its responsibility for the procurement of health equipment and supplies within the NHS, and later the procurement and supply of PPE to social care settings, the NHS Wales Shared Services Partnership fulfilled the role of the "customer" in relation to the Critical Equipment Requirement Engineering Team. It was the needs and demands of the NHS Wales Shared Services Partnership that drove the Critical Equipment Requirement Engineering Team's activities and prioritisation.

60. As set out earlier in this statement, the Surgical Materials Testing Laboratory is part of the NHS Wales Shared Services Partnership and was also a member of the Critical Equipment Requirement Engineering Team. The Surgical Materials Testing Laboratory role was to ensure any equipment provided to the NHS in Wales met the necessary technical and quality standards.

61. The NHS Wales Shared Services Partnership attended the meetings of the Critical Equipment Requirement Engineering Team, during which it would provide instructions to the Critical Equipment Requirement Engineering Team on key healthcare equipment and supplies demands. It was an extremely positive and productive relationship. After the meetings became less frequent in October 2020, the Critical Equipment Requirement Engineering Team continued to remain in contact with the NHS Wales Shared Services Partnership in particular discussing how to anchor local supply chains to mitigate future risk.

62. There were no issues or concerns which arose regarding the working relationship between NHS Wales Shared Services Partnership and the Critical Equipment Requirement Engineering Team.

The Critical Equipment Requirement Engineering Team during the pandemic

63. The Critical Equipment Requirement Engineering Team relied upon information provided by the NHS Wales Shared Services Partnership during meetings as to the need for certain healthcare equipment and supplies, and subsequently assisted in encouraging domestic manufacture in Wales in order to meet those needs. As set out in paragraph 32, the way in which the Critical Equipment Requirement Engineering Team encouraged domestic manufacture in Wales was to approach companies across the Welsh manufacturing base who we believed could have the capability to adapt their production lines, invite offers of supply from the wider market and pass on offers of help for triaging. This did not incur any additional costs to the Welsh Government. The work of the Critical Equipment Requirement Engineering Team is summarised in a briefing paper which I exhibit at **M5/CERET/048 - INQ000349260**.

64. From early March 2020, Industry Wales and subsequently the Critical Equipment Requirement Engineering Team contacted all the industrial sector forums including the Industry Wales family (Aerospace Wales Forum, Technology Connected, and Welsh Automotive Forum (over 550 companies)), Medi Wales, Make UK, Welsh Nuclear Forum, Confederation of Business Industry, Federation of Small Businesses, Marine Energy Wales, Chambers of Commerce, the Construction Industry Training Board, Mid Wales Manufacturing Group, South Wales Industry Cluster and Business Wales inviting expressions of interest of support. These were to be submitted to a dedicated email address which had been set up by Business Wales for the purpose of assisting with the pandemic response. In parallel, many of these parties were invited to attend an online conference hosted by the Life Sciences Hub on 25 March 2020 at 13.30; over 198 businesses were represented. These business contacts were shared with the Critical Equipment Requirement Engineering Team. I exhibit an extract from a PowerPoint presentation prepared by the Life Sciences Hub Wales for inclusion in the meeting of the Critical Equipment Requirement Engineering Team on 26 March 2020 at **M5/CERET/049 - INQ000509339.** This sets out an overview of the online conference.

65. Business Wales is a service which is operated by the Welsh Government and offers a range of contracted business support services to inspire entrepreneurs and help start, sustain and grow businesses. Business Wales was not a member of the Critical Equipment Requirement Engineering Team but provided administrative support during the relevant period by providing a dedicated email for businesses and organisations to write to offering

help and provided information on "the calls to arms" on its website. Although Business Wales provided administrative support, the Welsh Government appointed the Life Sciences Hub to collate, manage and triage all offers of support to the health and social care sector in Wales in relation to the Covid-19 pandemic. I exhibit screen shots from Business Wales signposting companies to the triage system at **M5/CERET/050 - INQ000509336, M5/CERET/051 - INQ000509337.**

66. On 3 April 2020, the First Minister issued a call to action for businesses in Wales to create a new Welsh supply of PPE to support NHS and social care staff. I exhibit a copy of the press notice at **M5/CERET/052 – INQ000505374.** I further exhibit a press release dated 8 April 2020 at **M5/CERET/053 - INQ000477058** in which the Minister for Economy, Transport and North Wales, Ken Skates, urged more companies to join the effort to help supply the NHS and social care sector in Wales with vital equipment.

67. The Life Sciences Hub built an extensive database of companies to send communications to, should specific products be required. It worked with membership organisations and other networks and had extensive social media coverage to ensure the widest possible reach when seeking industry engagement. It should be noted that the Welsh Government also received direct offers of help from companies which were referred to the Life Sciences Hub.

68. After the various calls to arms and the initial deluge of emails offering help and support, the Critical Equipment Requirement Engineering Team asked the Life Sciences Hub to set up a triage system that carried out the initial assessment of the offers and checked on the credibility of the company. If the background checks proved positive the offer was passed directly to the Critical Equipment Requirement Engineering Team where the appropriate team member picked up the offer. This was for mainly so-called "Route 3" activity (supply limitations, requires manufacturers to adapt processes), which is discussed more fully later in this statement. If support, including technical advice or funding, was required the offer was passed to the Innovation Team who assessed the company based on the business-as-usual criteria for Welsh Government grants via SMART Cymru. The Innovation Team would advise the Critical Equipment Requirement Engineering Team of the outcomes. To the best of my knowledge, I was not aware of any manufacturers making offers of supply of PPE or other items conditional on receiving government assistance to adapt their facilities.

69. This cycle continued whilst there remained demand and supply.

The procurement routes

70. As set out earlier in this statement; to help manage the needs of the NHS Shared Services Partnership, the Critical Equipment Requirement Engineering Team segmented the requirements into four procurement categories termed "routes" which were as follows:

    i. Route 1: existing supplier base, straightforward procurement
    ii. Route 2: existing supplier base, some minor restrictions on supply
    iii. Route 3: supply limitations, requires manufacturers to adapt processes
    iv. Route 4: supply does not exist

71. As set out in an update to the First Minister dated 6 April 2020 and exhibited at **M5/CERET/054 – INQ000505375**, Routes 1 and 2 were handled by the NHS Wales Shared Services Partnership as business as usual, and Routes 3 and 4 were led by the Critical Equipment Requirement Engineering Team. The focus of the Critical Equipment Requirement Engineering Team was on (a) Route 3 and working with companies to find ways they could set up or re-purpose manufacturing processes to produce goods and services that were not being made and (b) Route 4 and working with companies to find new solutions.

