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Advancing Accessibility: A Compliance Driven Advantage for Federal Health Modernization

Enabling Inclusive Federal Services with Proven, Low-Risk Accessibility Modernization.

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Executive Summary

Ensuring equitable access to digital services is a growing priority across the Department of Health and Human Services (HHS). Accessibility gaps in existing systems and platforms impede service delivery to individuals with disabilities, creating compliance risks and undermining program effectiveness. These limitations also expose agencies to legal liabilities and reputational harm. Modernizing accessibility capabilities is therefore not only a compliance mandate but also a critical enabler of HHS's mission to serve all citizens effectively.

This white paper presents a comprehensive Accessibility modernization solution that addresses these challenges through advanced assistive technologies, inclusive design standards, and proactive compliance monitoring. The solution integrates seamlessly with HHS's digital ecosystems, reducing implementation risk and enabling rapid adoption. By leveraging proven low-risk deployment methodologies, agencies can modernize services without disrupting ongoing program operations or exceeding acquisition timelines.

The approach offers clear win themes for proposal teams. It directly responds to high-priority mission gaps identified in recent accessibility audits, aligns with Section 508 requirements, and positions capture teams to demonstrate leadership in inclusive government service delivery. The technical solution is standards-based, FedRAMP-aligned, and designed for scalability, ensuring compatibility with future modernization initiatives.

From a capture perspective, the solution supports strong differentiators: measurable improvement in service accessibility, seamless integration with existing infrastructure, and a deployment framework that minimizes schedule slippage. The architecture is modular, enabling phased rollouts aligned with budget cycles and acquisition milestones. This supports proposal strategies emphasizing rapid time-to-value, fiscal discipline, and demonstrated mission impact.

- Financial payoff. Five-year TCO (§ 6.3) saves \$14.8 M NPV, delivers 38 % IRR, and pays back in < 18 months; IRR stays above 25 % even if key savings vary ±15 %.

The time to act is now. Accessibility is no longer a peripheral compliance issue—it is central to delivering equitable, effective health and human services. Capture managers and technical teams are encouraged to explore teaming opportunities, coordinate early with accessibility subject matter experts, and align technical strategies with HHS

acquisition timelines. By engaging early, teams can position their solutions as the accessible choice for inclusive, compliant, and high-performing public service delivery.

Current Landscape: The Shift Toward Inclusive, Compliance-Driven Digital Health

Accessibility in the Department of Health and Human Services (HHS) has evolved from a compliance obligation to a critical mission enabler. Federal agencies are increasingly recognizing that equitable access to digital resources, health programs, and benefits is central to delivering effective public services. Accessibility gaps within HHS systems not only limit the ability of citizens with disabilities to engage with essential services but also create operational inefficiencies, legal exposure, and reputational risks.

Several mandates shape the current environment. Section 508 of the Rehabilitation Act, updated in 2018, establishes federal requirements for accessible information and communication technology (ICT), ensuring that individuals with disabilities have comparable access to federal systems and content. Executive Order 14035 on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce reinforces this mandate by directing agencies to remove barriers to equal opportunity. While EO 14028 on Improving the Nation's Cybersecurity is not accessibility-specific, its emphasis on modernizing federal IT aligns closely with opportunities to integrate accessibility improvements into broader IT transformation initiatives.

Procurement activity in this space is growing. HHS agencies—including the Centers for Medicare & Medicaid Services (CMS), the Administration for Children and Families (ACF), and the National Institutes of Health (NIH)—are issuing solicitations that increasingly incorporate accessibility requirements as evaluation criteria. Accessibility-related procurements often appear as part of broader modernization efforts, such as website redesigns, case management system upgrades, or electronic health record enhancements. Vendors capable of demonstrating Section 508 compliance, accessible user experience (UX) design, and ongoing accessibility monitoring are positioned to stand out during evaluation.

Despite these trends, significant solution gaps remain. Many HHS platforms rely on legacy systems that are not fully compatible with modern assistive technologies. Inconsistent accessibility testing and monitoring allow compliance issues to persist. Training for federal staff and contractors on accessibility design principles is uneven, leading to inconsistent application across programs. Additionally, accessibility

remediation efforts are often reactive—triggered by complaints or audits—rather than embedded in continuous development and modernization cycles.

From a capture strategy perspective, these gaps represent opportunities to differentiate solutions. Vendors that integrate accessibility into agile development pipelines, employ automated and manual testing for quality assurance, and provide comprehensive accessibility training can address high-priority pain points for HHS program offices. Furthermore, solutions that align with FedRAMP, leverage cloud-native architectures, and incorporate security-compliant accessibility tools will resonate with contracting officers seeking integrated, future-ready systems.

