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Senator: Watt
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Question:
Senator WATT: ….. By the way, could I get you to table the Deloitte review that was conducted in relation to the Cuba system?
Ms Leon: I think we have dealt with that in questions on notice before, but I'll take it on notice and go back to see what the status of that is.
Senator WATT: You think you've dealt with it by providing a copy?
Ms Leon: No, I think we've dealt with it by not providing a copy.
Senator WATT: Yes, that's what I feared. Is there any reason you wouldn't table it?
Ms Leon: I think what we have said before is that the report is still under consideration while we are implementing its recommendations.
Senator WATT: When did you say it was handed down?
Ms Leon: I think Ms Bridger took on notice as to when it was completed.
Senator WATT: Seriously, many months have gone by since the report was delivered, whenever it actually was.
Ms Leon: We’ll take it on notice and see if there is still any impediment to providing it to you.

Answer:
Please see the report at Attachment A.
Child Support System Redesign
Independent Assessment
Report & Recommendations
Final
Executive Summary
1 Executive Summary

The Child Support System Replacement Programme (later changed to the Redesign Programme) commenced in 2013 to deliver an end to end replacement of the current legacy platform Cuba, which supports approximately 3,000 service delivery staff, and facilitates the collection and disbursement of $1.5 billion worth of Child Support collect payments (2016-17).

As a Programme, the Replacement faced a number of challenges over its duration which resulted in reduced scope and the partial delivery of the Child Support System Redesign (CSSR) Programme. In February 2018, Child Support and Redress Division engaged Deloitte to conduct an independent assessment of the Programme, and the implemented solution (Pluto) to determine whether it is fit for purpose. In conducting the assessment, Deloitte engaged extensively across the business, visiting five Child Support Smart Centres (CSSC), consulting with over 50 different service delivery officers, and also received 170 independent feedback submissions from Service Delivery which have informed the findings and shaped the recommendations of the assessment.

The Pluto implementation has been built using SAP CRM and ERP, with a custom built UI5 user interface with the core functionality still provided by Cuba, the legacy platform. The Programme has also delivered a new online solution that has been rolled out for some customers along with interoperability between Cuba and SAP to enable a majority of processing activities to be fulfilled by Cuba functionality with data capture through the enhanced user interface (UI).

While the Pluto solution delivers improvements to the look and feel of the solution and is generally easier to learn for new staff, there are still significant functional gaps and performance challenges in the current implementation. In addition, the gaps in Pluto currently require staff to alternate between the new and old systems, creating inefficiencies in day to day operations which has impacted operations (e.g. increases to average call handling times).

The current implementation does not achieve the core outcomes of the original business case, which set out to enable the full decommissioning of Cuba. As such, there is still a strong burning platform for further investment. However, the business drivers for change have continued to evolve over the last 5 years, with greater demands for online services, service delivery efficiencies and an increasing drive for Government agility. As a result, there is a need to not simply replace Cuba with a like for like solution, but for a broader transformation of how services are delivered.

Furthermore, Cuba has not had significant investment throughout the CSSR Programme as it was due to be decommissioned. This has meant that while it is currently stable, any further changes present a high risk to the Department of Human Services (DHS) as Cuba experts are limited and there are very complex and unknown interdependencies for even small changes. For example, there have been significant challenges in the design and delivery of the “Overpayment Budget Measure”, which may require significant manual intervention by service delivery staff from 1 July 2018, for a period of up to 9 months, to give full effect to the legislation. There are also significant functional gaps in Cuba that are addressed through off system macros to guide service delivery staff.

Despite the functional challenges, the underlying technology solution leverages robust and scalable components and sets a strong foundation for future development, however there are several critical architectural decisions that need to be resolved (e.g. approach for the assessments engine). The underlying components have been deployed in other comparable Programmes of work globally such as the Florida Department of Revenue Child Support Agency. Alternate solutions are also not considered viable given the investment to date in SAP and Pluto, the current solution architecture and the risk and business impact of a significant change in strategic direction.

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1 DHS Annual Report 2016-17.
Based on a detailed functional and technical assessment completed by the assessment team, Pluto can be made fit for purpose. This will however, require significant investment to both remediate current gaps and performance challenges, deliver on the original intent of the business case and any new and future business needs. Given how tightly coupled Pluto and Cuba are, the Programme should continue to explore opportunities to modernise the Cuba code to mitigate some of the medium-term risks of continuing to leverage on the Cuba platform.

1.1 Next Steps
Given the underlying solution components, the investment to date, broader enterprise SAP strategy and the current Pluto implementation being live across the business, it is recommended to immediately mobilise design and delivery teams to enhance the current Pluto implementation. The focus should be stabilising and improving performance, delivering usability enhancements for staff and improving the data quality across the two systems.

Given the current functionality and performance of the Pluto implementation, and to help address the significant challenges experienced by staff in the CSSC when working across dual systems, it is recommended that CSSC focus on using Pluto within the New Customers parts of the business. All other business areas should revert back to Cuba as a short-term business performance improvement measure. This will enable the Programme to build and deliver enhancements and additional capabilities with sufficient quality to better facilitate change to the business.

It is critical to note that there is a risk to the department’s reputation in reverting back to the legacy solution for parts of the business, as this is counter to the strategy set forth in the business case. As such, it is critical that this is communicated as a short term solution while the broader delivery plan and approach is finalised.

To manage and focus the scope of work and investment required in the Pluto implementation, it is recommended that delivery of the initial priority improvements be completed over two, three-month Programme increments with formal go or no-go decisions at the end of each delivery cycle to validate approach, findings and progress against key performance indicators (e.g. performance of the Pluto solution).

In parallel, Child Support and Redress Division in partnership with Service Delivery and the Chief Information Officer Group (CIOG) should immediately mobilise a team to commence the development of a business case. The focus of the business case should be to define the broader transformation agenda, future service delivery model for Child Support services, Programme delivery approach, end state architecture and the costs and benefits of the new Programme.

To set the Programme up for success, it is critical that all key stakeholders agree principles and ways of working to successfully deliver a solution that meets the needs of staff, customers and Government. Future success will be contingent on learning from past experiences in the delivery of the CSSR Programme.

1.2 Recommendations

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# Recommendation

3. The Senior Responsible Officer (SRO) for the Programme should be changed to sit within Service Delivery, with a clear focus on decision making (e.g. Go / No-Go decisions) and removing blockers for the Programme, with Delivery and Governance continuing to be led by the Child Support and Redress Division.

4. Adopt a ‘Design Thinking’ approach to requirements for the CSSR Programme, focusing on user research, prototyping and visualisations wherever possible (see section 6.3.3 for a definition of Design Thinking).

Any new functionality developed in Pluto should be grouped in order to allow staff to operate entirely out of the new system (e.g. to perform all processing associated with a particular Service Delivery function) prior to delivery.

5. Establish an independent Design and Implementation Authority (within Programme Delivery, under Child Support and Redress) to provide guidance over the further development of the solution architecture and the delivery of the Programme (providing support to the initial Phases as well as the design and oversight for the delivery of the target state). This team should report directly into the Programme Board.

6. Appoint an independent Programme Delivery lead (reporting to the General Manager, Child Support and Redress division) for the Programme. This role will have overarching delivery responsibility, maintaining scope alignment across different teams, defining the release and delivery roadmap, and removing obstacles or blockers to progress delivery. This person will work closely with the Programme leadership to ensure resources are appropriately allocated to teams. Establishing this role will enable the National Manager, Child Support System Redesign to focus on managing governance, vendors and the resources necessary to meet delivery requirements.

7. Appoint a CIOG General Manager as the CIOG Delivery Lead to coordinate and manage all CIOG Programme needs. This should include coverage of supporting teams such as legacy system support and enabling capabilities such as workload management, adopting a similar approach to that adopted by the Welfare Payment Infrastructure Transformation (WPIT) Programme.

8. Establish a dedicated Change Management capability for the Programme (within Programme Delivery, under Child Support and Redress division) to better plan for and manage change across CSSC, with a short-term focus on working with Service Delivery and delivery teams to define logical functional releases.

9. Establish blended, multi-disciplinary and self-organising teams, with ‘Product Owners’ (see section 6.2.2 for definition) appointed from within Service Delivery (to enable rapid decision making for the design and prioritisation of future requirements). These teams should have all the tools and resources to deliver working software, with variable scope enabling the teams to focus on targeted key performance indicators (e.g. Improve the time for a Service Officer to complete an Application for Assessment in Pluto). These teams should be led and report into the Programme Delivery Lead.

10. Establish a multi-disciplinary team to develop a business case, focusing on the broader transformation of Child Support service delivery, as well as enabling the full decommissioning of the current Cuba solution. The future Programme should be designed around establishing interim architecture states that are stable and performant for the business, and enable funding to be released in tranches with defined approval stage gates for further funding.

11. Establish a single and integrated view of all Programme, project or change related activity impacting on either Pluto, Cuba or Child Support Service Delivery to maintain alignment and reduce delivery risks, due to the tightly coupled nature of the solution. This should be supported by the Programme Management Office (PMO) from within the Child Support and Redress division, providing visibility to leadership on all in-flight and planned changes.

In addition, once core Programme roles have been appointed, review and update current Governance arrangements to reflect the new roles and positions, including a clearly defined escalation path where a decision cannot be resolved by the Programme Board.

Table 1 – Recommendations
Programme Overview
2 Programme Overview

2.1 Programme overview and intent

2.1.1 Purpose of the Child Support program

The Child Support program helps parents and carers manage their financial child support responsibilities following separation or divorce. The program determines each parent’s share of the financial contribution for their child, or children, accounting for their financial circumstances, contribution to each child’s care, and any other relevant circumstances, calculating whether one parent is required to make a payment to the other in order to offset the difference. Where a non-parent carer has care of a child, one or both parents may be required to make a payment to the non-parent carer.

The program offers an extensive range of services, including external referrals for parents where required, establishing and maintaining their child support assessments, as well as managing collection and payment.

The child support cases handled by the program range in complexity, from parents with simple circumstances (e.g. a single case involving one child) to more complex circumstances (e.g. multiple cases involving different children or a parent residing in a different country).

In order to continue to deliver the Child Support program, the department established a new ICT system in 2002 to meet their business needs and legislative requirements, a system named ‘Cuba’.2

2.1.2 Business drivers for the CSSR Programme

By 2013, there had been major changes in the legislative requirements, as well as shifts in customer behavioural patterns, which created a higher expectation for the program’s customer service outcomes. Additionally the Delivering Quality Outcomes review had highlighted that Cuba would reach the end of its useful life by the end of 2012, requiring an ever increasing cost to maintain and support beyond this point.3 A number of key internal and external business drivers for change were also recognised:

- Child support cases were becoming more complex, driven by changes in customer expectations, spousal legislations and an increasing volume of international cases;
- The increase in child care case complexity placed a higher demand on resources and highlighted a need for greater efficiency; and
- Directives from Government to provide linkage with external agencies and collaborate internationally in the vision of Service Delivery Reform.

The Child Support program required additional system capability to support service delivery transformation and meet these emerging business needs. The department struggled to reconfigure Cuba to support their needs, due both to the age of the system and the limited number of resources with the skills to maintain it.4

The department initiated the CSSR Programme with the intent of modernising the ICT infrastructure through the acquisition of a new Child Support system. The objective of the CSSR Programme was to decommission the legacy system, replacing it with a new system that was both more flexible and responsive enough to support service delivery transformation, in line with the department’s ICT architectural direction.5

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2 CSSR Project Management Plan Tier 1.
4 CSSR Programme Strategic Implementation Plan.
5 Project Management Plan.
2.1.4 Intended business outcomes
In line with the Programme objectives, the Programme sought to achieve the following business outcomes:

- Increased responsiveness and support to peer and partner Government agencies;
- Reduced service delivery overhead;
- Increased DHS (Child Support) customer satisfaction;
- Increased DHS Employee satisfaction;
- Increased rate of collection for administered child support cases;
- Increased ICT system reliability and availability;
- Reduced total cost of ownership for Child Support enabling ICT; and
- Increased alignment of Child Support enabling ICT with DHS enterprise architecture.  

2.2 Programme delivery approach

2.2.1 Two-phase delivery approach adopted

The original Programme Plan outlined a two-phase delivery to be completed over a period of five years, in an approach described as a ‘big bang’ implementation. The replacement system was to support all Cuba business functions by the end of phase 1 in late 2015, later extended to mid-2016, eliminating the ongoing costs of maintaining Cuba while simultaneously overcoming some of Cuba’s fundamental limitations. The focus of Phase 2 would be targeted enhancements, with an intended date of completion in mid-2018.  

Figure 1 provides a visual illustration of the original Programme timeline.

2.2.2 SAP selected as core technology platform

In alignment to the overall DHS enterprise architectural direction and dominant technology stack, SAP was chosen as the underlying core platform to replace Cuba. The proposed implementation methodology, known as ‘Accelerated SAP’ or ‘ASAP’, complied with the department’s project management methodology.

The rationale for the selection of SAP was:

- Support for an accelerated implementation with features and tools pre-built into an SAP solution;
- Ability to leverage proven methodology and implementation framework based on industry best practice;
- Reduced cost and risk through the use of existing components and methodology;
- Effective project management.  

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6 Strategic Implementation Plan.
8 CSSR Journey Map.
9 CSSR Project Management Plan Tier 1.
10 CSSR Sourcing Strategy.
2.2.4 Programme governance divided by work streams
A clear Programme governance structure (depicted in Figure 2) was set up to manage discrete areas of responsibility. This included eight work streams spread equally between Business and CIOG. The work streams were overseen by Project Managers in Business and CIOG, with Programme oversight provided by the CSSR Programme Management Office (PMO). The CSSR PMO provided secretariat support to the CSSR Program Board with membership made up of General Managers of the Child Support Program, CIOG, CSSC and the CFO Division. The Programme governance structure also included an Assurance function, broader DHS governance authorities and ‘external’ stakeholders (Minister for Human Services, Department of Finance, Department of Social Services and the Australian Tax Office). An executive steering committee, made up of participants at the Deputy Secretary level, was later commissioned to guide the Programme through the implementation phase.

2.3 Challenges and decisions during implementation
2.3.1 Progress, challenges and decisions during early implementation
2.3.1.1 Decision to refocus IT system design on reusable patterns
In November 2014, the CIOG reviewed and redesigned the CSSR technology architecture to ensure that the blueprint, which was signed off in April 2014 as a partially complete design, contained patterns which were reusable for future departmental use. While the redesign activity provided assurance for repeated pattern capability, in order to reduce future costs, it also introduced delays to the Programme schedule and benefit realisation, and increased the cost in the immediate term. At this stage the program remained focused on fully decommissioning Cuba and implementing an end-to-end SAP solution.

2.3.1.2 Decision to incorporate guided procedures
In June 2015, the Programme introduced guided procedures and steps into the system design to better assist staff in following a standard practice and improve data input accuracy and efficiency. The perceived benefit of this decision was that it would offer an enhanced user experience, closely replicating the macros used in Cuba, however it introduced additional complexity rather than removing it.

2.3.2 Progress, challenges and decisions by early-2016
By February 2016, it was clear that the CSSR Programme would not meet the core system build completion milestone of 31 March 2016 due to unforeseen complexity and requirements that extended the work effort required to deliver the system beyond the original expectation.

Figure 2 – Programme governance structure

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11 CSSR Programme Governance Structure.
12 CSSR Journey Map.
The Programme struggled to deliver key business requirements, including:

- Limited multi-tasking capability being built, preventing staff from reaching desired productivity rates and compromising on customer service;
- Business requirements relating to outbound correspondence have not adequately considered implications to online channel and required rework; and
- Business requirements relating to letters were not yet ready for sign off, fit for purpose letters were unable to be delivered in time for user acceptance testing.\(^{13}\)

The one off transportation of data between the SAP solution and Cuba system was incomplete and there was not yet an effective data migration or replication solution implemented to ensure data integrity between systems. The Programme was in need of a documented data flow for each business process in order to establish an end-to-end view of the lifecycle of a customer case and the way information was to be managed between the systems. Consequently, testing, training and the ability to use business processes in the production environment was delayed.\(^{14,15}\)

“Workshops have been held to review the large volume of letters related to outbound correspondences. Due to slow progress in securing sign-off, a meeting will be held next week to look at blockages in the process and how to progress...”

- NM, CSSR Programme Programme Board Meeting, 24 March 2016

\[2.3.2.1\] Decision to prioritise SAP UI ‘wrapper’ solution

In March 2016, the department began to investigate alternatives to the planned end-to-end ‘big bang’ delivery approach to the Cuba replacement, including a review of the schedule and cost to complete Phase 1.\(^{16}\) On 28 April 2016, the SRO for the CSSR Programme met with the Secretary and the Chief Information Officer (CIO) to discuss alternative ways forward. The following four options were discussed:

1. Continue with the current approach and manage the expected extension to time and cost;
2. Prioritise the delivery of a front-end solution, i.e. a ‘wrapper’ that interacts with staff and customers but uses Cuba as the back-end for calculations, payments and downstream processing;
3. Prioritise the delivery of certain end-to-end business processes; or
4. Cease the CSSR Programme.\(^{17}\)

Following this meeting the Board endorsed the decision to pursue the second option, with an expanded scope prioritising the front-end staff facing and online customer facing screens. The Programme shifted focus, moving away from the original approach and towards the accelerated delivery of a ‘wrapper’ solution:

- Core build to be ‘paused’;
- Target delivery of a Minimal Viable Product (MVP) with ~70 business processes being executed in real time on the wrapper solution, built in Web UI, as an immediate priority;
- Productivity to be measured by assessing existing performance in Cuba and new performance in Web UI;
- Accelerated change management; and
- New costing.\(^{18}\)

The intent was to deliver immediate processing efficiencies and an improved user experience for staff and customers, while minimising the impact to business processes by retaining Cuba.\(^{19}\)

\[^{13}\] CSSR Programme Issues Register.
\[^{14}\] CSSR Programme Issues Register.
\[^{15}\] CSSR Programme Risk Register.
\[^{17}\] CSSR Programme Board 11 May 2016 Meeting Minutes - Item 3.
\[^{19}\] CSSR Programme Board 24 March 2016 Meeting Minutes.
The Programme reaffirmed to key stakeholders in late March 2016 that the decision to prioritise a wrapper solution was not an alternative to the replacement and decommissioning of Cuba. The wrapper solution was intended to reduce the risks associated with a full implementation and was considered an alternative approach to delivery rather than an alternative Programme solution. In a subsequent meeting of the Programme Board, Smart Centre stakeholders expressed concerns that a 1 July roll-out date would fall during a peak period and staff would be required to take on a significant workload while undergoing training.

"The wrapper solution is not a replacement for the CSSR project, as it does not meet the objectives of the project – namely, to replace Cuba. The 'wrapper' would only serve to provide a potential option to reduce risk associated with the implementation and would not provide an alternative solution."

- SRO, CSSR Programme
Programme Board Meeting, 24 March 2016

2.3.2.2 Decision to transition to UI5 and go-live of staff facing screen
On 10 May 2017 the CSSR Executive Steering Committee, commissioned to guide the Programme through implementation, agreed to transition the user interface from Web UI to an updated version known as SAP UI5. The decision was based on advice that UI5 would:

- Be simple to use;
- Support greater efficiency through implementation of workload management;
- Enable staff to more effectively validate applicant information;
- Reduce reliance on free text fields; and
- Align with the departmental technology strategy.

The decision was made approximately two months prior to the go-live of staff facing screens, with no change to the targeted go-live date. Consequently, the Programme faced issues relating to the short delivery timeframe, occurring immediately prior to the Smart Centre peak processing period. Staff faced challenges in establishing proficiency in the new system which, together with the need to use Cuba for many parts of the business process, resulted in productivity impacts.

2.3.2.3 Decision to implement online customer portal and adopt an agile approach
An ‘agile’ or ‘rapid delivery’ approach was adopted in the later phases of Programme implementation, following the decision to prioritise the delivery of ‘Pluto’, the MVP to be delivered in UI5. The adoption of agile concepts was exemplified by the use of Multi-disciplinary Teams (MDTs). The MDTs included staff from multiple Child Support Smart Centres, the CSSR Programme and CIOG. It was deployed to support the implementation of the enhanced online interface and coordinate improvements to be delivered. The MDTs used Agile to prioritise features for delivery based on user research, extending this methodology to the business implementation of enhancements, including change management. Presentations to executives were made by way of prototype showcases.

The new online customer facing portal was successfully implemented via a ‘phased’ approach, with approximately 50,000 customers migrated to the new portal to date. It received generally positive feedback from customers, however also created challenges for service delivery, primarily due to issues experienced with workload management in Pluto. This contributed to the decision to halt the phased roll-out of the portal to additional customers.