72. As noted above, if a business considered that it could help, it could submit an expression of interest via the Business Wales website. Enquiries from industry with offers of support were logged via one general mailbox and other specific mailboxes on the Business Wales website. This process complemented the Life Sciences Hub's on-line portal. The reason we had two separate landing pages was to ensure we were capturing the broad spectrum of the market, i.e. life sciences companies were more likely to contact us via the Life Sciences Hub's on-line portal, whereas non-life sciences companies were more likely to contact us via the Business Wales website. This meant that we were unlikely to see duplication of offers and avoided doubling the work for staff. Both the Business Wales website and the Life Sciences Hub's on-line portal set out the requirements for businesses, such as location, size, staff on furlough etc however I am unable to recall the exact detail of those requirements.

73. Both the information on the Business Wales website and the Life Sciences Hub's on-line portal acted as landing page from which any information received was funnelled into a single point of receipt controlled by the Life Sciences Hub. These were then coordinated by the Life Sciences Hub which had a team set up to respond, filter and support the offers of

help. All emails were acknowledged immediately, and the respondent was contacted by the Life Sciences Hub team within 24 hours. On receipt of an enquiry, the companies were checked using Creditsafe and were asked if their products complied with regulatory standards. If products needed testing (such as respirators, surgical masks and hand sanitisers) their testing certification was reviewed by the Surgical Materials Testing Laboratory. The length of time to obtain approvals depended on the complexity of the product, so for a visor we were seeing approvals within days via the British Standards Institute ("BSI") but for more complex equipment approval tended to be via the Medicines and Healthcare products Regulatory Agency ("MHRA").

74. If the product was already approved for use in an NHS setting, then the enquiry was passed directly to the NHS Wales Shared Services Partnership. If the offer was for a new or uncertified product and was judged to be in the Route 3 or 4 categories, they were passed to the Critical Equipment Requirement Engineering Team to take forward. However, it must be remembered that what was developed was always driven by the critical equipment requirement list compiled by the NHS Wales Shared Services Partnership.

75. If supporting documentation failed to meet the verification criteria, the business was notified by the Life Sciences Hub Wales.

76. Provided all the supporting documentation was received and met the verification criteria, offers of supply were forwarded to the NHS Wales Shared Services Partnership to follow its usual procurement process. The NHS Wales Shared Services Partnership would assess the supply proposal in accordance with its own procurement guidelines, engaging directly with the business in question.

77. As set out earlier in this statement, the Critical Equipment Requirement Engineering Team received the first consolidated list of critical equipment from the NHS Wales Shared Services Partnership on 26 March 2020 falling within Route 3. I exhibit a PowerPoint presentation from 30 March 2020 at **M5/CERET/055 – INQ000470685** in which the Critical Equipment Requirement Engineering Team were briefed on the list and included:

    a) Visor – full face;
    b) Eyewear – disposable/reusable glasses;
    c) Facemask – FFP3 respirator;
    d) Facemask – surgical type IIR fluid resistant;
    e) Facemask – surgical type II standard;

f) Facemask – surgical type IIR fluid resistant with visor;
g) Gowns – fluid resistant thumb loop;
h) Gloves – examination nitrile long cuffed;
i) Hand hygiene – hand sanitiser alcoholic hand rub;
j) Hand hygiene – hand soap;
k) Overshoes;
l) Over sleeves;
m) General beds for surge hospitals.

78. The list grew to 18 items within weeks based on the 13 key items above. This included variations on masks, gloves and gowns. It should be noted body bags and general beds were added to the list but eventually removed due to sufficient supplies.

79. Route 4 comprised of items for which there was not a current manufacturing supply. The only product which fell within this route were the Continuous Positive Airway Pressure (CPAP) devices that were appropriate to the pandemic demand. Further information on the Continuous Positive Airway Pressure (CPAP) devices is set out later in this statement.

Scrutiny of the Critical Equipment Requirement Engineering Team

80. During the relevant period the procurement and supply of PPE and healthcare supplies was scrutinised by (i) the Senedd's Public Accounts Committee, (ii) the Senedd's Health and Social Care Committee (iii) the Welsh Government's Internal Audit Service and (iv) Audit Wales. Further information on such scrutiny and how the Critical Equipment Requirement Engineering Team were involved is set out below

Senedd's Public Accounts Committee

81. The Public Accounts Committee examines the economy, efficiency, and the effectiveness with which the Welsh Ministers have used their resources. The Committee will normally invite Accounting Officers to review reports. The Permanent Secretary is the Principal Accounting Officer for the Welsh Government, and the Chief Executive NHS Wales is the Accounting Officer for the NHS.

82. The work of the Critical Equipment Requirement Engineering Team was discussed at the Public Accounts Committee of the Fifth Senedd on 14 September 2020 and was attended

by Andrew Slade, Marcella Maxwell and the Head of Commercial Delivery and Capability of the Welsh Government. An update was provided on the Critical Equipment Requirement Engineering Team and how the establishment of the group exemplified new ways of working. I exhibit a copy of the transcript for the committee at **M5/CERET/056 – INQ000198631,** pages 4-19 of the transcript include the main discussion around the Critical Equipment Requirement Engineering Team.

83. The feedback from the Public Accounts Committee was complimentary of the work of the Critical Equipment Requirement Engineering Team. However, concerns were expressed from Senedd Members about the ability to assemble a similar set up in the event of a future pandemic. These concerns arose from a place of employee wellbeing, with it being acknowledged that all members of the Critical Equipment Requirement Engineering Team exceeded the normal course of their employment duties even by pandemic standards.

Senedd's Health and Social Care Committee

84. The Health and Social Care Committee examines policy and legislation related to health and social care and holds the Welsh Government to account on specific issues including the physical, mental and public health and well-being of the people of Wales, including the social care system. The Health and Social Care Committee carried out two inquiries into Covid-19 in July 2020 and March 2021 which included scrutiny of PPE, these are exhibited at **M5/CERET/057 - INQ000349686** and **M5/CERET/058 - INQ000066515**.