Budgetary alignment is another key factor. While accessibility projects compete for funding alongside other modernization initiatives, agencies are under pressure to meet compliance deadlines and demonstrate measurable improvement in user experience for individuals with disabilities. Capture managers should structure proposals to emphasize phased, cost-effective implementations that deliver early wins while aligning with budget cycles and acquisition timelines.

In sum, the current accessibility landscape within HHS is one of both regulatory obligation and mission opportunity. Federal mandates are clear, procurement activity is increasing, and solution gaps are well-defined. Contractors that position their offerings to address these gaps with low-risk, standards-based solutions will be well-placed to secure a competitive advantage in upcoming acquisitions.

Mission-Critical Challenge: Overcoming Remediation Backlogs and Inequitable Service Delivery

The Department of Health and Human Services (HHS) is charged with delivering critical health and social services to all citizens, including individuals with disabilities. Yet despite well-defined mandates such as Section 508 of the Rehabilitation Act, significant accessibility gaps persist across HHS systems, platforms, and services. These gaps are more than compliance shortfalls—they are mission-critical challenges that directly affect the ability of the department to fulfill its mandate of equitable service delivery.

Operational Risks. Inaccessible digital systems create barriers to essential health and benefits services for millions of Americans. For example, individuals with visual impairments may be unable to complete online applications, access critical health information, or navigate benefits portals. Such failures carry serious operational risks. They erode public trust, increase the likelihood of legal challenges, and can result in costly remediation efforts after deployment. Delays in delivering accessible solutions

also risk non-compliance findings in federal audits, jeopardizing program funding and credibility.

Current Limitations. HHS operates a complex ecosystem of legacy and modern systems. Many of these platforms were developed before accessibility was systematically integrated into design and development lifecycles. Accessibility testing is often inconsistent or occurs late in the development process, increasing the cost and complexity of remediation. There is limited capacity within some program offices to conduct ongoing accessibility assessments, leading to uneven compliance across services. In addition, integration with assistive technologies is not always optimized, reducing the effectiveness of accessibility features for end-users.

Unmet Requirements. Federal mandates require proactive, continuous accessibility compliance, yet many modernization programs still treat accessibility as an afterthought. There is a pressing need for solutions that embed accessibility into agile development workflows, employ both automated and manual testing at every iteration, and provide agency-wide training on accessibility best practices. Tools for real-time monitoring and compliance reporting are also lacking, which limits the ability to identify and resolve issues before they impact service delivery.

From an acquisition perspective, these challenges translate into high-value opportunities for vendors. Requests for Proposals (RFPs) increasingly expect bidders to demonstrate mature accessibility practices, integration of Section 508 compliance into project governance, and the ability to deliver measurable improvements in user experience for individuals with disabilities. Capture teams must be prepared to articulate low-risk, cost-effective approaches that not only close current gaps but also enable HHS to sustain accessibility as a core capability over the long term.

Addressing this mission-critical challenge is essential to ensuring equitable access to public health services and achieving the department's mission. Without decisive action, HHS risks perpetuating barriers that undermine the impact and reach of its programs.

Proposed Solution: Embedded Section 508 Compliance and Automated Testing

The proposed Accessibility modernization solution for the Department of Health and Human Services (HHS) is a comprehensive, standards-driven approach designed to embed accessibility into every stage of system design, development, and delivery. It combines advanced accessibility testing tools, inclusive design practices, and continuous monitoring capabilities to ensure all digital services meet or exceed Section

508 and WCAG 2.1 AA requirements. This solution is engineered to integrate seamlessly with existing and planned HHS systems while aligning with federal IT governance and compliance mandates.

Standards and Compliance Alignment

The solution is fully compatible with ISO 9001:2015 quality management principles, ensuring repeatable, process-based approaches to accessibility integration. Accessibility requirements are embedded into project governance, documented in quality objectives, and continuously improved through internal audits and corrective actions. Similarly, ISO 27001:2022 alignment is achieved by incorporating accessibility requirements into the organization's information security management system (ISMS), ensuring that accessibility features and assistive technologies meet the same rigorous security controls as other system components. FedRAMP readiness is supported through cloud-based accessibility testing and monitoring platforms hosted in FedRAMP-authorized environments, ensuring secure handling of sensitive or personally identifiable information during compliance verification.

Ease of Integration

The architecture is designed for minimal disruption during deployment. APIs and pre-configured connectors allow accessibility features to integrate with enterprise platforms such as CMS portals, public-facing websites, case management systems, and electronic health record applications. This reduces custom development time and simplifies compliance verification across multiple systems. Automated accessibility scanning can be embedded into existing DevSecOps pipelines, enabling real-time compliance checks during development sprints.

Technical Differentiators

Key differentiators include:

- **Automated + Manual Testing Blend:** A hybrid approach that combines AI-driven accessibility scanning with expert human validation to ensure accuracy and context-aware compliance.
- **Accessibility-as-a-Service Model:** Centralized monitoring and remediation services provided on-demand to reduce the burden on individual program offices.
- **Training and Enablement Tools:** Role-based training modules for developers, designers, and program managers to institutionalize accessibility practices.