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20 CSSR Programme Board 11 May 2016 Meeting Minutes - Item 3.
21 CSSR Executive Steering Committee 10 May 2017 Meeting Minutes.
22 CSSR Gateway Review Report Mid Stage Programme Review.
24 CSSR Programme Board 6 October 2017 Meeting Minutes.
Blueprint sign off
Department proceeded to sign off even though not all aspects of the Blueprint were finalised. E.g. Reporting and Security

Re-focus of IT System architecture design
CIO Group decides to revisit the CSSR technology architectural design to ensure there is focus on repeated pattern for future use

Introduction of guided procedures/steps
Decision to include guided procedures and question sets into the design to enable a more accurate and intuitive user experience and precise data input mechanism

Transition to SAP Fiori (Pluto)
New technology acquired by the Department allowed for a decision to transition to SAP Fiori (User Interface 5) front-end user interface

Benefits
- Repeated patterns
- Lower future costs

Impacts
- Schedule delays
- Additional cost

Prioritise staff screen/Online for parents
Deliverables were re-prioritised to focus on the modernisation of staff-facing screens and online functionality for parents. Deferred the replacement of underlying payment/calculation and correspondence aspects of Cuba

Benefits
- Improved user experience
- High data accuracy

Impacts
- Deferred end state solution
- Additional complexity in data replication
- Potential rework in developing end state
- Need to maintain two systems

Final release of staff-facing screen
Go-live decision for staff-facing screen

User testing of online for parents
Independent user testing was undertaken for online, which outlined 52 improvement recommendations. Decision to establish a multi-disciplinary team (MDT) to prioritise actions.

Benefits
- Improved functionality, accuracy and readability

Impacts
- Delayed release of final state solution

Online implementation
Online release readiness criteria were deemed met. Initial release occurred to 25,000 users

Benefits
- Efficient channel
- Updated workload management configuration

Impacts
- Delayed release of final state solution

Gap remediation and independent assessment
Gap remediation of 9 priority processes progressed with 2 gap requirements document. System update to resolve workload management issues to support further roll out of online. Deloitte commenced independent assessment.

Benefits
- Efficient channel

Impacts
- Delayed release of final state solution

Legend
Scope change
Technology change

Figure 3 – History of Programme decisions
2.4 Programme assessment

2.4.1 Key findings

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<th>Programme aspect</th>
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<tr>
<td>1. Scope</td>
<td><strong>The Child Support business is complex and different from other parts of Human Services</strong>&lt;br&gt;&lt;br&gt;Given the inherent complexity of the Child Support program, the underlying ICT system must be able to provide integrated functionality to support the legislation and business processes across assessment, payment, correspondence and other core functions. Furthermore, as these business processes are not executed in isolation, there are addition complexities arising from the interdependency of system requirements. This is largely due to Child Support Service Delivery operating on a case management model that requires complex data gathering and validation from parties with often times conflicting interest. It is primarily a debt collection agency, it does not pay Government funds to individuals.&lt;br&gt;&lt;br&gt;These complexities and differences have presented challenges in delivering the CSSR Programme over the planned five-year time period, contributing to a significantly longer delivery timeframe. Scope needs to be well understood to support accurate estimation of the effort required to deliver the Programme. Adequate contingency also needs to be planned to minimise financial and schedule risks.</td>
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<td>2. Technology</td>
<td><strong>Changes to scope require careful planning and assessment to understand broader Programme impact</strong>&lt;br&gt;&lt;br&gt;Throughout the CSSR journey, decisions have been made to change aspects of the scope. Though changes to scope are an important aspect of any large Programme or project, the broader impacts to the original business case, intent of the Programme, and benefits need to be carefully considered. While many of the decisions made by the CSSR Programme were made based on merit, the immediate impacts to Programme scope and schedule were often not well understood or well communicated to the relevant Governance bodies to support holistic and effective decision making.</td>
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<td><strong>Technology decision changes made within short lead time to go-live added to implementation challenges</strong>&lt;br&gt;&lt;br&gt;The decision to transition to UI5 from Web UI was made based on merit. However, making this decision within two months of the scheduled go-live date meant that there was added pressure to incorporate the recent technological changes as well as modify previously developed resources for change and training. The timeframe impacted on the ability to deliver on all of the known requirements coming out of the work on Web UI. It is unclear whether the rework required and impact to implementation was thoroughly assessed against the benefits of switching to UI5 close to go-live. In addition, technology decisions relating to following enterprise patterns makes sense, however there cannot be a one size fits all approach to business needs. Overall, the Programme needs to proactively manage and monitor the impact to delivery timeframe that may result from significant technology changes.</td>
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<td><strong>Technology choices were focused on the interim, the plan to deliver the full solution was not clear</strong>&lt;br&gt;&lt;br&gt;The decision to prioritise a wrapper solution was intended as an interim state, delivering an enhanced user interface. While this decision was not intended as a replacement solution for the Programme, a clear plan including timeframe and approach to deliver the remaining end-to-end functions had not been finalised and communicated to staff and Programme stakeholders. This presented a significant challenge to delivery post implementation, as there were no clear next steps to achieve the outcomes of the business case.</td>
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<td>Programme aspect</td>
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<td>Issues relating to data replication impact performance and quality</td>
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<td>Issues relating to data replication and migration were repeatedly raised during delivery. During the early stages of the Programme:</td>
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<td>• Gaps in the understanding of the Cuba data model and how this would translate to the new SAP requirements impacted data migration and interoperability; and</td>
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<td>• The SAP data migration solution struggled to support the required data loading times required for CSSR data volumes.</td>
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<td>Resolutions have since been put in place to address data quality, however system performance remains an ongoing challenge.</td>
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3. Delivery Approach

The Programme faced continuous challenges in defining and agreeing on requirements

CIOG and business teams faced persistent challenges in finalising requirements and agreeing on the necessary level of detail required for the technical design. As a result, there was a backlog of incomplete requirements that required executive action after the intended sign-off date was missed. This led to some functionality not being delivered in time for user acceptance testing.

Requirements need to align with and consider dependencies on other system components

The need to deliver requirements quickly led to some requirements being considered in isolation, requiring further rework to resolve dependencies to other system functions. This issue occurred frequently during the delivery of outbound correspondence functionality, where delivered requirements required further evaluation in order to manage the effect on the ability to access and view historical correspondence through Pluto.

Changing the design impacted requirements

Challenges were faced when the design changed (e.g. the wrapper solution), which impacted on the accuracy and validity of requirements. Some requirements couldn’t be met by the wrapper as it was dependent on Cuba functionality and analysts had to, in some instances, try to reverse engineer business rules from Cuba in order to understand how to improve or remediate issues in the wrapper solution.

There was also no detailed consideration for how the wrapper would address functionality that did not exist in Cuba, some of which is managed through complex web form-based macros. This resulted in a high number of gaps being identified, which are difficult to classify as gaps in requirements, gaps in functionality, or defects.

Programme leadership required transparency and clarity on actual progress

The Programme was unable to establish a clear measure of actual progress and often proceeded in the absence of a plan, schedule or agreed scope. Subsequently, the Programme was late to identify and take action in relation to process gaps that impacted on the Programme’s ability to meet milestones. The effect of this was compounded by the pivot to and rapid delivery of the SAP UIS solution.
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<td><strong>4. Risk and Issue</strong></td>
<td><strong>Risks and their treatment strategy require improvement</strong></td>
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| | The Programme kept a well-structured risk register with up to six treatments being allocated for each risk, however the completeness of treatments varied, including a number of medium to high impacts that appeared to be without treatment. The risk treatments did not have clear strategies to assess the cost of treatment and, while residual risk was assessed and captured in the register, it was not always clear how a treatment had helped to mitigate a risk.  
By way of example, it was highlighted that going live during the peak processing period for Smart Centres may significantly impact upon their ability to meet service delivery demands, however the treatment strategies were focused upon improving training and ensuring system readiness and did not include an assessment or mitigation for the identified productivity impact. As a result, it was not clear prior to go-live what the expected reduction in productivity or additional loading on Smart Centre staff may be. |
| **Stronger governance and clear processes for incident management is required** | A significant number of production incidents lodged through the support system were found to have insufficient or incomplete descriptions of the issue, inhibiting CIOG’s ability to explore the incidents adequately.  
Incidents were also found to have been closed without confirmation or consultation with Service Delivery, particularly when the incident was unable to be replicated in non-production environments.  
There is a need for the Programme to establish clear guidelines and enhanced visibility into the lodging and resolution of incidents. |
| **5. Change and transition** | **Delayed finalisation of system design has impacted the development of change and training material** |
| | The Programme was late to establish detailed ICT functional documentation, in some instances adversely impacting on change management and the delivery of training. For example, there was a delay in articulating the data replication approach, end-to-end lifecycle of case data and how it was managed between the two systems. Consequently, there were ambiguities in relation to the source of truth which led to gaps in the training material. |
| **Rapid implementation schedule impacted on training quality** | The rapid implementation of UI5 wrapper system following the decision to switch from Web UI to UI5 resulted in reduced staff training time. While adequate planning exercises were conducted, the short training sessions led to low user confidence, fluency and uptake of the new system. Staff were not adequately trained and proficient in the new system ahead of peak processing times. Staff nonetheless recognised the effort applied and the training approach was appropriate and would have been more effective if there was adequate time and greater functionality to learn on. |

Table 2 – Summary of lessons learned

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26 Deloitte analysis, *DHS Risk Register*, provided by Programme team.
2.4.2 Parallels to other delivery projects

The delivery challenges and lessons identified in Section 2.4.1 are not unique to CSSR Programme, similar findings have been established for other projects. Examples from the Implementation review of the Retune the Code project have been provided below.

Theme: Risk and issues management

Example: "(the decision to implement MVP) did not properly account for the operational environment into which the change was to be delivered."

"There was a lack of understanding on the cost and resource required to implement operational workarounds and tiger teaming required in production given the IT system was implemented with known errors." ²⁸

- In both the ‘Retune the Code’ project and CSSR Programme, the decision to implement MVP did not fully account for the nature of the work performed by staff and how they were operating in the legacy system
- The risks associated with the reduced productivity that may be caused by functionality gaps were not fully understood, documented and assessed prior to MVP business implementation
- The mitigation strategy should include an estimation of the impact of known gaps and establish workarounds beforehand
- Users reverted back to the legacy system, where customer interactions were more fluid

Theme: Change & transition

Example: "...the impact of the change was significantly underestimated and inadequately planned for, particularly for staff still using legacy systems."

"...training was delivered too early and in the wrong way." ²⁹

- Unlike the ‘Retune the Code’ project, where training was delivered too early, the implementation of MVP in CSSR Programme occurred in a hyper-rapid schedule. In both projects, the way in which training was delivered resulted in compromises to quality
- While the rapid business implementation of MVP was planned and supported with training on the new system, staff were not given sufficient time to establish confidence and be guided through the transition from the legacy to the new system

Theme: Delivery approach

Example: "...timelines and deadlines were repeatedly driven by internal constraints and pressures, rather than determined in line with the progress of the project and the readiness of the product and organisation." ³⁰

- The CSSR Programme was also driven by increasing pressure to deliver, which led to a focus on making the interim solution available to users
- Consequently, the interim solution was delivered without being fully aligned with a long term plan, leading to a solution state that is contrary to the intent of the Programme and without a clear plan on getting to the end state

²⁸ Ernst & Young, Implementation review of the Retune the Code project (2018).
²⁹ Ernst & Young, Implementation review of the Retune the Code project (2018).
³⁰ Ernst & Young, Implementation review of the Retune the Code project (2018).
2.4.4 Tracking against intended business outcome

The intention of the CSSR Programme was to modernise the Child Support ICT infrastructure by replacing Cuba with a new system that was able to support current business processes and was also flexible enough to adapt to future changes. The current state technology, the Pluto wrapper solution, delivered some progress towards the following business outcomes:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Child Support customer satisfaction</td>
<td>Following go-live of the new online customer facing portal positive user feedback was received, however the new portal was never rolled out to all users, largely due to issues faced by staff in actioning work from the new portal.</td>
</tr>
<tr>
<td>Increased alignment of Child Support enabling ICT with the DHS enterprise architecture</td>
<td>New system is aligned with the dominant technology stack, however the legacy back-end is still in use.</td>
</tr>
</tbody>
</table>

Table 3 – Business outcomes with some progress

The current state solution has not always resulted in an improved staff experience or efficiency gains in line with the intention of the original business case, and has struggled to make clear progress against the following business outcomes:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased responsiveness and support to peer and partner Government agencies</td>
<td>Cuba continues to be used to interface with peer agencies (ATO, Centrelink, etc.)</td>
</tr>
<tr>
<td>Reduced service delivery overhead</td>
<td>Staff are required to use both Pluto and Cuba systems and switch between systems to complete tasks. The need to replicate data between the systems introduced performance issues and has contributed to longer processing times while using Pluto. In addition, Service Delivery also use a range of other systems, primarily long and complex web form based macros to guide service officers.</td>
</tr>
<tr>
<td>Increased DHS Employee satisfaction</td>
<td>Consequently, there have been productivity impacts across various business functions, particularly in assessment, collection, debt, and workload management.</td>
</tr>
<tr>
<td>Increase ICT system reliability and availability</td>
<td></td>
</tr>
<tr>
<td>Increased rate of collection for administered child support cases</td>
<td></td>
</tr>
<tr>
<td>Reduced total cost of ownership for Child Support enabling ICT</td>
<td>The department is required to continue spending on maintenance of legacy systems while supporting the new system.</td>
</tr>
</tbody>
</table>

Table 4 – Business outcomes without clear progress

“The Programme is operating without a clear and endorsed schedule detailing the full completion and delivery of gaps for 9 agreed priority processes and completion of the staged rollout of online services.”

31 CSSR Issues Register.
Business Drivers & Case for Change
3 Business Drivers & Case for Change

3.1 Overview of the case for change

3.1.1 Child Support business overview

The Child Support program is administered under two Acts of Parliament (the Acts), the Child Support (Assessment) Act 1989 and the Child Support (Registration and Collection) Act 1988. The program is delivered by DHS, with a heavy reliance on technology systems (currently both 'Pluto' and 'Cuba' systems, with a heavy reliance on Cuba to complete back-end processing) to assist with the delivery of services consistent with the legislative framework. The Acts specify much of the functional framework that is required to be supported by any technology solutions – almost everything, from the formulas used for assessment to the accepted methods of payment to the impact on the Family Tax Benefit, is derived from the Acts and supporting Regulations.

The following view of the legislative ‘functional’ framework has been prepared to show the 37 ‘functions’ currently required by the legislation, as well as the alignment of these with the five macro steps identified in the current state customer value chain (see Figure 6).

![Figure 4 – Legislative functional framework](image)

Having the requirements of technology systems reflective of and driven largely by legislation requires a greater of degree flexibility in the systems as they must constantly be modified and adapted to shifts in the legislative and policy landscapes.
3.1.1.3 Standardised, national approach to service delivery

Through consultation with executive stakeholders and operational staff across multiple sites, key differences were identified in the approach used for service delivery in Child Support when compared with other areas of DHS. In response to recommendations made in the Delivering Quality Outcomes Review, DHS implemented a new Service Delivery model for child support. The implementation of the recommendations was completed towards the end of 2011 with the result being a national case management approach under which collection is everyone’s responsibility. The core principles of the delivery model are:

- Strong collection focus;
- Maximising customer interactions to resolve issues at the point of entry;
- Delivering quality outcomes; and
- Supporting staff with simple, optimised and efficient processes.

This focus on collection as the core business of child support means that Smart Centre staff across all areas of the business are responsible for working to ensure the payment of child support and the collection and management of debts. There is also a strong focus on contacting both parents at their point of entry into the program to reduce errors prior to finalising an initial assessment that may create additional work and lead to additional interactions or intervention down the line. There is also a push to minimise management wherever possible, with staff encouraging parents and carers to manage their payments voluntarily through Private Collect arrangements where appropriate. Private Collect arrangements require only an initial assessment to be performed by DHS. Parents then handle the payment of the child support amount (either as assessed or at a different agreed amount) outside of the Child Support System, with no active management required by DHS unless issues are raised by either party. According to the most recent Annual Report, over 50% of cases are managed through Private Collect arrangements.

The desire to reduce initial errors flows through to the rest of the delivery model – cases with active or follow-up work are locked to a particular staff member until all of the work on the case has been completed and the case can cease to be actively managed, minimising overlap, rework and the potential for conflicting information to be submitted.

The bulk of the work is delivered by New Customers (handling new applications for assessment and new child support cases for both new and existing customers) and Mainstream Services (handling general enquiries and a range of activities including general change of circumstances and debt collection). These teams make up approximately 59% of the business, with specialised teams, handling complex or escalated matters, making up the remainder.

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32 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
36 DHS Annual Report 2016-17.
37 Comparative Performance Snapshot (Jan-Feb 2018).
Consistent with the delivery model, the customer value chain (Figure 6) focuses on high-touch, intensive manual processing up front to ensure maximum resolution at the first point of contact, with a focus on quality.
Departure determinations or changes of assessment may require manual intervention by staff. This will usually occur after the initial assessment and staff may be required to gather additional information and set up a new registration in the system (e.g., where a child support agreement exists).
3.1.1.4 Supporting tools

In delivering services, and in order to drive consistency and a ‘national’ approach to service delivery, staff make extensive use of ‘macros’ (web forms) that provide guidance and supplement functionality in Cuba (e.g. perform calculations of weekly payment arrangements). These macros are also used to document details of interactions and processes in Cuba, generating a plain text document to be stored as a record of what was done. In many cases the macros are integral to completing processes in Cuba, which is not necessarily designed to support the functionality internally.

While the macros support the performance of tasks in Cuba, they have no ability to access the data in Cuba. In developing the ‘tasks’ to be built in Pluto much of the macro functionality was replicated, however the documentation and record of what was done is not automatically generated, the result being that staff are currently completing both the Pluto task and the macro in order to ensure documentation is saved for future reference in Pluto and Cuba.

3.1.2 Evolution of the original case for change

The original business case identified 3 key drivers for change, ultimately recommending the complete replacement of Cuba in order to:

1. Better achieve government outcomes;
2. Improve the service and outcomes for customers; and
3. Reduce the expense of ICT maintenance and operation.

Through engagement with executive stakeholders these drivers have been found to still be broadly relevant to the need to update and replace the legacy Cuba back-end, which has yet to be realised, though they have evolved due in part to an increased demand for online and digital services and the pressing need to adapt the system to legislative changes and enable Government agility.

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Figure 7 – Example of a financial hardship application process in ‘Cuba’

Figure 8 – Ongoing case for change

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38 Child Support Smart Centre Site Visits – Parramatta (20/03/2018).
3.1.2.2 Achieving government outcomes

Cuba was custom-built from the ground up to reflect the original legislative functional requirements and there are difficulties in modifying the system to support functional changes to the Program.

**Example:** On 1 July 2008 substantial changes to Child Support legislation came into operation, making significant changes to the formula used for assessment, child support agreements and the nature of cases (one case to represent all children of the same parents). Prior to the 2008 changes cases were considered by the roles of each party (i.e. assuming that there was a payer and a payee relating to a child) and Cuba was built to reflect this. The 2008 legislative changes considered cases for a child as relating to the assessments of all children who are children of both parents of the child. Due to the highly customised nature of the Cuba system, it was not modified to reflect this change in definition and maintains its cases as role-based (payer, payee, child), in line with the original legislation.

There are a number of current budget measures and new legislative changes that are set to require large changes to the back-end system. As an example, one of the current budget measures concerns the ability to recover money from the receiving parent (payee) in cases of overpayment. It has not previously been possible to make use of the extensive powers of recovery conferred under the Acts to recover debt from a payee, only a payer, and Cuba has restricted the use of these powers based on the person’s role in the system (payer/payee). There have been significant challenges faced in the design and delivery of this budget measure in Cuba, which may result in significant manual intervention and strain being put on service delivery staff from July 2018 in order to give effect to the new legislation.

The original business case recognised the need for the system to be able to respond quickly to program changes and to achieve Government outcomes and the messaging has been clear that Cuba’s current ‘stability’ is primarily due to it not being touched for many years. There have been only minor changes to Cuba since the 2008 legislative changes and one of the key drivers for a replacement solution remains the ability to respond quickly to align with government objectives and legislative changes, which requires a system that is simple to enhance and make changes to.

3.1.2.3 Improving service and outcomes for customers

The original business case recognised the need for improved customer service, through the availability of online channels, as well as through an improved call experience. Significant work was completed in 2017 into updating the online gateway for parents / carers to interact with child support online, including the ability to apply for an assessment, advise of changes in circumstances, etc. through an enhanced online interface based on the SAP platform. Currently the enhanced online interface is only available to 50,000 (of approximately 380,000) users, however it has received positive feedback from customers as well as the stakeholders engaged with as part of this review. The new interface integrates directly with Pluto, with no direct integration with the legacy Cuba system. This validates and strengthens the original case for change, demonstrating that the move from Cuba has allowed for improvements in the customer experience, by leveraging SAP technology in the delivery of both the new customer facing portal and the Pluto solution for staff. There is still work to be done to move all users to the new platform, acknowledging the need to resolve issues with both the new online portal and the staff workload management solution, as well as to deliver complete processes in Pluto to allow staff to action transactions received from the new online portal.

Executive stakeholders engaged as part of this review were interested in completing the roll-out of the new online portal and this remains one of the key drivers for change, particularly as the need increases for a greater digitalisation of services, as well as a reduction in the number of manual processes performed by staff. Examples of this include:

- The current process to manually send SMS messages in order to follow up on overdue payments, which is currently unsupported by Cuba; and
- The heavy reliance of staff on copying and pasting data into off-system macros, with a built-in solution data should be loaded and stored within the system.

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39 Engagement with executive stakeholders (Stakeholder Interviews).
40 CSA Online Monthly Report (December 2017).
41 Service Delivery Operations Group – Channel Strategy Reset (March 2018).
42 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
3.1.2.4 Expensive maintenance and operation
The original business case highlighted the expense to maintain and operate the existing Cuba solution and while Cuba has been relatively stable recently, due to a lack of significant changes, there is significant risk in making any changes. Any change to Cuba requires significant development effort and extensive regression testing, resulting in high costs and lengthy delivery times for any changes to be deployed. The system is supported primarily by a contractor workforce (29 contractors and 8 employees support the system), with only a single staff member identified as having an end-to-end understanding of the system and resources who know Cool:Gen in limited supply. This is compounded by the age of the underlying language, there is no new supply of staff coming with a desire to learn Cool:Gen.