85. Recommendation 2 of the July 2020 report called on the Welsh Government to review its own systems to ensure mechanisms were in place to enable manufacturers in Wales to respond quickly in supplying appropriate PPE in the event of any future outbreaks. In responding to the recommendation, the Welsh Government outlined the role the Critical Equipment Requirement Engineering Team had played in being the link between industry and the NHS in Wales. The Welsh Government's response to the Committee report is exhibited at **M5/CERET/059 - INQ000198449.**

Welsh Government's Internal Audit Service Report: Covid-19 Personal Protective Equipment

86. The Welsh Government's own Internal Audit Services audited the provision of PPE in December 2020. Its purpose was to consider whether the PPE strategy within the Welsh Government was appropriately managed and controlled and that the Welsh Government had the appropriate oversight of the procurement of PPE.

87. In the Report, exhibited at **M5/CERET/060 – INQ000022592**, the Critical Equipment Requirement Engineering Team is described as being established at the start of the pandemic to work alongside manufacturers to procure PPE and other critical supplies and equipment for the NHS in Wales. It was noted in the report that the team's membership had been reviewed and it had been confirmed that it was chaired by Industry Wales. The report observed that the purpose, aims and objectives of the Critical Equipment Requirement Engineering Team were clear and understood by the Group but that an earlier agreed terms of reference would have been helpful to formalise membership, key deliverables and expectations to enhance members' accountability. Although the Critical Equipment Requirement Engineering Team already had in place initial terms of reference from May 2020, the Critical Equipment Requirement Engineering Team subsequently published its final terms of reference, exhibited earlier in this statement at **M5/CERET/016 – INQ000321202**.

Audit Wales

88. In the report "Procuring and Supplying PPE for the Covid-19 pandemic" dated April 2021 and exhibited at **M5/CERET/061 – INQ000214235,** the Auditor General noted that Welsh Government officials involved in the Critical Equipment Requirement Engineering Team worked closely with manufacturers to help them build capacity and obtain certification for some of the more complex PPE items. However, the report noted that the time taken in preparations meant that potential suppliers could not capitalise on relatively high prices in spring and summer 2020 when the NHS Wales Shared Services Partnership was ramping up orders for its Winter Plan, and when the Welsh suppliers would have been reasonably price competitive.

89. I am unable to provide any information about whether Welsh suppliers were able to provide competitive prices for PPE or whether Welsh suppliers were ready to provide stock only after the initial peak of demand had passed. Such information may be available from the NHS Wales Shared Services Partnership who would be better placed to assist the Inquiry with these questions.

90. I am also asked whether the stimulation of Welsh manufacture was ultimately cost-effective both for the Welsh Government and for the NHS and care sector in Wales as the final buyer as compared to internationally procured PPE. It is difficult for me to comment on the issue of cost-effectiveness as contract negotiations and final prices paid were dealt with by the

NHS Wales Shared Services Partnership. However, the fact that over 30 companies repurposed their production lines and created an estimated 400 jobs, as outlined in paragraph 99, I feel the Critical Equipment Requirement Engineering Team provided an effective boost to Welsh manufactures while also helping to provide critical healthcare equipment to the NHS in Wales.

Workstreams set up by the Critical Equipment Requirement Engineering Team

91. The Inquiry has asked me to set out each workstream set up by the Critical Equipment Requirement Engineering Team. There were not any formal workstreams as such, but its activities revolved around the items on the critical list compiled by the NHS Wales Shared Services Partnership. For specific products, discussion was usually led by a junior member of the team who became a subject matter expert for their particular product.

Collaboration with the Life Sciences Hub in relation to the development or procurement of ventilators and Continuous Positive Airway Pressure (CPAP) devices

92. The Critical Equipment Requirement Engineering Team did not collaborate with the Life Sciences Hub in the development or procurement of ventilators. The initial demand for ventilators was led by the UK Government, through its Ventilator Challenge. Whilst a number of Welsh companies supported this activity, and Industry Wales was involved in garnering support from Welsh companies for the Challenge, the Critical Equipment Requirement Engineering Team played no active role in relation to this issue.

93. Further information on the involvement of the Critical Equipment Requirement Engineering Team (of which the Life Sciences Hub was a member) in the development and procurement of Continuous Positive Airway Pressure (CPAP) devices is set out later in this statement.

94. The Life Sciences Hub may be better placed to provide the Inquiry with further information about its specific role in relation to the development and procurement of Continuous Positive Airway Pressure (CPAP) devices and the UK Ventilator Challenge (if any).

The Critical Equipment Requirement Engineering Team and businesses

95. The Inquiry has asked for information about how the Critical Equipment Requirement Engineering Team provided advice and support to businesses in Wales who were looking to repurpose their existing manufacturing capabilities to produce PPE and other key healthcare equipment and supplies during the pandemic.

96. As set out earlier in this statement, the Critical Equipment Requirement Engineering Team would receive enquiries from businesses offering support via the Business Wales Website. These enquiries were checked and triaged by Life Sciences Hub. Provided the business in question passed the Creditsafe check, the Critical Equipment Requirement Team would assign to it an official who would work with the business to explore what it was offering and what it required to enable its products to be certified and made available to the health and social care sector in Wales. For example, it might need approval from the Surgical Materials Testing Laboratory or an introduction to the NHS Wales Shared Services Partnership, or guidance in relation to financial support, including grants, from the Welsh Government's Innovation Team. It would be for the business itself to undergo the relevant processes, but the lead official assigned to the business would be involved in providing arm's length support and direction. Should the products be intended for the health and social care sector in Wales, qualified offers of support were passed on to the NHS Wales Shared Services Partnership, and it would be for the NHS Wales Shared Services Partnership to decide whether or not to enter into a contract with the business in question.

97. Companies who were supported by the Critical Equipment Requirement Engineering Team included the Royal Mint, which changed its production facilities to enable the production of visors, and Penderyn Whisky which made hand sanitiser. The Rototherm Group was also supported to change production from making industrial measuring equipment to making high quality face shields. The Critical Equipment Requirement Engineering Team supported Rototherm to obtain a CE marking which allowed it to supply healthcare staff; by the end of April 2020, it was producing 65,000 units per week. Any contracts for these goods would have been put in place by the NHS Wales Shared Services Partnership. Accordingly, I am unable to provide a full list of suppliers who were provided with assistance by the Critical Equipment Requirement Engineering Team and who were actually awarded a contract. Once companies had passed any testing required, they were passed to the NHS Wales Shared Services Partnership who made a decision about whether to enter into a contract with the company. As such they would hold the details of which companies who

came through the Critical Equipment Requirement Engineering Team went on to be awarded a contract. The Critical Equipment Requirement Engineering Team was not involved in the negotiation or entering into contracts which were handled by the NHS Wales Shared Services Partnership.

