



In-sourcing the Welsh Government's ICT service

Report of the Auditor General for Wales

March 2021



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Key messages

- 1 The Welsh Government's decision to in-source its Information and Communications Technology (ICT) services represents a significant change, after many years of out-sourced ICT. The intentions were to reduce costs, increase control and flexibility of services, improve resilience and enable more flexible working for staff. Our work focused on whether the transition to an in-house service was well managed and on track to deliver the intended benefits. **Appendix 1** describes our audit approach and methods.

The in-sourcing project has been managed well and delivered on time. Some benefits are being achieved but the full benefits have not yet been realised

- 2 In 2017, the Welsh Government decided in principle to end its out-sourced ICT contract (the Merlin contract) and bring ICT services in-house. Officials prepared a business case that recommended in-sourcing all main ICT service areas, with selective out-sourcing for infrastructure and project services such as technical upgrades. There were clear investment objectives and a mix of financial and non-financial benefits that the in-sourcing should deliver. The business case was comprehensive, and the objectives aligned well with the Welsh Government's wider ICT modernisation programme.
- 3 In planning the transition, the Welsh Government carried out extensive work to understand the needs of different user groups within the organisation. The Welsh Government also took the positive step of contacting four other public bodies to learn from their recent experiences of in-sourcing.

- 4 Some aspects of the governance and leadership arrangements adopted by the Welsh Government were not 'textbook' but this did not appear to impact negatively on overall delivery. Divided lines of accountability are now resolved with the Chief Digital Officer being solely responsible for the central ICT function. The Chief Digital Officer also now reports directly to the Executive Committee and Board, which should address the need to raise the profile of ICT issues at a senior level.
- 5 Financial resources allocated to the programme have proved adequate. The transition was partly funded through an invest-to-save approach and was delivered broadly within its revenue and capital budgets of £12.7 million over the two years to 31 March 2019. The transition was also staffed effectively, with the Welsh Government using redeployment and external contractors to provide the required expertise.
- 6 The Welsh Government's approach to programme and project management was largely effective, with implementation proceeding broadly in line with planned timescales. Because the transition was treated as a process rather than an event, the phased approach allowed ample time for the Welsh Government to learn and adapt before phasing in further changes.
- 7 Gateway Reviews concluded that risk management was sub-optimal but managers considered the approach to be sufficient given the fairly stable risk environment. Ultimately, the Welsh Government managed the risks effectively to ensure the transition was delivered on time. However, one high-level risk has materialised, namely insufficient operational staffing to fill the ICT team structure set out in the Target Operating Model (TOM). Since the transition, staffing levels in the ICT team have been 15-20% short of the TOM and some staff have been working significant overtime to fill gaps.
- 8 There is scope for the Welsh Government to strengthen the way it monitors ICT service performance. The performance indicators used to monitor performance need to be updated to reflect the new in-house service model and to consider performance in the context of widespread homeworking from service users. There is also scope for more challenge of ICT service performance through more frequent, high-profile scrutiny.

- 9 Financial savings were a fundamental part of the business case for bringing ICT services in-house. Some of the intended benefits are now being delivered but the full savings have not yet been realised. Savings of £4.9 million were delivered in 2019-20 but not the full £8.1 million anticipated in the business case. The shortfall was largely due to an increase in costs for software and unfilled posts resulting in higher-than-anticipated costs for contractors.
- 10 In addition to financial savings, the business case anticipated a range of non-financial benefits. Some, but not all, of the non-financial benefits are being delivered, although it is difficult to judge success because the Welsh Government did not set specific targets for these. While there has been a gradual decline in the number of serious ICT incidents since the transition, there has also been a dip in ICT service desk performance, which is most likely due to understaffing. However, user satisfaction with ICT services has improved since the transition and the rollout of new laptops. The rollout of new laptops to most staff by the end of 2019 has clearly been a key factor allowing flexible and homeworking during the COVID-19 pandemic.



It is good to be able to report in positive terms on an ICT change programme that has served the Welsh Government well as it has faced the challenge of a different way of working in response to the COVID-19 pandemic. The job is not complete, however, with further action required to secure all of the intended benefits, to address the pressures caused by understaffing, and to ensure lessons are learnt for future projects.

Adrian Crompton
Auditor General for Wales



Key facts

11 The infographic below summarises the key facts from our report.



Overall Welsh Government expenditure on ICT services

- £13.9 million in 2019-20



Budget for the implementation programme

- £12.7 million over two years



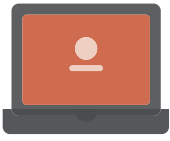
Staffing

- 54 contractor staff transferred to the Welsh Government ICT team
- The ICT team now has 87 permanent staff plus 4 contractors covering permanent posts
- 15-20% shortfall in ICT staffing since the transition



Savings

- £8.1 million savings planned in 2019-20
 - £4.9 million savings achieved in 2019-20
-

**Wider benefits**

- 6,000 new laptops rolled out to staff
- £23,000 reduction in travel costs (and much larger reductions are likely from 2020-21 onwards)
- 8,000 staff now able to connect remotely at the same time

**User satisfaction**

- 85% user satisfaction in March 2020 (up from 56% in October 2018)

**ICT service desk performance**

- 67% first-time fix rate in the 22 months to October 2020 (down from 74% in the 12 months to January 2019)
- 72% 20-second call answer-rate in the 22 months to October 2020 (down from 94% in the 12 months to January 2019)
- 12% of calls abandoned after 30 seconds in the 22 months to October 2020 (up from 3% in the 12 months to January 2019)

12 The timeline below shows the key dates relating to in-sourcing.



September 2014

The Welsh Government extends the Merlin contract for five years

September 2004

The Welsh Government signs the ten-year 'Merlin' contract with Siemens Business Services (subsequently taken over by Atos) for out-sourced ICT

November 2017

The Welsh Government in-sources a small team of corporate application services staff, as a pilot for larger ICT in-sourcing

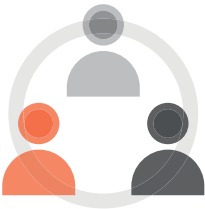
In-principle decision to in-source most ICT services from January 2019

February 2018

Independent Gateway Review gave the overall programme a traffic-light risk rating of 'amber'

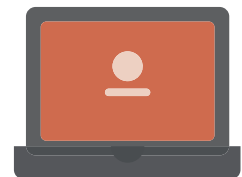
March 2018

Business case approved to bring ICT services in-house, starting a ten-month transition phase



October 2018

Publication of another Gateway Review, which again rated the overall programme as 'amber' and the in-sourcing element as 'amber-green'



11 January 2019

In-sourcing happens as planned, with staff transferred successfully from Atos to the Welsh Government

March/October 2019

Rollout of 6,000 laptops to staff

Recommendations

The table below sets out our recommendations to the Welsh Government.