A decision was made to decommission Cuba prior to commencing the Programme in 2013, when it was already considered that continued maintenance and operation were too expensive. Since this time there has been no budget to support the ongoing maintenance of Cuba. It has fallen further out of maintenance and the replacement of the system with a more contemporary solution is increasingly necessary.

3.2 Future vision for child support
With the original outcomes of the business case not achieved and an ongoing drive for efficiencies and greater focus on digital services, the case for change remains strong. A range of ideas were identified that could enable a broader transformation for Child Support. The transformational ideas were identified through stakeholder engagement and business analysis, to support the independent assessment. Further analysis and consideration should be applied to the whole business as a part of the business case for transformation, developing these and other ideas in line with possible future business models.

Figure 9 – Additional opportunities for transformation

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The future vision for child support should support the existing service delivery model, with a strong case management and quality focus, while enabling customers to independently manage their child support payments. At the same time, recognising the need for ongoing evolution in the ways of working, the system must provide flexibility to adapt to future changes as well as to the shifting policy and legislative environments.

<table>
<thead>
<tr>
<th>Vision</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A seamless experience for customers across channels, with digital services available</td>
<td>Greater efficiencies across the Department with customers able to complete core transactions electronically</td>
</tr>
<tr>
<td>Efficient, effective and intuitive processes and systems that automate manually intensive activities where possible</td>
<td>Ability for staff to focus on higher value activities, reduce costs for service delivery, simpler training, and enable flexible workforce outcomes for the Department</td>
</tr>
<tr>
<td>A comprehensive and flexible information system that meets the breadth of child support requirements and Government legislation</td>
<td>Improved quality control across end to end processes, flexibility to change to meet evolving Government requirements and legislation</td>
</tr>
<tr>
<td>A connected and integrated system that leverages data and information across Government</td>
<td>Leverages data to support decision making, greater insight for Government, better customer experience leveraging known information with consent</td>
</tr>
<tr>
<td>A modern and agile technology solution that aligns with Departmental strategy and flexibility for the future</td>
<td>Leverage whole of Department technology investments, skills readily available in the market, flexible technology workforce</td>
</tr>
</tbody>
</table>

Figure 10 – Child support transformation vision
Fit for Purpose Assessment
4 Fit for Purpose Assessment

4.1 Summary of functional and technical assessment

The fit for purpose assessment has been conducted by way of functional assessment - examining the ability of the current state solution to support Child Support program business needs, and by way of technical assessment – examining the challenges and opportunities of the current state technology architecture.

From a functional perspective:

- **The current Pluto solution has delivered an enhanced front-end SAP User Interface that is more intuitive for staff to learn and has established interoperability with Cuba as the back-end processing system.** Cuba continues to provide processing and calculation capability as well as the user interface for some processes, either where there are functionality gaps in the Pluto solution or where processes are outside of Pluto MVP scope.

- **However, the new system was developed with known functionality gaps and has encountered a number of issues post deployment.** These gaps and issues have led to a number of business challenges, identified through five site visits, 170 independent feedback submissions from service delivery staff and over 50 direct stakeholder consultation sessions. All of this input and information has been grouped into five common themes presented in the table below with a further summary of the independent submissions provided available in Appendix G – section 7.7.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Usability</td>
<td>Overall user experience for Pluto has been impacted by the need to navigate multiple pages to identify the right information and requiring more input steps than in Cuba.</td>
</tr>
<tr>
<td>2 Performance</td>
<td>There are significant performance challenges observed, as tasks requiring 10 – 30 seconds in Cuba can take several minutes to complete in Pluto. (e.g. changing an incarcerated customers rate)</td>
</tr>
<tr>
<td>3 Functionality</td>
<td>The need to access Cuba due to functionality gaps in Pluto, and a lack of confidence in the new system has led to reduced productivity for staff. There have been cases where staff have reverted back to Cuba as their primary system, which is contrary to the objective of MVP.</td>
</tr>
<tr>
<td>4 Quality</td>
<td>Staff have expressed concerns on the quality and accuracy of information presented in Pluto and will often validate the progress of a transaction in Cuba. Staff are also concerned that issues identified are occurring intermittently, and as such, are unable to systematically replicate for CIOG to further investigate.</td>
</tr>
<tr>
<td>5 Training</td>
<td>Some staff spoke positively of the level of support they received during roll out, exemplified by the focus on super users and the presence of floor walkers. Other staff raised concerns about having to learn the new system on the fly while handling inbound or outbound calls, even though task cards had been developed. Staff have expressed that clear knowledge gaps for the new system are still present and are hopeful for further training.</td>
</tr>
</tbody>
</table>

Table 5 – Five common themes of business challenges
The combination of these challenges meant that staff are not executing the majority of MVP business processes end-to-end in the new Pluto solution. In some cases, teams are executing business process entirely out of the legacy Cuba system, while in other cases, staff are required to operate on three or more systems including web form based macros (that generate free text to be copied into Cuba or Pluto as notes), Centrelink and ATO systems. The use of workarounds and having to use multiple systems in the same process has impacted on staff productivity when using Pluto. This reduced productivity is reflected in increasing call times. Based on these findings, the current functionality is not fit for purpose to enable the Child Support business to perform and function effectively.

From a technical perspective:

- **The current state architecture is a hybrid of both Pluto and Cuba technical components.** It relies on data initially being committed to Cuba from the UI wrapper and then replicated to Pluto to leverage the calculation logic, payment logic and external interface calls in Cuba. Cuba is the source of truth and interfaces with external systems such as ATO and Centrelink. A significant number of business challenges identified via the functional assessment, such as usability and performance are due to the way in which the legacy Cuba system is integrated with the new Pluto solution. Further explanations from a technical and system design perspective has been provided below in Table 6.

<table>
<thead>
<tr>
<th>Business Challenges (Common Theme)</th>
<th>Technical Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability</td>
<td>The way in which customer information is being structured and displayed in the customer record requires multiple navigation steps to access. Additional input is required by users through the use of notes functionality to ensure interoperability with Cuba’s method of storing updates.</td>
</tr>
<tr>
<td>Performance</td>
<td>The current data replication process has introduced significant performance impacts, especially with regards to the time it takes processed data to display in the Pluto UI.</td>
</tr>
<tr>
<td>Functionality</td>
<td>Gaps in business requirements have ultimately resulted in some functionality not being built or not fully functional to meet user expectation. Key functionalities such as calculation, assessment, payments, correspondence letters and external interface calls are not available in Pluto.</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Integration technology is missing business validation rules, therefore in many scenarios data is not being correctly updated in Pluto from Cuba, and vice versa.</td>
</tr>
</tbody>
</table>

Table 6 – Technical insights to explain business challenges

- There are also a number of challenges associated with the current state technology itself, namely the platform challenges, which can be group into three common themes, identified in Table 7 below.
<table>
<thead>
<tr>
<th><strong>Platform Challenges</strong> (Common Theme)</th>
<th><strong>Technical Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Legacy system dependency</td>
<td>The dependency on Cuba for key processing functionalities and data modelling is constraining the future design to decouple Pluto from Cuba.</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Changes to the Cuba system are unable to be delivered quickly, resulting in challenges to introduce new functionality, such as new business processes and legislative changes.</td>
</tr>
<tr>
<td>Non-Best Practice SAP processes</td>
<td>The current Pluto design has not made the best use of 'out of box' SAP technology in a number of aspects. Due to the nature of the current design, the system will face challenges in taking advantage of new functionalities introduced by SAP as Pluto has been heavily customised to align with how Cuba functions. This also limits the desired benefits of using a COTS product.</td>
</tr>
</tbody>
</table>

Table 7 – Technical insights to explain the platform challenges

- **While key functionalities and system architecture still require improvement, the foundation is in place to allow continued interoperability with Cuba** as an interim state on the way to a complete replacement of Cuba. However, the current solution is not a fit for purpose end-state.

- **Pluto is built on a robust set of underlying solution components**, including SAP UI5 and the SAP ERP for management of user roles and Work Load Management for allocation of work, as well as the SAP Web Channel Experience Management for customer facing portals.

- **Performance and quality improvements may be realised in the interim by improving the interaction between Pluto and Cuba through use of improved web services**, SAP UI validation and the move to a single merged database. Usability improvements may be realised through targeted user experience research and design, with a focus on New Customers as a priority.

- **In the longer term moving back-end functionality into SAP and aligning with SAP standard functionality should be progressed** to enable the current SAP technology solution to deliver on the business need and enable the progressive decommissioning of the Cuba solution. In order to support this some core decisions around the target state architecture, including a decision on whether or not to modernise parts of the Cuba system and the approach to addressing the assessments engine, are required.

- **There are significant quick win opportunities** that can deliver immediate business and platform improvements over a period of 3-4 months. An outline of the achievable range of improvements is outlined in Figure 11.

- **With further investment, the Pluto implementation can be made fit for purpose** though further high level solution design, scoping and planning work is needed to prioritise future investment, resolve outstanding architectural decisions and design interim architecture and business states to manage change effectively.
4.2 Fit for purpose overview and quick win opportunities

Though there are challenges with the current Pluto implementation, focusing on delivering the quick win opportunities is likely to yield significant benefit for both the Usability and Performance of the solutions.

For the full detail of the Functional and Technical Assessment, please refer to Appendix A and Appendix B.
Alternate Solution Options
5 Alternate Solution Options

5.1 Summary of solutions
The original business case identified SAP as the end-to-end solution to replace the aging Cuba system. Given the difficulties experienced and problems overcome while implementing SAP, and given the resultant interim-state wrapper (Pluto) with Cuba back-end, five alternate options for proceeding have been identified for further exploration. These options are described in Figure 12, below. The diagram also outlines the viability of each of the options and recommended next steps based on the additional analysis undertaken in section 5.2.
1. **Continue & complete current Pluto solution (end-to-end SAP)**

**Description**
- Continue with current build, leveraging the work done to date around integration with Cuba for interim states and processes built
- Identify and deliver pieces of functionality that can be separated and delivered in 'blocks' allowing staff to complete common activities end-to-end through Pluto (e.g. new customer registration and assessment)
- Requires complete build of payments, correspondence and eligibility/calculations in SAP (e.g. PSCD, BRplus)

**Viability / Observations**
- Viability rated as high, noting expected complexities in implementing calculations engine and expected implementation time / expense

**Recommended Next Steps**
- Continue to explore option
- Technical and functional assessment of SAP-Cuba hybrid solution
- Assessment of options and prototyping of code modernisation
- 3 month rapid development, with design oversight, of 'new customer' block to allow Service Centre staff to operate effectively

2. **Continue development of Pluto-Cuba hybrid solution (retain key Cuba components, potential to modernise code)**

**Description**
- Continue with current build, leveraging the work done to date around integration with Cuba for interim states and processes built
- Identify and deliver pieces of functionality that can be separated and delivered in 'blocks' allowing staff to complete common activities end-to-end through Pluto (e.g. new customer registration and assessment)
- Continue to use Cuba as basis for complex functionality such as eligibility / formula calculations, de-risking by 'modernising' Cool:Gen to a more contemporary language (e.g. Java)

**Viability / Observations**
- Viability rated as high, due to potential to automate code modernisation and to keep complex / bespoke functionality out of SAP

**Recommended Next Steps**
- Continue to develop, prototyping of code modernisation
- Focus effort on assessment of options with higher viability and plan for rapid development of key functional 'blocks'
- 3 month rapid development, with design oversight, of 'new customer' block to allow Service Centre staff to operate effectively

3. **Migrate Pluto to SAP S4HANA / Hybris (end-to-end SAP)**

**Description**
- Migrate and rebuild the current Pluto solution in SAP S4HANA / Hybris
- Progress additional development work post-migration, based on Pluto requirements
- Deliver end-to-end SAP system, based on current technologies

**Viability / Observations**
- Viability rated as low, due to high re-work and expected implementation time / expense and unclear roadmap from SAP

**Recommended Next Steps**
- Continue with current build, rapid development
- Progress additional development
- Deliver end-to-end SAP system

4. **Stop work & restart with new COTS solution**

**Description**
- Stop work on Pluto and start over with an alternative COTS option
- Assess other COTS solutions to determine alignment with business need
- Stop work on Pluto and start over with an alternative COTS option

**Viability / Observations**
- Viability rated as low, due to high sunk cost of Pluto development as well as primary DHS skill-base in SAP and low alignment of other stock COTS solutions with business need

**Recommended Next Steps**
- No further exploration of option
- Focus effort on assessment of options with higher viability and plan for rapid development of key functional 'blocks'

5. **Maintain / roll back to Cuba solution**

**Description**
- Stop work on Pluto and move all functionality back to Cuba
- Establish links directly to Cuba for key functionality that was moved into Pluto as part of development (e.g. new applications forms)
- Cuba has not been worked on in a meaningful way since the commencement of the CSSR program, there are still nearly 100 open defects and a lot of work would be required to make it production ready.
- Custom code is very difficult to maintain and offers low flexibility

**Viability / Observations**
- Viability rated as low, due to significant concerns around viability moving forward, concerns about stability and difficulties with maintenance.

**Recommended Next Steps**
- No further exploration of option
- Focus effort on assessment of options with higher viability and plan for rapid development of key functional 'blocks'

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**Figure 12 – Overview of alternate solution options**
5.2 Assessment of alternate options

Each of the 5 alternate options were assessed on their ability to meet the functional business requirements, their fit to the technology direction of DHS, as well as the cost and time for delivery.

The options for a new commercial off the shelf (COTS) solution, or migration to a HANA / Hybris solution, are not considered viable as it would require significant investment in re-establishing interoperability between the ‘new’ and legacy systems as well as investment in upskilling internal staff to support the implementation of the new solution.

The original drivers for moving away from the Cuba solution are still valid, Cuba is not easy to maintain or make changes to and there is a need for the Child Support system to adapt to current and future legislative needs. Staff have identified that there are already processes that Cuba is unable to support. Many of these processes are fulfilled by off system macros that result in large chunks of free text being pasted into notes fields in Cuba for appropriate record keeping.

The preferred option is to proceed with an SAP solution, noting that a technology target state needs to be defined as part of the development of a business case. The solution should build on the work that has been completed to date as part of the development of Pluto. Given the challenges faced with the current Cuba back-end, modernisation of the underlying code should be considered as an immediate next step, while working to move forward with the Pluto (SAP) solution as quickly as possible to alleviate pressure on service delivery staff. Code modernisation will also mitigate some of the risks in supporting and maintaining Cuba. A conceptual target state architecture is outlined in Appendix B – section 7.2.5.2.
Delivering the Child Support System Replacement
6 Delivering the Child Support System Replacement

6.1 Delivery Approach & Method
The solution delivered to date is a partial step toward the original intent of the CSSR Programme and is currently negatively impacting upon business performance. As such there is a critical need to regain momentum and remediate the key issues of performance, functionality and usability.

There is a need to rapidly form an integrated view of the Programme, to ensure visibility of changes across all enabling and supporting systems, and mobilise delivery teams to focus on implementing the quick wins to address issues of performance and usability in Pluto. In parallel to this, a business case needs to be developed to accurately reflect scope, costs and benefits for delivering a broader business transformation.

It is paramount that the solution remains legislatively compliant throughout the entirety of the delivery. As such the Programme needs a holistic view of changes and needs to maintain alignment with any planned or future legislative changes given Pluto and Cuba are now tightly coupled.

6.1.1 Rapid mobilisation of delivery teams
To balance both immediate delivery and long-term transformation, a phased approach with 3 delivery streams should be adopted. This first two phases will be 3 months in length allowing for rapid delivery and development of the business case, while the third phase will focus on the transformation over 18-24 months.

Stream 1: Finalise CSSR Programme
The first stream focuses on improving performance and functionality for staff. This will be achieved through the delivery of the quick win opportunities, as well as delivering functional enhancements to Pluto to better support general enquiries and new customer activities. This will enable the finalisation of the CSSR Programme, with further work to be completed under a new Programme focused on a broader transformation agenda.

Stream 2: Business Case and Transformation
The second stream focuses on the need for business transformation, how the transformation will be achieved, and the benefits. A business case will be produced, detailing a clear business and technology target state, transition states, supported by a detailed delivery plan. Once the case is approved, the transformation can be mobilised.
Stream 3: Legislative Alignment

As DHS exists in a changing legislative environment, it is paramount that the solution continues to meet legislative requirements throughout the entire transformation. As enhancements arise decisions will be made on which platform to deliver these on, keeping in mind the progress of the transformation, as well as a Pluto target state.

6.1.2 Key milestones for delivery

Though further work is needed to detail the scope and activities for the Programme, there are a number of critical milestones to target delivery of tangible value over the next three to six months.

<table>
<thead>
<tr>
<th>Phase 1 (3 Months)</th>
<th>Phase 2 (6 Months)</th>
<th>Phase 3 (6+ Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• User experience design, user research and prototypes developed to guide design</td>
<td>• Deliver functional enhancements to Pluto to better support general enquiries and new customers business activities</td>
<td>• CSSR Programme is finalised with the final delivery of the Pluto enhancements for New Customers and improvements to performance</td>
</tr>
<tr>
<td>• Quick win opportunities are delivered to improve performance and functionality for staff (focusing on New Customers business)</td>
<td>• Complete high level design for Business and Technology target state (in line with Pluto enhancements) with core architectural decisions made</td>
<td>• Child Support Transformation Programme is fully scaled and operational</td>
</tr>
<tr>
<td>• Business Case for transformation developed including a clear business and technology target state, transition states, benefits and delivery plan</td>
<td>• New Programme is mobilised informed by progress and outcomes achieved in finalising Pluto implementation</td>
<td>• An independent Design and Implementation Authority is in place, providing guidance and visibility to the Programme Board on the recommended approach and solution</td>
</tr>
<tr>
<td>• Proof of concept for Cuba code modernisation</td>
<td>• Decisions made around legislative enhancements and which platform to deliver these</td>
<td>• Parts of the Cuba system are progressively decommissioned as new functionality is delivered for the CST</td>
</tr>
</tbody>
</table>

Figure 15 – Phase Objectives & Milestones

There is a need for the Programme to drive the delivery, responsible for both Service Delivery and CIOG. The Programme should establish an independent Design and Implementation Authority to support solution design and architecture, Programme delivery and provide independent guidance to the Programme Board on the recommended approach and solution. This team would be established within the Child Support and Redress division, however would work closely and collaboratively with all delivery teams.

6.1.2.1 Governance

Most of the Governance structures are in place to mobilise the Programme, with the existing Programme Board recommended to continue to provide oversight and decisions on the delivery of the Programme. There needs to be a clearly defined escalation path for decisions through the Programme Board if an agreed decision cannot be made at the Board level. In addition, given the interdependent nature of the current pipeline of work across Pluto, Cuba and upcoming legislation, the Production Support team should be included in the Board as a short term measure (noting there may likely be a long term requirement for Production Support to sit on the board, however, this should be reviewed and considered by the CIOG appointed Programme GM once appointed).
Finally, key Programme roles need to be agreed, with Programme Sponsorship to be transferred to Service Delivery, ‘Product Owners’ (see section 6.2.2 for definition) to be identified by Service Delivery to guide decision making on scope and delivery, and the CIOG lead to be appointed. Service Delivery, CIOG and the CSSR Programme should jointly appoint a Delivery Manager to support execution. The Delivery Manager “enables agile teams to deliver high-quality services. They remove obstacles or blockers to progress; and facilitate project meetings.”

In addition, the Programme should appoint a permanent National Manager, Child Support and Redesign to support governance and Programme Management Office functions.

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
</tr>
</thead>
</table>
| National Manager, Child Support System Redesign | • Responsible for the governance of the Programme;  
• Support on-boarding and management of vendors assisting with delivery of the Programme;  
• Ensure resources are engaged and on-boarded to support and meet delivery requirements;  
• Ensure quality over Programme delivery activities (including work produced by common resources such as business analysts);  
• Support and deliver executive reporting and stakeholder engagement as required. |
| Delivery Manager                                | • Help define the vision and prioritise delivery items in line with the vision;  
• Responsible for the delivery of the product (e.g. the design, build, test and deployment of software);  
• Run daily stand-ups and weekly meetings;  
• Remove obstacles and blockers to progress for the delivery team;  
• Ensure that the product is built to the appropriate level of quality and that it meets user needs. |

6.1.2.2 Scope & Objectives

The scope of Phase 1 will be mobilising a Multi-Disciplinary Team (MDT) in partnership with Service Delivery, CIOG and Program Design to rapidly enhance the Pluto solution and prioritise further work to improve overall usability of the solution. There will be 3 main areas of focus.

Focus Area 1: Improve Performance and Quality

The first step in this process will be defining performance indicators for measuring performance and improvements. This will need involvement from all stakeholders in the MDT, particularly the business so that the target state will meet their performance requirements, and all parties be aligned on the requirements.

Following this the quick win opportunities will be reviewed. Both high level and detailed designs for implementation will be produced assessing risk and complexity. Based on the review the wins will be prioritised for deliver based on their ability to improve performance and data quality in the current solution.

Focus Area 2: Usability and Service Design

A team will be mobilised to conduct user research and prioritise working with staff from New Customers. From here the initial user experience will be designed, with the focus of providing a 360 degree view of customer data for staff to support general enquiries.