98. Another major development was the consideration of the production of face masks for the UK market. The Critical Equipment Requirement Engineering Team assisted a number of local firms to consider the investment, development and supply chain required for mass production for the UK market. Subsequently three local companies Rototherm, Brother Engineering and Hardshell invested in mass production equipment and achieved certification. After the companies received certification, they would have worked to secure contracts independently with the NHS Wales Shared Services Partnership and would not have had any further dealings with the Critical Equipment Requirement Engineering Team.

99. Over 30 companies re-purposed production lines to produce hand sanitiser, 25 companies re-purposed production lines to make face visors; 30 companies provided decontamination solutions for surfaces; 9 companies invested in machinery to produce clinical grade face masks and coverings and 5 of these were capable of mass production. The Welsh Government estimates that, in total, 400 jobs were created because of this commercial activity. In addition, 189 community volunteers made over 5,000 sets of scrubs. The Critical Equipment Requirement Engineering Team was therefore instrumental in creating and sustaining both commercial and non-commercial activities during the pandemic. As highlighted earlier in this statement, I was not aware of which companies were contracted by the NHS Wales Shared Services Partnership and I am unable to provide any further details of which companies have remained in the PPE market post-pandemic. As the procuring organisation the NHS Wales Shared Services Partnership would be better placed to provide information on current usage of PPE and where it is procured from.

100. A briefing from the Critical Equipment Requirement Engineering Team exhibited at **M5/CERET/062 – INQ000507413** highlights the range of industries and academic institutions who offered support.

101. Welsh Government Innovation Team colleagues provided invaluable support to the Critical Equipment Requirement Engineering Team with their expertise to companies and, where appropriate, supporting their innovation activities.

102. The Inquiry has asked whether the Critical Equipment Requirement Engineering Team supported businesses in the development of PPE that offered adequate protection for a variety of ethnic and religious minority staff, and staff who were predominately female. The Critical Equipment Requirement Engineering Team was aware of the PPE sizing and fitting issues raised by women and Black, Asian and Minority Ethnic staff. This was specifically raised by the Trades Union Congress during a PPE briefing dated 28 April 2020 which I exhibit at **M5/CERET/063 – INQ000222787**. It was noted in that briefing that the Welsh Government aimed to source two varieties of FFP2 and FFP3 face masks that would combat this problem. Discussions concerning specification of PPE would have been led by the NHS Wales Shared Services Partnership when entering into contract with the supplier in question and reflected in their list of critical items. The Critical Equipment Requirement Engineering Team was not involved in assessing and interpreting the demand for these products.

103. Furthermore, the Critical Equipment Requirement Engineering Team was aware that some third sector organisations had raised concerns about the use of face masks for those who were deaf or hearing impaired and those suffering with dementia. I exhibit the notes from the Critical Equipment Requirement Engineering Team meeting dated 12 June 2020 at **M5/CERET/064 – INQ000505318** in which the matter of clear face masks was discussed, and I further exhibit an email chain at **M5/CERET/065 – INQ000509327** in which the Deputy Chief Medical Officer for Wales asked whether we could put out a call for clear mask manufacturing. Whilst there is reference in that email chain to a company who were able to quickly develop a clear face mask that also met all of the necessary infection prevention and control safety requirements, the Critical Equipment Requirement Engineering Team was not directly dealing with the sourcing of clear face masks. There were concerns over their effectiveness as exhibited in an email to the Deputy Chief Medical Officer for Wales dated 14 May 2020 and exhibited at **M5/CERET/066 – INQ000509325**. Ultimately the use of clear masks in health settings was taken forward by the UK Government, rather than the Welsh Government, as part of a four nations' approach in which the UK Government procured supplies of such masks from an American company as exhibited at **M5/CERET/067 – INQ000509333** in an email dated 9 October 2020.

104. The Inquiry has asked whether the Critical Equipment Requirement Engineering Team supported businesses in the development of re-usable PPE. The Critical Equipment Requirement Engineering Team tried wherever possible to encourage the development and production of reusable products, particularly in view of the environmental benefits associated with reusable PPE. The Critical Equipment Requirement Engineering Team

worked very closely with senior members from the Surgical Materials Testing Laboratory, who were part of a UK Government activity on this subject, to ensure that the products were certified and therefore fit for purpose.

105. As regards re-usable gowns, the Critical Equipment Requirement Engineering Team held detailed discussions with manufacturers including Alexandra. The NHS Wales Shared Services Partnership would hold the details of what contracts were awarded to these companies. The Critical Equipment Requirement Engineering Team also worked with volunteers on the production of reusable scrubs and provided funding for the materials and transport to distribute and collect the reusable scrubs which was ultimately delivered to the NHS in Wales. As is exhibited in the First Minister's PPE briefing dated 19 May 2020 at **M5/CERET/023 – INQ000228025,** the Critical Equipment Requirement Engineering Team was aware of the importance and possibility of reusable gowns. It worked alongside the NHS Wales Shared Services Partnership in exploring the specification of single use and reuseable gowns but, at the time, was awaiting confirmation on the demand for reusable gowns which would have indicated whether a bespoke solution was viable. I am aware that, whilst there was a demand for reusable gowns on the grounds of sustainability, this option was not taken further for a number of reasons which I understand included cost and infection risk.

106. The Critical Equipment Requirement Engineering Team also explored the use of reusable masks and visors. As exhibited in the First Minister's PPE briefings dated 17 April 2020 at **M5/CERET/017 –INQ000507396**, the Critical Equipment Requirement Engineering Team was in discussions with three Welsh companies (Hybrisan, G E Healthcare and Design Reality) who were collaborating to try and meet the challenges involved in establishing the production of reusable facemasks. However, there were concerns over the use of re-usable facemasks in terms of how an individual could be relied upon to achieve the cleaning regime necessary, so no production was established.

107. The Inquiry has asked whether the Critical Equipment Requirement Engineering Team awarded any contracts for the manufacture and supply of PPE and other key healthcare equipment and supplies during the pandemic. Generally speaking, the Critical Equipment Requirement Engineering Team did not award any contracts for the manufacture and supply of PPE or any other key healthcare equipment and supplies during the pandemic as this would have been undertaken by NHS Shared Services Partnership. The limited exceptions were:

a) The purchase of Continuous Positive Airway Pressure (CPAP) components to be used in the supply chain for final products being developed for the NHS Wales Shared Services Partnership procurement.
b) The purchase of materials for volunteers to make scrubs to be used within the NHS in Wales.
c) Funding transport to deliver the materials in (b) above.
d) A back to work video.

