DSpace 7 Beta Release Program Proposal

October 22, 2019

Executive Summary

The following proposal is to move the DSpace version 7.0 forward through a series of 6 Beta "Managed" Releases culminating in a feature complete, production ready version 7.0. To publish a road map and stay on schedule, the assumption is paid labor will be used for all critical elements. The total cost estimate (with no volunteer or in-kind contributions) is appx. **\$310,000**.

This effort will require approximately **2,950 development hours**, **885 code review**, **QA and testing hours** over the course of **11 to 12 months** through a series of 6 incremental scoped releases of functionality starting in February 2020. This series of staged releases will allow thorough testing and feedback from the community and customers who chose to evaluate the new version features incrementally. It will facilitate customer and community familiarity with the new interfaces and features. It will enable more timely and manageable testing and feedback from the community during the course of development and refinement. It will also allow for time to raise funds in a rational, cohesive manner.

Managed Product Release (MPR) Benefits

The managed product release process will achieve several goals for the community:

- 1. A fully tested and feature complete release of version 7.0.
- 2. A reliable release schedule that can be managed.
- 3. A new communication and project management structure that can be used for future advancement of the platform.
- 4. The MPR will afford community testing and buy-in at each release.
- 5. The MPR will build trust with the community by consistently following a milestone, agile type of process.
- 6. The MPR will lower the risk of delays and potentiality to increase the robustness of critical design elements via 'for-pay' contributions yet still allow for volunteer contributions on components that better lend themselves to those elements.

Assumptions

For planning and evaluation, we make the following assumptions:

- Contract Developer cost (\$75/person hour)
- Code review, QA and Testing is 30% of development time. This work is done concurrently with development in terms of schedule
- Schedule is determined by 35-hour week assuming one developer
- Assume plan start 1 Nov 2019, subsequent beta releases can be developed in parallel to compress schedule as needed.

High Level Plan

\$215,250 of development, **\$64,575** code review, QA and test. LYRASIS has identified certain features for independent sponsorship and fundraising given that they are less defined at this time or have non-contract based commitment e.g. Configurable Entities and Statistical Reporting.

Contribution: QA and Test environments will be needed. This will be provided by LYRASIS. OpenAIRE.eu has committed via MOU 2 FTEs toward development.

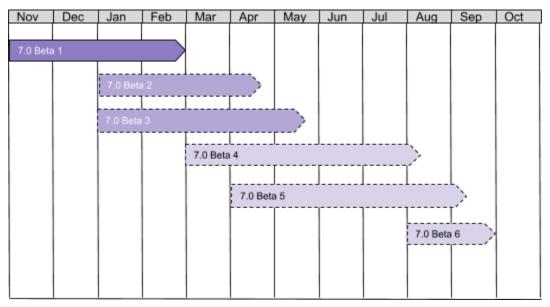
Fundraising: There are at least 5 areas of potential fundraising activity that can be pursued; governance can determine and prioritize any of the ideas proposed below.

- a) Community Sponsorship of certain features. This would include "adopt-a-feature". The understanding would be that the tech roadmap might not follow or align with the funding stream.
- b) Strategic Grant applications. While seductive 'go get a grant', again the timing might not align with when cash is needed.
- c) A concerted outreach to the current members. The challenge here is the timing of when the dollars come in might not align with the proposed schedule.
- d) An end-of-the year campaign where the membership is encouraged to place unused funds from their budgets into a LYRASIS fiscal agent bucket that can be used to pay for services. Again, the risk is timing and actual dollars raised.
- e) Accelerated volunteer code contribution. The risk is the right skills might not be available when needed.

With the beta feature releases, we can not only compress schedule, but focus our fundraising activities around certain components or features. This will help map priorities for new features, namely Configurable Entities and Statistical Reporting. It will also help target relevant interest groups for community-based underwriting and sponsorship.

Communication and Engagement: The managed release plan for version 7 via six beta releases will enable customer expectation management as well as secure the time needed for feature development and fundraising. The ultimate goal is to transition from an unreliable "Big Reveal" release strategy to a more reliable managed beta release schedule that facilitates community engagement, ownership and expectation management.

Schedule



- Beta 1: Browse / Search / Deposit / Auth
- Beta 2: Admin / Config Entities Phase 1
- Beta 3: Batch Processing / Advanced Deposit
- Beta 4: Config Entities Phase 2 / OpenAIRE
- Beta 5: Resource Sync / Statistical Reporting
- Beta 6: Rework and Refinement
- Version 7.0