

KEVIN F. MCCUMBER  
DEPUTY CLERK

LISA P. GRANT  
DEPUTY CLERK

Office of the Clerk  
U.S. House of Representatives  
Washington, DC 20515-6601

April 15, 2022

The Honorable Zoe Lofgren  
Chairperson  
Committee on House Administration  
1309 Longworth House Office Building  
Washington, DC 20515

The Honorable Rodney Davis  
Ranking Member  
Committee on House Administration  
1216 Longworth House Office Building  
Washington, DC 20515

Dear Chairperson Lofgren and Ranking Member Davis,

Pursuant to Section 501 of House Resolution 756 from the 116th Congress, I am submitting this quarterly report on adopting standardized formats for legislative documents.

As I reported previously, legislative branch staff completed initial planning and procurement activities related to the next phase of the “More Documents in USLM” roadmap (included below), entitled “Remaining bill/resolution versions.” The Government Publishing Office (GPO) leads this effort with representatives from GPO, the Office of the Clerk, the Secretary of the Senate, and the Library of Congress, along with the contractor who performs the modeling activities. Since the formal project kickoff on November 8, 2021, Clerk staff have assisted with the creation and prioritization of the remaining bill and resolution versions by measure type and complexity. Since our last quarterly report in January 2022, the project team has met regularly to create USLM data standards for the remaining bill and resolution versions.

*Roadmap for Publishing Legislative Documents in USLM XML Format<sup>1</sup>*

Completed	U.S. Code
Completed	Enrolled bills, public laws, and the Statutes at Large
Completed	HOLC/SOLC statute compilations
IN PROGRESS	Remaining bill/resolution versions (introduced, reported, engrossed, all amendments, et. al.)
C	Committee Reports
D	House portions of the <i>Congressional Record</i> , including the <i>Daily Digest</i>
E	Hearing Records
F	House Calendar
G	<i>Precedents of the U.S. House of Representatives</i>
H	<i>House Journal</i>

One central goal of this stage of the roadmap is to ensure that the modeled USLM XML is conducive to interoperability within the legislative ecosystem and considers the editing and publishing needs of all legislative organizations.

As mentioned in previous reports, there is a cross-organizational set of systems that utilizes the USLM schema. Each project builds upon the tools and successes of previous projects. The XML Working Group, in consultation with the Bulk Data Task Force, continues to analyze and recommend next steps that build on the work that has already been accomplished. As with any data standardization efforts, interoperability is a key goal, and project work must address any potential impacts on documents and systems used within the legislative branch.

Below I have provided brief updates on some of the current projects using the USLM schema.

- **GPO’s XPub Program:** Formerly the Composition System Replacement project, GPO’s XPub Program is replacing its aging and proprietary MicroComp composition system and associated applications and is a major initiative in furthering GPO’s transformation to an all-digital, all-XML workflow. GPO continues to develop a production release to bring bills, resolutions, amendments, public laws, and the Statutes at Large into XPub production in the 117th Congress and work closely with House and Senate users and stakeholders (including the Office of the Clerk and Secretary of the Senate, as well as the Legislative Counsels and Committees in both chambers). Key to this production release is ensuring that XPub is fully

---

<sup>1</sup> For more information about this roadmap, please see page four of the initial report at <https://cha.house.gov/sites/democrats.cha.house.gov/files/documents/Adopting%20Standardized%20Formats%20for%20Legislative%20Documents.pdf>.

and seamlessly integrated with the XML editors the House and Senate use to draft legislation, commonly called XMetaL and LEXA. GPO continues to perform extensive regression and integration testing on the system, in collaboration with key House and Senate staff, with the goal of being ready to deploy to production in 2022. As part of the lead-up to this release, GPO released a proposed responsive HTML format for congressional bills and public laws for public comment. This format will replace the plain text file GPO currently provides. Optimized for any device (including mobile devices, tablets, desktops, and laptops), the format uses modern, easy-to-read fonts for screen usage and search engines. It also contains metadata for re-use by data providers. GPO presented this new format at the March 10, 2022, Bulk Data Task Force meeting, and GPO provided samples of these files available for download via GPO's XPub GitHub repository.<sup>2</sup>