Recommendations

Tracking of benefits and costs

- R1** We recommend that, in future business cases and change programmes, the Welsh Government clearly profiles the delivery of its intended financial and non-financial benefits by setting clear target levels and milestone dates. This would make it easier to assess whether programmes are on track to deliver as intended.
- R2** We recommend that the Welsh Government schedules a formal review of the delivery of the benefits from the in-sourcing, at three years after the transition, to ensure medium-term impacts are recorded and reported on.
- R3** We recommend that the Welsh Government develops a more robust mechanism to measure the true cost of projects to inform project planning, monitoring and evaluation. This should include a proportionate approach to measuring the cost of significant internal resources spent on projects, including the time of its own staff.

Recommendations

Operational performance management

- R4** We recommend that the Welsh Government updates the key performance indicators and operational targets for ICT services, to ensure they reflect the new model of in-house service provision, including increased home and flexible working and reduced travel.
- R5** We recommend that a summary dashboard covering ICT service performance is considered by the Executive Committee as a standing agenda item for challenge and scrutiny.
- R6** We recommend that the Welsh Government introduces benchmarking of its ICT service performance and structures to allow comparison with other organisations.
- R7** We recommend that the Welsh Government introduces a formal, annual review of user satisfaction of ICT services, to assess whether improvements are being sustained in the long term.

Staffing levels

- R8** We recommend that the Welsh Government revisits the staffing levels set out in its Target Operating Model for ICT and develops an action plan for achieving the required staffing. Without taking such steps, there is a risk that the full benefits of the transition will not be delivered.



Background to the in-sourcing

01

The business case to in-source ICT services set out clear objectives and a mix of financial and non-financial benefits

- 13 Under the Merlin contract, Atos maintained the Welsh Government's ICT systems, undertook development work (sometimes referred to as 'project services') and provided infrastructure, equipment and expertise. However, when variations to the contract were needed, negotiations were time-consuming. The Welsh Government also had concerns about the cost of the contract, and what it considered to be variable service standards¹.
- 14 Our 2011 report on the Merlin contract noted that the contract was delivering core ICT services effectively². However, the report also found that the Welsh Government could not demonstrate that all expenditure under the contract represented value for money.
- 15 In 2014, the Welsh Government extended the Merlin contract but with a view to progressively in-sourcing services. The extended contract also allowed the Welsh Government to procure from alternative suppliers for project services and infrastructure³.
- 16 In November 2017, a small team of Atos staff dealing with corporate application services was transferred into the Welsh Government, which provided a small-scale testbed for further in-sourcing. Later in 2017, the Welsh Government decided in principle to end the Atos contract when it expired in 2019 and bring remaining services in-house.

1 In advance of publication, we invited comments on our draft report from Atos. Atos noted that while it did not wish to raise any formal comments at that stage, it did not necessarily agree with some of the Welsh Government's assertions about the previous out-sourced arrangements that we have included in this report.

2 Auditor General for Wales, [The delivery of ICT services and ICT projects under the Merlin contract](#), August 2011

3 Specialist services (eg project management, technical solution design) for new ICT development work and procurement of equipment and other ICT assets.

- 17 In March 2018, the Welsh Government's Executive Committee approved a business case for in-sourcing. Officials had prepared the detailed business case in line with the 'five case business model' recommended in HM Treasury guidance, and the case included the following investment objectives:
- to **reduce ICT service costs from 2019**, at lower-than-market prices for a comparable service, at a level of user satisfaction that benchmarks well against peer group averages;
 - to **reduce project services costs** at rates below the market average for comparable services;
 - to **improve services** through a move to portable devices with less hardware renewal and with higher levels of user satisfaction; and
 - to **improve flexibility of location** through more flexible ICT, with reduced travel costs and travel time.
- 18 The business case provided a comprehensive assessment of the strategic context and set out six options for the next steps following the expiry of the Merlin contract. The six options were assessed against the investment objectives and six critical success factors, which were:
- **business needs:** how well the option satisfied the existing and future business needs of the Welsh Government;
 - **strategic fit:** how well the option fitted with the Welsh Government ICT Strategy 2016-2021;
 - **benefits optimisation:** potential return on expenditure in terms of business outcomes and benefits (qualitative and quantitative, direct and indirect to the organisation) and contribution to improving overall value for money (economy, efficiency and effectiveness);
 - **potential achievability:** the Welsh Government's ability to manage the required level of change, the level of risk and the need for supporting skills;
 - **potential affordability:** the organisation's ability to fund the required revenue and capital expenditure; and
 - **business continuity:** ability to manage and reduce risk through the transition period.
- 19 The business case also identified a mix of financial and non-financial benefits and set out the estimated costs, timescale and management arrangements for the project. We describe these benefits in detail in **Part 3** of this report.

- 20 To achieve these benefits and investment objectives, the business case set out a preferred option, described as a 'hybrid model'. **Box 1** provides details of this model.

Box 1: The 'hybrid model' was the preferred option in the business case

The model proposed in the business case was to in-source most ICT services with selective out-sourcing of certain specialist technical services (design or technical solutions and technical subject expertise) where potentially beneficial. This was described as a 'hybrid model' whereby the Welsh Government ICT team retains control of key functions and service delivery but also has flexibility to acquire specialist expertise from external contractors where it would not be practical or cost-effective for the Welsh Government to maintain the skills in-house.