108. The purchases in paragraphs (a) and (b) were managed by direct award because there were no alternative local suppliers available. The Critical Equipment Requirement Engineering Team authorised £4,881 for transport as set out in paragraph (c) to pick up the completed NHS scrubs from the volunteers who had made these garments at home.

109. As regards paragraph (d), at the time there were a number of uncertainties regarding individuals going back to work. We used a Powys based company, Control Techniques, to host a camera crew from Orchard Media to film a Safe Return to Work during Covid-19 video. The objective was to highlight the simple adaptations the company had made to all areas of its workplace to reduce transmission risk to staff. This was filmed over a weekend when there were no staff onsite, and the crew maintained safe distance throughout their time at the factory. The cost was below the £5,000 procurement threshold and Orchard were a tried and tested company on the marketing framework.

110. The Inquiry has asked whether the Critical Equipment Requirement Engineering Team, or any members of the Critical Equipment Requirement Engineering Team, secured regulatory 'easements' or exceptions for any manufacturers who took part in the Team's schemes. I can confirm that the Critical Equipment Requirement Engineering Team was not involved in securing any regulatory 'easements' or exceptions for any manufacturers, but I am unable to confirm whether any of its members outside the Welsh Government were involved in securing any such regulatory easements or exceptions.

111. The Critical Equipment Requirement Engineering Team was not involved in guaranteeing or awarding contracts to suppliers that were assisted by it. With the exception of those businesses which were directly awarded contracts by the Critical Equipment Requirement Engineering Team (further information on that and the funds spent is set out earlier in this statement at paragraph 49), all businesses offering products which could be used in the health and social care sector in Wales were passed to the NHS Wales Shared Services

Partnership to follow its usual procurement process. It remained a decision for the NHS Wales Shared Services Partnership whether to contract with the business in question.

112. As set out earlier in this statement, some organisations would receive innovation grant funding to assist in developing its products. Whilst I was not involved in the decision making in allocating such grants, I am aware that the allocation of a grant would not necessarily mean that the NHS Wales Shared Services Partnership would subsequently enter into contract with the organisation in question. Accordingly, it was a commercial decision to allocate, and accept the grant, and there was always a risk that the product may not be taken forward by the NHS Wales Shared Services Partnership. However, there were of course other commercial markets outside of the NHS in Wales which could be utilised.

113. There were no write-offs attributable to surplus PPE or any other reason. The only write-off concerned the Continuous Positive Airway Pressure (CPAP) components. Further information on that subject is set out later in this statement.

114. Earlier in this statement, I exhibited the final Terms of Reference for the Critical Equipment Requirement Engineering Team at **M5/CERET/016 – INQ000321202** which were published in November 2020. The Terms of Reference included a "lessons learned" section which was written by a senior official within Welsh Government who supported the Critical Equipment Requirement Engineering Team. It noted that the group took a number of pressurised decisions which in hindsight led to resources being utilised on activity that was not required, but that could change if the pandemic entered a second phase. The reference to "pressurised decisions" that led to resources being utilised on activity that was not required relates to the decision to purchase the components for the Continuous Positive Airway Pressure (CPAP) devices. Further information on the decision to purchase the components for the Continuous Positive Airway Pressure (CPAP) devices and the subsequent financial write-off is set out later in this statement.

115. The Inquiry has asked whether any changes were made following the lessons learned. Prior to the Covid-19 pandemic, the Welsh Government did not have any experience of the majority of its staff working remotely from home and therefore the environment in which we found ourselves in during the pandemic was completely novel. One of the key lessons related to staff welfare and the importance of individualised regular and thorough check-ins to ensure that those working from home felt appreciated and their hard work was acknowledged. Following the lessons learned review, the Welsh Government put in place

significant support measures many of which are still in place today such as regular breaks, anchor days and wellbeing support.

116. The Critical Equipment Requirement Engineering Team was not involved in supporting the manufacture of ventilators during the pandemic. On 16 March 2020 Industry Wales was invited by the Welsh Government to join a conference call with the UK Government as it launched the UK Ventilator Challenge; however, the Critical Equipment Requirement Engineering Team did not ultimately play any active role in sourcing ventilators in response to the Ventilator Challenge, albeit a number of Welsh companies were involved.

117. In relation to Continuous Positive Airway Pressure (CPAP) devices, the Critical Equipment Requirement Engineering Team worked with CR Clarke Ltd, Panasonic and Micronel UK during the pandemic on the development of CPAP devices. As noted above the Critical Equipment Requirement Engineering Team would receive offers of support from a number of different businesses and groups during the pandemic. An anaesthetist working for Hywel Dda University Local Health Board had designed a new prototype Continuous Positive Airway Pressure (CPAP) device and was working with an Ammanford based company known as CR Clarke Ltd to manufacture the device. As is set out in the email chain dated 22 March 2020 exhibited at **M5/CERET/068 – INQ000509323**, officials from the Critical Equipment Engineering Team helped by contacting various manufacturers who could assist in supplying the component parts necessary for CR Clarke Ltd to build the Continuous Positive Airway Pressure (CPAP) devices.

118. This proved challenging as a number of suppliers were already engaged in the UK Ventilator Challenge. Micronel UK was identified as being able to provide potentially up to 10,000 blower motors. At that time there were no alternative suppliers who could provide the correct certification and specification to enable the manufacture of the Continuous Positive Airway Pressure (CPAP) devices. A direct award was made to Micronel on the grounds of extreme urgency in line with UK Cabinet Office issued "Procurement Policy Note - Responding to COVID-19 Information Note PPN 01/20" in March 2020 using regulation 32(2)(c) under the Public Contract Regulations 2015, which allows contracting authorities to enter into contracts without competing or advertising the requirement.

119. Assessing demand for Continuous Positive Airway Pressure (CPAP) devices in the early part of the pandemic was difficult. The initial purchase order was subsequently revised for 2,000 blower fans and 2,000 Printed Circuit Board controller units.

