Delivering sustainable data centre facilities dedicated to the UK public sector

- Crown Hosting Data Centres (CDHC) is a joint venture between HM Government and Ark. If it was better utilised, it could save the UK public sector £15 billion over five years, with in-year Return on Investment (ROI).
- In order to do this, CDHC believes Government should: (i) develop an incentivised programme to drive cross-public sector adoption from day one in government; (ii) direct Whitehall to take advantage of the savings on offer and lead by example; (iii) prohibit Whitehall from renewing outdated monetarily and environmentally expensive legacy contracts; and (iv) give a single person responsibility for driving adoption across Government.
- Doing so would free up vital public spending power, allowing for the rapid and successful delivery of other policy priorities.

The opportunity for public sector savings

- The ‘Cloud First’ flagship policy has since 2013 directed the migration of Government data from traditional (“legacy”) IT to public cloud.
- The National Audit Office has observed that migrating public sector data to public cloud has proved difficult, time consuming, and expensive.
- The Cabinet Office and the Competition and Markets Authority have expressed concern regarding the ability of the public sector to obtain Value for Money from public cloud due to the market dominance of two suppliers (Microsoft and Amazon) and lack of digital skills in the civil service.
- In 2023 more than 50% of IT spend by the Government was on the public cloud, but the Crown Commercial Service, using Gartner figures, predicts that it will take until 2031 for 50% of Government’s data to be delivered from the public cloud.
- CHDC was created to provide cost-effective, energy efficient, reliable, secure locations for public sector data. To release money, to enable Government data to be reshaped so that when it is subsequently migrated to the public cloud it costs less to operate.
- CHDC uses the facilities of Ark, which provides world class facilities to the private sector, including cloud and AI. This enables the public sector to ride on the coattails of industry and access the same cutting-edge technologies.
- CHDC is massively under-utilised, with Government policy prioritising the migration of Government data to public cloud over Value for Money. We understand that ensuring controlled and effective Government spending is a central priority for the Government.
- By encouraging public sector organisations and Government Departments to transition to CHDC where they are not yet able to transition to the cloud, there is an opportunity for significant savings – with an additional £15 billion over the next five years alone. The Government must grasp the benefits that are available as it transitions away from legacy IT, which will produce significant savings to invest elsewhere.
The benefits of using CHDC

- Saving money, with an additional £15bn of savings through the increased adoption of CHDC:
  - Since CHDC’s launch in 2015, we have saved the public sector £1.5 billion per year, and we have the capacity to save an incoming government an additional £15 billion over the next five years.
  - 75% reduction in electricity use through use of purpose built efficient facilities;
  - Low, fixed and benchmarked prices for core products, at rates in the lowest quartile of the market; and,
  - As a joint venture between the Cabinet Office and Ark Data Centres, 25.1% of the profits are returned to the Government Exchequer.
- CHDC’s benefits are not only financial. With market leading facilities for energy efficiency, our sites are also significantly more energy efficient than our competitors - whether it's through the widespread use of renewables, including solar panels, or using biofuels instead of diesel for our back up generation, or conserving water through grey water harvesting.
- By conservative estimates, CHDC customers reduce their electricity usage on data centres by 75% when they move to us, reducing carbon emissions and saving taxpayers money. Tackling energy waste in government would make significant headway on cutting emissions.
- Additional skilled jobs in an industry in which the UK is leading the world, enacting a key policy area for the Government.
- Secure and reliable UK locations for public sector data to be reshaped until it is suitable, and the civil service has sufficient skills to migrate it to the public cloud and obtain Value for Money.
- This means that we (CHDC) provide better value, and more secure data centres than any other provider to the public sector, with all public sector data hosted exclusively in the UK.
- We are also currently the only company approved to host Official Sensitive, Secret, and Top Secret data in the UK, with measures in place to provide sufficient cyber and physical security on all our sites. All our public sector sites store data onshore in the UK, with total transparency with the UK Government and wider public sector. This provides greater protection and oversight in the collection, processing and storage of critical UK data — as well as supporting jobs through the 100+ UK companies in our supply.

Actions the Government can take to unlock £15 billion of savings

To tackle waste and inefficiency in the public sector and unlock significant savings, the Government should:

- **Develop an incentivised programme to drive cross-public sector adoption.** Government should commit to developing a programme providing financial incentives to public sector organisations to adopt CHDC as a way to transition away from outdated legacy contracts and upgrade data services in line with the Government’s cloud first strategy.

- **Require Government departments to take advantage of the savings on offer from CHDC.** The Home Office, DWP, MoD, HMRC, the MoJ, and NHS England are, in small ways, already taking advantage of CHDC. But departments (including those tasked with increasing technological adoption in the UK) are reliant on legacy systems, and ‘the Government is not managing its data in a strategic way, as it does for other important assets’, as outlined by the National Audit Office [link](#).
Where departments are not able to transition to the cloud, or where cloud services are not cheaper, the Government should commit to requiring them to move to CHDC.

- **Prohibit renewals of expensive and inefficient legacy contracts.** Failure to modernise legacy systems exposes the public sector to possible service disruption, operational failure, and cyber attacks. The Government should prohibit the renewal of such legacy contracts and require departments to either transition fully to the cloud within 18 months and within their existing budget, or move immediately to CHDC to realise the cost savings.

- **Secure an individual responsible for the uptake of CHDC services within central Government.** The Government should require individuals to report regularly on the progress made by Government departments in taking advantage of the savings on offer from CHDC. This could be reported in the Red Book each year.

## Annex A

### How these new savings are costed

- CHDC provides a location for less than 2% of central Government IT, as measured independently by DEFRA (under the Greening Government Commitments). If the Government could triple the amount of IT located in Crown Hosting, then this would save an additional £3bn per year, or £15bn over five years across all areas of the public sector. Tripling the amount of IT in Crown Hosting, to equate to 6% of the total of central Government IT estate, is achievable but requires the Government to mandate it so that departments act and relocate.

- Such mandatory action is common in non-IT areas like office space. No department can procure office space for themselves, but are required to go through the Government Property Agency which combines departments into common locations (Government Hubs) to save money.

- CHDC can currently scale to accommodate well beyond the tripling (3x) discussed above, using the premises of Ark Data Centres, which has already commissioned sufficient additional data centre space to accommodate an 8x expansion. Further, if an incoming government took action and gave a firm demand signal, more data centre space could be commissioned for construction.

### Case study: CHDC’s work with the Department for Work and Pensions

- The Department for Work and Pensions (DWP) is an excellent ongoing case study of where a forward-thinking organisation’s decision to partner with CHDC has saved a significant amount of taxpayer money, reduced its carbon footprint, and accelerated its journey to the public cloud.

- The business processes of DWP are supported by a large estate of back-office IT systems, built up over decades. The infrastructure hosts 163 front-line and payments systems that provide critical services and make payments in excess of £217 billion per annum to over 20 million UK citizens.

- DWP started their business transformation with the ambition to “dramatically improve the efficiency with which DWP handles its data”. The transformation had and continues to have the ambition to move IT beyond supporting the operation of DWP, towards a future where the data drives innovation and improves citizen facing services, through the adoption of delivery from the public cloud.
• CHDC has worked with DWP since 2016, investing £108m into a relocation to CHDC premises and new IT, and as a result, has saved £150m per year (£1.2bn to date).
• Since then, this money has been re-invested by DWP in modernising skills & IT services and moving DWP in the direction of a modern data-centric organisation, but also returning the initial investment within nine months. Extrapolation of the DWP savings would suggest that the annual saving that Crown Hosting enables is £1.5bn per year across the whole public sector, and of that £0.45bn is saved by central Government.