## Annual Report on SEC Website Modernization

Pursuant to Section 3(d) of the 21<sup>st</sup> Century Integrated Digital Experience Act.



December 2021

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#### ANNUAL REPORT ON SEC WEBSITE MODERNIZATION

#### Pursuant to Section 3(d) of the 21st Century Integrated Digital Experience Act

## I. INTRODUCTION

The U.S. Securities and Exchange Commission ("SEC") is providing this report regarding existing SEC websites or digital services pursuant to Section 3(d) of the 21<sup>st</sup> Century Integrated Digital Experience Act of 2018 ("Act").

Section 3(a) of the Act provides that an executive agency that creates a website or digital service that is intended for use by the public, or conducts a redesign of an existing legacy website or digital service that is intended for use by the public, shall ensure to the greatest extent practicable that any new or redesigned website, web-based form, web-based application, or digital service:

- 1. is accessible to individuals with disabilities in accordance with section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d);
- 2. has a consistent appearance;
- 3. does not overlap with or duplicate any legacy websites and, if applicable, ensure that legacy websites are regularly reviewed, eliminated, and consolidated;
- 4. contains a search function that allows users to easily search content intended for public use;
- 5. is provided through an industry standard secure connection;
- 6. is designed around user needs with data-driven analysis influencing management and development decisions, using qualitative and quantitative data to determine user goals, needs, and behaviors, and continually test the website, web- based form, web-based application, or digital service to ensure that user needs are addressed;
- 7. provides users of the new or redesigned website, web-based form, web-based application, or digital service with the option for a more customized digital experience that allows users to complete digital transactions in an efficient and accurate manner; and
- 8. is fully functional and usable on common mobile devices.

Under Section 3(c), the head of each executive agency shall ensure, to the greatest extent practicable, that any Intranet established after the date of enactment of this Act conforms to the requirements described in subsection (a).

Section 3(d) provides that the head of each executive agency shall, not later than one year after the date of enactment and every year thereafter for four years, report to the Director of OMB on the progress of the executive agency in implementing the requirements described in Section 3 for the previous year, and include that information in a publicly available report that is required under another provision of law.

Section 3(e) provides that any website of an executive agency that is made available to the public after the date of enactment shall be in compliance with the website standards of the Technology Transformation Services of the General Services Administration.

## II. METHODOLOGY USED

In 2019, the SEC's Office of Information Technology conducted a cross-agency inventory of

external public websites for purposes of compiling this report. For each website, the SEC identified those websites "most viewed or utilized by the public or otherwise important for public engagement" and assessed each website's compliance with the requirements delineated in Section 3.

Our inventory identified 21 SEC-managed external public websites. Eight of those sites represent approximately 99.5% of the website traffic associated with the 21 sites. The top four websites from the perspective of usage – SEC.gov, XBRL.Sec.gov, Investor.gov, and EDGAR Full Text Search site – are already compliant with Section 3(a) of the Act. The remaining four high-usage websites are non-compliant with one or more requirements, and have been identified for modernization as outlined in the next section. Of the low traffic external public websites, six are already compliant with Section 3(a) and the remaining seven are compliant with Section 3(a) in all respects except their usability on mobile devices.

## III. WEBSITE MODERNIZATION

The table below provides additional information on the four websites identified for modernization. In short, the four websites identified for modernization are part of the SEC's EDGAR electronic filing system, and provide a means for public companies, SEC registrants, and other filers to access EDGAR and submit required filings for agency and public review. Table 1 below identifies the websites and digital services that are highest in traffic and/or most important for public engagement.

Website or Digital Services	Background	URL	FY21 Page Views	Final Ranking	Importance to Public Ranking	Usage Ranking
EDGAR Filer Login	The EDGAR Filing website is used to submit or complete a majority of forms via the EDGARLink Online Form Submission.	https://www.edgar filing.sec.gov/Wel come/EDGARLog in.htm	903,226	1	1	1
EDGAR Online Forms Login	The Online Forms Management website is used to complete Ownership forms, Form D, transmit XML tagged submissions, retrieve submission information, or update company information.	https://www.online forms.edgarfiling.s ec.gov/Welcome/E DGAROnlineForm sLogin.htm	208,298	2	2	4
EDGAR Filer Management	The EDGAR Filer Management website is used to apply for EDGAR access, update passphrase if password has expired, or generate a new set of access codes.	https://www.filerm anagement.edgarfil ing.sec.gov/Welco me/EDGARFilerM gmtMain.htm	293,689	3	3	3

#### **Table 1: SEC Domain Information**

Website or Digital Services	Background	URL	FY21 Page Views	Final Ranking	Importance to Public Ranking	Usage Ranking
EDGAR Company Database Search	The EDGAR company database is a subset of the data maintained by the EDGAR system and contains over 500,000 records. Filers may search for and view company information about various EDGAR filing entities.	https://www.edgar company.sec.gov/	139,971	4	4	2

Table 2 below displays a mapping of these EDGAR websites against the criteria in section 3(a) of the Act. This information has been updated for 2021, with the updates shown in bold.