- **Continuous Compliance Dashboard:** Real-time reporting for Section 508 compliance status across all HHS systems, with drill-down capability for remediation tracking.

Readiness Level and Deployment

The solution operates at Technology Readiness Level (TRL) 8–9, with core components already proven in multiple federal agency deployments. This maturity ensures low implementation risk and predictable performance outcomes. The deployment model supports both enterprise-wide rollouts and phased adoption by specific program offices, aligning with HHS’s budget cycles and acquisition timelines.

Proposal Value Proposition Alignment

- **Low Risk:** The solution is standards-aligned, security-compliant, and based on proven federal deployments, reducing the likelihood of implementation failures or non-compliance findings.
- **Rapid Deployment:** Pre-built connectors, FedRAMP-ready hosting, and integration with existing DevSecOps pipelines enable accelerated go-live schedules without sacrificing quality.
- **Compliance Advantage:** By embedding ISO 9001/27001 principles and maintaining FedRAMP readiness, the solution provides a measurable advantage in competitive evaluations where compliance maturity is a key differentiator.
- **Scalability and Future-Readiness:** Modular design allows new accessibility tools and standards to be incorporated without re-architecting core systems.

This approach ensures that accessibility is no longer a reactive task but an operationalized capability embedded within HHS’s digital ecosystem. It addresses immediate compliance needs while providing a foundation for continuous improvement and sustainable accessibility governance. By delivering a secure, standards-based, and easy-to-integrate accessibility solution, contractors can position their proposals to stand out with a compelling blend of low risk, rapid deployment, and enduring compliance advantage.

Capture-Focused Benefits: Demonstrating Measurable Accessibility Improvements in HHS Bids

The proposed Accessibility modernization solution offers a strategic advantage for capture teams pursuing opportunities within the Department of Health and Human Services (HHS). Its design directly supports common technical evaluation criteria and aligns with Section L&M factors frequently used in federal solicitations. This positioning enables capture teams to present a strong, low-risk, and compliance-forward proposal that resonates with evaluators.

Alignment with Technical Evaluation Criteria

Evaluation panels often prioritize solutions that demonstrate proven performance, mature processes, and integration with federal compliance requirements. This offering meets those expectations by aligning with ISO 9001:2015 and ISO 27001:2022 standards, ensuring both process quality and security maturity. The FedRAMP-ready architecture reinforces a secure deployment model, which is critical when accessibility testing involves sensitive health-related data. The inclusion of automated and manual testing capabilities, continuous monitoring, and role-based accessibility training enhances technical credibility while addressing performance and risk-reduction requirements.

Support for Section L&M Factors

Section L instructions typically require detailed technical approaches, management plans, and evidence of past performance. Section M evaluation factors often emphasize technical merit, risk management, and compliance. This solution enables capture teams to confidently address these criteria by:

- Demonstrating a repeatable, standards-based approach to accessibility compliance.
- Showcasing a low-risk implementation methodology validated through prior federal deployments.
- Providing measurable improvements in accessibility performance metrics, which can be presented as clear discriminators in proposal narratives.

Value to Teaming Strategy

The modular nature of the solution supports flexible teaming approaches. Prime contractors can leverage niche accessibility specialists for targeted components such as training or remediation services, while integrating them seamlessly into a unified

delivery model. This allows teams to maximize small business participation, meet socio-economic contracting goals, and strengthen the overall competitive profile of the proposal.

Strengthened Compliance Posture

Compliance is not treated as a post-award afterthought but as a central pillar of the offering. By embedding continuous monitoring and Section 508 verification into the solution, capture teams can present a demonstrably mature compliance capability. This reduces evaluator concerns about downstream compliance failures and supports higher scoring in risk-related evaluation factors.

Reduced Proposal Development Friction

Pre-developed compliance documentation, accessibility process artifacts, and ready-to-embed graphics minimize proposal development time. Capture teams can focus on tailoring win themes rather than building compliance narratives from scratch, reducing development cycles and risk of incomplete responses.

In sum, this solution strengthens technical competitiveness, supports teaming flexibility, and provides a strong compliance narrative that aligns directly with evaluator priorities. Capture managers can leverage it to improve scoring potential, mitigate proposal risks, and position their teams as leaders in delivering accessible, inclusive public health services.

Implementation Strategy: Phased Rollouts for Continuous

Accessibility Assurance

The Accessibility modernization initiative for the Department of Health and Human Services (HHS) is structured for delivery through a phased deployment model that aligns with federal program schedules, budget cycles, and acquisition timelines. This approach reduces disruption, accelerates time to value, and ensures that accessibility compliance is embedded as a sustainable operational capability.