- 21 We concluded that the business case provided a clear rationale for the selected option. We also concluded that the investment objectives in the business case aligned well to the Welsh Government's 'Future ICT' portfolio, a broad suite of changes to technology and ways of working that reflected developments in the external environment. The programme involved a shift to cloud-based technologies and rolling out laptops⁴ to all staff to enable flexible working at any location.
- 22 These changes could have been delivered through an out-sourced model but the Welsh Government believed that this would have taken longer and would have been more expensive. As part of the in-sourced model, the Welsh Government believed decisions could be made or amended more easily without the constraints of contract negotiations and the divergent incentives of a customer-supplier relationship. A further benefit of the in-sourced model was to develop in-house expertise and thus build the resilience and long-term maturity of the Welsh Government's ICT function.

4 In the vast majority of cases, the new laptops replaced staff members' desktop computers, thereby enabling staff to flex their location. In some cases, the new laptops were a better replacement for existing laptops.



Management and implementation of the transition

02

Planning of the transition was based on a robust assessment of needs and the phased implementation allowed ample time for learning and adjustment

The Welsh Government planned the transition having carried out a robust assessment of need and having learnt from other organisations

- 23 The Welsh Government carried out an extensive programme of work to understand the needs and preferences of different user groups for the future provision of ICT. This work included the development of user profiles, a staff survey with 1,600 responses, staff workshops to explore issues in more depth, and a task and finish group to discuss the opportunities and requirements for new devices and changes in the service model. The feedback from these exercises was used to inform the universal provision of laptops to staff, the shift to web-based applications and the introduction of video-conferencing technology.
- 24 The staff surveys highlighted the need for an improved support service that better supported staff with particular requirements, such as homeworkers and those using assistive technology. The surveys also identified a need for staff to be able to obtain help with ICT matters through additional routes as well as the traditional call helpdesk.
- 25 This staff engagement did not consider the question of in-sourcing specifically. Officials told us that staff views about the current service were clear and well-established; staff were unhappy with the service and the quality and functionality of equipment. The business case for the in-sourcing rested on value for money and the potential for service improvement, so it was not deemed necessary to engage widely with staff in order to justify this approach.
- 26 Officials did consider the experiences of four other public sector organisations⁵ that had in-sourced their ICT services. These experiences indicated that significant savings and a more flexible, responsive service could be achieved if services were in-sourced, but the transition needed to be planned well in advance with significant preparation time. The Welsh Government allowed ten months to deliver the transition after approval of the business case. Officials also consulted the UK Government Digital Service, which confirmed that the Welsh Government's emerging plans were in line with UK Government policy to in-source ICT services.

5 Driver and Vehicle Licensing Agency (DVLA), Natural Resources Wales, Swansea Council and the Department of Business, Energy and Industrial Strategy.

Some aspects of governance and leadership arrangements were not 'textbook' but this did not impact negatively on overall delivery

- 27 In large part, the Welsh Government adopted a governance system for the in-sourcing in line with established project and programme management protocols. The Chief Digital Officer was the senior responsible officer for the Future ICT portfolio, which was split into two programmes:
- a technical programme headed by the Chief Technology Officer⁶ to implement various projects and workstreams to deliver technical solutions; and
 - a Target Operating Model (TOM) implementation programme headed by the Chief Digital Officer⁷ to oversee the transition to an in-sourced service.
- 28 The implementation programme had its own programme board, known as the Transition Board, with representatives from across the Welsh Government. The Transition Board met regularly to discuss progress and risks and make key decisions. It received appropriate information on progress, risks and key issues.
- 29 Governance structures evolved over time as plans became firmer and requirements clearer. Once the business case for in-sourcing ICT services was approved, the implementation programme was delivered through subject-specific workstreams, as shown in **Exhibit 1**.

6 The Chief Technology Officer's role is to own and develop the Welsh Government's technology strategy, oversee the ICT service, and support the Chief Digital Officer.

7 The Chief Digital Officer's role is to deliver the Welsh Government's agenda for Digital, Data and Technology. The postholder reports directly to the Permanent Secretary.

Exhibit 1: The four workstreams of the implementation programme

<p>TOM Design</p> <p>To develop staff structures, roles and responsibilities, service definition and design, ICT process and policy design.</p>	<p>Organisational Design</p> <p>To manage the transfer of staff from Atos and other sub-contractors into the Welsh Government, and to oversee the move of all relevant staff into the new TOM.</p>
<p>Commercial</p> <p>To replace contracts⁸ held by Atos and to ensure that Atos' exit terms and conditions were met, including the settlement of all outstanding debts and disputes.</p>	<p>Tooling</p> <p>To identify ICT tools and products to support the TOM.</p>

Source: Audit Wales

- 30 Each workstream had its own leader responsible for delivering a work plan. However, the Organisational Design workstream was the only one to have a project board. The Chief Digital Officer felt that project boards were unnecessary for the other workstreams as their risk and complexity did not justify the additional administrative overhead. The main risks and issues were reported to the Transition Board, which made all key decisions, and the absence of project boards did not appear to hamper delivery of the programme.
- 31 An independent Gateway Review⁹ commissioned towards the end of the programme commented on the variety of arrangements in place for managing projects and suggested that they should be rationalised. However, the review concluded that changes were unnecessary for the remainder of the transition as progress was being 'controlled by a coalition of competent and willing participants: it is not 'textbook' but it works for now'. Officials whom we interviewed concurred that the arrangements worked well in practice and the Programme Closure Report considered the evolution of governance arrangements to be a strength of the programme.

8 Atos had numerous contracts with software suppliers and other contractors for services used by the Welsh Government that needed to be novated (moved over) to the Welsh Government.

9 A Gateway Review is an independent peer review, by experienced practitioners, of a programme or project at key decision points in its lifecycle to provide assurance on whether it can proceed successfully to the next stage. The reviews provide a snapshot at a point in time and are part of a broader formal assurance framework.