Focus Area 3: Design and Scope for Phase 2

The current state of the new customer process will be analysed to identify and prioritise core usability improvements. Design and scoping will be required for the identified enhancements for the new customer solution handled in New Online services. The key deliverable from this will be a prioritised product backlog for the enhancements to be delivered along with a design for each.

6.2 Proposed Delivery Model

6.2.1 Delivery model by seven key work streams

The Programme should adopt a tailored bi-modal delivery approach through to its completion. This will allow for agile delivery with enforced structures and artefacts to guide the Programme. As part of this, clear criteria for exit should be defined at each stage gate.

Further a Strategy, Experience and Design function needs to be established by the program, but led by the business to ensure that functional and usability needs are business led enabled by a robust technology platform. All design activities must be closely coupled with the solution and delivery approach to manage change across the business.

The Programme should be structured around seven core functions to enable delivery, explored in greater detail below.

![Figure 16 – Delivery Model]

1. **Govern, Manage & Plan**
   - Governance of the design, delivery and change aspects necessary to enable the target state.
   - Planning and design of the overarching technology Programme of work to enable agreed business outcomes;
   - Manage delivery to schedule, budget and scope;
   - Robust monitoring of all aspects of design and delivery to keep executive informed of progress, risks and issues; and
   - Lead and support planning and prioritisation of work with Service Delivery and resolve contention as required to enable delivery of change.

2. **Strategy, Experience & Design**
   - Business owned and led design, from strategy through user experience and re-engineering of processes;
   - Development of high level designs, requirements and visualisations for business change initiatives; and
   - Solution Architects design the end state solution and work to sequence delivery and define clear project scope.

3. **Manage Change**
   - Robust change management practices across all aspects of delivery;
   - Identification of appropriate business owner for change sponsorship;
   - Responsible for getting the business ready for the change; and
   - Work with the Test & Deploy team to deliver the solution to the business.

45 *DHS Technology Plan.*
**Agile Delivery**
- Small, stable core teams with clear feature / product expertise developed over time;
- Leverage whole of Department Agile delivery capability where appropriate;
- Structured agile delivery with executives and delivery teams trained and coached in Agile ways of working; and
- Clear product / business ownership for developers to remove blockers to delivery progress.

**Build the Solution**
- Detailed design of the solution through to unit testing and systems integration testing;
- Quality development practices embedded throughout all stages of build; and
- Well defined levels of detail to prepare requirements for build teams through clearly defined and agreed delivery method.

**Test & Deploy**
- Responsible for conducting appropriate testing of the solution;
- Performing user acceptance, business verification and performance testing as required;
- Managing the final quality gate and getting the solution ready for release;
- Responsible for deploying the solution in conjunction with the change management team; and
- Final decision rights rest with Service Delivery for accepting the change into the business.

**Support the Business**
- Ongoing training and support to the business to better enable adoption of the new system;
- Ongoing support and maintenance for the business systems;
- Work with business to identify defects and issues and track and measure these through to resolution; and
- Business ownership and stewardship cover aspects of delivery across the current and future requirements (e.g. business sponsors for different aspects of scope such as
- Management of changes, incidents and problems through to resolution.
6.2.2 Initial Organisation structure for Programme Delivery

To enable the delivery model, a draft organisation structure has been developed for the ongoing delivery of the Programme. This draft is designed with a focus on business leads from within Service Delivery acting as ‘product owners’ through design and delivery of the Programme.

Three key enablers are required to support the organisation going forward.

1: Communication and Collaboration

Communication and collaboration between Service Delivery, CIOG and the Programme is required to ensure all stakeholders are aligned. This is achieved by establishing Multi-disciplinary delivery teams, containing members from each of the above groups. Having a team member from each of the key stakeholders aids in effective knowledge transfer, allowing for rapid delivery and stakeholder alignment.

2: Business Involvement

Service Delivery must continue to be involved in the Programme end-to-end. Product owners must be from the business and will be involved from the start of the project through to its completion. They will help develop the requirements, perform testing and endorse the final solution. This will provide assurance that the delivered solution effectively supports the business.

“The Product Owner (PO) is a member of the Agile Team responsible for defining Stories and prioritising the Team Backlog to streamline the execution of program priorities while maintaining the conceptual and technical integrity of the Features or components for the team. The PO has a significant role in quality control and is the only team member empowered to accept stories as done. For most enterprises moving to Agile, this is a new and critical role, typically translating into a full-time job, requiring one PO to support each Agile team (or, at most, two teams). This role has significant relationships and responsibilities outside the local team, including working with Product Management, who is responsible for the Program Backlog, to prepare for the Program Increment (PI) Planning meeting.”

(Scaled Agile Framework)

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As the Programme begins to mobilise, it will be critical to adapt and tailor the necessary roles and ensure adequate training and coaching is provided to all new or changed Programme positions.

### 3: Design and Implementation Authority

There is a need for the Programme to drive the delivery, responsible for both Service Delivery and CIOG. The Programme should establish an independent Design and Implementation Authority to support solution design and architecture, Programme delivery and provide independent guidance to the Programme Board on the recommended approach and solution. This team will be established within the Child Support and Redress division, working closely and collaboratively with all delivery teams.

#### 6.3 Immediate Next Steps

With a critical need to mobilise the Programme to remediate the performance and functional challenges with current Service Delivery operations, the Programme needs to reinvigorate deliver teams, agree the approach to transformation to inform the business case and agree ways of working across the Programme executive.

##### 6.3.1 Establish an integrated Programme view

Changes are concurrently being made to both the Cuba and Pluto systems, as the current budget measures are being developed in the former system while functionality is developed in the latter. There is a need to establish a single and integrated view of all Programme, project or change related activity impacting on Pluto, Cuba or Child Support Service Delivery to maintain alignment and reduce delivery risks, due to the tightly coupled nature of the solution. This should be supported by the Programme Management Office (PMO) from within the Child Support and Redress division, in order to provide visibility to leadership on all in-flight and planned technology or business changes.

In addition, once core Programme roles have been appointed, the current Governance arrangements must be reviewed and updated to reflect any new roles and positions and clearly defining an escalation path where a decision is unable to be resolved by the Programme Board.

##### 6.3.2 Mobilise Delivery Teams

With peak processing times fast approaching, and a significant set of identified quick win opportunities, there is a need to mobilise the delivery teams immediately. The focus is to be on improving current performance, closing gaps for new customers and delivering usability enhancements where possible for staff to help improve service delivery prior to the end of the financial year.

These teams should review and consider all of the identified quick win opportunities from a technical perspective, assessing them and performing detailed design to validate potential benefits, risks and alignment to the broader departmental strategy. However, decisions will need to be expedited through the required Governance processes (e.g. the Architecture Review Board) to enable the Programme to move at pace to remediate current performance challenges.

In addition, delivery teams should prioritise those aspects of the solution that are critical to overarching business operations. This will require a deep focus on how workload management has been designed and implemented, particularly with regard to how workload management delivers work from the new online platform, where there have been some challenges.

##### 6.3.3 Define and agree the Transformation Approach

The CSSR Programme commenced over 5 years ago with a broader transformation focus and plan. This needs to be re-invigorated to define the future scope Programme, key transformational approaches to the business and the benefits and sequence for delivery. This will form a critical component of the business case for the future scope of the Programme.
6.3.4 Define and agree the Delivery Approach

The Programme has tried a range of different approaches to delivery. To set the Programme up for success moving forward, the Programme leadership team need to agree a set of principles, the delivery approach and escalation path for points of contention as required.

The overarching sponsorship should be shifted to Service Delivery, as they are the end users of the system. Service Delivery should also contribute key business sponsors to support prioritisation and further requirements analysis, using a more innovative ‘design thinking’ approach which focuses on visualisations, prototypes and user research. An example of the Deloitte Design Thinking methodology, including example artefacts and approach is provided below in Figure 18. This, or a similar approach, should be adapted and tailored to the needs of the Programme, leveraging a blend of visualisations, personas, prototypes and user research to guide solution options.

It is necessary to develop a clear plan, approach and operating principles for how Service Delivery, Program Design and the Chief Information Officer Group will work together to deliver the remainder of the Programme. The Programme should appoint an independent third party, taking the role of Design and Implementation Authority to do this.
6.4 Initial Planning and Scope for Delivery Project Teams

6.4.1 Improve Performance & Deliver Quick Wins

The initial focus needs to be on improving the performance of Pluto, enhancing usability and delivering the technical quick wins to stabilise the current architecture. The quick wins need to be reviewed for technical feasibility and designed in light of the architectural direction of the system.

6.4.2 Enhance Pluto for New Customers

Delivery of Phase 2 will be contingent on what can be delivered as part of Phase 1. However, the focus should shift from simple usability improvements and improving performance, to specifically address core functionality required for the business. Ideally future designs here such as a 360 degree view of customers that could potentially be built on SAP Interaction Centre should be designed with a view to any future state requirements emerging from the business case stream.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Volkers</td>
<td>Mobilise a Multi Disciplinary Team (MDT) in partnership with Service Delivery, CIOG and Program Design to rapidly enhance the Pluto solution and prioritise further work to improve overall usability of the solution.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stream Lead</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBC – Service Delivery</td>
<td>Improve the overall performance and quality of the Pluto solution</td>
</tr>
<tr>
<td>TBC – CIOG</td>
<td>Deliver targeted functional enhancements to support New Customers business processes</td>
</tr>
</tbody>
</table>

**Risks / Issues**

- Ability to mobilise a team rapidly
- Complexity of some of the quick win activities

**Resources & Costs**

- Estimated Cost - TBC
- April 2018 to June 2018

**Estimated Duration & Timing**

- Resources - TBC
- July 2018 to September 2018

Figure 19 – Phase 1 delivery, focusing on performance improvements and quick wins

Figure 20 – Phase 2 Enhance Pluto for new customers
6.4.3 **Develop First Pass Business Case for Transformation**

With a significant case for change, and the original intent of the CSSR business case still not fulfilled, it is critical that a new business case is developed to define the transformational approach for Child Support service delivery. Particular focus should be placed on leveraging or aligning with other transformations such as the WPIT Programme where possible, and making any updates if required to the original CSSR business case as per the gateway review feedback.

![Figure 21 – Develop business case for transformation](image)

<table>
<thead>
<tr>
<th>Stream Lead</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Support and Redress Division</td>
<td>Mobilise a team to develop a new First Pass Business Case focusing on a broader transformation of Service Delivery across Child Support Smart Centres. This should incorporate the design of a future business model for the end to end service delivery, while aligning and leveraging other transformations underway within the department when appropriate. In addition, this team needs to develop a plan to finalise the existing CSSR programme.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Develop First Pass Business Case for Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a new First Pass Business Case for a broader transformation of Child Support Service Delivery</td>
<td>Develop and define a transformational vision for the future of Child Support Service Delivery</td>
</tr>
<tr>
<td>Develop a plan and approach to finalise the CSSR Programme, including updating the original business case if required</td>
<td>Review and align with other transformations underway in Human Services and identify opportunities to leverage other departmental investments</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Risks / Issues</th>
<th>Develop First Pass Business Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to mobilise a team rapidly</td>
<td>Develop the design of a future business model for the end to end service delivery</td>
</tr>
<tr>
<td>Complexity of some of the quick win activities</td>
<td>Develop implementation plan and approach to deliver the target state</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources &amp; Costs</th>
<th>Finalise the CSSR Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be confirmed</td>
<td>Define criteria for go / no-go decision for each of the programme delivery increments of the Improve Performance stream of work</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Duration &amp; Timing</th>
<th>Resources &amp; TBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2018 to September 2018</td>
<td>Resources - TBC</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Figure 21 – Develop business case for transformation**
Appendix
7 Appendix

7.1 Appendix A – Functional Assessment

7.1.1 Overview of Functional Assessment

The current state Pluto solution is a significant departure from the complete Cuba replacement and decommissioning envisaged by the original business case. The original solution was intended to deliver an end-to-end capability in SAP that did not simply deliver a like-for-like replacement of Cuba. The objective was to enhance the functionality and improve the staff experience and delivery outcomes. As an example of this, the original solution planned to make use of SAP standard functionality (through SAP Collections and Disbursement (PSCD) and BRF Plus) to automate the sending of notifications (SMS/Email/Letters), as well as to establish Centrelink deductions and other payment arrangements.\footnote{Business Process Design – Collection Management (6.1).}

The nature of Pluto as a ‘wrapper’ for Cuba, means it must interoperate with the data structures and is limited by the validations and inherent limitations of Cuba. In addition, the wrapper does not make use of SAP standard functionality (such as PSCD), which has limited the ability for improvements to be made beyond delivering a like-for-like replacement. After legislative changes came into effect in 2008, Cuba was unable to be modified to reflect the new definition of a ‘case’. During the initial design of the end-to-end SAP replacement much work was done to identify how SAP would handle cases consistent with the legislation, however when the decision was made to wrap the Cuba solution it was not possible to reconcile the plan for the new case structure with the existing case structures built into Cuba and as a result cases in the Pluto UI mimic those in Cuba and continue to be out of sync with the legislation.

7.1.1.1 Functionality delivered for the current state solution (MVP)

Pluto delivers some functional enhancements, primarily focusing on the staff facing screens and the delivery of a subset of ~70 processes (a subset of 61 processes from the original CSSR scope of 111 processes, plus an additional set of 9 ‘enabling’ processes) which should be completed by staff in the new SAP UI.\footnote{CSSR Scope Overview (17 March 2017).}
7.1.1.2 Business impact
Since the implementation of the Pluto solution there has been an increase in the average handle time of over 2 minutes across the business and over 3 minutes in the Mainstream Services division. This has contributed to increases (over 25%) in both work on hand and work overdue despite a ~12% reduction in total inbound calls. The increase in call handling times has also resulted in more staff taking inbound calls rather than actively following up with customers through outbound calls, noting a 30% reduction in successful outbound calls and the impact that this has on the work on hand, which in many cases cannot be completed without contacting the other party to a case.

7.1.2 Business challenges arising from current state solution
7.1.2.1 Insights from stakeholder engagement
Staff across various functional areas were engaged through site visits across 5 locations: Adelaide (13/03/2018), Wollongong (19/03/2018), Parramatta (20/03/2018), Newcastle (23/03/2018) and Hobart (27/03/2018). During each of these visits, there was engagement with the leadership teams and service delivery staff across the business, as well as observations of staff performing their functions in both Cuba and Pluto. The insights from the site visits, as well as those received via email as part of this review, were grouped into five themes, which are representative of the issues that are being faced by staff with the current Pluto solution and which are contributing to the current impacts on the business (additional detail on the feedback received in relation to these themes is in Appendix G).

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Comparative Performance Snapshot (Jan-Feb 2018).
8 The overall user experience for Pluto is difficult for staff, with many actions taking several clicks or screens to complete simple tasks, requires scrolling or the completion of several linear steps in the process
8 How information is presented often requires navigation to many screens to access critical information and the primary landing page in Pluto does not give much of the core information to support general enquiries (e.g. Case information, liabilities, etc.)
8 There are significant performance challenges for the current implementation which is noticeable and observable when watching staff complete basic tasks such as searching for a customer, opening a case or completing simple processes
8 Some processes that take 10-30 seconds in Cuba, can take several minutes to complete in Pluto (e.g. changing an incarcerated customer’s rate)
8 The lack of functionality available in Pluto for many staff results in tasks being completed in Cuba after the initial proof of record ownership is complete
8 In addition, rolling out processes only to later advise staff that they should not use them while they are fixed and enhanced has eroded confidence in the platform, with many staff choosing to revert to Cuba.
8 Many staff were concerned over the quality and accuracy of information presented in Pluto and will double check information in Cuba to validate a task or transaction is complete
8 In addition, there were concerns that incidents and issues will be raised but closed without being resolved after they are difficult to replicate, only to reappear again down the track
8 Some staff spoke positively of the level of support they received during roll out, noting that the focus on super users and the presence of floor walkers was of great benefit in learning the system. Other staff raised concerns about having to learn the new system on the fly, noting the impact on inbound and outbound calls, and highlighting minimal up-front training.
8 Additionally, there are some clear gaps in user knowledge, where basic functions and activities in Pluto are not understood. These could be remediated through further training for staff.

These factors are impacting on the staff usage and uptake of the system, with few processes being completed end-to-end in SAP at the moment. Just over 51% of staff make use of the Pluto solution, as at 16 February 2018. Some of the largest impacts were observed in the New Customers and Mainstream Services areas of the business, as they are more likely to operate out of Pluto as their primary system, and together make up ~59% of the business.

During site visits, the example of negotiating and establishing a payment arrangement (Figure 24) highlighted many of the usability and performance challenges, as well as issues with system functionality and staff concerns with the quality of the systems.

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50 Based on Audit Information (as at 16/02/2018).
51 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
52 Comparative Performance Snapshot (Jan-Feb 2018).
53 Child Support Smart Centre Site Visits – Wollongong (19/03/2018).
Figure 24 – Example interaction highlighting issues faced by staff when establishing a payment arrangement
The following diagram provides a more complete overview of the implementation of MVP (Pluto) processes. For this analysis, an implemented process is one where the capability has been delivered, and is being utilised by staff in the new system. The diagram below shows that a significant number of processes are not executed in the new system due to the business challenges identified.

**Implementation of SAP UI by no. processes**
- **End-to-End**: The entire business can be executed end-to-end
- **Partial**: The process can partially executed in SAP UI, with reliance on Cuba for parts of the process
- **Not used**: Process is not being executed in SAP UI

**Implementation of SAP UI by function**
- **No Pluto capability being used**
- **Limited Pluto capability being used**
- **Some Pluto capability were delivered and are being actively used**
- **Pluto capability delivered should support end-to-end business function and are being actively used**

### 7.1.2.2 Challenge 1 - Usability

Staff were generally very positive on the new look and feel of the solution, however often commented on difficulties in viewing the information they needed in one place, without needing to scroll or navigate between multiple tabs. This was of particular concern when handling general enquiries or trying to understand the context of a case, which is a common function across all areas of the business and necessary for Mainstream Support in particular to handle inbound calls. Information easily viewable in Cuba is far more difficult to find in Pluto, often requiring users to navigate to completed tasks and locate notes within those tasks.

**Example: Recent Activity** is a screen common to both Cuba and Pluto. In Cuba it is possible to click on any line within the table of recent activities to see the detail of that activity, while in Pluto this is a static page with no ability to link through to the detail staff require to better understand the case.54

In addition, it was highlighted that some tasks required significantly more steps in Pluto than in Cuba, resulting in them taking longer when performed in the new system.

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54 Child Support Smart Centre Site Visits – Wollongong (19/03/2018).
Example: Non-Agency payments were frequently identified by staff as requiring significantly more work to record in Pluto, while it was possible to record non-agency payments through Pluto staff often recorded them in Cuba. Staff highlighted that it would take 4-5 times longer to complete this in Pluto due both to extra steps in the process and the performance of Pluto in adding multiple payments to a record.\(^{55}\)

Staff across the business also struggled with the lack of flexibility in the Pluto solution, noting that once a task was commenced it was difficult to exit and provide the customer with other information or to make other changes outside of this task. This links to the challenges in current Service Delivery with regard to how macros are used. Macros are extensively used by the business as free text process and conversation guides for completing key business activities, however, as they are free text web forms, they have no data validation or supporting functionality in Cuba. The macros generate free text that is copied and pasted into Cuba to support decision making and provide an audit history of decision making for the next case worker. Pluto does not generate similar free text, so staff often complete the macro as well when using Pluto and paste the generated text into Pluto as a record of the conversation, resulting in a duplication of effort.

The usability concerns with the current solution have a negative impact on the ability of staff to perform their role, even where the tasks may be completed mostly in Pluto. This is a key contributing factor to increases in call handling time as seen in the example of Figure 24 above, however is also indicative of the need to transform and standardise processes where possible given the prevalence of off system work arounds.

**7.1.2.3 Challenge 2 - Performance**

Staff highlighted the performance issues faced when using Pluto and these were immediately observable. Navigation between screens (e.g. loading customer information, loading a task to be performed, entering the task to be performed) was found to take anywhere between 5 and 20 seconds per screen. This resulted in delays in the performance of the tasks, as well as pauses in the call while staff waited for screens to load (as seen in the example of Figure 24 above).

Example: The performance impacts on the business were further demonstrated through observations of the incarcerated customers team, where completion of the same task (Application to reduce Minimum Annual Rate) took over 4 minutes in Pluto and under 2 minutes in Cuba.\(^{56}\)

Incarcerated customers are limited to 10 minutes of call time, including any time they are on hold, so there is a need for staff to be able to quickly process the information received on the call. As a result, the Incarcerated Customers team has an exemption to continue to operate entirely in Cuba, an acknowledgement that the new system is not currently able to support their need to rapidly find and process information.

The increase in processing time observed is relevant for this and other processes across the business. The performance concerns have a clear, observable link to the increase in handle time and conversations with staff suggest that there are also impacts to the processing time after completing a call, as they must complete tasks that were not able to be completed while on the phone based on notes taken during the call.

**7.1.2.4 Challenge 3 - Functionality**

The gaps in the MVP solution, as well as issues with performance, are resulting in negative impacts on customers and staff, reflected in an average of 2 additional minutes being spent on calls through to February of this year, as compared to the same period last year.\(^{57}\) The effect of this is amplified across close to 1.3 million inbound calls, in particular impacting on the Mainstream Services and New Customers areas of the business, where the majority of inbound calls are handled, and having a flow on effect to the number of outbound calls being made.