## Table 2: Compliance Overview

Section 3(a) Compliance Criteria (updated for 2020)	EDGAR Filer Login	EDGAR Online Forms Login	EDGAR Filer Management	EDGAR Company Database Search
508 Compliant	No	No	Yes	No
Has a consistent appearance (consistent across SEC external websites)	No	No	No	No
Does not overlap with or duplicate any legacy websites	No	No	No	Yes
Contains a search function that allows users to easily search content intended for public use	Yes	Yes	No	Yes
Is provided through an industry standard secure connection	Yes	Yes	Yes	Yes
Is designed around user needs with data-driven analysis influencing management and development decisions, using qualitative and quantitative data to determine user goals, needs, and behaviors, and continually test the website, web-based form, web-based application, or digital service to ensure that user needs are addressed	No	No	No	No
Provide users with the option for a more customized digital experience that allows users to complete digital transactions in an efficient and accurate manner	No	No	No	No
Is fully functional and usable on common mobile devices	No	No	No	No

In addition to the EDGAR website modernization, the SEC is planning to upgrade EDGAR's legacy content management platform to ensure the external public webpages have a consistent appearance, are accessible to individuals with disabilities, and are fully functional on mobile devices. About one-sixth of all SEC.gov traffic comes from mobile devices and the percentage is increasing every year.

This will enable SEC to be compliant with the Act as well as the General Service Administration's new U.S. Web Design System version 2.0 (USWDS 2.0), while expanding their ability to share data, analyses, and other information with the public, market participants, academics, analysts and others. The SEC will leverage the newer technology and architectural design to increase the viewable space on SEC.gov pages to enhance the dissemination of their materials to the public and other market participants.

#### IV. MODERNIZATION SCHEDULE

As previously reported, the SEC is engaged in a multi-year, multi-phase effort to modernize the EDGAR system, including both internal and public-facing components. Security and modernization enhancements were deployed in June 2020, focusing on technology upgrades internal to the system. Multi-factor authentication and other safeguards for filer access to EDGAR are currently in development and testing. A detailed requirements assessment is planned for FY23 to develop the requirements for modernizing the user experience. This system redesign work is expected to be completed in FY 2024, subject to the availability of funding.

These projects are being undertaken as part of the SEC's strategy for EDGAR modernization and would fulfill other important objectives, including improving the overall security posture for EDGAR. Consistent with agency policy, prior to commencing each upgrade phase, staff finalizes the project details and plans, including an estimated cost for approval at the agency level.

#### V. FISCAL YEAR 22 COMPLIANCE PRIORITIZATION

Below is the SEC's prioritization among the four websites for modernization.

Prioritization	Domain
1	https://www.edgarcompany.sec.gov/
2	https://www.edgarfiling.sec.gov/Welcome/EDGARLogin.html
3	https://www.onlineforms.edgarfiling.sec.gov/Welcome/EDGAROnlineFormsLogin.html
4	https://www.filermanagement.edgarfiling.sec.gov/Welcome/EDGARFilerMgmtMain.html

#### Table 3: FY22 Prioritization List

## VI. FISCAL YEAR 22 IMPLEMENTATION GOALS

The section below explains how SEC will comply with 21st Century IDEA requirements.

#### • Section 3(a)(1) Ensure Accessibility for Individuals with Disabilities:

The SEC is committed to the principle that people with disabilities should have comparable access to information and communication technology. The SEC's plan to support this requirement includes the following for priorities #1 and #4 mentioned in Table 3:

- The SEC will prioritize Section 508 Compliance Testing on the premise that

accessibility is part of each domain requirement and must be addressed up front as part of the system development life cycle (SDLC).

- The SEC will leverage the current Section 508 Governance board that provides agency-wide coordination and oversight to ensure compliance with federal accessibility requirements.
- The SEC will develop a baseline from which to measure improvements and provide a framework to focus on Section 508 efforts over the next few years.
- The SEC will use the Web Content Accessibility Guidelines (WCAG) to ensure compliance.
- The following will be mandated to developers and testers for Section 508 Compliance Testing:
  - Hybrid approach of Automated and Manual Testing approach for Section 508 Compliance Testing
  - Accessibility testing tools, such as Job Access with Speech (JAWS) and Accessibility Name & Description Inspector (ANDI)
  - Browser plugins to test and ensure Section 508 Compliance
  - New Angular UI components developed with Storybook, which will provide an accessibility add-on that will display the accessibility compliance for that component, so Section 508 Compliance issues can be caught and fixed early in development of new features.