- 32 Our work raised some concerns about top-level leadership and engagement. The Director General who acted as the 'ICT champion' on the Board left in 2017 and was not replaced. There was consensus among programme staff that this led to a loss of profile for the Future ICT portfolio and ICT issues generally. Many ICT matters were delegated to the Operations Committee, a sub-committee of the Board, and its replacement with a 'People and Corporate Services Committee' reporting to the Executive Committee diluted the focus on ICT issues. No-one from the ICT function was on the Executive Committee (the Welsh Government's top-level management team chaired by the Permanent Secretary). There were also divided lines of accountability, with the Chief Technology Officer and Chief Digital Officer reporting to different Directors-General, although both had responsibility for different aspects of the Future ICT portfolio.
- 33 The Project Closure Report commented that these sub-optimal arrangements impacted negatively on reporting, speed of delivery and morale, until corrective measures were put in place by creating the People and Corporate Services Committee. In practice, however, these issues did not have much practical impact on the day-to-day running of the implementation programme once funding was in place and the business case was approved. As of April 2020, the Chief Digital Officer has complete responsibility for the central ICT function (some specific applications are managed locally by the relevant Welsh Government divisions). He now sits on the Executive Committee, which should raise the profile of ICT and create a clear management structure with a single line of accountability to the Board.

The Welsh Government allocated adequate financial resources to the programme and it was delivered broadly on budget

- 34 The total estimated cost of the implementation programme was £12.7 million over two years to 31 March 2019. However, the precise cost cannot be determined as time spent on projects by Welsh Government staff outside the Office of the Chief Digital Officer was not measured. In addition, the overlapping objectives of the Future ICT Programme and 'business as usual' ICT work meant that some activities were difficult to classify against a particular budget. We also found that most project evaluations and lessons-learned exercises did not include an assessment of the project cost.
- 35 The central ICT function's core budget had been constrained for many years and the Welsh Government concluded there was not enough headroom in the core budget to fund the implementation programme. The absence of approval for the funding had been a key risk for the programme and would have prevented it moving forward.

- 36 The funding was secured, partly through an invest-to-save bid of £6.4 million approved by the Finance Minister in November 2017. Further funding came from the core budget for ICT services. In addition, the Enabling Government programme provided £12.95 million to meet the costs of other projects in the Future ICT portfolio. The funding was intended to deliver long-term savings by enabling a programme of work to modernise ICT infrastructure in preparation for the end of the Atos contract, improve digital services and manage data more effectively.
- 37 The funding proved sufficient to deliver the transition on time and the programme delivered broadly within its revenue and capital budgets. Total expenditure by the Office of the Chief Digital Officer on the Future ICT portfolio (which included a broader range of projects than those covered by the invest-to-save bid) in the three years to 31 March 2019 was £19.5 million, £112,000 less than budgeted, with a slight overrun on revenue expenditure and a small underspend on capital spending.

Contractor staff were transferred on time as planned, despite some slippage during the preparation process, but understaffing of the ICT team remains a significant issue

- 38 The Organisational Design project was a particularly important part of the transition. The project comprised the transfer of contractor staff into the Welsh Government, the design of a new staffing structure for the TOM, and a restructuring of the central ICT function. The aim was to create a 'one team ethos' with all staff working towards the new model from day one.
- 39 Fifty-four staff employed by Atos and two sub-contractors were transferred into the Welsh Government's employment. The transfer was governed by Transfer of Undertakings (Protection of Employment) (TUPE) regulations, which protect employees' contractual terms and prevent adverse changes by the new employer. Restructuring of the ICT function at the same time as the TUPE process was an ambitious and challenging aspect of the project because of dependencies between the various stages.
- 40 The restructure required all jobs in the new structure to be graded using the Civil Service's job evaluation scheme, JEGS, which determines the salary scale for employees. This stage was delayed by missing or out-of-date job descriptions from the contractors and a lack of Welsh Government staff to complete the large volume of job evaluations. The Welsh Government recovered the situation by asking the contractor staff to complete their own job descriptions, moderated by Welsh Government managers.

- 41 There was further delay as some staff appealed the outcome of their job evaluation. These appeals were unsuccessful, and the process of matching people to posts in the new structure was completed by December 2018, in time for the transfer on 11 January 2019. The process was facilitated by a pragmatic decision to modify the TOM in some respects to a 'receiving operating model' or 'Day 1 operating model' with a post for each person currently employed by the contractors or in the central ICT service of the Welsh Government.
- 42 The Welsh Government was able to agree terms for the TUPE transfer with employee representatives of all three contractors. All transferred staff were enrolled into the Civil Service Pension Scheme, which was more favourable than the Atos pension scheme. Contractor staff then had two options:
- move to Welsh Government terms and conditions; or
 - remain on their current salary and existing terms and conditions, as modified in negotiations with employee representatives.
- 43 The Welsh Government was unable to replicate some features of Atos' employment offer, notably company cars and private medical insurance, and offered to buy out these benefits. However, Atos staff were disappointed with this offer as the cost of purchasing equivalent benefits privately was significantly more expensive. Several staff were disappointed with the outcome of the job evaluation, which resulted in considerably lower salaries under the Welsh Government's pay and grading system. These staff chose to retain their salary by remaining on their existing terms and conditions but it is likely to be several years before Welsh Government salaries for their jobs have caught up with their current protected salary. The Welsh Government was not able to provide us with details of the overall cost or saving arising from the TUPE process.
- 44 **Exhibit 2** shows the main findings from the Welsh Government's lessons-learned exercise in relation to the transfer. The exercise also raised concerns that the Welsh Government's temporary ban on permanent promotion, introduced immediately before the transfer, would make it more difficult to recruit the right people to new posts in the TOM. The Welsh Government had promoted the potential for career progression as one of the selling points for the transfer to contractor staff, and the project team feared that the policy decision (which applies to the whole Welsh Government and was outside their control) would damage morale.