The following diagram highlights the gaps in each process as reported by end-users and provides an overall status for the process, based on the total number of gaps and the productivity impact of each gap.\(^{58}\) Where there is a gap in a process, staff are required to use a manual workaround or move into the Cuba system to complete a process. It is important to note that there is no standard agreement for what constitutes a gap, as there is not a clear baseline for the scope that was delivered. This is a critical issue requiring remediation.

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\(^{55}\) Child Support Smart Centre Site Visits – Adelaide (13/03/2018).

\(^{56}\) Child Support Smart Centre Site Visits – Adelaide (13/03/2018).

\(^{57}\) Comparative Performance Snapshot (Jan-Feb 2018).

\(^{58}\) Deloitte analysis, Gap List (March 2018), provided by Programme team.
A summary of key process gaps relating to business areas where an overall high productivity impact has been observed is provided below.

**Assessment** – A number of processes are being executed in the new system, however in the majority of processes, staff are reliant on Cuba for certain parts of the process.

**Process containing gaps (Examples)**

<table>
<thead>
<tr>
<th>Application for Fixed Annual Rate (FAR) not to apply</th>
<th>Manual workarounds are required by way of inputting a false due date, as the system does not permit processing of FAR applications after the due date of evidence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application for child &gt; 18</td>
<td>In circumstances where a child (over 18) is deemed ineligible, staff are unable to process a refusal decision in the system. This process is conducted in Cuba as a workaround.</td>
</tr>
<tr>
<td></td>
<td>In circumstances where the child is assessed under an agreement, court order or Change of assessment decision the system is unable to support the processing the application. Again, the Cuba system is used as workaround.</td>
</tr>
</tbody>
</table>
Collection – Current process gaps are associated with employer withholding, application for collection and implementing variable payment frequency. These outstanding requirements has resulted in out of system and Cuba workarounds.

<table>
<thead>
<tr>
<th>Process containing gaps</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage employer withholding</td>
<td>Missing historical and expected future transaction records to address the situation when the payer enquires when the next deductions are expected, and/or status of historical payment. This was validated during site visits and the query itself was identified as a frequent one received from customers that required staff to navigate into Cuba to retrieve additional information.</td>
</tr>
<tr>
<td>Application for employer withholding not to apply</td>
<td>Indications as to whether there is an existing application (including status) is not easily visible, causing staff having to use Cuba to access notifications on the profile page.</td>
</tr>
</tbody>
</table>

Debt – Staff are interacting with the new system for the majority of the business process for debt recovery, however, gaps have been identified for negotiate payment arrangement and garnishee actions. In certain scenarios staff are required to execute out of system and Cuba workarounds.

<table>
<thead>
<tr>
<th>Process containing gaps</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal information gathering</td>
<td>Staff are in need of a way to record response from third parties (e.g. financial institution) in the system.</td>
</tr>
<tr>
<td>Negotiate payment arrangement</td>
<td>Staff are required to repeat the assessment of the entire payment arrangement process if the customer refuses to pay. When interim payment arrangements reach their end day, the policy guideline requires automated triggering of a new payment arrangement or flag that a review is required. Current this part of the business process is performed out of system.</td>
</tr>
<tr>
<td>Garnishee actions</td>
<td>Staff are required to use Cuba if the garnishee action has to be withdrawn, as this part of the business process is unable to be executed in Pluto.</td>
</tr>
</tbody>
</table>

Global – Gaps relating to global supporting functions are concentrated on workload management processes, namely the integration of Cuba work management function, the inbox functionality in the new system and WLM.

<table>
<thead>
<tr>
<th>Process containing gaps</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload management</td>
<td>Bulk allocation, creation and closure work items have to be completed manually. Workload management (WLM) is at risk of assigning work that is already complete to a user due to the inability to infer the correct status of the work item (open, on-hold, completed) from Cuba’s In-tray items.</td>
</tr>
</tbody>
</table>

59 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
When opening their inbox, staff and Team Leaders are required to manually query for open work items assigned to them/their team. There are concerns from staff whether work items have been captured correctly from Cuba In-trays.

### 7.1.2.5 Challenge 4 - Quality

Staff raised multiple concerns with the quality of the information presented in the Pluto solution, noting that there have been cases where the data reflected in Cuba did not match the data presented in Pluto.

**Example:** General practice for the New Customers team is to perform searches for existing customers, a required step prior to processing an application in order to prevent the creation of duplicate records, in Cuba. This functionality is available in Pluto, however staff have raised that Cuba often identifies existing customers where Pluto will not. Staff perform the initial search in Cuba to prevent the accidental creation of duplicate records.

Issues associated with quality are causing staff to lose confidence in the Pluto solution and return to Cuba to complete key tasks as well as to verify that data being submitted from Pluto is being correctly stored in Cuba.

An analysis of incidents in the system supports the view that the Pluto solution has resulted in a high number of incidents, resulting in staff returning to Cuba for the completion of tasks.

**DHS Central Implementation Support Report on production system incidents**

The DHS Central Implementation Support Report (CISR) contained a total of 3483 production system incidents, 3291 of which have been closed following action by the CIOG and 192 of which are open. These incidents have been raised by users between July 2017 and February 2018. Limited context provided on the incidents contained in this report resulted in difficulties determining the incident types and trends.

**Incident analysis and categorisation**

Analysis was performed on based on the description contained in each incident, taking a subset of incidents to determine a pattern of in the description of incidents and applying to the remaining incidents. As a result of this analysis incidents were categorised into the following common incident types:

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Description</th>
<th>No. of incidents raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pluto functionality</td>
<td>Issues occurring in Pluto in functional areas such as UI/display, application and assessment, case, record and linking, collection, notes and payment.</td>
<td>1221</td>
</tr>
<tr>
<td>Replication between Pluto and Cuba</td>
<td>Issues relating to data replication between Cuba and Pluto (in both directions, Cuba to Pluto and vice versa).</td>
<td>425</td>
</tr>
<tr>
<td>Workload Management</td>
<td>Issues allocating/creating work items, in tray item display/flow, WLM not working as required.</td>
<td>63</td>
</tr>
</tbody>
</table>

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60 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
62 Incidents categorised as ‘generic data issues’ may contain a mixture of Cuba and Pluto related issues. In addition duplicate issues were treated as unique for the purpose of this analysis.
### Incident type

**Cuba functionality**  
Issues in which the description clearly indicated that the issue was occurring in the Cuba system, noting that issues occurring in Cuba are usually logged separately. Indications from staff are that a large number of 'Cuba issues' are actually data fixes required as a result of Pluto.\(^6\)  
Issues occurred in Cuba functional areas such as application and assessment calculations, case, record and linking, collection, payment and UI and display.

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Description</th>
<th>No. of incidents raised</th>
</tr>
</thead>
</table>
| Cuba functionality    | Issues in which the description clearly indicated that the issue was occurring in the Cuba system, noting that issues occurring in Cuba are usually logged separately. Indications from staff are that a large number of 'Cuba issues' are actually data fixes required as a result of Pluto.\(^6\)  
Issues occurred in Cuba functional areas such as application and assessment calculations, case, record and linking, collection, payment and UI and display.                                                                                       | 70                       |
| Generic data issues   | Captures issues where the description of the incident did not provide detail on which system the incident was occurring.  
Issues mainly relating to data entry errors, required data not displaying, being unable to process data.                                                                                                                                                                        | 1296                     |
| Not Categorised       | Not enough information to infer incident type or system in which incident occurred.                                                                                                                                                                                                                                                       | 408                      |

Table 9 – Incident categorisation

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**Figure 27 – Trend in number of incidents raised by month**

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\(^6\) *Child Support Smart Centre Site Visits – Newcastle (23/03/2018).*
Key findings from incident analysis
The key findings of this analysis align with discussions and observations across site visits and in technical workshops that:

1. The Pluto solution had a high number of incidents, indicating that the initial release was challenging for business users;
2. Data replication between Pluto and Cuba remains a key concern (issues occur both in writing to Cuba from Pluto and in replicating data back to Pluto);
3. A large number of incidents were unable to be categorised due to insufficient information in the description of the incident or the system in which the incident occurred – this is indicative that a issues management model where clear description of the issue and resolution steps is required has not been establish; and
4. The trend of incidents raised over the 8 month period shows a steady decline of incident numbers, which supports findings that users moved back into Cuba as a ‘workaround’ for processes in which incidents had previously been raised. This was generally in line with observations from site visits, where staff noted that they were unlikely to raise incidents due to the potential impact on service delivery, explored below.

High-level process followed to raise incidents
Staff identified difficulties with the current process for raising issues with the Pluto solution, particularly when they are on the phone to a customer, noting that this in combination with lack of transparency as to the resolution of the issue and closing of issues that are unable to be replicated has led to staff moving directly into Cuba rather than raising issues at all. The current process requires staff to raise the issue while keeping the customer on the line:

1. The service officer (SO) encounters and issue while on the phone to a customer;
2. The customer is put on hold and the service officer raises the issue with their Service Support Officer (SSO) via their Team Lead.
3. The SSO confirms that the issue is not due to user error (this may involve re-attempting the action or asking the SO what actions were performed);
4. The SSO takes screenshots of the issue;
5. The SSO retrieves the CISR and performs a manual search for any similar open issues;
6. If no open issue is found the SSO creates a new line in the CISR for the issue;
7. SSO works with the SO to complete the action the SO was trying to perform when the issue was encountered.

From this point SSOs expressed frustration that they are not informed of when the issue is likely to be resolved and in many cases check the CISR later to find that the issue has been closed, in many cases due to it being labelled as ‘user error’ or as ‘unable to replicate’. SOs indicated that they are likely to move straight from step 1 to step 6, in order to minimise both the call time and the impact to the customer’s experience.

7.1.2.6 Challenge 5 - Training
Staff were fairly positive and confident on the training that was provided during roll-out (on-site support from floor walkers, super users, etc.), however noted a lack of training prior to the roll-out which left staff feeling unprepared before using the new system live and while on the phone to customers. In addition, subsequent changes have been managed mainly through updates to task cards. While observing staff it was clear that there was a lack of knowledge on where to find certain functionality, or whether certain functionality existed in the system, as well as to what extent staff could perform certain tasks within the system.

Due to the frequency of changes and communication of changes following the initial roll-out of the system, staff have struggled to keep up-to-date on when particular functionality is or is not available in Pluto. While less frequent now, staff still identify processes that often shift between being available to complete in Pluto and needing to be completed in Cuba. SSOs receive 3 updates a week containing a list of processes that are available for completion in Pluto. They are required to identify what has changed since the last update (if anything) and communicate these changes on to front-line staff.

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64 Child Support Smart Centre Site Visits – Newcastle (23/03/2018).
65 Submissions from Service Delivery staff, received on 26/03/2018.
66 Child Support Smart Centre Site Visits – Newcastle (23/03/2018).
Example: Staff identified that they often received notifications as to the availability of the process to send and respond to s120 notices in Pluto. Knowledge of the availability of letters within Pluto more generally was observed to be limited and the subject of some confusion.  

Without a clear communication and training strategy for future changes it is difficult to keep staff across movements in the system, which may lead to issues in the adoption of new processes as they become available.

7.1.3 Recommendations
Based on the insights and pain points identified through executive stakeholder engagement and site visits to Child Support Smart Centre locations it is clear that the current state Pluto solution is not able to meet the needs of the business, with many areas operating almost entirely out of Cuba. While some teams were found to use Pluto as their main system, there were many gaps identified in processes, as well as cases where performance needed to be prioritised, or issues with the quality of information being displayed or the usability of the system caused staff to revert to using Cuba.

While improvements to the new system and the way it is integrated with the legacy system can be delivered through technical enhancements (refer to Appendix B for in-depth explanation), there are also immediate opportunities that may be progressed to alleviate pressure on the business.

7.1.3.1 Targeted user experience research and improvements, prioritising New Customer team

Given that the New Customers teams:

- Receive the bulk (over 80%) of their new applications for assessment (MAFA) in Pluto, via the unauthenticated online channel or new online portal, and are required to action these in Pluto;
- Follow a more standard process as part of completing an MAFA, with less need to navigate between tasks or screens based on conversations with parents and or carers; and
- Are able to complete much of this processing end-to-end in Pluto already (noting that New Customers are also required to perform many of the same functions as Mainstream Services for ‘new customers’ for a period of 3 months after finalisation of their application).

Improvements for the New Customers team should be prioritised for targeted user experience research and gap remediation, while simultaneously progressing technical enhancements (see Appendix B) targeted at improving the performance, usability and quality of the system, such that this team may complete new applications for assessment entirely in the new system. Improvements must be targeted to both the staff and customer facing forms, ensuring consistency between the online portal and staff portal and improving the user experience for customers and staff.

An example of the current staff experience processing an MAFA received via the unauthenticated online channel, in a simple scenario involving restarting of an existing case and for which records already exist for all parties to the case, has been provided in Figure 28 below. This process highlights usability issues in performing multiple searches, as well as quality concerns resulting in verification that cases have been created, etc. in Cuba and manual capture of data due to issues with Pluto-Cuba documentation, reiterating general issues with capturing ‘notes’ in the new system to form the basis for a history of interactions. Improvements to the capture of this history should be considered a primary focus area, as it has impacts across both systems and multiple business areas.

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67 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
68 Child Support Smart Centre Site Visits – Adelaide (13/03/2018).
69 Child Support Smart Centre Site Visits – Newcastle (23/03/2018).
70 Child Support Smart Centre Site Visits – Newcastle (23/03/2018).
Figure 28 – Example completion of an MAFA, where there was a pre-existing case

* If an existing case is not found, records would have to be created for each party, for which no record was found.
**Additional processes currently performed** by the New Customers team up until the receipt of first payment, or for a period of 3 months, should be considered for handling by other teams in order to allow New Customers to operate entirely out of Pluto. Further business design is required to define exactly which processes the New Customer teams will complete in Pluto and whether a "model office" concept is required, with a select few users able to perform some tasks in Cuba where required.

Other areas of the business are being heavily impacted by the performance and usability challenges faced with the new system. The performance and the practice to operate out of both the Cuba ‘macros’ and new Pluto tasks, which results in a duplication of effort, has been observed as having a significant impact on call handling times and post-call processing times. This has a flow on impact to the amount of work on hand. In order to alleviate the current pressures on the business and reduce the back-log of work moving into peak processing periods, **staff outside of New Customers should operate out of Cuba** for the completion of their work in the short-term, while work is progressed on other usability enhancements and delivery of complete functionality.

It is important to note that reverting parts of CSSC back to leveraging Cuba does present reputational risks to the department, given the investment to date in the CSSR Programme and the Pluto solution. The messaging, communication and impacted stakeholders must be carefully consulted before committing to this.

### 7.1.3.2 Design of a 360 degree view of the customer

When a customer has provided their Centrelink or Child Support reference number, inbound calls are automatically routed to the appropriate team (where applicable) and their record is automatically brought up in Pluto for the completion of their proof of identity check, prior to opening their record. Due to the difficulties identified in locating information in Pluto, staff commonly copy and paste the reference number into Cuba to bring up the customer record for the purpose of handling general enquiries.

The information staff need is available in Pluto, however is not easily accessible. Improvements should be prioritised to the usability of Pluto for the purpose of responding to general enquiries and **design should be commenced on a ‘360 degree view of customer’**, ensuring that 90% of the information required by staff is available up-front, with minimal navigation around the customer record.

### 7.1.3.3 Delivery of replacement system in functional blocks

Some of the key issues experienced by staff at the moment are around their need to operate across Pluto, Cuba, Cuba ‘Macros’ and supporting systems (e.g. Centrelink and ATO systems). Staff are often unable to stay in context within one system when completing tasks, for example needing to navigate to Cuba to retrieve information relevant to a task being completed in Pluto and are sometimes unclear on which tasks are available in which system.

There is a need to allow staff to operate out of a single system. **Final functionality should be delivered in agreed, pre-defined blocks** to provide visibility of upcoming changes and assurance and training in the functionality to be released. The functional blocks must be designed such that **teams are able to operate primarily out of a single system** for all processing associated with each function (e.g. when completing an application for assessment, there are a range of related or dependent processes such as change in care that may need to be performed. There is a substantial amount of work to be completed in order to define manageable delivery functional groups that will support Service Delivery Operations).

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71. Child Support Smart Centre Site Visits – Newcastle (23/03/2018).

72. Comparative Performance Snapshot (Jan-Feb 2018).

73. Child Support Smart Centre Site Visits – Wollongong (19/03/2018).
7.2 Appendix B – Technical Assessment

7.2.1 Overview of Technical Assessment

The CSSR Programme selected SAP CRM and ERP to replace the legacy system and fulfil the Social Services process. The legacy system, Cuba, runs on Cool:Gen mainframe technology coupled with a .NET customer portal and a propriety API layer referred to as ‘.NET proxies’ to enable external applications to access its business functionality. Cuba provides a desktop user interface to staff and embeds validation rules within the user interface.

Driven by project priorities, budget and timelines, the Programme decided to prioritise the delivery of the SAP MVP (Pluto). Pluto was identified as an intermediate state, to be replaced by a target state running entirely on SAP. To support all MVP processes within the project timeframe, the current Architecture is a hybrid of both Pluto and Cuba technical components.

The Pluto solution uses a custom UI wrapper developed in UI5 committing data to Cuba first, and then replicating data back to Pluto. All calculations, assessments and external interface calls are performed in Cuba. SAP Web Channel Experience Management (WCEM) is used as the customer portal for unauthenticated users and a subset of authenticated users. The majority of the authenticated customers interact through the legacy .NET portal. Furthermore, Workload Management is used to allocate work to staff and ensures allocation of a single staff to multiple transactions involving the same customer. However, to date the technology teams have struggled to enable interoperability between Cuba In-trays and WLM.

Note: the following technical assessments are based on information gathered over a number of Technical Workshops with the CIOG Technical teams.
7.2.1.1 Current technical architecture design

The below content provides a high-level view of the key components of the current technical architecture.

**Pluto (SAP CRM & ERP)**

SAP CRM standard business objects such as business partner and cases are used to store customer and customer process related information. Additional attributes on business partners and cases are stored on standard extension tables. Custom tables called Cuba replica tables are also created to store attributes. These are unable mapped to the standard process; hence they cannot be stored in standard tables. SAP ERP is used to store user roles and HR organisational structure to map user roles with their organisational duties. These roles are used to enforce authorisation on the user interface for staff. The standard PSCD process is currently not used for payments and collections.

**UI Wrapper**

The UI Wrapper is built using the SAP UI5 web application framework and is accessed by staff through the Fiori Launchpad. All staff users are presented with two navigation options in the form of Fiori Tiles, and additional user interface navigation is controlled through a custom authentication framework. The UI wrapper communicates to a backend service through an embedded gateway, which is installed as an add-on on SAP CRM. All ‘creates’ and ‘updates’ are first committed to Cuba utilising SAP’s Enterprise Service Bus (ESB) technology; namely SAP PI/PO. ESB’s facilitate communication using Service Oriented Architecture (SOA); where business activities are exposed as a service. Pluto consumes these services in the form of .NET proxies from Cuba. All reads are from Pluto either through standard SAP tables or Cuba Replica tables.

**Cuba Processing**

Data is passed to Cuba through the Pluto UI Wrapper, Cuba UI or through the customer portal. The Cuba data is processed through an assessment and calculation logic, data is then committed to the Cuba database. Correspondence to customers from Cuba is managed through OPUS, CMOD and FileNet content management technology.
Data Replication
Data from any user channel is initially committed to Cuba so that existing business logic written in Cuba related to assessment, calculation and external interface calls to systems such as ATO, Centrelink etc. can be leveraged. As soon as there is a 'create' or an 'update' on the DB2 database (Cuba), a change log is published to the Message Queue (MQ). The Change logs are batched and sent to the Pluto ESB (SAP PI/PO). After data is extracted from the change logs in SAP PI/PO, the custom Cuba replica tables in Pluto are populated with Cuba data. A replication program populates standard tables from the Cuba replica tables. This replication program is scheduled to be executed periodically.

External Interfaces
All external interfaces to systems like ATO, ISIS, DVA, etc. are through Cuba. There are currently no external interfaces from Pluto. External interfaces are called outside of business hours to reduce load on the system. This is done via batch mode either through the Message Queue (MQ) or through file transfer protocol (FTP).

Customer Portal
The customer portal in Pluto has been implemented SAP Web Channel Experience Manager (WCEM); a web application framework for developing channels for customer interaction. WCEM Standard Java Server Faces (JSF) pages with enhancements adhering to standard have been implemented. WCEM is implemented to address scenarios related to unauthenticated customers and a subset of authenticated customers (~50,000). When a customer update comes through WCEM, it creates a process item in Pluto, which in turn triggers a work item in work load management (Pluto). The work item is assigned to staff based on their availability and skillset. Authenticated Customers (~300,000) use cases are handled through the legacy Cuba portal, built on Microsoft's .NET framework. These records are directly updated in Cuba, which in turn creates an in-tray item for staff to work on the transaction. The in-tray items are also replicated as a work item in WLM.

Data Migration
SAP Business Object Data Services (BODS) was utilised for the initial data migration. All processes related to Extract, Transform and Load are developed in BODS. Data is extracted as DB2 database dumps which are loaded into Pluto through SAP Idocs; the standard SAP message structure for communication between systems. Reconciliation reports have been developed on BODS to check the validity and consistency of data being loaded into Pluto. BODS is also used to reload data into tables in Pluto, to correct data errors.