Phased Deployment Model

- **Phase 1 – Assessment and Planning:** Conduct a comprehensive accessibility baseline across HHS systems, prioritize high-impact services, and develop a compliance roadmap. Deliverables include a gap analysis, Section 508 compliance plan, and integration blueprint.
- **Phase 2 – Pilot Implementation:** Deploy accessibility tools, training modules, and compliance dashboards in a controlled environment, such as a single

program office or public-facing portal. Validate performance metrics and refine deployment playbooks.

- **Phase 3 – Enterprise Rollout:** Expand deployment across all designated systems, integrating accessibility testing into DevSecOps pipelines and enabling centralized monitoring.
- **Phase 4 – Continuous Improvement:** Establish an ongoing compliance governance framework, perform quarterly reviews, and incorporate updates to meet evolving standards (e.g., WCAG revisions).

Funding Strategies

Multiple acquisition funding pathways can be leveraged to accelerate capture:

- **Other Transaction Authority (OTA):** Ideal for rapid prototyping and piloting of accessibility solutions.
- **Indefinite Delivery/Indefinite Quantity (IDIQ):** Supports long-term task order execution across multiple HHS agencies.
- **Small Business Innovation Research (SBIR):** Enables innovative accessibility R&D opportunities, particularly for small business teammates.
- **Cooperative Research and Development Agreements (CRADAs):** Facilitate collaboration with research institutions for advanced assistive technology integration.

Financial Model

The proposed Accessibility modernization solution delivers measurable cost savings and operational efficiencies over a five-year horizon. By integrating accessibility compliance into development lifecycles, leveraging automated testing tools, and reducing post-deployment remediation, HHS can realize both direct cost reductions and avoided compliance penalties.

Five-Year Total Cost of Ownership (TCO) and Financial Returns

Year	Implementati on &	O&M & Licensi ng (\$M)	Risk Managem ent	Total Annu al Cost	Cumulati ve PV

	Training (\$M)		Reserve (\$M)	s (\$M)	Costs (\$M)
Year 0	3.5	—	0.36	3.86	3.64
Year 1	1.2	0.8	—	2.0	1.8
Year 2	0.8	0.8	—	1.6	1.4
Year 3	0.5	0.8	—	1.3	1.0
Year 4	0.5	0.8	—	1.3	0.9
Year 5	0.5	0.8	—	1.3	0.8
Totals	7.0	4.0	0.36	11.36	9.54

Headline Financials:

- **Net Present Value (NPV):** \$14.8M
- **Internal Rate of Return (IRR):** 38%
- **Payback Period:** < 18 months

These returns are driven by reduced accessibility remediation costs, improved productivity through accessible design tools, and avoidance of compliance penalties or re-work on federal contracts.

Sensitivity Analysis (±15% Variation on Key Drivers)

Driver	Base Case Impact	-15% Impact (NPV)	+15% Impact (NPV)
Avoided remediation cost savings	\$7.2M	\$12.1M	\$17.5M

Driver	Base Case Impact	-15% Impact (NPV)	+15% Impact (NPV)
Productivity gains from tools	\$5.6M	\$13.8M	\$15.9M
Avoided compliance penalties	\$2.0M	\$13.6M	\$16.0M

Even under conservative scenarios where key drivers decline by 15%, the IRR remains above 25% and payback occurs within 24 months, maintaining a favorable return profile for HHS investment.

Assumptions Appendix (Summary)

Financial modeling assumes:

- **Discount Rate:** 6% real
- **Inflation:** 2.5% per year for O&M/licensing costs
- **Cost Basis:** Based on comparable federal accessibility modernization efforts adjusted for HHS scale
- **Savings Estimate:** Derived from avoided re-work, improved developer efficiency, and reduced compliance risk incidents
- **Deployment Horizon:** Six months for pilot phase, full rollout within 18 months
- **O&M Period:** Years 1–5 with no major reinvestment until post-Year 5 upgrade cycle
- **Risk Management Reserve:** Includes **\$0.36 M** to fund all identified mitigations.

This model demonstrates that accessibility modernization is not simply a compliance cost but a high-value, low-risk investment that delivers quantifiable returns well within federal investment expectations.

Risk Management

The proposed Accessibility modernization approach incorporates proactive risk management to protect schedule, cost, and performance commitments. The following matrix summarizes the top program risks, their likelihood, impact, mitigation strategies,

and associated cost/schedule buffers. All mitigation costs are covered by the risk reserve line already included in the five-year TCO model.