Exhibit 2: Lessons learned from the Organisational Design project

Conclusion on the overall implementation of the project

The three separate but linked TUPE transfers were completed and at the same time, two Welsh Government divisions were restructured. Against a tight timescale, these five elements were transitioned to a completely new structure and to a common timeline with no noticeable disruption to delivery. The risks identified through the project were successfully managed and the successful delivery of this complicated project by the Organisational Design project team has been widely acknowledged.

Strengths

- Governance structure worked well, especially the project board.
- Staff engagement activity and consultation process.
- Negotiation of the TUPE transfer measures.
- Project team worked well together.

Weaknesses/missed opportunities

- Inadequate job descriptions from the contractors led to months of wasted time and adversely affected relationships for a time.
- Engagement with shared services and HR business partner teams could have been improved to assist in the transition to business as usual.
- A communications plan with adequate resources from the outset would have ensured stakeholders were regularly kept up to date with progress.
- There would have been benefits from being able to call on more resources during peaks in the project team's workload.
- The Welsh Government had managed several TUPE transfers in recent years, but each implementing team had needed to learn about the requirements from scratch. A dedicated resource within the Welsh Government might have been helpful.

Source: Welsh Government, **OD Project: In-sourcing ICT Services – Lessons Report**, February 2019 (unpublished)

- 45 Since the transition, the Welsh Government has found it challenging to fully staff the service. The ICT division has been understaffed by 15-20% since the transition¹⁰. Such understaffing increases the pressure on existing staff and potentially damages morale. As described in **paragraph 58**, the understaffing is also likely to be impacting on service desk performance levels and contributing to the fact that not all intended benefits are being realised.
- 46 Retaining ICT staff has been a challenge since transition and a small number of staff have moved elsewhere within the Welsh Government. Another contributing factor to the understaffing is the hold on external recruitment (unless a specific business case is agreed) that the Welsh Government introduced in March 2020 due to financial constraints and due to the difficulties of recruiting during the pandemic.
- 47 In mid-2020, the Welsh Government appointed a number of permanent ICT service desk staff and is currently recruiting a Chief Technology Officer. The division has also now had approval to recruit to seven ICT posts in various teams.
- 48 Currently, there is no workforce plan for the central ICT division to set out measures for developing skills and recruiting staff to deliver the TOM. However, officials intend to develop a workforce plan for the whole digital, data and technology (DDaT) function across the Welsh Government. The process is currently at an early stage, but is likely to consider staff progression, apprenticeships and changes to the operating model to adjust to changes in the external environment including technical changes.

10 Posts filled by contractor staff are not counted as vacant in these calculations.

The project management approach was largely effective and the phasing in of changes allowed time to learn and adapt

- 49 The in-sourcing of ICT has been a process rather than a single event. Since 2014, the Welsh Government has procured much of its project services and infrastructure requirements outside the Atos contract, and in 2017 it transferred a small team of Atos staff into the Welsh Government (**paragraph 16**). Based on advice from the UK Government Digital Service and the experience of other government departments that had attempted similar changes, officials spent considerable time planning the transition as part of a broader Future ICT portfolio. This gradual approach allowed officials to learn from experience and avoided a 'big-bang' approach.
- 50 The Welsh Government used both the PRINCE2 methodology and the Agile Scrum approach to project manage the technical aspects in the Future ICT portfolio. Officials told us that the approach worked well. The approach was a hybrid between a traditional PRINCE2 'waterfall' method, which requires detailed planning at the outset of the project, and Agile, which is more flexible and better suited to technical projects where service design needs to be adapted during the project rather than planning it in detail at the start. Agile was deemed less suitable for the commercial and HR workstreams where specific legal requirements needed to be met and much of the work needed to be done in a particular order. These commercial and HR workstreams used a waterfall approach.
- 51 The Welsh Government established a programme management office, a temporary function to co-ordinate planning and reporting across the implementation programme and to act as a secretariat for the Transition Board. Officials developed detailed delivery plans for each workstream and began work immediately on delivery. Progress was reported to the Transition Board in regular highlight reports, which summarised key issues and rated confidence in successful delivery as red, amber or green, depending on progress and risks. The Gateway Reviews and the Project Closure Report concluded that day-to-day programme management disciplines were effective.
- 52 The implementation programme proceeded broadly in line with planned timescales so that key milestones were achieved. Importantly, terms and conditions were agreed for all staff transferring from the contractors to the Welsh Government in time for the transition date of 11 January 2019. Once it became clear that the transfer of staff could take place on time, programme managers changed their rating of the implementation programme from 'amber' to 'amber-green'.

- 53 A Gateway Review in October 2018 concurred with this rating for the transition of services from Atos but was less confident about the overall Future ICT portfolio, rating it as 'amber'. The review noted that officials had made a conscious effort to focus on the immediate Merlin transition, which had de-risked that element of the programme. However, the review was concerned that financial constraints, diluted reporting lines and segmented responsibilities would hinder progress towards achieving the aspirations of the TOM. For example, financial constraints and recruitment restrictions would make it difficult to recruit for key posts in the TOM, and the segmentation of responsibility for ICT across the Welsh Government could limit efficient service provision.

There was scope to improve risk management and there is an ongoing resourcing risk to the achievement of the Target Operating Model, but ultimately risks were managed effectively to meet the transfer deadline

- 54 The Welsh Government took a standard approach to risk management. Risks were identified in a risk workshop, and the main risks were recorded and monitored at programme level in regularly updated risk registers. Each risk was rated on a five-point scale of how likely it was to occur and the severity of its impact if it did occur. The resulting score, out of a maximum of 25, was classified as red (requiring immediate action), amber or green. The registers included broadly defined actions to reduce the risk to levels that were 'amber' or 'green' in all cases. Each risk was assigned an owner who was responsible for managing the risk, and risks were monitored by the programme board.
- 55 The first Gateway Review in February 2018 commented that key staff were aware of key risks but there was little evidence of 'a structured and controlled approach to mitigation', and the programme management office was not resourced to track risks effectively. The second Gateway Review in October 2018 found little evidence of substantial improvement and concluded that risk management was sub-optimal due to complicated governance and 'a confused picture surrounding planning and resource control'. These criticisms were most relevant to high-level and longer-term risks rather than the specific project risks affecting the successful achievement of the transfer deadline.