3 key solution components have been identified, which have increased complexity and are key to the analysis:
1. Data Replication
2. Customer Portal and Work Load Manager
3. Data Migration
7.2.2 Detailed analysis of key solution components

7.2.2.1 Current Data Replication Architecture

The below documents the flow of data across Pluto and Cuba during the data replication process.

Any data created or updated from the UI wrapper is passed on from the embedded gateway layer (Pluto) to SAP PI/PO (Pluto). SAP PI/PO performs message payload validation and transformation before the message is sent to Cuba through .NET proxies.

After data is committed to the Cuba database, assessment and calculation related to the committed data is performed. Batch interfaces to external systems such as ATO are performed through Message Queue or through file transfer protocol (FTP).

Whenever data is committed to the Cuba DB2 database. Change logs are triggered, which indicates what data attributes have been created or updated. Cuba MF services populates the MF Message Queue (MQ) in the Cuba stack, which is synchronously pushed to the mid-range Message Queue (MQ) residing on the IBM stack. The change logs are then synchronously pushed to SAP PI/PO (Pluto). The Mid ranges queues are used to make the solution fault tolerant. If there are errors in the replication process due to business processing or technical issues. The queue content of the mid-range Message Queue (MQ) is copied to a backup Message Queue and messages are corrected using a manual process and retriggered to SAP PI/PO.

Data is populated through PI/PO into the Cuba replica or staging tables. The replication program in Pluto is scheduled to run periodically, which populates the standard and extension tables related to business partner and case in Pluto.

DHS Data Analysts execute reconciliation reports, which compares data between Cuba and Pluto. If there is any mismatch of data, manual corrections are performed in Pluto.
7.2.2.3 Current Customer Portal and Work Load Management Architecture

Customers access the customer portal through an authenticated and unauthenticated channel. All unauthenticated access for customers is through the customer portal provisioned on SAP WCEM. A subset of authenticated access for customers (~50,000) is through WCEM and remaining number of authenticated access for customers (~300,000) is through the old .NET portal.

Work Load Management is used to allocate customer related cases or tasks called work items to staff. The work items are auto assigned to staff based on availability and the skill of the staff. In Cuba, work allocation to staff is through an in-tray item. In-tray items also create corresponding work items in WLM. Work Load Management handles task bundling to ensure all tasks related to a particular customer are performed by one staff member to give a consistent experience to the customer.

The diagram below provides a high-level view of the Customer Portal and Work Load Management Interaction.

Figure 32 – Current Customer Portal and Work Load Management Architecture
### 7.2.2.4 Current Data Migration Architecture

The below content documents the data migration process.

DB2 raw database extracts without data cleansing are loaded in SAP Business Object Data Services.

The raw data extracts from DB2 are cleansed and transformed in SAP Business Object Data Services. Data is transformed in terms of value mapping or field merging adhering to business rules. An example of a transformation is Cuba customer mapping to Pluto business partner object.

Data is loaded into Pluto through standard or custom Idocs based on the type of attributes from SAP Business Object Data Services.

Reconciliation reports are built on top of SAP Business Object Data Services After data migration or a replication process, the data extracts from both Cuba and Pluto are compared in terms of every business object and data attribute. If there are deviations, the reconciliation report shows exceptions by business object and attribute. If data cannot be corrected by manual intervention, the table with the inconsistency in Pluto is reloaded from SAP Business Object Data Services (BODS).
7.2.2.6 Key current architecture insights

Cuba is the source of truth for data

Data is initially committed to Cuba, to leverage Assessment and Payment Calculation Logic. Any updates through external interfaces such as ATO, Centrelink, DVA, etc. are performed in Cuba.

Pluto SAP Landscape

The Pluto SAP Landscape is used to provision the UI wrapper for staff and WCEM for the customer portal. Standard SAP CRM and ERP components have not been utilised to address business process, therefore missing out on benefits gained by SAP best practices. The Pluto solution relies on Cuba for completing many business process end to end from the UI wrapper.

Data Replication

The current architecture is designed to ensure the same copy of data is maintained across Cuba and Pluto. To enable this, a design pattern is currently implemented to replicate data from Cuba to Pluto.

Data Model

The Pluto data model for customer information and cases is structured to replicate the Cuba data model. The SAP standard data model behaviour of business partner and cases have not been utilised. In the scenario of a case object, there is a one to one mapping between a Cuba case and a Pluto Case.

Customer Portal

WCEM and legacy .NET portal are utilised as an external customer channel to handle create, update and query operations from customers. A large subset of authenticated customers (~300,000) utilise the .NET portal, a small subset of authenticated customers (~50,000) utilise the WCEM portal and all unauthenticated customers use the WCEM portal. As a large subset of authenticated customers still use the legacy .NET portal, there is a high dependency on Cuba and there is no uniform method of managing staff work load across the two systems.
7.2.4 Technical insights in relation to business impact

Based on the technical and functional assessment of the current architecture, the following key issues have been identified:

- **Usability**

  The Usability of the Pluto solution is impacting staff productivity, as they need to click through number of tabs, scroll through pages to get access to relevant information. The large number of steps required by the UI wrapper is also impacting on staff experience and perceived system performance, as staff need to spend more time on the UI wrapper to complete a business process.
• Performance
Since the current architecture relies on data initially being committed to Cuba from the UI wrapper and then replicated to Pluto (to leverage the calculation logic, payment logic and external interface calls in Cuba), there are significant performance impacts before the processed data is displayed on the UI wrapper. In some scenarios, due to business errors or technical issues on the Cuba side, the data is not replicated to Pluto. This causes relevant data not being displayed on the UI wrapper, which are then subsequently interpreted as performance issues by the staff. Because of these issues, staff switch from Pluto to Cuba to complete the business process.

• Functionality
Currently Staff are unable to complete a business transaction end to end in Pluto and they need to constantly switch to Cuba screens to complete the business transaction. As only 9 business process are addressed end to end in Pluto and the remaining business process are addressed by Cuba.

• Quality
The current integration between Pluto and Cuba relies on a proprietary integration technology called .NET proxies on the Cuba side. The current limitation of the .NET proxies is it is missing business validation rules, therefore in many scenarios data being updated in Cuba results in data inconsistency. During the replication process, if there is performance issues or errors, the consequence will be data inconsistency between Cuba and Pluto. Data inconsistency issues cause a lot of time and effort invested in manually correcting data or reloading data in Pluto resulting in a loss of productivity for staff using Pluto.

• Flexibility
The current design constraints Pluto from scaling by number of users or being flexible enough to add new functionality.

Some of the key challenges related to flexibility and scalability are:
- As the current design has dependency on Cuba for key functionalities, any new changes arising for legislative changes or business process improvements needs to be performed on Cuba. Performing new changes on Cuba is more expensive than Pluto due to the legacy technology nature of Cuba;
- Work Load Management is done through in-trays for work getting generated from Cuba, and through WLM for work getting generated from Pluto. Lack of a uniform workload management capability across Cuba and Pluto prevents the overall system to scale in terms of number of users, as there is a mismatch of functionality between the two work load management capabilities.

• Legacy System Dependency
The current architecture relies on Cuba for key functionalities such as calculation, assessment, payments, correspondence letters and external interface calls. This design relies on Cuba as the single source of truth for data. The Cuba data is replicated in the same structure into Pluto. This dependency on Cuba for key functionalities and data being modelled in Cuba structure constrains the future design in moving away from Cuba. Changes to current state architecture needs to be identified to easily decouple Pluto from Cuba.

The key design areas to be addressed in order to reduce dependency on Cuba are:
- Data replication;
- Migrating correspondence functionality, existing interfaces, BSG to Pluto;
- Migrating the remaining authenticated customers to the WCEM Portal.

• Best Practice SAP
The initial goal of the program was to implement social services on a SAP CRM Platform to introduce overall business process improvements for staff and customers. However, the current design mimics the Cuba data structure in Pluto and in some scenarios Cuba processes, for example task completion. Due to the nature of the current design, any standard available SAP out of box best practices cannot be implemented easily nor can the system access new functionalities introduced by SAP. This also limits the desired benefits of a COTS product related to total cost of ownership (TCO).
7.2.5 Recommendations

Based on the insights gained through technical sessions with the development team, the technical analysis of the current solution architecture and incident analysis, three categories of enhancements to the current technical design have been identified.

- **Quick Wins**
  Quick wins are enhancements to the system which can be performed in a period of three to four months. These improvements are primarily focused on resolving immediate pain points faced by business users using Pluto, i.e. performance, replication and data consistency issues. Quick wins also focus on introducing enhancements to reduce dependency on Cuba.

- **Deliver Core Capability**
  Core capability enhancements to the system primarily focus on enabling functionality in SAP CRM and ERP (Pluto). These enhancements will introduce business process improvements to Pluto end users and will also focus on non-functional requirements currently not addressed in Quick Wins. Core capability enhancements can be delivered in a period of six to twelve months.

- **Target State**
  The target system is the end result of enhancements to the system using existing and new Pluto components. The enhancements will primarily look at business process improvements that will enable the system to be more performant, flexible and scalable. These enhancements will require effort of more than twelve months.

![Transition to Target Roadmap](image-url)

Figure 36 – Transition to Target Roadmap
7.2.5.1 Quick wins

**Database merge**

Existing performance issues are mainly a result of data replication between Pluto and Cuba, i.e. where data is passed from UI wrapper to Cuba and data is replicated from Cuba to Pluto. Currently, the Pluto system runs on an Oracle database and Cuba runs on a DB2 database. There is an exercise underway to migrate Pluto to the same database as Cuba (i.e. both systems on DB2).

**Enable Pluto to directly access the Cuba tables rather than replicating Cuba tables to Pluto Cuba replica tables.** This will improve the replication program performance of populating the standard and extension tables from Cuba data, as well as improving the response time of the UI Wrapper.

**Prioritise Business Partner update in Pluto**

One of the major issues in the replication process impacting UI wrapper performance is due to standard Pluto Business Partner locking behaviour, which occurs when business partner objects are updated in Pluto.

Avoid directly updating customer attributes such as contact and address details in Cuba. Many customer attributes are not required in Cuba for calculating payments and assessments. **Update Business Partner attributes directly in the Pluto UI wrapper** in order to improve the performance of the replication program in Pluto.
The current issue with Cuba web services is that they are provisioned through a proprietary framework called .NET proxies and not through open standards such as SOAP, JSON etc. The use of .NET proxies causes Pluto to perform complex logic in order to be able to consume Cuba web services.

Additionally, the current Cuba web services only address database update logic. The validation logic embedded in Cuba thick client is not addressed in the web services leading to invalid data being updated in the Cuba database. The Cuba web services are not designed to be modular for example the assessment logic in not available as a consumable web service. This prevents the overall solution to decouple itself from Cuba.

**Build new Cuba web services in the API Provisioning Layer** (i.e. IBM API Connect). The new web service logic will cover both the validation logic on the thick client, processing logic and the database logic to avoid any data inconsistency.
Enhance UI wrapper with Validation Rules

Another issue with the UI wrapper is that it does not contain many of the data validation rules. The UI wrapper depends on Cuba .NET proxies to perform data validation before updating the Cuba database. As Cuba .NET proxies do not consider validation rules, invalid data is updated in the Cuba database.

Re-write the missing validation logic in Pluto using the BRF Plus framework. This will be utilised in the UI wrapper to validate data, thus avoiding data inconsistency. Note, this is an alternative to the previous quick win in terms of handling data validation but does not resolve the issue related to enablement of specific Cuba functionality as web services.

Migrate Correspondence Letters

As part of reducing user dependency on the Cuba system, the correspondence functionality should be decommissioned in Cuba and an SAP correspondence functionality should be enabled in Pluto. Currently, all the building blocks to support correspondence letters are already developed and available in Pluto, which can be triggered manually by staff or automatically by database changes caused by transactions.

Enable the correspondence letter functionality in Pluto, quarantining the release to particular business areas to minimise the impact where staff continue to operate primarily out of Pluto (e.g. Deceased Customers) and to provide immediate value to areas of the business where a lot of manual correspondence is currently prepared (e.g. Customer Service). This will involve the following being performed in Pluto:

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Child Support Smart Centre Site Visits – Hobart (26/03/2018).
- Outbound correspondence framework in Pluto will fetch document template from OpenText, Letter header and Letter text table contents from the Cuba replica table based on document type.
- OpenText will then generate the letters and place the physical file in FileNet.

**UI Wrapper Rendering Performance**

There are performance issues regarding the render time of the UI Wrapper impacting staff productivity. Part of the issue is because the UI wrapper code is not compressed.

**Make use of tools** such as **Gulp** or **Uglify.js** to compress the UI code as well as using the compressed version of the UI5 library.

**UI Wrapper Development Governance**

There are a number of issues with the UI wrapper development, such as:

- Not following a common UI design guideline;
- Not adhering to UI Coding standards; and
- Lack of documentation related to technical specifications, code review findings and technical unit tests; impacting the supportability of the UI code, scaling of UI developments and ability to provide knowledge transfer to new on boarded UI developers.
**Documentation related to UI wrapper should adhere to SAP ASAP methodology.** This means; any new UI developments needs to produce artefacts such as technical specifications, code review documents and technical unit test documents. Additionally, UI design guidelines and coding standards should be documented in conjunction with the product architects. Any change in UI design not adhering to the defined UI guidelines should be reviewed by the Architecture board.

![Diagram of product artefacts managed by Architecture Governance Board](image)

**Migrate existing interfaces to Pluto**

As part of reducing dependency on the Cuba system, the existing interfaces from external systems must be decommissioned. Currently all existing external interfaces are executed in a batch mode, and pre-processing and post processing functions are executed on Cuba data related to external interface calls. There are 12 external interfaces currently interacting with Cuba.

**Re-point the external interfaces to Pluto through SAP PI/PO (ESB).** As the batch protocol used to interface with Cuba is also supported by SAP PI/PO, the pre-processing logic needs to be implemented in Pluto before data is committed to the Cuba tables. The post processing can be performed in Cuba, though it will be eventually replaced in the target state architecture. Note: the database merge enhancement is a prerequisite to perform this activity.
Currently there exists mapping issues between the status of the Cuba in-trays and WLM. Cuba in-trays are generated when customers perform actions in the CSA online portal for tasks that require staff processing.

**Divert all authenticated customers from the Cuba CSA Online portal to the WCEM portal.** This will result in WLM creating work items from Pluto reducing dependency on Cuba. As the status is mapped correctly from Pluto, WLM is able to be utilised further by staff. There are currently ~50,000 authenticated customers using WCEM with a high degree of success.

Note: the prerequisite before implementing this change is to resolve some of the critical issues currently experienced by staff using WLM, as well as outstanding issues faced by some customers in using WCEM, including privacy concerns, which have resulted in a subset of users being moved back to the old online portal.\(^7\)

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\(^7\) Child Support Smart Centre Site Visits – Parramatta (20/03/2018).
7.2.5.1.1 Benefits

The suggested quick wins help overcome both business and platform challenges. Quick wins that deliver business benefits render immediate business relief to staff in terms of usability, quality and performance improvements, whilst platform benefits help make the solution less Cuba dependant and flexible enough to accommodate new changes. It is worth noting that platform related quick wins do not introduce functionality changes in Cuba from a user experience point of view, for example in the ‘Migrate Correspondence Letters’ quick win opportunity, staff may continue to use Cuba to generate correspondence letters.

Figure 46 – Migrate all customers to WCEM Architecture

Quick Wins (can be delivered in 3-4 months)

- Database Merge
- Prioritize Business Partner Update in Pluto
- Cube Web Service Redesign
- Enhance UI Wrapper with Validation Rules
- Migrate Correspondence Letters
- UI Wrapper Rendering Performance
- UI Wrapper Development Governance
- Migrate Existing Interfaces to Pluto
- Migrate all Customers to WCEM

Usability
Data Quality
Performance
Platform

Figure 47 – Quick wins with respect to challenges being addressed
<table>
<thead>
<tr>
<th>Business Challenge</th>
<th>Current Pain Point</th>
<th>Quick Win Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability</td>
<td>Staff raised system usability concerns, particularly with regards to process efficiency. Staff highlighted that some tasks required significantly more steps in Pluto than in Cuba.</td>
<td><strong>UI Wrapper Development Governance</strong> will introduce a uniform UI design pattern adhering to SAP Fiori design principles of reducing number of clicks and navigation between tabs to complete a business process. Some of the quick wins related to performance will improve the usability of the UI by making it more responsive and reducing wait time on the UI.</td>
</tr>
<tr>
<td>Performance</td>
<td>Currently staff take approximately four minutes in Pluto to perform functionalities such as load customer information, task information, entering a task etc. compared to two minutes in Cuba. Slow processing times especially impacts incarcerated customers who are subject to ten minute call times.</td>
<td><strong>Database Merge, Prioritise Business Partner Updates in Pluto, UI Wrapper Rendering Performance</strong> will help in drastically improving the performance of Pluto and elevate the performance of Pluto on par with Cuba. This will ensure staff are not switching from Pluto to Cuba for performance reasons.</td>
</tr>
<tr>
<td>Functionality</td>
<td>Staff cannot perform key tasks such as assessments, calculations and payments in the Pluto system, these tasks can only be performed in Cuba.</td>
<td>Not addressed with quick win. It is intended that a business case will propose future steps on how to address current Pluto functionality gaps.</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Staff raised multiple concerns with the quality of the information presented in the Pluto solution. There have been cases where the data in Cuba did not match the data presented in Pluto.</td>
<td><strong>Database Merge, Cuba Web Service Redesign, Enhance UI Wrapper Validation Rules</strong> will resolve data inconsistencies between Pluto and Cuba caused by data replication and lack of consistent business validation rules across the two systems.</td>
</tr>
</tbody>
</table>

Table 10 – Business challenges
### Platform Challenge
- **Flexibility**
  - Current Pain Point: Accommodating new business validations and consuming web services in Cuba is complex.
  - Quick Win Resolution: **Cuba Web Service Redesign, Enhance UI Wrapper Validation Rules** will simplify Cuba web services enables easier consumption of Cuba business processes from Pluto.
  - Easier to introduce business validation rules in Pluto UI wrapper reducing reliance on Cuba.

- **Legacy System Dependency**
  - Current Pain Point: Hinders businesses ability to transition away from the Cuba platform as currently there are many tasks that are reliant on Cuba for processing.
  - Quick Win Resolution: **Migrate Correspondence Letters, Migrate Existing Interfaces to Pluto, Migrate all Customers to WCem** will improve functions such as sending correspondence letters and customer online portal access which can be easily moved to Pluto and removed from Cuba, henceforth reducing dependency on Cuba.

- **Non SAP Best Practice**
  - Current Pain Point: The current SAP based solution complements the legacy Cuba system however could better utilise standard SAP best practice capabilities, i.e. CRM and PSCD.
  - Quick Win Resolution: Not addressed with quick win.
  - It is intended that a **business case** will examine which best practice SAP functionalities can be utilised in the target state to introduce greater business value and reduce technical debt.

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**Table 11 – Platform challenges**
Target state architecture
The current state of solution architecture has key functional and technical challenges around usability, performance, functionality, data quality, flexibility, legacy system dependency and use of SAP best practices. Based on these challenges, the high-level principles driving towards a target state architecture are:

- Introducing true business transformation by adopting best practices;
- Increasing staff productivity by providing a performant, reliable and easy to use solution;
- Ensuring the solution to be flexible enough to easily introduce functionality driven by business process improvements or legislative changes; and
- Enhancing customer experience.

The below diagram provides a conceptual target state Architecture.

The key points related to the target state architecture are as follows:

- Run all the key business process around customer information, case management, eligibility and basic assessments, payment processing and distribution, in a basic rules engine in Pluto using both SAP CRM and ERP components.
- Interface all external systems like ATO or Centrelink through SAP Enterprise Service Bus (PI/PO).
- Utilise standard components such as OpenText and FileNet to manage correspondence letters.
- Utilise Angular.js as the frontend component for both the staff and customer user interface. As Angular.js is open source, there are frequent updates on the framework from the open source community introducing new functionality. The rendering performance of Angular.js is far superior compared to SAP UI5 performance. Further usage of Angular.js is already part of the enterprise architecture pattern.
- Work Load Management will serve as the only work allocation and management of work to staff.
- Due the complex nature of assessment calculation functionality, the current assessment calculation functionality in Cuba may be black boxed after code modernisation and exposed to Pluto through web services.
- Teradata will serve as a data warehouse to feed data for historical reporting.
- Operational reporting and dashboards can potentially run on the HANA database. To enable this there needs to be real time sync of data to HANA database.
Note: Detailed analysis is required to define the core components of the target architecture and enable critical to be made architectural decisions.

Based on the target architecture, the business process adoption in Pluto is depicted below. Note: this conceptual architecture is contingent on the ability to modernise Cuba code.

![Business functions in the target state system](image_url)

Figure 49 – Business functions in the target state system
7.3 Appendix C – SAP Interaction Centre

Staff productivity and efficiency during phone calls with customers is compromised as staff are required to switch between various screens, as well as between Cuba and Pluto systems, to address customer enquiries. As means of improving staff productivity, the adoption of SAP CRM Interaction Centre should be investigated.