120. With regard to the build and assembly of the Continuous Positive Airway Pressure (CPAP) devices, during the Covid-19 pandemic CR Clarke had developed and fabricated the initial Continuous Positive Airway Pressure (CPAP) prototype and also the components for the trial assemblies and we engaged with CR Clarke Ltd in that regard. However, CR Clarke Ltd was a small engineering company, and it was unable to support full scale manufacture. The Critical Equipment Requirement Engineering Team was able to identify an alternative to CR Clarke. Accordingly, we used Panasonic as it had set up a full production line that was quality assured and received support for key testing equipment for the trial from the Innovation Team.

121. The financial consequences of the development of the Continuous Positive Airway Pressure (CPAP) devices and component parts are set out later in this statement.

122. The Inquiry has asked how many Continuous Positive Airway Pressure (CPAP) machines were manufactured with the help of the Critical Equipment Requirement Engineering Team. 80 prototype Continuous Positive Airway Pressure (CPAP) devices were ordered by the NHS Wales Shared Services Partnership and were subsequently manufactured following the approval for clinical trials by the Medicines and Healthcare products Regulatory Authority. I exhibit a copy of the press notice indicating approval of the Continuous Positive Airway Pressure (CPAP) device by the Medicines and Healthcare products Regulatory Authority at **M5/CERET/069 - INQ000505372.** Finally, 30 devices were used for UK medical trials and, after a request to the Welsh Government by Bangladesh Health Services a further 50 were gifted to Bangladesh for medical trials.

123. The Inquiry has asked how the cost of ventilators and Continuous Positive Airway Pressure (CPAP) machines prior to the pandemic compared with the cost of ventilators and Continuous Positive Airway Pressure (CPAP) machines available on the market during the pandemic. I am unable to comment on how the cost of ventilators and Continuous Positive Airway Pressure (CPAP) machines prior to the pandemic compared with the cost of ventilators and Continuous Positive Airway Pressure (CPAP) machines available during the pandemic as the Critical Equipment Requirement Engineering Team was not involved in purchasing entire units.

124. The Inquiry has asked how the cost of ventilators on the market differed from the manufacture and sale/purchase cost of ventilators manufactured with the help of the Critical

Equipment Requirement Engineering Team. I am unable to comment on that as the Critical Equipment Requirement Engineering Team was not involved in the sale/purchase of ventilators.

125. The Inquiry has asked how spending controls were implemented and what were the thresholds for scrutiny of these. As set out earlier, the Critical Equipment Requirement Engineering Team had the delegated authority to utilise a budget of £5 million held by the Thematic Division of the Welsh Government if and when necessary. I had the authority to authorise expenditure up to £2 million. As also set out earlier in this statement, the Critical Equipment Requirement Engineering Team had ministerial authority to procure under Regulation 32 (extreme urgency).

126. Where forecast spend was in excess of £25,000, a risk register was created for each proposed purchase order which was subsequently presented to a Scrutiny Group made up of representation from the Critical Equipment Requirement Engineering Team. The decisions of these scrutiny sessions and the risk register are exhibited at **M5/CERET/070 – INQ000505382, M5/CERET/071 – INQ000505384** and **M5/CERET/072 – INQ000505383**. It must be remembered at this stage of the pandemic we were seeking to secure components that could have been used UK wide.

Excess stock

127. In the Welsh Government Consolidated Accounts for 2022-2023 at page 150, exhibited at **M5/CERET/073 – INQ000489910**, it is noted as follows:

> "Disposal of components purchased relating to Continuous Positive Airway Pressure (CPAP) devices. £0.565million was written off as a constructive loss. This was the optimal method for the disposal of electronic components purchased in support of the Economic response to NHS Critical Supplies – COVID-19. The Critical Equipment Requirement Engineering Team took a risk-based decision to plan to purchase key components for up to 10,000 CPAP devices. This forecast was based on extensive discussion and modelling between CERET, HMG Cabinet Office, Innovate UK and relevant medical leads. Unfortunately, the components were not eventually required as the CPAP was not manufactured in the expected numbers. Efforts to sell the items to date have been unsuccessful and the components now have minimal value."

128. The sum of £0.565 million was written-off because too many component parts were sourced for the final market for the new Continuous Positive Airway Pressure (CPAP) device. The Critical Equipment Requirement Engineering Team took a risk-based decision to commit to purchase 10,000 component parts before the exact forecast demand was known in view of the global demand for the component parts and the anticipated demand for the Continuous Positive Airway Pressure (CPAP) units. This demand included within hospitals, other medical facilities and domestically. The decision to purchase 10,000 component parts was described as a "risk-based" decision because at the time we committed to such volume, we did not have a definitive indication from the NHS in Wales as regards the forecast demand for Continuous Positive Airway Pressure (CPAP) devices and had not yet received approval from the Medicines and Healthcare products Regulatory Agency. However, the volume ordered was based on discussions with Innovate UK at that time and the Critical Equipment Requirement Engineering Team was anxious to avoid a situation in which the demand for Continuous Positive Airway Pressure (CPAP) devices outweighed the supply. The 10,000 units were seen as reasonable worst-case scenario in the context of the UK's ventilator challenge and also took into account the potential use of the Continuous Positive Airway Pressure (CPAP) device in the home setting so as to reduce the number of hospital admissions. At that time the UK Government was referring to a need for between 15,000-30,000 invasive ventilators and the Continuous Positive Airway Pressure (CPAP) was emerging as a preferred respiratory device.

129. As more clinical information about the actual demand for Continuous Positive Airway Pressure (CPAP) devices became clear this was later reduced to 2,000, resulting in the Welsh Government paying for Micronel's direct costs in reducing our order. I exhibit a briefing which I submitted to the Director of Business and Regions dated 10 March 2021 at **M5/CERET/074 – INQ000505369** in which approval was sought to pay the invoice for £276,000 plus VAT from Micronel. The Welsh Government subsequently paid the invoices, and the equipment was taken into Welsh Government's ownership.

130. I exhibit a Ministerial Advice which was sent to the Minister for Economy, Vaughan Gething MS, on 27 July 2022 at **M5/CERET/075 - INQ000321204** in which approval was sought to seek the optimal method for the disposal of Continuous Positive Airway Pressure (CPAP) components purchased. As outlined in the Ministerial Advice, the total cost to the Welsh Government for the equipment purchased, and needing to be disposed of was £565,197.84.