- 56 Welsh Government officials that we interviewed acknowledged that a more structured and in-depth approach to risk management could have been taken. However, they considered the arrangements sufficient in the context of a fairly stable risk environment. Ultimately, the risks were managed effectively to deliver the transition on time and meet all key milestones.
- 57 The main risks for the transition were related to the transfer of staff from Atos to the Welsh Government, due to potential delays in the job evaluation and matching process or problems engaging successfully with the contractors and their staff. In addition, the extra cost of pension provision for transferred staff was highlighted as a risk that the Welsh Government chose to accept. More broadly, the risk registers highlighted the need for adequate staff resources and training to ensure that the restructured ICT function would provide a seamless and high-quality service, including the need to recruit externally to fill vacant posts in the TOM.
- 58 Insufficient resourcing to deliver the TOM is the one high-level risk that has clearly materialised. As described in **paragraph 45**, many posts have not been filled, including some key technical roles, and staff are stretched with some working significant overtime.

There is scope to strengthen the way performance is monitored by more regularly scrutinising an improved set of indicators

- 59 The Welsh Government currently monitors ICT service performance through a set of indicators that it regularly records and reports. However, given the transition and its resulting changes to the nature, methods and arrangements for delivering ICT services, there is now a need for the Welsh Government to review its operational ICT service level targets and indicators.
- 60 The Welsh Government is carrying out work to develop a new organisational Key Performance Indicator framework. The current draft of the framework already includes a small number of ICT-related metrics. However, there is scope to consider further metrics that cover the performance of the whole in-house ICT service, and provide a focus on the greater provision of cloud services, increased flexible/home working, plus new ICT applications, tools and equipment for staff.
- 61 When the Welsh Government reviews its ICT indicators, it should also consider how performance compares with external comparators, including other UK Government departments. Benchmarking is a gap in the current performance monitoring arrangements.

- 62 There is also scope for the Welsh Government to improve its scrutiny of ICT service performance. ICT performance indicators are monitored at an operational level within the ICT services division management team. ICT matters are also reported to the Executive Committee on an exception basis. However, given that technology, digital and ICT are such key enablers for the Welsh Government, there would be benefits from presenting a summary of ICT performance at a senior level, to increase scrutiny and challenge, on a more formal and regular basis. During our work, the Welsh Government was changing its reporting arrangements, with the Chief Digital Officer becoming a member of the Executive Committee. This presents a key opportunity to increase both the profile and scrutiny of digital and ICT matters.



Delivery of the intended benefits

03

Some of the intended benefits are being delivered but there have been fewer savings than anticipated in 2019-20

Savings are being delivered but not to the extent planned, largely due to a shortfall in the ICT staffing levels and increases in the estimated software and contractor costs

63 Financial savings were a fundamental part of the business case for bringing ICT services in-house. **Exhibit 3** shows that while the Welsh Government has not secured all of the savings it had hoped for, it has claimed savings of £4.9 million in 2019-20. For context, the Welsh Government's overall expenditure on ICT services in 2019-20 was £13.9 million.

Exhibit 3: Expected and actual savings from the transition, 2019-20

Higher-than-expected savings are shown in green and lower-than-expected savings are shown in red.

Business case objective	Expected savings	Actual savings
Reduce ICT project services costs	£6 million	£3 million
Reduce ICT service costs	£2 million	£1.25 million
Reduce business operating costs:		
• Managed print services	£100,000	£443,000
• Data centre	No target set	£155,000
Improve flexible working:		
• Reduced travel costs	No target set	£23,000
Total	£8.1 million	£4.9 million

Source: Unaudited financial data provided by the Welsh Government

- 64 The Welsh Government has reduced ICT project services costs by £3 million. This was a conservative estimate based on the final year of the contract. It achieved this by using internal ICT Services Division staff (and contractors) in the delivery of ICT projects, instead of using the out-sourced managed service contract. The Welsh Government told us that the full £6 million savings target was not met because the ICT division has not established a fully functioning programme management office, which could have been used by the wider organisation to reduce its use of contractors and third parties. These matters are described further in **paragraph 69a**.
- 65 Savings of £443,000 were secured in 2019-20 by centralising managed print services at Welsh Government offices. This involved reducing the numbers of desktop printers and providing a number of centralised or shared printing services. The Welsh Government has made greater savings than planned due to further reductions in printers and staff producing lower volumes of printing than expected.
- 66 The business case included an aim of reducing the reliance on data centres and reducing the physical, on-premise ICT infrastructure, by moving services to the cloud. The Welsh Government had planned to close its Data Centre 2¹¹ in 2020-21 but this was decommissioned earlier than planned, at the end of 2019. This resulted in savings of £155,000 on data centre electricity and maintenance costs.
- 67 Flexible working arrangements enabled by the new laptops have resulted in reduced travel costs of £23,000. This was largely realised for the Bedwas and Merthyr office locations, where the new laptops were rolled out first. The Welsh Government had not set a target for reduced travel costs in 2019-20, and these savings will have increased significantly in 2020-21 as the COVID-19 pandemic has caused many more staff to work from home. Substantial savings are expected in future on travel and subsistence costs. However, there will also be additional costs incurred in assisting staff in their homeworking arrangements by providing equipment such as monitors and keyboards.
- 68 The Welsh Government has reduced ICT service costs by £1.25 million in 2019-20. However, the actual costs were different to those estimated in the business case. We have identified some of the key areas where there were variances and these are summarised in **Exhibit 4**. When producing the business case in early 2018 the Welsh Government used the actual costs incurred from 2017-18 to estimate the ICT service costs and overheads for 2019-20.

11 Data Centre 2 was located on Newport Road, Cardiff, within a Home Office building. The data centre included key departmental and administrative ICT systems, and it was part of the Welsh Government's off-site backup arrangements to make copies of the organisation's data.

