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Bwrdd Iechyd Prifysgol  
Bae Abertawe  
Swansea Bay University  
Health Board



<b>Meeting Date</b>	<b>21 June 2021</b>		<b>Agenda Item</b>	<b>2.2 (ii)</b>
<b>Report Title</b>	<b>National Data Centre Risk Update</b>			
<b>Report Author</b>	Carl Mustad (Head of ICT Operations)			
<b>Report Sponsor</b>	Matt John (Director of Digital)			
<b>Presented by</b>	Matt John; Carl Mustad			
<b>Freedom of Information</b>	Open			
<b>Purpose of the Report</b>	The purpose of this paper is to provide an update on the National Data Centre risk on the Health Boards Risk Register (HBRR) in relation to the National Data Centre Transition Project.			
<b>Key Issues</b>	<ul style="list-style-type: none"> <li>• The significant national data centre outages experienced over previous years</li> <li>• The significant improvement in the robustness of the LIMS laboratory system since an upgrade in December 2020</li> <li>• The scale and complexity of the National Data Centre transition to a new site</li> <li>• The ultimate aim of the project to establish a better service by transitioning from a tier 2 to a tier 3 data centre</li> </ul>			
<b>Recommendations</b>	Audit Committee Members are asked to note: <ul style="list-style-type: none"> <li>• the rationale for the Health Board's current National Data Centre risk score of 20</li> <li>• the current status of the National Data Centre Transition Project</li> <li>• the intention to review the Health Board's National Data Centre risk score in Q4 once the success of the transition has been evaluated</li> </ul>			
<b>Specific Action Required</b> <i>(please choose one only)</i>	<b>Information</b>	<b>Discussion</b>	<b>Assurance</b>	<b>Approval</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## **1. INTRODUCTION**

The purpose of this paper is to provide an update on the National Data Centre risk on the Health Boards Risk Register (HBRR) in relation to the National Data Centre Transition Project.

## **2. BACKGROUND**

As previously reported, a number of the Health Board's systems are national and are hosted within two data centres that are managed by Digital Health and Care Wales (DHCW). There have been a number of multi system outages over the last 3 years with a number of factors causing outages or resulting in extended outages. Whilst several systems have been affected, the Laboratory System (LIMS) had also experienced numerous other single system failures.

Due to these issues and how they affected Health Board services, a risk was added to the HBRR initially scoring 20. In December 2020 a significant upgrade was applied to the LIMS infrastructure, which has had the desired effect of stabilising the system, anticipated to continue until the replacement system planned for 23/24 is in place.

The most recent major outage in June 2019 at the Blaenavon Data Centre (BDC) was caused by poor maintenance of cooling systems and insufficient monitoring. During 2020 the supplier of the BDC confirmed that the contract with DHCW would end and all the NHS Wales systems held there would need to move to a new location by October 2021. Whilst this presented a significant risk for the period of transition, it also provides an opportunity for NHS Wales to improve stability of hosted services. However, given the scale and complexity of the transition, the health board risk was retained at 20, despite the significant improvement made to the stability of LIMS.

## **3. NATIONAL DATA CENTRE PROJECT UPDATE**

DHCW are leading the National Data Centre Project to transition all NHS Wales digital services hosted at BDC to CloudCentres Data Centre (CDC) outside Cardiff. This aim is to provide a smooth transition to an improved data centre environment. The BDC is a tier 2 data centre where is CDC is tier, which means it provides far more redundancy for power and cooling and uptime maintenance capabilities.

Whilst the project is large scale and complex, the approach taken by the project team has been to focus on risk mitigation and maintaining uptime. Services that are resilient across the two Data Centres (i.e. Critical Services) will continue to operate from the Newport Data Centre (which will remain) whilst the infrastructure is transitioned from BDC to CDC. Whilst being transitioned, the geographic resilience for these Services is removed but every effort will be made to ensure the physical infrastructure is transitioned safely, securely and in a timely manner to minimise impact to resilience.

There are some services that are not classed as “critical” which do not have resilience across the two data centres. For these DHCW are liaising with relevant stakeholders to ensure contingencies are in place during transition. Health Board Digital Service Leads are working in collaboration with DHCW to fully understand the logistics of the plan and ensure SBU colleagues are informed and have the necessary business continuity plans in place.

During April the project suffered a significant setback to the implementation of its network connectivity, which was needed before the transition of services could start. The original moves were scheduled for eight consecutive ‘transition weekends’ beginning at the end of May. Despite all attempts to compress timescales with Third Party Suppliers, the project team accepted that change was inevitable and started exploring the most assured way of altering the plan. Following a full impact assessment, new dates were communicated as 30th July through to 3rd October. This allows the project to still meet the deadline of vacating BDC by the end of October 2021, but with less contingency. However, the latest project update for June (appendix 1) indicates that DHCW are still confident of this schedule within weeks of the transition commencing.

Once the transition is complete, the SBU Digital Services Team will monitor national service performance closely and will hopefully be in a position to reduce the National Data Centre risk score during Q4 21/22.

#### **4. GOVERNANCE AND RISK ISSUES**

There has been very good engagement and communication with NHS Wales organisations and their digital teams throughout the project. Health Board’s are represented at the project board by a nominated digital director and updates at the National Service Management Board (NSMB) and Infrastructure Management Board are standing agenda items. Furthermore, monthly project board communications are circulated to health boards (appendix 1).

The national Infrastructure Management Board (IMB) and Service Management Board (NSMB) are the boards that oversee Major Incidents, identify risks for national services and make recommendations to improve the availability of national services. These boards meet monthly to hold DHCW to account for delivery of services.

- Infrastructure major incident reviews are undertaken with selected board members and recommendations agreed in the board.
- The impact of outages are also mitigated against by the Business Continuity plans that are in place within the Service Delivery Units to allow operational services to continue during a data centre service outage.

#### **5. RECOMMENDATIONS**

##### **Audit Committee Members are asked to note:**

- the rationale for the current National Data Centre risk score of 20
- the current status of the National Data Centre Transition Project

- the intention to review the Health Board's National Data Centre risk score in Q4 once the success of the transition has been evaluated

Governance and Assurance		
Link to Enabling Objectives (please choose)	Supporting better health and wellbeing by actively promoting and empowering people to live well in resilient communities	
	Partnerships for Improving Health and Wellbeing	<input type="checkbox"/>
	Co-Production and Health Literacy	<input type="checkbox"/>
	Digitally Enabled Health and Wellbeing	<input checked="" type="checkbox"/>
	Deliver better care through excellent health and care services achieving the outcomes that matter most to people	
	Best Value Outcomes and High Quality Care	<input type="checkbox"/>
	Partnerships for Care	<input type="checkbox"/>
	Excellent Staff	<input type="checkbox"/>
	Digitally Enabled Care	<input checked="" type="checkbox"/>
	Outstanding Research, Innovation, Education and Learning	<input type="checkbox"/>
Health and Care Standards		
(please choose)	Staying Healthy	<input type="checkbox"/>
	Safe Care	<input type="checkbox"/>
	Effective Care	<input type="checkbox"/>
	Dignified Care	<input type="checkbox"/>
	Timely Care	<input type="checkbox"/>
	Individual Care	<input type="checkbox"/>
	Staff and Resources	<input checked="" type="checkbox"/>
Quality, Safety and Patient Experience		
N/A		
Financial Implications		
N/A		
Legal Implications (including equality and diversity assessment)		
N/A		
Staffing Implications		
N/A		
Report History	N/A	
Appendices	Appendix 1 – Data Centre Transition Project Communications	