- **Office of Law Revision Counsel's Modernization Projects:** The Office of Law Revision Counsel (OLRC) is engaged in maintenance and enhancement work to improve the Hammurabi system for bill drafting, the ClassAct system for new law classification, and the Coda system for editing the U.S. Code. The OLRC is striving to eliminate performance issues and develop new features to ensure tools used to edit and improve the U.S. Code use the latest version of USLM. Additional details about these projects and our collaborative work are available in Law Revision Counsel Ralph Seep's April 6, 2022, statement before the House Appropriations Subcommittee on the Legislative Branch.<sup>3</sup>
- **Editing in XML:** As described in the initial report, the House and Senate use XML editors with a generation one schema to draft legislation. Legislative branch staff continue to discuss how legislative documents, such as statute compilations, the Statutes at Large, bills, resolutions, and amendments could be edited in USLM XML. The core staff of the XML Working Group meet regularly to discuss these matters, including how to provide better tools for collaboration between legislative drafters and Members and their staff. We expect these discussions will lead to a future project proposal(s). Legislative Counsel Wade Ballou and I shared additional details about tools for collaborative drafting in our March 31, 2022, letter to the Committee on Appropriations, attached to this report.

If you or others on the Committee have questions about the contents of this report, please do not hesitate to contact me.

Sincerely,



Cheryl L. Johnson  
Clerk of the House

Enclosure

---

<sup>2</sup> <https://www.govinfo.gov/features/bdtf-meeting-march-2022>

<sup>3</sup> <https://docs.house.gov/meetings/AP/AP24/20220406/114592/HHRG-117-AP24-Wstate-SeepR-20220406.pdf>



March 31, 2022

The Honorable Rosa DeLauro  
Chairperson  
Committee on Appropriations  
H-307 The Capitol  
Washington, DC 20515

The Honorable Kay Granger  
Ranking Member  
Committee on Appropriations  
1036 Longworth House Office Building  
Washington, DC 20515

Dear Chairperson DeLauro and Ranking Member Granger,

We are writing to you to address concerns that some Members have about the lack of software tools for collaborating with others on proposed legislative text. Untimely access to legislative drafting most commonly occurs during peak drafting periods in which broad legislative matters involve nearly all Committees of jurisdiction and drafting staff, which creates backlogs.

As you may be aware, for decades congressional staff have used drafting tools designed for highly specialized job functions in the House Office of Legislative Counsel (HOLC) and Senate Office of Legislative Counsel (SOLC); Office of the Clerk and Secretary of the Senate; Government Publishing Office; and certain Committees. These drafting tools, including the House's XMetaL and the Senate's LEXA, do not lend themselves to collaboration through traditional redlines, such as tracking changes and joint drafting. The Office of the Clerk and the Secretary of the Senate maintain these editors with assistance from the House and Senate Legislative Counsels, respectively. Additionally, these editors share a common XML data standard, which is covered in detail in reports the Clerk of the House submitted to the Committee on House Administration and provided to your Committee on February 28, 2022.

Currently, drafting collaboration happens through meetings (by phone, in person, and via teleconferences), screen sharing, comments or other markup on the PDF output, emails, and Microsoft Word files. Microsoft Word is not customized to provide drafting efficiencies, nor does it meet all the publishing requirements for congressional bills, resolutions, and amendments.

We recognize that there are a range of Member and staff views. Requests for better legislative drafting tools, editing, and publishing is a natural outcome of adding a digital layer to our centuries' old paper-based law-making process.

We and our staff who work through the Legislative Branch Bulk Data Task Force and the Legislative Branch XML Working Group believe we can develop collaborative tools for legislative branch staff, Members, and others. Our offices are compiling the risks, opportunities, and potential paths forward. Already we know that any new tools Members and staff adopt to create, manage, and publish bills, resolutions, and amendments must—

- complement the existing workflow and ecosystem.
- preserve document integrity both in policy intent and formal document structure. (Together, the current XML format, legislative branch-wide document workflows, and drafting standards adhered to by the HOLC and SOLC preserve the document integrity at a high level.)
- maintain the quality of the legislative language submitted to the Hopper and at other points in the legislative process.
- preserve the quality of the legal impact of the legislative language, which can be analyzed by asking several questions:
  - How well do the enacted words carry out the intended policy?
  - Can the bill draft be interpreted correctly?
  - Can the legislative language be implemented?
  - Can the legal policy intent of the legislative language be applied correctly?
  - Are the only ambiguities those that are intended?
  - Is the document internally consistent?
  - Do the amendments execute technically and fit into current law appropriately?

We will continue to update the Committee as we work on this matter. If you have any questions or would like to discuss this matter in more detail, please do not hesitate to contact us.

Sincerely,



Cheryl L. Johnson  
Clerk of the House



E. Wade Ballou Jr.  
Legislative Counsel

cc: The Honorable Tim Ryan, Chairman, Legislative Branch Appropriations Subcommittee  
The Honorable Jaime Herrera Beutler, Ranking Member, Legislative Branch Appropriations Subcommittee