Exhibit 4: Key areas of variances in the expected and actual ICT service costs

ICT service costs	Estimated costs 2019-20 (business case – March 2018)	Actual costs – 2019-20
Software and tools	£6.1 million	£8.4 million
Consultancy costs	£0	£0.7 million
Platform services	£1.2 million	£1.3 million
Professional Support Office	£1.6 million	£0.8 million
Service operations	£1.8 million	£1.7 million
Senior management	£0.5 million	£0.2 million

Source: Unaudited financial data provided by the Welsh Government

69 The bullet points below provide some further explanation of the variances in **Exhibit 4**:

- a staff costs were lower than anticipated, largely because the ICT team has been understaffed by 15-20% since transition to the in-house service. A programme management office was due to be created to provide programme and project management and business support to ICT infrastructure and application projects. However, it was never fully formed. While this has resulted in savings of £773,000, the lack of the programme management office does mean that the service is more reliant on contractors than planned, and that the full service of the programme management office has not been available to the wider organisation.
- b senior management costs were £248,000 lower than anticipated in the business case due to changes in the ICT management team structure and due to the vacant Head of Professional Services post. Costs to deliver the core service and operations, such as the ICT service desk, as well as the problem, change and asset management teams, were £152,000 lower than expected. However, consultancy costs were £741,000 higher than anticipated, with contractors being used to staff some positions in the ICT service desk and for the new laptop rollout programme.

- c software costs were considerably higher than anticipated, partly because there has been greater consumption of software licences than originally expected. The Welsh Government also underestimated some price increases across the software marketplace and price rises in relation to the preferential supplier rates previously delivered under the Atos contract.
 - d an increase in applications moved to the cloud and increased data usage resulted in costs being £133,000 higher than originally estimated.
- 70 While we have not completed a full audit of the savings figures reported by the Welsh Government, we did complete a high-level sense check on the figures included in the project's benefits tracker. We found a small number of issues and errors in the tracking of savings, which the Welsh Government has now addressed¹².
- 71 We also found scope for the Welsh Government to make improvements to the tracking and profiling of savings and benefits, for example by profiling the intended delivery of non-financial benefits for future years. The Welsh Government maintains an internal spreadsheet to track the delivery of benefits every month. While the Welsh Government had originally planned to produce in-depth mid-year benefits assessments, it has since decided to carry out this in-depth reporting at the end of the financial year, to avoid duplication of effort. The benefits tracker for 2019-20 was due to be presented to the Executive Committee for scrutiny in February 2021.
- 72 In addition to the savings detailed above, the business case included an intention to avoid capital costs for replacing certain ICT infrastructure. The Welsh Government had expected to save £4 million per year, for five years from 2019-20, in relation to capital expenditure on ICT infrastructure. This cost avoidance is possible because the Welsh Government no longer needs to refresh as much on-premise ICT infrastructure and devices, because this work is now covered within cloud services hosted by third parties. Due to the reduction in on-premise infrastructure, additional costs for cloud platform services have been incurred. These costs had been estimated at £1.15 million for 2019-20 but the actual costs were higher by £133,000.

12 Two errors related to miscounting of between £15,000 and £20,000 in savings. The third error related to double counting of savings on print costs of £100,000. These have since been corrected.

Some, but not all, non-financial benefits are being delivered, although it is difficult to judge success because specific targets were not set

- 73 In addition to financial savings, the business case said that in-sourcing ICT services would lead to a range of non-financial benefits. However, the Welsh Government did not set specific targets for these, making it difficult to measure success. **Exhibit 5** lists each of these benefits and summarises the Welsh Government's progress so far. The Welsh Government has made some progress towards achieving the non-financial benefits but further improvements are required.

Exhibit 5: summary of progress in achieving non-financial benefits

Benefits	Summary of progress
<p>Remote access</p> <p>Resolving remote access issues to reduce the volume of calls made to the ICT service desk from ICT users for this type of issue</p>	<p>Calls to the ICT service desk for remote access issues reduced after in-sourcing, from an average of 368 per month in 2018 to an average of 225 in 2019.</p> <p>While call volumes increased in 2020 (to an average of 621 per month in the first five months of 2020) this is likely to be due to the new homeworking arrangements during the pandemic. In March 2020, the month that the first lockdown was announced, the number of calls spiked at 1,080.</p>
<p>Application management</p> <p>Resolving application management issues by introducing an application support service to develop new applications and bring these into service</p>	<p>The intended role of the application management and support service is to develop new ICT applications for Welsh Government departments and bring these into service to meet business needs. The purpose of these applications varies but an example could be to enable electronic forms to replace paper documents in some internal processes.</p> <p>The Welsh Government had not delivered an application management and support service at the time of our work. A number of application support engineer posts were being recruited in late 2020, with the intention of commencing the service at the start of 2021.</p>

Benefits	Summary of progress
<p>Virtual private network (VPN)</p> <p>Improving resilience in remote access capacity by increasing the number of staff who can concurrently connect to the VPN</p>	<p>The Welsh Government has improved its resilience in remote access capacity by increasing the numbers of staff who can connect remotely at the same time from 2,000 in 2019 prior to the pandemic to 8,000. This should provide more than enough capacity, given that the Welsh Government has approximately 6,000 staff.</p>
<p>Flexible working</p> <p>Flexible working benefits allowing staff to work at home or another office location away from their main office base</p>	<p>New laptops have enabled more flexible working, which has been hugely beneficial given the new working arrangements necessary during the pandemic.</p> <p>The COVID-19 disruptions have shown that effective ICT and digital tools are a key enabler for flexible working and collaboration within teams. The Welsh Government's rollout of new laptops to all 6,000 ICT users by November 2019 significantly increased business resilience and allowed staff to carry on working flexibly from home. The timing of the laptop rollout was key to giving staff the opportunity to become familiar with the new laptops and software tools prior to the March 2020 lockdown.</p>
<p>Avoiding travel</p> <p>Avoiding the need to travel and reducing time spent travelling</p>	<p>New laptops and video conferencing solutions are resulting in avoided journeys. The Welsh Government expected travel time to reduce in 2019 but has not measured this. It is clear that travel time has reduced considerably during the pandemic.</p>
<p>Carbon reduction</p> <p>Reduced carbon emissions by reduced printing activity and by closing a data centre</p>	<p>While this benefit was not specifically listed in the business case, the Welsh Government claims that its reduction in printing activity (referred to in paragraph 65) has reduced carbon dioxide emissions by nearly 700 kg when comparing the period June 2019 to February 2020 with the period March 2020 to November 2020. The Welsh Government claims an additional reduction in carbon emissions as a result of closing Data Centre 2 and will be reporting formally on this at the end of the 2020-21 financial year.</p>