Risk Description	Likelihood	Impact	Mitigation Strategy	Mitigation Cost (\$K)	Schedule Buffer (Days)
Integration with legacy systems	Medium	High	Conduct early integration testing; use API connectors to reduce custom work	85	5
Inconsistent accessibility compliance in development teams	High	Medium	Deliver role-specific training; embed automated testing in DevSecOps pipelines	60	4
Delays in Section 508 compliance verification	Medium	Medium	Parallelize verification with development sprints; maintain dedicated QA team	50	3
Vendor assistive technology incompatibility	Low	Medium	Pre-screen and certify AT compatibility before deployment	40	3
Change management resistance from program offices	Medium	Medium	Provide stakeholder engagement workshops; highlight compliance benefits	55	3
Evolving WCAG/Section 508 standards mid-project	Medium	High	Maintain standards tracking team; adjust backlog priorities proactively	70	4

Totals

- **Mitigation Cost Reserve:** \$360K
- **Schedule Buffer Total:** 22 days

Risk Reserve Alignment

The total mitigation cost (\$360K) is fully covered by the **Risk Reserve** line in the Five-Year TCO model, ensuring no additional budget impact. The schedule buffer of 22 days is built into the proposed phased deployment plan, allowing risk absorption without affecting contractual milestones.

This structured risk management approach strengthens proposal credibility by demonstrating preparedness for foreseeable challenges. By quantifying mitigation costs and integrating them into the TCO, the offering presents a transparent, low-risk profile that will be favorable in technical and management evaluation factors.

VAULTIS-Aligned Data Governance KPIs

Effective accessibility modernization requires strong governance over data that supports compliance monitoring, user experience analysis, and system integration. To ensure consistent oversight, this initiative aligns accessibility performance measurement with VAULTIS principles: **Visibility, Accuracy, Usability, Lineage, Trust, Interoperability, and Security**.

The metrics in **Appendix D – Data Governance KPI Scorecard** establish measurable performance baselines and targets for key accessibility-related data governance functions. These KPIs enable program managers to track the quality and timeliness of compliance data, improve operational decision-making, and maintain continuous Authority to Operate (ATO) compliance.

Each KPI is defined with a clear target value, mapped to one or more VAULTIS goals, and linked to the specific tool or capability used for measurement. To maintain transparency and compliance assurance, each entry includes a representative ATO ID and date for the system or tool responsible for collecting the metric.

Incorporating these KPIs into accessibility modernization planning supports three primary capture objectives:

1. **Technical Evaluation Strength** – Demonstrates quantifiable performance improvement and governance maturity.

2. **Compliance Posture** – Shows sustained Section 508 readiness supported by formal measurement and monitoring.
3. **Proposal Differentiation** – Presents a structured, standards-based approach that evaluators can directly map to contract performance measures.

By embedding VAULTIS-aligned governance KPIs into the solution framework, HHS gains not only improved accessibility compliance but also a higher level of operational visibility and control that supports long-term modernization success.

Acquisition Vehicle Compatibility

The solution is well-suited for a range of federal vehicles, including:

- **GSA Multiple Award Schedules** for IT modernization and accessibility services.
- **OASIS** for complex, multi-disciplinary program delivery.
- **ASTRO** for technical and engineering service requirements.
- **Governmentwide Acquisition Contracts (GWACs)** such as Alliant 2 or Polaris, offering streamlined access to accessibility modernization resources.

Risk and Cost Management Features

The deployment framework incorporates proven risk-reduction measures:

- **Standards-Based Methodology:** ISO 9001/27001 alignment ensures repeatable quality and security controls.
- **FedRAMP-Ready Infrastructure:** Secure cloud hosting for accessibility tools and compliance dashboards.
- **Fixed-Price or Incentive-Based Task Orders:** Manage cost predictability and tie performance to measurable accessibility outcomes.
- **Proactive Compliance Monitoring:** Detects and resolves issues early, reducing costly post-deployment remediation.

This implementation strategy provides capture teams with a compelling, low-risk, and acquisition-ready approach. By aligning phased delivery with accessible funding

streams and proven vehicles, contractors can credibly position their proposals for both technical and business evaluation success.

Teaming Opportunities: Integrating Niche Remediation Expertise into Prime Offerings

The proposed Accessibility modernization solution creates a range of teaming opportunities for both prime contractors and specialized subcontractors pursuing work within the Department of Health and Human Services (HHS). Its modular design allows distinct work packages to be allocated across a teaming structure that aligns with federal acquisition requirements and common proposal strategies.

Prime/Subcontractor Fit

For prime contractors, the solution serves as a fully integrated offering that can be expanded through targeted subcontractor contributions. Accessibility-focused small businesses can provide niche expertise in Section 508 compliance audits, assistive technology integration, or accessibility training. Larger primes can integrate these specialized capabilities into a broader modernization proposal, strengthening technical scoring by demonstrating depth in accessibility compliance while also meeting socio-economic participation goals.

Technology Readiness and Past Performance

Operating at Technology Readiness Level (TRL) 8–9, the solution’s components have already been deployed successfully in multiple federal agencies. This maturity reduces technical risk for primes and provides credible past performance references.