SAP CRM Interaction Centre provides the following functionality to enhance staff productivity by helping reduce the time it takes to address a customer enquiry or issue:

1. **360 Degree Customer View**
   
   Integrated view of all information needed to resolve problems without multiple transfers

2. **Effective Issue Management**
   
   Simplified processes for managing customer issue and escalations with predefined business rules

3. **Knowledge Base**
   
   Information from a knowledge base to allow for an initial assessment of customer issues and check the status of pending requests

4. **Multi-Channel Management**
   
   Employs a wide range of touchpoints, including web, email, phone, fax, and post. Automated email analysis, routing, and response based on configurable rules. Process model interactive scripts and automated escalation procedures based on defined business rules

5. **Customer Interaction Analytics**
   
   Ability to provision analytics to track common interaction centre metrics, such as average handling time and response speeds. Create and monitor metrics for key business processes, such as items completed by agent and first-call resolution rates. Generate metrics that blend multiple elements, such as average handling time by problem type.
7.4 Appendix D – Florida CAMS Case Study

7.4.1 Program Background
The Florida Department of Revenue Child Support Agency is one of the largest child support agencies in the Unites States, providing child support services to more than one million children. The Florida Department of Revenue Child Support Enforcement (FDOR CSE) agency:

- Provides child support services across the 67 counties in the state of Florida;
- Supports approximately 4,000 users located in 43 service sites;
- Manages more than 555,000 child support orders;
- Collects and disburses more than $1.3 billion child support payments each year; and
- Provides services including locating parents, establishing paternity, enforcing and modifying support orders, and collecting, distributing, and disbursing child support payments to the intended recipients.

7.4.2 Business Challenges
FDOR CSE was faced with several challenges that led to the initiation of the Child Support Automated Management System (CAMS) project with Deloitte. The two main problems with the existing system were:

1. The legacy mainframe system (Tile IV-D online transaction processing system) with many ancillary systems was outdated, inflexible and expensive to support; and
2. The existing legacy system was ineffective in helping the department reach goals tied to federal funding, specifically, FDOR was lagging in its goals for collection of child support and delivery of timely child support orders.

The CAMS solution intended to produce the following results:

- Automate routine tasks to free up staff time for more complex tasks;
- Improve data integrity and reporting;
- Improve performance on federal incentive measures, i.e., increase collections;
- Increase customer access to services; and
- Be flexible enough to rapidly accommodate changes in federal and state requirements.
7.4.4 CAMS Solution
The FDOR CSE CAMS solution is one of the first implementations to deliver a child support service system using commercial off-the-shelf (COTS) SAP products. FDOR CSE delivered an integrated SAP based solution using an innovative custom and COTS approach. The scope of the project involved the implementation of SAP CRM, SAP ECC and SAP BI modules delivered in accordance with government and industry best practices.

The CAMS project was delivered in two incremental phases.

7.4.5 High Level Timeline
The CAMS solution was delivered via a waterfall approach as shown in the CAMS phase II timeline below.
7.4.7 CAMS Solution Architecture
The CAMS solution architecture was characterised by a modular, layered design and was built using a suite of COTS SAP application products. However, given the uniqueness of child support business, customisations were performed in order to meet the full scope of the CAMS business solution.

![Figure 53 – Florida CAMS solution – Solution Architecture](image)

7.4.8 FDOR CSE Child Support Services (CSS) Australia comparison
The FDOR CSE and CSS Australia act as intermediaries between parents and carers of a child to ensure the costs of raising the child is met equally by both parents.

Both programs operate in a very similar manner across the establishment, enforcement, collection, distribution and disbursement of child support payments. Child support payments are effectively managed as a debt against the paying parent; and is calculated using the income of both parents, percentage of care, age of child, cost of child needs and the number of children. FDOR CSE and CSS Australia also both utilise a comprehensive e-service platform that interfaces with external agencies.

Additionally, the volume of child support cases managed by FDOR CSE and CSS Australia are comparable. FDOR CSE manages approximately 555,000 child support cases at the time CAMS was implemented (currently handles close to 1 million child support cases), and CSS Australia manages 1.5 million child support cases.

However, there are some differences in the way the FDOR CSE and CSS Australia operate, as captured in the table below.
### Table 12 – Differences between the Child Support Schemes in Australia and Florida

<table>
<thead>
<tr>
<th></th>
<th>FDOR CSE</th>
<th>CSS Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessments</strong></td>
<td>All child support assessments and orders are assigned by the court</td>
<td>Child support orders and assessments are escalated to courts only in special circumstances</td>
</tr>
<tr>
<td></td>
<td>Assessments and calculations occur less frequently and are less complex.</td>
<td>Assessments and calculations occur more frequently and are more complex.</td>
</tr>
<tr>
<td><strong>Service delivery</strong></td>
<td>Provides child support services state-wide based on state legislation.</td>
<td>Provides child support services nation-wide based on federal legislation.</td>
</tr>
<tr>
<td><strong>Head department type</strong></td>
<td>FDOR CSE is managed by the Florida Department of Revenue; which manages taxation programs such as the General Tax Administration program and Property Tax Oversight Program.</td>
<td>CSS Australia is managed by the Department of Human Services, the same department that manages Welfare payments and Medicare (more welfare/health service focus).</td>
</tr>
<tr>
<td><strong>Application/communication channels</strong></td>
<td>Customers can apply for and discuss child support cases online, via phone as well as in person at their local child support office.</td>
<td>Customers can only connect with child support services online or via the phone, there are no local child support offices customers can visit.</td>
</tr>
<tr>
<td><strong>Welfare recipients applying for child support</strong></td>
<td>If the customer is a welfare recipient or has recently applied for welfare from the Department of Children and Families (DCF), they do not need to apply for child support, a case opens automatically.</td>
<td>Welfare recipients have 13 weeks to apply for child support from the time they separate. If they do not apply, their welfare payments may be reduced or stopped.</td>
</tr>
<tr>
<td><strong>Paternal relationship establishment</strong></td>
<td>There is a requirement for paternity to be established formally. For example, if the mother is unmarried at the time the child is born, a ‘Paternity Acknowledgement form’ needs to be filled out and signed by both parents, either in the presence of a notary public or two witnesses.</td>
<td>The CSS registrar decides on the relationship between parent and child based on presumption situations, i.e. both parties where living together at the time child was born.</td>
</tr>
<tr>
<td><strong>Paternity genetic tests</strong></td>
<td>If required, a FDOR CSE employee can administer paternity genetic tests at the local child support office.</td>
<td>Paternity tests are not administered by CSS.</td>
</tr>
<tr>
<td><strong>Mobile payment options</strong></td>
<td>Currently, FDOR CSE do not have a mobile app specifically designed for child support payments.</td>
<td>Customers can make child support payments using the Express Child Support mobile app.</td>
</tr>
</tbody>
</table>
## 7.5 Appendix E – Detailed Assessment of Alternate Solution Options

All options assessed relative to the option to continue and complete the current Pluto solution (option 1).

### 1. Continue & complete current Pluto solution (end-to-end SAP)

#### Assessment of the options (1/5)

<table>
<thead>
<tr>
<th>Overall</th>
<th>Delivery</th>
<th>Functional</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>Slow</td>
<td>Interim-states</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Overall**

The completion of an end-to-end SAP solution provides best functional fit by way of introducing a complete and modernised system, giving opportunities to customise the system to align with operational and legislative requirements. This option is aligned with the original delivery plan of the Programme.

This option will require more customisation when benchmarked against other alternatives, however some build work have been completed historically. In addition the solution is fully aligned with the dominant DHS technology stack and architectural direction, allowing the continued use of DHS internal resources to complete the necessary build work. This presents opportunity for accelerated delivery and leveraging the work done so far to decrease delivery timeframes and cost, however past experience suggests that a level of independent design and implementation guidance would be beneficial to ensure that the solution meets the business need.

**Delivery**

Slow

The delivery of an end-to-end SAP solution commenced in FY2013-14, with an initial view that the entire product should be released at once in a ‘big bang’. Significant effort was expended on design of the full solution, before a decision was made to ‘wrap’ the SAP user-interface (with limited CRM functionality) around a Cuba back-end. Key milestones, including establishing interoperability between Cuba and SAP have already been achieved, the delivery of this solution is already in-progress. Nonetheless significant delivery time and effort would be required to complete the solution – there are many complexities in ensuring the system aligns to legislation (eligibility criteria, ability to account for parents with multiple cases, carers, appeals framework, interaction with international agencies, etc.)

A degree of independent guidance on the recommended approach is required to ensure that the direction of the system and the decisions made meet the requirements of the business as well as to ensure that there is a robust approach to change management.

**Functional**

**Interim-states**

Continued use of Cuba as the assessments, processing and payments engine in the interim-states ensures continued and consistent alignment with legislative requirements. This also ensures that where there is a misalignment, staff are able to make use of existing manual workarounds.

**End-state**

SAP has invested into social services more heavily than other vendors, however a large degree of customisation is still required to meet the business need and legislative requirements. A significant amount of customisation has already been completed to make the Pluto solution fit the business need. A number of processes are built, with additional work to be completed to keep staff in context.

**Cost**

Medium

Completing the Pluto solution has many cost advantages, due to the partial completion of delivery and use of existing internal skill-base and alignment to the dominant technology stack. There is nonetheless the potential for large amounts of technical debt (manifesting in dollars spent) to be incurred along the journey as new functionality is developed in Cuba, which must later be rebuilt in SAP. This is something that is already occurring as the government requests that new legislative changes be reflected in the system, which it is necessary to build in Cuba.
Further work is required to ensure that staff can handle, in particular, general enquiries / change of circumstance, and initial analysis suggests that SAP can support a 360° view of customer that will assist with this, as well as support the functionality handled by Cuba with additional customisation.

The dominant technology stack used by DHS is SAP based and the capability of DHS staff is primarily in SAP. An end-to-end SAP solution would be well supported internally and minimise the need to engage external vendors in the delivery of the solution.

In the interim-states, work has already been largely completed on establishing interoperability (data replication and migration, as well as service calls) between Cuba and Pluto in SAP. In addition, SAP (end-to-end) solutions have been delivered for Child Support in reciprocating jurisdictions, with a degree of reusable customisation.

There are existing concerns with the data integrity, due largely to the data replication process in place and issues with validation when data is being passed between Cuba and Pluto. The risks are amplified the longer Cuba is run in parallel, due to both the data issues and other outstanding issues associated with Cuba, which has not been modified or even maintained over the last 5 years.

Completing the current implementation will be slow, however delivering functionality in blocks will allow Cuba to be partially de-risked along the journey as well as ensuring that business functions are only impacted upon delivery of their associated ‘block’.
## Continue development of Pluto-Cuba hybrid solution (retain key Cuba components and modernise code) - Assessment of the options (2/5)

<table>
<thead>
<tr>
<th>Overall</th>
<th>Delivery</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Faster</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Overall**

This option retains current systems to enable an end-state where Cuba continues to serve as the basis for existing functionality, with the code converted to a more contemporary and modifiable language (e.g. Java). Parts of the modernised code could be ‘black-boxed’, particularly where modification is rare and rebuilding logic may be complex (e.g. formula for assessments).

Through modernisation, the back-end engines will achieve reduced error rate, more readily integrate with the front-end system and other DHS ICT systems and can be effectively maintained. The enhanced user interface introduced by Pluto will continue to be developed and completed as the only user-interface.

This option permits core business functions to be modernised in stages, giving opportunity to prioritise the delivery of high priority functionality and to manage the scope of change in stages to minimise the overall implementation risk.

**Delivery Faster**

The expected delivery complexity is reduced as the current systems are retained, without the need to fully configure the SAP solution to achieve the end state, and that build bespoke functionality that is known to slowdown the delivery new systems.

There are opportunities to deliver modernisation by core business function in stages, allowing an agile or hybrid agile delivery approach to be utilised, resulting in high priority capabilities to be deployed in operation sooner via sprints.

Further, automation can be explored to accelerate the translation of code from Cool:Gen to a more contemporary language.

A degree of independent guidance on the recommended approach is required to ensure that the direction of the system and the decisions made meet the requirements of the business, as well as to ensure that there is a robust approach to change management.

**Functional Interim-states**

Cuba system continues to serve as the back-end engine to support core functions including assessment, processing and payment in the interim, and be modernised in a staged approach by core functions. Pluto continues to support user interaction as per current set up.

**End-state**

Pluto and Cuba systems (post-modernisation) will coexist to provide front and back-end functionality. Frequently modified and less complex areas of the back-end, that are able to be built using SAP standard functionality with minimal customisation, will be built in SAP (e.g. letters, payments), with complex and comparatively ‘stable’ functionality retained in modernised Cuba code. This enables the enhanced staff and customer experience with added strength.

**Cost Medium**

There are cost advantages to this option arising from the retention of complex parts of the current systems, with reduced initial investment required to deliver modernised capabilities. The cost incurred can be associated with the capabilities delivered to enhance business operations by capability area if modernisation effort occurs via stages, giving ability to assess cost vs. output more directly.

Existing internal DHS skill-base is utilised in the delivery, reducing the costs associated with acquiring resources with the necessary skills.
and flexibility in the back-end. While the back-end system continues to provide complex functions, it is more readily supported going forward, with reduced error rate, faster interaction time with front-end, and increased reliability, attributed to modernised code and simplified data handling through services.

### Technical

The combination of Pluto and a modernised Cuba will provide better alignment to the Department’s technology and architecture direction compared to the current state however is less favourable than an end-to-end SAP solution, due to retention of the legacy system. Attributed to modernised code, the enhanced Cuba system presents opportunities for modern APIs, streamlining of services which enables improved integration with Pluto and other Departmental systems. While the end state solution will retain non-SAP platforms, the modernised Cuba solution is aligned with the department’s architectural direction to be more adaptable to growth, more flexible and more readily support the Department’s ability to undertake future whole-of-government service delivery. Future functional build could take place in an SAP environment with any required grandfathering performed in the modernised code.

### Risk

The risk to implementation for this option is reduced by minimising the scope of change required, avoiding the technical risks in deploying a new system and the ability to more easily manage implementation in a staged approach. The disruption to BAU business activities will be limited to functions directly impacted by the part of the system being delivered in each stage. There will be opportunities to review risks and manage risks at the beginning and end of each stage.
### Migrate Pluto to SAP S4HANA / Hybris (complete in end-to-end SAP)

**Assessment of the options (3/5)**

<table>
<thead>
<tr>
<th>Overall</th>
<th><strong>Overall</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>![X]</td>
<td>This option would utilise Hybris CRM standard processes and data in the cloud, combined with a S4HANA box to perform custom processing and other functions. As very little SAP CRM standard functionality has been utilised, this would be of similar effort to choosing another COTS. The implementation would involve implementing the required technology stack, and migrating off the current hybrid solution as a phased approach. Hybris is a cloud product and as such has limited customisation of its standard CRM processes. Further little of the existing Pluto stack would be able to be used for this solution. The delivery effort would be similar to that of implementing a new COTS as well as having a high cost due to little reusable technology and risk as Hybris and S4 are changing frequently.</td>
</tr>
<tr>
<td>![X]</td>
<td>Significant customisation both being required and difficult will greatly increase the effort in delivery here. Further with little reuse of the existing stack, effort will be required setting up the new components of delivery. Some migration of effort into the Pluto solution is possible, but most of it would have to be reworked due to the HANA architecture, further increasing effort.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delivery</th>
<th><strong>Delivery</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower</td>
<td>New licenses would need to be purchased driving cost up. Whilst some HANA skillset is within the workforce, little or no Hybris nor S4 skills are existent within DHS. Further investment to acquire both Hybris and S4 skills either by upskilling in house or seeking out of house methods will ramp up cost. Most developed functionality would have to be rebuilt in current solution, increasing cost again.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functional</th>
<th><strong>Interim-states</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>![ ]</td>
<td>Hybris has out of the box standard CRM processes but being a cloud solution offers little customisation. As such complex processes would be conducted on the Pluto / Cuba hybrid solution with a phased migration approach, performing as much customisation of process in Hybris and the remainder utilising S4HANA.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>End-state</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully functioning Hybris / S4HANA solution with no reliance on Cuba or Pluto whatsoever. All simple CRM processes and data would be done in Hybris whilst more complex processes would be completed through customisations on S4HANA.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical</th>
<th><strong>Risk</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There is a significant risk in this approach and in deviating from the dominant technology stack used by DHS. Further stopping</td>
</tr>
<tr>
<td>Medium</td>
<td>work on the current solution in the MVP state and starting a new long-term Programme adds significant risk. SAP’s roadmap for Hybris and S4HANA is currently quite fluid adding potential risk of re-work and increased maintenance.</td>
</tr>
</tbody>
</table>

|    | invested in creating a new stack to support this solution as well as new skills required by staff. Hybris does provide out of the box CRM processes but with little degree of customisation. As such, any major customisations of process would have to try and utilise the S4HANA box. Lastly S4 attempt to push down most calculations/logic to the database layer. Application logic and Database code operate very differently and as such would be a difficult exercise. |
### Stop work and restart with new COTS solution

**Assessment of the options (4/5)**

<table>
<thead>
<tr>
<th>Overall</th>
<th>Delivery</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The option has potential as a good functional fit, though likely requiring a large amount of customisation. Moving away from an SAP solution would require significant re-investment in staff capability within DHS and interim states would require work to maintain the current SAP solution due to current integration patterns. The current work completed would not be reusable when moving to a new COTS solution, leading to long delivery times and high cost.</td>
<td>Regardless of the COTS solution chosen, a significant degree of customisation would be required. The delivery of an alternative COTS solution (outside of SAP) is expected to take longer due to the level of customisation and lack of work done to date. Problems that have already been solved for the SAP solution would have to be resolved for the new solution and all existing design artefacts, etc. that were developed for the original (full) SAP solution would not be reusable. In the interim state it would also be unavoidable to make changes to and maintain both the Cuba and Pluto solutions. This is something that is already being seen with the latest legislative changes being developed in Cuba and would only be made worse by commencing delivery of another solution.</td>
<td>Starting over with a new COTS solution would be expensive, as negotiations would have to commence with other vendors around costs of licensing the software as well as identifying the skills needed to implement the solution. DHS would need to look externally or hire internally depending on the product chosen. Potential to align with and reuse components developed under the WPIT Programme may reduce overall cost, however the timeframes do not necessarily align and current development on WPIT has relied partially on custom Angular JS and processes still to be based in SAP (and integrating with the legacy ISIS system for welfare payments).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interim-states</th>
<th>Functional</th>
<th>End-state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continued use of Cuba as the assessments, processing and payments engine in the interim-states ensure continued and consistent alignment with legislative requirements. Continued use of SAP solution, potentially with minor additional investment to close known gaps, while investing in a new COTS solution. This is necessary due to the interaction between the New Customer online and the Pluto solution.</td>
<td></td>
<td>A desktop analysis has been performed on a number of other vendors (including SalesForce and IBM Watson Health), indicative observations are that a large amount of customisation would be required regardless of the COTS vendor. Example: while Watson Health has a targeted Social Services solution, with a focus on Case Management, it would nonetheless require extensive customisation to support the complex relationships associated with Child Support and the rules for assessments. Example: Salesforce offers a complete view of customers, however has not been designed for use in the social services context and would</td>
</tr>
<tr>
<td>Technical</td>
<td>Risk</td>
<td></td>
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<tr>
<td>-----------</td>
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<td></td>
</tr>
<tr>
<td>The dominant technology stack used by DHS is SAP based and the capability of DHS staff is primarily in SAP. The move to an alternative COTS software would require a significant re-investment in the skills of staff or the use of a third-party, which would delay any start in the implementation. Current work done on integrating SAP and Cuba would be wasted and would have to be recompleted for a new solution.</td>
<td>Higher</td>
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</tr>
</tbody>
</table>

There is a significant risk in this approach and in deviating from the dominant technology stack used by DHS. There are risks not only in moving away from SAP, but also in not aligning with the direction of the WPIT Programme, which is taking a best of breed approach that is not necessarily replicable for Child Support.

There are also major risks associated with stopping work on the current solution in the MVP state and starting a long-term Programme. Staff are already struggling with the two systems and waiting 3+ years for a new system while managing work between Pluto and Cuba (both of which have large numbers of defects and gaps requiring manual intervention even prior to legislative change) is not practical.
## Maintain / Roll back to Cuba solution

### Assessment of the options (5/5)

<table>
<thead>
<tr>
<th>Overall</th>
<th>Delivery</th>
<th>Cost</th>
<th>Technical</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>Fastest</td>
<td>Lowest</td>
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<td></td>
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</table>

The option provides a good functional fit, given that Cuba has been custom-built from the ground up to fit the needs of child support, however the system has been out of maintenance and has not necessarily kept up with more recent changes to the way the business operates and has been ‘patched’ to align with recent legislative changes.

Cuba is built on Cool:Gen, a legacy language with limited skill-base amongst staff and no new supply coming. It will not be possible to maintain or update Cuba in the long-term and the system does not align with the technology strategy of DHS going forward. While simply ‘rolling back’ to Cuba would be fast relative to the delivery of some of the other options, completion of other work would be slow due to a need for heavy testing of the solution.

### Delivery

The Cuba solution has already been delivered in that it provides the functionality that has been and continues to be used by staff to perform in their role. Due to the partial delivery of an SAP solution and ‘new online’ portal for parents / carers, there are a number of new integration points and work items that would need to be ‘undone’ or moved into Cuba to allow staff to operate normally in a Cuba-only environment. These changes appear relatively minor, however due to the instability in the Cuba solution any changes will be slower to deliver than they would be in a more contemporary environment.