While there has been a gradual decline in the number of serious ICT incidents, understaffing is the most likely cause of the dip in service desk performance after the transition

74 The Welsh Government had hoped that the in-sourcing would enable the ICT team to provide a better service through the ability to flex resource and respond quickly to business needs. One measure of overall service performance is the number of serious incidents that the service responds to. The number of these so-called 'Impact Level 1' incidents¹³ has gradually declined between January 2018 and December 2020. However, some indicators show a reduction in service desk performance in the six months after the transition. Whilst performance started to recover slightly in late 2019, this performance remained below operational level targets in 2020. **Exhibit 6** compares service desk performance in October 2020 with the performance before the transition.

Exhibit 6: service desk performance before and after transition

Indicator	Target	Pre-transition performance	Post-transition performance
First-time fix rate following calls to the ICT service desk	70%	74%	67%
20-second service-desk call answer-rate	95%	94%	72%
Service-desk calls abandoned after 30 seconds	5%	3%	12%
Incident management resolution rate	95%	98%	89%

Source: Welsh Government data. Note: Some of the targets have changed during the period covered in the exhibit.

Note: The pre-transition performance covers the 12-month period up to January 2019 and the post-transition performance covers the 22-month period up to October 2020.

13 Impact Level 1 incidents are defined as ICT incidents that affect more than 1,000 users.

75 The most obvious reason for this dip in performance is that the ICT team has been understaffed by 15-20% since transition. The transition away from an out-sourced model means that the risks associated with resource gaps in the ICT service have transferred to the Welsh Government. These risks have materialised since the transition and there have been difficulties staffing the ICT service desk since January 2019. Several ex-contractor staff took the opportunity afforded by the transfer to obtain posts elsewhere in the Welsh Government, placing further pressures on resources and increasing the use of agency staff.

User satisfaction with ICT services has improved since the transition and the rollout of new laptops

76 Another key measure of service performance is the satisfaction of service users, which has improved since the transition. The Civil Service People Survey of October 2018 found that 56% of Welsh Government staff agreed or strongly agreed 'I have the technology (ICT/IT) I need to do my job effectively'. When staff were asked the same question in March 2020, 85% agreed or strongly agreed.

77 The Welsh Government also ran an ICT user and tools survey in January 2020, which largely focussed on the laptop rollout, use of new digital tools and how these have led to behaviour change. Eighty-nine per cent of staff responded positively to the statement 'I have the technology to do my job effectively'. The survey also found:

- 88% of staff were satisfied with the new laptop rollout process and approach;
- 93% of staff had started to use the new laptop to work flexibly from home and 49% of staff used laptops when travelling; and
- 90% of staff responded positively that they have the ICT equipment to support them to work smartly.

78 The January 2020 survey showed that the new laptops and applications were proving to be a catalyst for behavioural change:

- 77% of staff were using their laptop in meetings instead of printing meeting papers;
- 89% were using instant messaging to communicate with colleagues rather than email; and
- 63% were using collaborative tools, for example, Skype, to hold virtual meetings.

- 79 The survey also highlighted a number of improvement suggestions from ICT users, including:
- training should be provided for ICT users on the knowledge, use and awareness of the new software and business applications on the new laptops;
 - staff suggested there was scope to improve collaborative working with external stakeholders, for example, through the use of Skype with other organisations; and
 - scope to digitise business processes, for example, by removing paper forms and replacing them with electronic forms and processes.
- 80 The Welsh Government's ICT service has taken action to address some of these issues by allowing virtual Microsoft Teams meetings with external organisations since April 2020. Furthermore, in July 2020 the Welsh Government agreed a two-year training contract with a company to deliver training to staff on the new Microsoft Office software, collaboration tools and virtual meeting software. The training has begun and it will continue through to June 2022.



Appendices

Audit approach and methods

Audit approach and methods

Under the previous Merlin contract, the Welsh Government paid a private company to provide it with ICT services. The Merlin contract was the subject of a report from the Auditor General in 2011.

In 2017, the Welsh Government took the decision in principle to in-source ICT services. In March 2018, the Welsh Government approved a business case to bring ICT services in-house, starting a ten-month transition phase. The in-sourcing was part of a broader suite of changes to technology at the Welsh Government, called the Future ICT portfolio. Our work focused on the in-sourcing rather than the broader portfolio.

The transition to an in-sourced service happened as planned in January 2019 and we did not begin any work until January 2020, to ensure a full year had passed and to allow enough time for the changes to bed in. We carried out the bulk of our fieldwork in the second half of 2020.

Our review considered whether the Welsh Government's transition to an in-house ICT service was on track to deliver the intended benefits. Our scope covered the strategic approach to planning the transition, the management and implementation of the transition, the delivery of intended outcomes, and the arrangements for oversight and performance monitoring. **Exhibit 7** sets out the audit methods we used.

Exhibit 7: audit methods

Document and data review	We reviewed documents relating to the planning and delivery of the transition including the business case, project plans, highlight reports, benefits realisation outputs and minutes of relevant forums.
Interviews	We carried out a range of interviews with staff involved in leading, planning and implementing the transition. During the course of our work, there were changes to the posts of Chief Digital Officer and Chief Technology Officer within the Welsh Government. We engaged with the incumbents as well as their predecessors.



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