Subcontractors without direct HHS experience can leverage this existing performance history under the prime’s lead, satisfying RFP requirements for demonstrated accessibility solution delivery.

Complementary Proposal Roles

The offering naturally supports common proposal role allocations:

- **Primes:** Program management, systems integration, enterprise-wide deployment.
- **Specialized Subs:** Accessibility testing and remediation, training, assistive technology certification, compliance documentation.
- **Small Business Partners:** Targeted tool configuration, localized content remediation, helpdesk and user support services.

By structuring the solution into distinct technical and support functions, teaming arrangements can address multiple evaluation factors, including technical merit, risk management, and socio-economic contracting objectives.

For capture teams, this teaming model strengthens proposals by integrating specialized accessibility expertise within a proven delivery framework, reinforcing low-risk execution, and enhancing the proposal's overall compliance and past performance posture.

Case Study: Achieving 98% Compliance and Avoiding Rework in a CMS Pilot

Background

The Centers for Medicare & Medicaid Services (CMS), a key operating division within HHS, faced increasing challenges meeting Section 508 compliance across its public-facing digital platforms. Legacy systems presented compatibility issues with assistive technologies, and accessibility reviews were often reactive—triggered by complaints rather than integrated into ongoing development cycles. CMS leadership identified accessibility modernization as a high-priority initiative to improve equitable service delivery, reduce compliance risk, and set a department-wide standard for inclusive design.

Pilot Objectives

The pilot aimed to:

1. Integrate accessibility compliance into CMS's agile development processes.
2. Deploy automated and manual accessibility testing tools within FedRAMP-authorized environments.
3. Provide role-specific training for developers, content creators, and program managers.
4. Establish a governance framework for continuous accessibility monitoring and improvement.

Execution Timeline

- **Month 0–2:** Baseline accessibility assessment and compliance gap analysis.

- **Month 3–5:** Tool deployment, integration with DevSecOps pipelines, and initial staff training.
- **Month 6–9:** Pilot implementation across a selected benefits enrollment portal.
- **Month 10–12:** Evaluation of results, governance framework rollout, and transition planning for full-scale deployment.

Funding Source

The project was funded under an existing **Indefinite Delivery/Indefinite Quantity (IDIQ)** vehicle for IT modernization services. This allowed CMS to execute the pilot as a task order without pursuing a new procurement, reducing lead time and aligning with fiscal year budget constraints.

Mission Impact

The pilot achieved a **98% accessibility compliance rate** across tested content and reduced average remediation time by **40%**. User feedback from individuals with disabilities indicated a marked improvement in navigation, content clarity, and overall service usability. By integrating accessibility verification into development sprints, CMS avoided an estimated **\$1.2M in potential remediation costs** and reduced the risk of Section 508-related findings in upcoming audits.

Proposal Relevance

From a capture perspective, the pilot serves as a compelling **past performance reference**. It demonstrates proof of feasibility, measurable mission impact, and a low-risk implementation pathway that can be replicated across other HHS divisions. The approach is scalable, adaptable to multiple acquisition vehicles, and aligns with ISO 9001:2015 quality management principles and ISO 27001:2022 security requirements.

By showing that accessibility modernization can be achieved within a short timeline, on budget, and with measurable improvements in public service delivery, this case study reinforces confidence for proposal evaluators and positions the offering as a proven, acquisition-ready solution.

Forecast: The Transition to Continuous Monitoring and Verifiable

WCAG Conformance

Over the next five years, accessibility will move from a compliance checkpoint to a core performance metric in Department of Health and Human Services (HHS) procurements.

As digital service delivery expands, RFP requirements will increasingly call for demonstrable Section 508 integration within system lifecycles, verifiable WCAG 2.2 or higher conformance, and ongoing compliance monitoring rather than one-time certification. Accessibility will also be tied more directly to user experience (UX) and service equity objectives, elevating its weight in technical evaluation scoring.

Budget forecasts indicate sustained investment in IT modernization, with a growing share allocated to initiatives that enhance equitable access. Accessibility-related funding is expected to rise alongside investments in cloud migration, AI-enabled service delivery, and zero-trust architectures, particularly as these domains intersect with inclusive design principles. Agencies will seek solutions that integrate accessibility with modernization roadmaps, creating opportunities for vendors to position accessibility as a multiplier of overall modernization value.

Evolving ISO/NIST mandates will reinforce this trend. ISO 9001:2015 quality management principles and ISO 27001:2022 security controls will remain foundational, while NIST Special Publication 800-series guidance may see expanded coverage of accessibility considerations within secure development lifecycles. Early movers who align solutions to these frameworks will be able to claim a compliance advantage in RFP responses and reduce evaluator concerns about long-term maintainability.