131. As explained in that Ministerial Advice, the post pandemic situation was such that demand for Continuous Positive Airway Pressure (CPAP) devices was no longer significant in the

UK with most hospitals having adequate provision of ventilator devices. This was coupled with rapid innovation crystalised by the needs of the pandemic which meant technology and materials science developed extremely quickly and had moved on since the components were first ordered.

132. There was early optimism that continued development of the Continuous Positive Airway Pressure (CPAP) for use in Bangladesh would result in resale opportunities for the Welsh Government stock, but this did not materialise.

133. There were no precious metals or semi-conductors within the Welsh Government equipment and previous historical sales of these components have been relatively low volume, which meant in reality they were scrap value only. Similarly, as the components had been in storage, their warranty had expired, and the Welsh Government could not guarantee their reliability which consequently meant they were unattractive to manufacturing/production companies.

134. Welsh Government officials, working closely with Industry Wales and other members of the Critical Equipment Requirement Engineering Team continued to explore a value for money option for the disposal of the components including: selling into global marketplace (via Trade Journal advert or auction), though historical previous sales had been relatively low volume and slow; selling back to the supplier who had offered to purchase at minimal cost; writing off completely or obtaining scrap value.

135. The components had also been offered unsuccessfully to Cardiff University, Swansea University and Trinity St Davids' University for R&D purchases. Micronel had also said it might be able to purchase back for salvage purposes, but no offer was ultimately forthcoming. The Welsh Government had also considered auctioning or advertising via trade journals, but this would have attracted further cost, which may have exceeded market or scrap value.

136. Despite a concerted effort through all available channels to sell the items, the Critical Equipment Requirement Engineering Team did not receive any industry lead offers to purchase the components. The best and only informal offer received was £500 from Dr Rhys Thomas, the designer of the Continuous Positive Airway Pressure (CPAP) device.

137. Given their minimal value, Ministerial Advice was approved and the figure of £0.565 million was written off as constructive loss and the assets were disposed.

138. It is a requirement of Managing Welsh Public Money that for such losses, departments should also consider the case for a Written Statement to the Senedd. Due to the potentially novel and contentious aspect of this disposal, clearance was also sought from the Welsh Government's Corporate Governance Centre of Excellence.

139. I exhibit a copy of the Written Statement issued by the Minister for the Economy, Vaughan Gething, on 22 November 2022 at **M5/CERET/076 - INQ000505367**. This statement confirms that the Minister had agreed to formally write off funds used during the Covid-19 pandemic to procure components intended for the proposed development of Continuous Positive Airway Pressure (CPAP) devices in Wales. The statement also noted that a considerable number of the units were donated to Engineering Education Skills Wales for use in their schools' design challenge projects in the coming years, with the balance being recycled in Wales by local recycling companies following a competitive tender process. A&LH Environmental Services Ltd purchased the remaining obsolete components.

140. The Inquiry has asked whether the figure of £0.565 million which was ultimately written off was anticipated and, if not, what figure was anticipated. Under the Welsh Government's standard terms and conditions for the supply of goods, we were aware that we would be liable to pay Micronel's direct costs that were reasonably incurred in fulfilling the order up to 10 April 2020 (i.e. that being the date that we reduced our order from 10,000 to 2,000). Whilst we were aware that this could amount to £137.95 per cancelled component (i.e. the price we initially paid for the first batch of components), every effort was made to mitigate this cost with Micronel, and it was ultimately dependent on Micronel's assessment of its direct costs that were reasonably incurred. The amount we ultimately paid (£276,000) was significantly less than the value of the stock, and less than the initial estimate given by John Roe of Micronel on 24 April 2020 (£535,000). The remainder of the sum represented the stock which we had already purchased and paid for and was therefore fully anticipated once it became clear that there was not sufficient demand for the Continuous Positive Airway Pressure (CPAP) devices, and all options of selling them to other sources had been exhausted.

141. Other than the Continuous Positive Airway Pressure (CPAP) components, there was no excess stock or any product that the Critical Equipment Requirement Engineering Team was responsible for.

142. Although the Critical Equipment Requirement Engineering Team were aware of concerns regarding the Continuous Positive Airway Pressure (CPAP) devices developed by Mecedes/Formula 1, relating to the possibility that such devices may spread the virus (see for example the email from Marcia Jones dated 31 March 2020 and exhibited at **M5/CERET/077 – INQ000509324**), the Critical Equipment Requirement Engineering Team was not made aware of any evidence relating to safety issues or concerns regarding Continuous Positive Airway Pressure (CPAP) machines that were manufactured with the help of the team albeit that the claim that Dr Rhys Thomas's Continuous Positive Airway Pressure (CPAP) device could reduce viral loads was never proved. The Continuous Positive Airway Pressure (CPAP) device was only deployed after full Medicines and Healthcare products Regulatory Agency approval and built under strict quality standards.

Innovation

143. The Critical Equipment Requirement Engineering Team was recognised for excellence in public procurement in the Go Awards in association with Procure X in April 2021. I exhibit a copy of the Go Awards Wales 'Covid-19 Outstanding Response Award' at **M5/CERET/078 – INQ000477051**. The citation submitted was via the awards website and not retained. The award related to outstanding response and collaboration between so many stakeholders in speed and efficiency – stakeholders included Industry Wales, the NHS Wales Shared Services Partnership, the Surgical Materials Testing Laboratory, the Life Sciences Hub and three Welsh Government Divisions (Health, Economy and Procurement). The Critical Equipment Requirement Engineering Team was also put forward to the UK national awards but was unsuccessful.

144. Although the main focus for the Critical Equipment Requirement Engineering Team was developing new supply chains for existing high-volume products such as gowns, aprons, masks, visors, and sanitisers, it must be remembered that some members of the Critical Equipment Requirement Engineering Team came from the Innovation Team within the Welsh Government. It was the Innovation Team that explored all research development and innovation options that came to the Critical Equipment Requirement Engineering Team via the Life Sciences Hub.

145. Throughout the Covid-19 pandemic, the Welsh Government's Innovation Team operated its 'SMART' suite of programmes, an integrated delivery mechanism of advice and financial support to Welsh businesses and universities, designed to commercialize new products,

processes and services. During the early stages of the pandemic, funding was made available for Covid-19 related Research, Development and Innovation within businesses and research organisations through the SMART Cymru operations (i.e. the £6 million innovation fund referred to earlier in this statement). Funding was awarded to 37 Research, Development and Innovation projects, from 41 applications received, with impacts including manufacture of PPE to oxygen sensors, thermal imaging, respiratory devices, IT tracking systems, diagnostics and sanitising products. University-based projects included collaboration on oximeters and Covid-19-testing protocols, mask design and respiratory devices. As stated earlier, the Critical Equipment Requirement Engineering Team was not involved in the decision making as regards innovation funding. That said, to assist the Inquiry, I have set out below a selection of the projects which the Innovation Team were directly involved in.