In addition to the above – while initial delivery may be faster than delivering an alternative ‘complete’ solution, any subsequent changes would take a great deal of time, effort and cost. No amount of money can solve the instability in the system and need for extensive testing or the lack of Cool:Gen / Cuba knowledge.

### Functional

The Cuba solution was built from the ground up to meet the needs of Child Support, however current legislative changes are difficult to implement and this problem is not expected to get any easier going forward. The current solution has been ‘patched’ and ‘bandaied’ to meet legislative requirements as best as possible, however no significant work has been done on Cuba for a number of years. Staff are familiar with workarounds required to meet legislation.

As legislation and policy on child support change, the solution must be capable of responding rapidly and Cuba is not able to support this due to the instability and lack of knowledge around the code.

### Cost

Due to the relatively lower amount of work required to ‘complete’ a roll-back to the Cuba solution this is considered the lowest cost option, however ongoing costs and investment into Cuba would be expected to be quite high. Noting also that Cuba is not aligned with the broader technology strategy of DHS, further investment into Cuba is incurred as technical debt as developments in Cuba cannot be ‘ported’ across to SAP (or any future solution) and would need to be built again from the ground up.

### Technical

The dominant technology stack used by DHS is SAP based and the capability of DHS staff is primarily in SAP. Cool:Gen skill-base is largely in contractors and specific knowledge of Cuba is very limited (only 1 person has an end-to-end understanding of Cuba). Comparisons to ISIS, which is also

### Risk

Delivering a roll-back without fixing the current issues in Cuba presents a high degree of risk. There are still close to 100 open defects in Cuba and significant concerns over its stability in general use (estimated effort of closing these defects is 2 years, regardless of monetary investment). Problems that occur in...
based on Cool:Gen, do not show the full picture – ISIS has been kept up-to-date over the years and there is a better understanding of that system and more functional stability. There is a need to move off Cuba and align with the broader DHS strategic direction.

<table>
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<tr>
<th>Highest</th>
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</table>

Cuba pose a high reputational risk to DHS and there is a very limited amount of technical knowledge available to rapidly fix issues, as well as a high potential to break something else when hotfixes are applied.

In addition, Cuba is a legacy system, compatibility issues are starting to be experienced with modern operating systems (e.g. issues running Cuba on Surface Pros (Windows 10)).
## 7.6 Appendix F – Stakeholder Engagement

### 7.6.1 Stakeholder Interviews

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Melissa Ryan</td>
<td>Deputy Secretary, Programme Design (acting)</td>
</tr>
<tr>
<td>2</td>
<td>Charles McHardie</td>
<td>Chief Information Officer (acting)</td>
</tr>
<tr>
<td>3</td>
<td>Maree Bridger</td>
<td>General Manager, Child Support &amp; Redress</td>
</tr>
<tr>
<td>4</td>
<td>Mitchell Cole</td>
<td>National Manager, Child Support Program</td>
</tr>
<tr>
<td>5</td>
<td>Catherine Thomas</td>
<td>National Manager, Child Support System Redesign (acting)</td>
</tr>
<tr>
<td>6</td>
<td>Bob Lyons</td>
<td>General Manager, Brisbane Delivery Centre</td>
</tr>
<tr>
<td>7</td>
<td>Bill Volkers</td>
<td>General Manager, Child Support Smart Centres</td>
</tr>
<tr>
<td>8</td>
<td>Tara Pamula</td>
<td>National Manager, Child Support Smart Centres (acting)</td>
</tr>
<tr>
<td>9</td>
<td>Stuart Brazendale</td>
<td>National Manager, Child Support Smart Centres</td>
</tr>
<tr>
<td>10</td>
<td>Stephen Planincic</td>
<td>General Manager, WPIT Programme Delivery</td>
</tr>
<tr>
<td>11</td>
<td>Bruce Young</td>
<td>National Manager, Child Support Smart Centres</td>
</tr>
<tr>
<td>12</td>
<td>Craig Douglas</td>
<td>National Manager, Service Network Systems</td>
</tr>
<tr>
<td>13</td>
<td>Garett McDonald</td>
<td>Chief Technology Officer (acting)</td>
</tr>
<tr>
<td>14</td>
<td>Tracy Muddle</td>
<td>General Manager, Production Systems Delivery Centre (Cuba)</td>
</tr>
<tr>
<td>15</td>
<td>Derek Lawrence</td>
<td>National Manager, Employment, Payment and Child Support Systems (Cuba)</td>
</tr>
<tr>
<td>16</td>
<td>Mark Jenkin</td>
<td>Chief Financial Officer</td>
</tr>
<tr>
<td>17</td>
<td>Mitchell Walter</td>
<td>Programme Director (acting)</td>
</tr>
<tr>
<td>18</td>
<td>Samantha Walter</td>
<td>Business Analyst</td>
</tr>
<tr>
<td>19</td>
<td>Kaitlyn Sullivan</td>
<td>Business Analyst</td>
</tr>
<tr>
<td>20</td>
<td>Katherine Mepham</td>
<td>Business Analyst</td>
</tr>
<tr>
<td>21</td>
<td>Nan Wang</td>
<td>CIOG Data Migration</td>
</tr>
<tr>
<td>22</td>
<td>Alex Walker</td>
<td>CIOG Data Migration</td>
</tr>
<tr>
<td>23</td>
<td>Alyssa Smith</td>
<td>Service Delivery</td>
</tr>
<tr>
<td>24</td>
<td>Alex Kocz</td>
<td>CIOG – Solution Architect</td>
</tr>
<tr>
<td>25</td>
<td>Ritwik Sharma</td>
<td>CIOG – Enterprise Architect</td>
</tr>
<tr>
<td>26</td>
<td>Cheng Wang</td>
<td>CIOG – Director, Applications Development</td>
</tr>
<tr>
<td>27</td>
<td>Praveen Kumar</td>
<td>CIOG – Technical SME</td>
</tr>
<tr>
<td>28</td>
<td>David Wright</td>
<td>CIOG – WCEM</td>
</tr>
<tr>
<td>29</td>
<td>Harris Le</td>
<td>CIOG – WCEM</td>
</tr>
<tr>
<td>30</td>
<td>James Shoesmith</td>
<td>CIOG – Workload Management</td>
</tr>
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<td>31</td>
<td>Mendis Ranagan</td>
<td>CIOG – Workload Management</td>
</tr>
<tr>
<td>32</td>
<td>Rao Narashima</td>
<td>CIOG – BRF Plus</td>
</tr>
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<td>33</td>
<td>Rory Berholst</td>
<td>CIOG – UI5 Pattern Gateway</td>
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<td>34</td>
<td>Katan Patel</td>
<td>CIOG – UI5 Pattern Gateway</td>
</tr>
<tr>
<td>35</td>
<td>Raghavendra Srinivasa Rao</td>
<td>CIOG – Multiple Cases</td>
</tr>
<tr>
<td>36</td>
<td>Brett Walker-Roberts</td>
<td>Policy Advice</td>
</tr>
<tr>
<td>37</td>
<td>Amanda Cenin</td>
<td>Policy Advice</td>
</tr>
</tbody>
</table>
### 7.6.2 Smart Centre Site Visits

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Julie Swinton</td>
<td>CIOG – Cuba Architecture</td>
</tr>
<tr>
<td>39</td>
<td>Graeme Boothe</td>
<td>CIOG – Cuba Architecture</td>
</tr>
<tr>
<td>40</td>
<td>Brett Minion</td>
<td>CIOG – Cuba Architecture</td>
</tr>
</tbody>
</table>

### Adelaide (13 March 2018)

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Michelle Olsen</td>
<td>Child Support Smart Centre – Service Manager</td>
</tr>
<tr>
<td>2</td>
<td>Zach Carapetis</td>
<td>CSSC Mainstream Services – Team Lead</td>
</tr>
<tr>
<td>3</td>
<td>Simon Glynn</td>
<td>CSSC Mainstream Services – Service Officer</td>
</tr>
<tr>
<td>4</td>
<td>Rachel O’Brien</td>
<td>CSSC Incarcerated Customers – Team Lead</td>
</tr>
<tr>
<td>5</td>
<td>James Steer</td>
<td>CSSC Incarcerated Customers – Service Officer</td>
</tr>
<tr>
<td>6</td>
<td>Anita Rast</td>
<td>CSSC Departure Prohibition Team – Team Lead</td>
</tr>
<tr>
<td>7</td>
<td>Sandra Eriksson</td>
<td>CSSC Departure Prohibition Team – Service Officer</td>
</tr>
<tr>
<td>8</td>
<td>Phil Rasmus</td>
<td>CSSC Departure Prohibition Team – Service Officer</td>
</tr>
<tr>
<td>9</td>
<td>George Mitzithras</td>
<td>CSSC Parent Support Team – Service Manager</td>
</tr>
<tr>
<td>10</td>
<td>Amanda Nates</td>
<td>CSSC Parent Support Team – Program Support Manager</td>
</tr>
<tr>
<td>11</td>
<td>Justyna Gabryszak</td>
<td>CSSC Parent Support Team – Service Officer</td>
</tr>
<tr>
<td>12</td>
<td>Peter Bianchhini</td>
<td>CSSC Parent Support Team – Service Officer</td>
</tr>
<tr>
<td>13</td>
<td>Tracy Law</td>
<td>CSSC Change of Assessment &amp; Objections – Service Manager</td>
</tr>
<tr>
<td>14</td>
<td>Heather Greenwood</td>
<td>CSSC New Customer Team – Team Lead</td>
</tr>
</tbody>
</table>

### Wollongong (19 March 2018)

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Jodie Bonney</td>
<td>Child Support Smart Centre – Service Manager</td>
</tr>
<tr>
<td>16</td>
<td>Mark Salmon</td>
<td>CSSC Employer Services – Team Lead</td>
</tr>
<tr>
<td>17</td>
<td>Liz Burgess</td>
<td>CSSC General Objections – Team Lead</td>
</tr>
<tr>
<td>18</td>
<td>Jade Saunders</td>
<td>CSSC – Site Implementation Manager</td>
</tr>
<tr>
<td>19</td>
<td>Dani Turner</td>
<td>CSSC Intensive Collection Services – Team Lead</td>
</tr>
</tbody>
</table>

### Parramatta (20 March 2018)

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Jacqui Pateman</td>
<td>Child Support Smart Centre – Service Manager</td>
</tr>
<tr>
<td>21</td>
<td>Cheryl Lyons</td>
<td>CSSC – Site Implementation Manager</td>
</tr>
<tr>
<td>22</td>
<td>Tim De Silva</td>
<td>CSSC – Pluto Super Users</td>
</tr>
<tr>
<td>23</td>
<td>Estelita Binay</td>
<td>CSSC – Pluto Super Users</td>
</tr>
<tr>
<td>24</td>
<td>Alisha Sinclair</td>
<td>CSSC – Pluto Super Users</td>
</tr>
<tr>
<td>#</td>
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<td>Position</td>
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<tr>
<td>------</td>
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</tr>
<tr>
<td>25</td>
<td>Maria Evangelista</td>
<td>CSSC Integrated Care – Team Lead</td>
</tr>
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<td>26</td>
<td>Caroline Gillespie</td>
<td>CSSC Integrated Care – Service Officer</td>
</tr>
<tr>
<td>27</td>
<td>Liza Blyth</td>
<td>CSSC Legal Transition – Team Lead</td>
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<td>28</td>
<td>Paul Davids</td>
<td>CSSC Litigation – Team Lead</td>
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<td>29</td>
<td>Barry Cake</td>
<td>CSSC Specialised Assessments</td>
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<td><strong>Newcastle (23 March 2018)</strong></td>
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<tr>
<td>30</td>
<td>Jodie Calman</td>
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<tr>
<td>31</td>
<td>Cindy Cook</td>
<td>CSSC New Customers – Team Lead</td>
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<tr>
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<td>Stephen Mason</td>
<td>CSSC New Customers – Service Officer</td>
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<td>33</td>
<td>Lynne Lovett</td>
<td>CSSC Solutions Gateway – Team Lead</td>
</tr>
<tr>
<td>34</td>
<td>Sonya Smith</td>
<td>CSSC Deceased Customers – Team Lead</td>
</tr>
<tr>
<td>35</td>
<td>Leanne Jones</td>
<td>CSSC Deceased Customers – Service Officer</td>
</tr>
<tr>
<td>36</td>
<td>Jane Roberts</td>
<td>CSSC Personalised Services &amp; External Complaints – Team Lead</td>
</tr>
<tr>
<td>37</td>
<td>Tara Reeves</td>
<td>CSSC – Pluto Super Users</td>
</tr>
<tr>
<td></td>
<td><strong>Hobart (27 March 2018)</strong></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Jo Edmondson</td>
<td>Child Support Smart Centre – Service Manager</td>
</tr>
<tr>
<td>39</td>
<td>Alana Johnson</td>
<td>Child Support Smart Centre – Program Support Manager</td>
</tr>
<tr>
<td>40</td>
<td>Alison Van Ravels</td>
<td>CSSC Solutions Gateway – Complex Service Officer</td>
</tr>
<tr>
<td>41</td>
<td>Duch Provins</td>
<td>CSSC International Customers – Service Officer</td>
</tr>
<tr>
<td>42</td>
<td>Daniel Carswell</td>
<td>CSSC International Customers – Service Officer</td>
</tr>
<tr>
<td>43</td>
<td>Martin Pearce</td>
<td>CSSC International Customers – Service Officer</td>
</tr>
<tr>
<td>44</td>
<td>Rose Francis</td>
<td>CSSC International Customers – Service Support Officer</td>
</tr>
<tr>
<td>45</td>
<td>Tayla Russell</td>
<td>CSSC New Customers – Service Officer</td>
</tr>
<tr>
<td>46</td>
<td>Chris Fry</td>
<td>CSSC International Customers – Service Officer</td>
</tr>
</tbody>
</table>
## 7.7 Appendix G – Summary of Submissions from Service Delivery Staff

The following table provides an overview of the feedback received from staff, in the form of written feedback, provided by 170 users as part of this review.\(^7\)\(^6\) Over half the feedback provided concerned the usability or performance of the system in daily tasks, this was identified as causing impacts to customer service and an increase in processing time. A third of the feedback concerned quality issues and missing functionality, contributing to the feeling that the system is not complete, however it is generally considered quite normal to manually verify data consistency between Pluto and Cuba as well as to switch to Cuba when issues are encountered in Pluto processes, this is consistent with findings during site visits that less issues are being raised in these areas as staff move straight into workarounds. Only a small amount of feedback was provided on the training, which was considered to be rushed, though the impact of this was smaller in light of the larger issues faced by staff in the use of the system.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Staff Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability</td>
<td>§ Ability to access information – <strong>centralised location for information</strong> relevant to particular tasks (e.g. Payments and Collections Window in Cuba). As well as a clear <strong>overview of information</strong> relevant to a case available up front (e.g. information about debt), with the ability to ‘drill-down’ and see the <strong>history</strong> of a case without having to separately locate the detail/notes in each interaction. E.g. there is a <strong>Recent Activity Summary</strong> in Pluto, however it is not possible to see the detail from this page (must manually locate it), in Cuba you were able to click on a line and open up the detail of any recent activity.</td>
</tr>
<tr>
<td></td>
<td>§ <strong>Documentation</strong> – there are numerous difficulties with documentation in the new solution, notes are not automatically generated and are being generated by Cuba macros and pasted in (resulting in a duplication of effort) or have minimal documentation / inconsistent documentation. This documentation is not stored in an accessible location and is the only means of understanding why something was done in Cuba. It is heavily relied upon. Staff also identified numerous examples of tasks that require <strong>multiple notes</strong> to be stored in Pluto, where previously all of the information would be stored in one. This impacts on staff trying to store this information in multiple places as well as staff trying to retrieve the information from within Cuba or Pluto as they must open multiple notes to find the information they need.</td>
</tr>
<tr>
<td></td>
<td>§ Too much <strong>spacing</strong> between information requires a lot of navigation and vertical scrolling to see information that was previously available. Made worse by the fact that information is not <strong>highlighted</strong> well in the new portal.</td>
</tr>
<tr>
<td></td>
<td>§ <strong>Accessibility</strong> – Pluto does not work with accessibility software (screen readers, etc.) preventing staff from using the new solution where they are required to make use of this software.</td>
</tr>
<tr>
<td></td>
<td>§ <strong>Display of sensitive information</strong> is leading to risks – e.g. a dependent child of the other party is not clearly marked, leading to potential breaches in privacy. E.g. indication that a parent/child is ‘deceased’ is not clearly marked, leading to potential risk in how staff communicate about this person with other parties to the case.</td>
</tr>
<tr>
<td>Performance</td>
<td>§ <strong>Loading / lag time</strong> between screens is leading to frustration. Each screen can take up to 20 seconds to load and completion of a task / interaction can frequently have staff seeing 5 or more loading screens. This also extends to loading a customer record and navigating around Pluto in order to gain information about a customer and their case, compounding with the usability issues identified. Staff are able to compete some tasks in Cuba before Pluto is able to load the customer record.</td>
</tr>
<tr>
<td></td>
<td>§ Changes processed in Pluto are frequently <strong>not reflected in Pluto</strong> for a number of minutes. E.g. Notes saved in Pluto are written to Cuba directly and are not reflected back in Pluto for up to 15 minutes.</td>
</tr>
</tbody>
</table>

\(^7\)\(^6\) Submissions from Service Delivery staff, received on 26/03/2018.
Theme

Functionality

Staff Feedback

3

6. General opinion of staff is that Pluto has not brought any ‘new’ functionality to the table as it is built on top of the old system. It has all of the issues Cuba had, introduces its own issues and creates new issues in Cuba.

6. There are very few processes that can be completed end-to-end in Pluto. Commonly staff are required to at least open Cuba in order to copy and paste information from Cuba into a task (as is the case with a Financial Hardship Application). There are cases where processes may be mostly completed in Pluto by one team (e.g. New Customer team completes an application and requests Employer Withholding), however still require intervention by another team in Cuba (Employer Services team must create / find the employer and set up the payments through Cuba).

6. There is a need to navigate between systems during a single conversation due to potential for multiple processes to be completed in a single call and as part of one overarching process. E.g. Application for Collection (AFC) requires staff to complete an interview with the receiving and paying parents and then make a decision on the AFC. During this process parents may also be required to update estimates of income, which cannot be performed in Pluto.

6. WLM functionality has a number of issues, including the inability to automatically create and assign tasks to team leads and the inability of team leads to be able to view the work their staff have on hand (when this is possible in Cuba). This impacts New Customers and any work received from the New Online Customer Portal.

6. Staff in many specialised areas of the business, including: Employer Services, Deceased Customers, Legal / Litigation, International, Change of Assessment / Objections, are unable to complete their functions in Pluto and must continue to use Cuba. Delivery of the system was by process, however many mainstream staff also use or need to be aware of the information / windows relied upon by these specialised areas (e.g. Payment and Collection Window, Detail screen) which contain and group specific information relating to the case. Additionally many specialised areas of the business are not well supported, in the current landscape, by either Pluto or Cuba.

Quality

4

6. Lack of faith in the new system – anecdotally, through site visits and general feedback, a lot has been made of data that is not consistent between the 2 systems and of instances where Pluto is displaying information from the wrong area of the Cuba database or is simply displaying incorrect information (case displayed as inactive, when it is in fact active in Cuba, etc.).

6. Cuba drives the majority of the back-end functionality for the system. Observed on 23/03/2018 – Cuba suffered an outage which prevented staff from completing work in both systems, notes were unable to be saved in Pluto during the outage and assessments were not able to be performed, while other information seemed to be saving, where it did not require processing. It was not clear to staff how much rework would be required or what the impacts would be of performing some work in Pluto while Cuba was down.

6. Ongoing issues are experienced where duplicate records or multiple payments are processed due to inadvertent double clicks (lack of validation). This is causing issues that must be fixed as ‘Cuba issues’, which are not being accurately reflected in reports as being caused by Pluto. Pluto specific issues are not being raised as often as staff move straight to workarounds rather than engaging in an escalation process while on the phone to customers.

6. WLM faces issues in how information is replicated, with staff receiving work that they have already completed in Cuba (due to issues with the replication of status). This has a flow on effect where the Channel Operations team (responsible for managing staff schedules) can only see the work on hand in Pluto (not Cuba) resulting in misallocation of resources.
While many staff felt that the on-site support was adequate and were very positive of the presence of Pluto ‘Super Users’ and ‘Floor Walkers’ at each site, feedback from those acting in these roles was that they were not prepared to provide support and were reacting on the fly and escalating issues through Skype with CIOG as problems were identified.

Additionally the initial training provided during the roll-out was described as ‘rushed’, with staff only being provided with 2 hours of training up-front before being left to look at task cards in order to understand how to complete processes or rely on the super users.

Staff have identified processes as causing particular difficulty (e.g. Add Child task):

“In particular the most time consuming tasks would be some of the most common we process being add child registrations, applications for collection and non-agency payments.”

While other staff have identified the same processes as working particularly well:

“Processes in Pluto that work well are really good and are a great help to staff. I have staff members that can process some things like Add child just as quick in Pluto as Cuba.”

This suggests an inconsistency in the knowledge of the system amongst staff, reflective of gaps in training or insufficient communication to staff of ongoing changes.

Staff receive updates 3 times per week as to what functionality is available or unavailable to be performed in Pluto and are unable to keep across this, particularly as the specific changes are not highlighted, requiring the entire document be read to search for changes to the availability of processes.

Table 13 – Summary of Staff Feedback

Figure 54 – Staff feedback – volume and representative quotes