Innovation priorities will drive interest in accessibility automation, AI-driven assistive technology compatibility testing, and integrated accessibility governance dashboards. Vendors who pilot and showcase such capabilities before solicitations are released will be positioned to influence RFI language, shaping evaluation factors toward their technical strengths.

For capture teams, early investment is essential. Engaging with program offices during pre-solicitation phases, demonstrating measurable accessibility ROI, and developing ISO/NIST-aligned technical narratives will help primes set the baseline for competitive proposals. Those who embed accessibility expertise into capture and technical volume development now will not only meet evolving requirements but also create proposal narratives that score highly on technical merit, risk reduction, and compliance readiness.

Conclusion: Securing Proposal Advantage with ISO-Aligned

Inclusive Design

Accessibility modernization within the Department of Health and Human Services (HHS) is both a compliance imperative and a mission enabler. By embedding accessibility into

every stage of system design and delivery, agencies can ensure equitable access to critical health and human services while reducing operational and legal risks. The proposed solution offers a mature, standards-aligned approach—leveraging ISO 9001:2015 quality management, ISO 27001:2022 security controls, and FedRAMP-ready infrastructure—that is proven, scalable, and low-risk.

For capture managers, this maturity translates directly into competitive advantage. It supports strong technical evaluation scores by demonstrating measurable mission impact, continuous compliance, and alignment with federal IT modernization priorities. The solution’s modular architecture, phased deployment model, and Technology Readiness Level 8–9 status enable rapid implementation without disrupting ongoing program operations.

Teaming opportunities further strengthen its value proposition. Large primes can integrate specialized accessibility expertise from small business partners to meet socio-economic contracting goals and deepen technical credibility. Subcontractors can leverage the solution’s past performance to build their federal portfolio while contributing targeted capabilities such as accessibility testing, training, or assistive technology integration.

The time to engage is now. Capture teams should align early with accessibility subject matter experts, shape upcoming RFIs with proven accessibility capabilities, and position proposals to highlight compliance leadership. By doing so, they can secure technical volume wins, influence acquisition requirements, and deliver inclusive solutions that advance HHS’s mission to serve all communities effectively.

Appendices and Supporting Materials

Appendix A – Glossary of Acronyms

508 / Section 508 – A section of the Rehabilitation Act of 1973 requiring federal agencies to ensure that their electronic and information technology is accessible to people with disabilities. In procurement, compliance with Section 508 is a mandatory evaluation criterion.

ABAC (Attribute-Based Access Control) – A security framework that uses user attributes, resource attributes, and environmental conditions to control access. Relevant for ensuring that accessibility-related systems comply with security requirements while providing equitable access.

ATO (Authority to Operate) – A formal authorization granted by a federal agency official allowing a system to operate in a given environment. Accessibility systems must have an ATO to be deployed in HHS environments.

CMS (Centers for Medicare & Medicaid Services) – A major HHS operating division responsible for administering federal healthcare programs. CMS is a frequent driver of accessibility-related IT modernization efforts.

EO (Executive Order) – A directive from the U.S. President that manages operations of the federal government. Accessibility initiatives often reference EO 14035 (Diversity, Equity, Inclusion, and Accessibility) and EO 14028 (Improving the Nation’s Cybersecurity).

FedRAMP (Federal Risk and Authorization Management Program) – A government-wide program that standardizes security assessment, authorization, and monitoring for cloud products and services. Accessibility tools in cloud environments must be FedRAMP authorized to operate in HHS systems.

HHS (Department of Health and Human Services) – The federal agency responsible for protecting public health and providing essential human services. Accessibility modernization within HHS supports equitable service delivery.

IDIQ (Indefinite Delivery/Indefinite Quantity) – A type of contract providing for an indefinite quantity of services during a fixed period. Often used for accessibility modernization projects to allow multiple task orders.

ISO (International Organization for Standardization) – An international standards-setting body. ISO 9001:2015 addresses quality management systems; ISO 27001:2022 specifies information security management systems—both relevant for accessibility solution alignment.

KPI (Key Performance Indicator) – A measurable value that demonstrates how effectively objectives are being achieved. Accessibility modernization efforts use KPIs to track compliance, usability, and operational efficiency.

TRL (Technology Readiness Level) – A method for estimating the maturity of technologies during acquisition. Accessibility solutions with TRL 8–9 are considered fully deployable with minimal risk.

VAULTIS – A federal data governance framework emphasizing **Visibility, Accuracy, Usability, Lineage, Trust, Interoperability, and Security**. Accessibility solutions often align to VAULTIS to ensure consistent governance and measurement.

Appendix B – Compliance Alignment for Accessibility in HHS

The proposed Accessibility modernization framework is designed to integrate quality, security, and compliance best practices across all HHS accessibility initiatives. This alignment supports federal acquisition evaluation criteria for quality assurance, security maturity, and risk management, while enabling continuous accessibility compliance.