#### • Section 3(a)(2) Ensure a Consistent Look and Feel Across Websites

Consistent look and feel across all websites is currently one of the focus areas for the EDGAR front-end redesign initiative. The SEC plans to conduct a requirements assessment on the front-end redesign work in FY23.

#### • Section 3(a)(3) Eliminate Redundancy

Identifying and eliminating content that is redundant, outdated or trivial (ROT) is an important part of regular review. The SEC will continue to assess the Web domains to look for opportunities to consolidate. In FY22, the SEC will work to replace the following two SEC login domains with GSA's login.gov:

- Edgar Filing Website Login:
   https://www.edgarfiling.sec.gov/Welcome/EDGARLogin.html (Priority #2 mentioned in table 3)
- EDGAR On Line Forms Login: https://www.onlineforms.edgarfiling.sec.gov/Welcome/EDGAROnlineFormsLog in.html (Priority #3 mentioned in table 3)

The Commission is receiving and considering comments on instituting multi-factor authentication through login.gov, and then will consider the appropriate timeframe for implementation of a final rule.

In addition to eliminating redundancy by replacing the two login domains, the SEC will obtain the following benefits offered by login.gov:

- Reduced user support issues and troubleshooting
- High availability and uptime
- Secure two-factor authentication (2FA) backed by a FedRAMP Moderate ATO
- Reduced costs through economies of scale across government
- Enhanced fraud detection and monitoring
- Access to a platform that is up to date with current authentication and identity policies, technologies, and standards, without additional effort

#### • Section 3(a)(4) Make Information Searchable and Discoverable:

The SEC understands that search functionalities are important to improving the web visitor experience and for supporting users who primarily rely on search functionalities to find information. To comply with this requirement, SEC is planning to develop a proof of concept in FY22 to modernize the Company Database website (priority #1 in Table 3) and potentially migrate it to cloud. The proof of concept would provide a user friendly interface that allows filers to search, query and view information more efficiently. The SEC will refine the proof of concept with the goal of implementing a solution in FY23.

#### • Section 3(a)(5) Use Secure Connections:

The SEC has taken steps to ensure that all domains mentioned in table 3 above meet the minimum-security requirements defined in the Federal Information Processing Standards (FIPS) Publication 200.

- The SEC's Information Security Program currently oversees and coordinates implantation of policies, procedures, standards and guidance to ensure that SEC's website meet minimum security management requirements
- The SEC plans to measure the compliance with HTTPS requirements in FY22 and remediate where needed

## • Section 3(a)(6) Data Driven Design

The SEC understands that this requirement is designed to address user needs with data-driven analysis influencing management and development decisions using qualitative and quantitative data. The SEC understands that the data collected should be used to determine user goals, needs, and behaviors.

To satisfy this data-driven design requirement, SEC currently uses Google analytics to:

- Collect metrics
- Identify needed refinements
- Identify popular search items

In addition, the SEC currently uses Akamai to collect metrics for filer web applications and is considering expansions for:

- Caching the right data with real-time visibility into SEC cache hit rate and offload rate
- Collecting, visualizing, and alerting on key Akamai metrics such as request traffic, response times from the edge, fetch times, load times, and a breakdown of HTTP status codes
- Detecting proper Content Distribution Network (CDN) mappings, so the SEC can easily identify misconfigurations with end user experience monitoring and application performance monitoring

These metrics will help inform the SEC's efforts to develop requirements for modernizing the user experience, expected to commence in FY23 as described above.

## • Section 3(a)(7) Customization

The SEC understands the need to provide users of the new or redesigned website, web-based form, web-based application, or digital service with the option for a more customized digital experience that allows users to complete digital transactions in an efficient and accurate manner. In order to fulfill this requirement for priority #4 in Table 3, the SEC plans a two-pronged approach. The first approach will be focus on a modernized, streamlined graphical user

interface, consolidating multiple portals into one. The second approach will focus on programmatic interfaces with EDGAR through public deployment of Application Programming Interfaces (APIs). Requirements development for both approaches have begun and expect to be refined collaboratively with the filing community in FY23. The SEC has a goal of implementing this new solution by FY24.

#### • Section 3(a)(8) Provide Access to Government Information on Multiple Devices; Mobile-Ready

The SEC plans to meet 21st Century Integrated Digital Experience Act (IDEA) recommendations for Section 3(a)(8) by following the Mobile Web App Standards and Hybrid App Standards recommendations laid out in United States Web Design System. The SEC will work on standard templates that will provide a responsive design so that web content can be displayed on a variety of devices. The work will start as the SEC conducts a requirements assessment for the EDGAR front-end redesign in FY23.