146. Swansea University was one of the academic institutions which applied to the Welsh Government's innovation fund to produce a working respiratory prototype device to meet the core requirements of clinicians managing Covid-19 patients. The project was entitled the Accelerated CV2020 Ventilator programme. **Exhibit M5/CERET/079 - INQ000507390** refers. On 1 April 2020, the Welsh Government's Innovation team confirmed in an email and an award letter to Swansea University that its application for Covid19 Resilience Innovation Support was approved for funding of £10,000 for the project, later amended to £11,208. Exhibits **M5/CERET/080 - INQ000507391, M5/CERET/081 - INQ000507392** and **M5/CERET/082 - INQ000507399** refer. The ventilator was designed, built and tested within 10 days.

147. Subsequently, Swansea University, University of Wales Trinity Saint Davids, and Swansea Bay Health Board collaborated with Treharne Automotive Engineering on the design for manufacture of the ventilator, and TT Electronics on the manufacturing process in preparation for a bid from the Welsh Government's Covid-19 Resilience Fund to take the project to full production as part of the UK Government Ventilator Challenge. The project was awarded £300,000 from the Covid19 Resilience Fund to deliver a 'Designing for Manufacturing and Assembly' process subject to Medicines and Healthcare products Regulatory Agency accelerated progression. Unfortunately, the Medicines and Healthcare products Regulatory Agency accelerated progression was denied by the UK Government and as a result of this decision this project was terminated.

148. Cardiff University undertook tests on materials for the manufacture of filter respirator masks and using microwave technology to decontaminate masks for reuse.

149. The University of Wales Trinity St Davids designed and produced prototypes of face masks to accommodate Positive End-Expiratory Pressure (PEEP) valves and work with ventilators and/or Continuous Positive Airway Pressure (CPAP) devices. A second Continuous Positive Airway Pressure (CPAP) device was also developed by University of Wales Trinity Saint Davids and was focused on refinement of the original unit to significantly improve the oxygen efficiency and usage in a hospital setting. Noting that shortage of oxygen was one of the early concerns it became an issue for the Critical Equipment Requirement Engineering Team for current and new hospitals.

150. Researchers at the University of South Wales (USW) developed an innovative blood oxygen monitor after supplies of the device became limited as a result of the pandemic. In collaboration with the Welsh Government, Panasonic UK, and clinicians at Hywel Dda University Health Board, the device was known as a pulse oximeter. The team of researchers turned around the concept from first principles to prototype in two weeks and developed a product that provided high accuracies at lower oxygen levels, an essential requirement for effective Covid-19 treatment. The Welsh Government awarded £83,000 to the University of South Wales to cover the research and development cost for the new design. The Critical Equipment Requirement Engineering Team worked with the University of South Wales to develop a new oxygen sensor for two matters. Initially, finger O2 sensors became very scarce so a local supply was seen as important. Secondly, the accuracy in particular for different skin types on the low-cost options was perceived as poor. During the period of development, the market became flooded by global sources with many units available and the Welsh project was stopped albeit with ability to restart if necessary.

151. A briefing to the First Minister on 17 April 2020 outlined the support and offers for help being offered by academic institutions, exhibited at **M5/CERET/017 - INQ000507396.**

152. Other innovating products which the Innovation Team within the Critical Equipment Requirement Engineering Team directly assisted with included:
    a) Re-purposing technology more typically used in Financial Services to offer an improved Covid-19 symptom checker as part of the 111 and 999 service. The Critical Equipment Requirement Engineering Team introduced Senseforth, who had been working with the Welsh Ambulance Service Trust and FinTech Wales on this product, to the NHS Informatics Service ("NWIS") to develop this solution.
    b) Clear masks. The clear mask was focused on the need for those with hearing impairment or for young and old with concerns over masked carers/clinicians.

This involved a clear mask sealed but with cartridge filters appropriate to protection against Covid-19. However, as set out in paragraph 103, the use of clear masks was ultimately taken forward by the UK Government, rather than the Welsh Government, as part of a four nations' approach.

c) A bed turning device. This arose from the need to rotate a patient frequently whilst under ventilation and became a development to create a rotating stretcher device to fit hospital beds in intensive care. This work was carried out by a local Welsh SME engineering company, EBS.

153. A briefing from the Critical Equipment Requirement Engineering Team exhibited at **M5HSSG/062 - INQ000507413** also highlights the range of industries and academic institutions which offered support.

154. Ultimately, the urgent need in developing local supply chains and innovative products declined as the pandemic peak demand reduced. The only products which the Critical Equipment Requirement Engineering Team was involved in purchasing and which were subsequently written off were the Continuous Positive Airway Pressure (CPAP) devices.

155. The Critical Equipment Requirement Engineering Team does not hold any information about how many of the innovative products it was involved in were ultimately used by the NHS in Wales. The NHS Wales Shared Services Partnership would be best placed to provide the inquiry with such information.

LFT and PCR test kits

156. The Critical Equipment Requirement Engineering Team was not directly involved in the manufacture and/or distribution of PCR and LFT test kits or their constituent parts. Other teams within the Welsh Government may have been involved in the research, development and innovation of such kits but I am unable to provide any evidence on this matter as I was not involved.

Lessons learned

157. With the exception of the "lessons learned" that was contained with the terms of reference for the Critical Equipment Requirement Engineering Team, no other internal or external

reviews, lessons learned exercises or similar were produced or commissioned by the Critical Equipment Requirement Engineering Team.

158. A personal reflection on the key lessons learned is one of trust, awareness and candour. Some members of the Critical Equipment Requirement Engineering Team had been working together for many years, others we had never met. Over this intense period the whole team became extraordinarily close and remains so. We trusted each other to work independently, and individuals felt empowered to make quick decisions. Our knowledge of the Welsh manufacturing sector, underpinned by Industry Wales's own acute awareness of the sector and sub-sectors was absolutely invaluable. Governments need arms-length bodies and vice versa to ensure truth is brought to power based on sound information and intelligence.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed:

Personal Data

Dated: 10 December 2024