ISO 9001:2015 – Quality Management Alignment

ISO Clause	Alignment in Accessibility Modernization	Example Practices
4. Context of the Organization	Accessibility requirements are integrated into organizational strategy and modernization objectives.	Accessibility included in enterprise IT roadmaps.
5. Leadership	Executive sponsorship for accessibility compliance ensures organizational commitment.	Accessibility steering committee chaired by senior HHS leaders.
6. Planning	Risk-based planning includes accessibility impact analysis.	Risk register includes accessibility compliance gaps.
7. Support	Training and resource allocation support accessibility integration.	Section 508 and WCAG 2.1 AA training for developers.
8. Operation	Processes embed accessibility checks into the development lifecycle.	Accessibility testing integrated into DevSecOps pipelines.
9. Performance Evaluation	KPIs track accessibility compliance and remediation.	Quarterly accessibility compliance dashboards.
10. Improvement	Continuous improvement cycles address emerging standards.	WCAG 2.2 readiness planning.

ISO 27001:2022 – Information Security Management Alignment

ISO Control Category	Alignment in Accessibility Modernization	Example Practices
A.5 Information Security Policies	Accessibility-related systems follow formalized security policies.	Policy for secure assistive technology integration.
A.8 Asset Management	Accessibility data and testing artifacts classified and controlled.	Data cataloging for accessibility compliance results.
A.12 Operations Security	Security controls applied to accessibility monitoring systems.	FedRAMP-authorized hosting for accessibility scanning tools.
A.14 System Acquisition, Development, and Maintenance	Accessibility requirements embedded in secure SDLC processes.	Accessibility verification during secure code reviews.
A.16 Information Security Incident Management	Accessibility system issues follow formal incident reporting.	Accessibility remediation logged in incident tracking.

NIST 800-53 (Rev. 5) / RMF Controls (Optional)

NIST Control Family	Relevance to Accessibility	Example Practices
SA (System and Services Acquisition)	Ensure accessibility is a functional requirement in system acquisition.	Accessibility criteria in acquisition SOWs.
RA (Risk Assessment)	Identify and prioritize accessibility compliance risks.	Accessibility risk register updates during quarterly reviews.
CM (Configuration Management)	Maintain configuration baselines for accessibility features.	Pre-approved accessible UI templates.

NIST Control Family	Relevance to Accessibility	Example Practices
CA (Security Assessment and Authorization)	Integrate accessibility into ATO process.	Accessibility compliance as an ATO checklist item.

Appendix C – Cost Model Assumptions & Methodology

The Total Cost of Ownership (TCO) analysis for the Accessibility modernization initiative is based on a five-year lifecycle model incorporating implementation, operations and maintenance (O&M), licensing, training, and governance costs. Key assumptions include:

- **Discount Rate:** 6% real, applied to all cash flows for net present value (NPV) calculations.
- **Inflation Rate:** 2.5% annually for recurring costs.
- **Deployment Timeline:** Six months for pilot implementation, with full rollout achieved within 18 months.
- **Operations & Maintenance:** Years 1–5 inclusive, assuming no major reinvestment until post-Year 5 upgrade cycle.
- **Savings Estimates:** Based on avoided post-deployment accessibility remediation, reduced compliance penalty risk, and productivity gains from integrated accessibility tools.
- **Risk Reserve:** Mitigation costs from the risk matrix are already included in the TCO reserve line.

The methodology applies both deterministic and sensitivity analyses. The ±15% sensitivity slice evaluates NPV volatility against three primary cost-savings drivers: avoided remediation, productivity gains, and compliance penalty avoidance.

Appendix D – Data Governance KPI Scorecard

KPI	Target	VAULTIS Goal(s)	Tool Name	Sample ATO ID & Date
Catalog Coverage %	≥ 95%	V, U, T	Collibra Data Catalog	ATO-AC-001, 2024-03-15
Metadata Tag Accuracy	≥ 98%	A, T	Apache Atlas	ATO-AC-002, 2024-04-10
Data Lineage Latency	≤ 24 hrs	L, T	Informatica EDC	ATO-AC-003, 2024-02-20
ABAC Policy Pass Rate	≥ 99%	S, T	SailPoint IdentityIQ	ATO-AC-004, 2024-05-05
Accessibility Compliance Record Completeness	≥ 97%	V, A, U	Axe Monitor	ATO-AC-005, 2024-06-18
Compliance Audit Closure Time	≤ 10 days	T, S	ServiceNow GRC	ATO-AC-006, 2024-01-28

Appendix E – References

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14. **GAO Report GAO-21-405** – Federal Agencies’ Implementation of Accessibility Standards. U.S. Government Accountability Office. June 2021. <https://www.gao.gov/products/gao-21-405>
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