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CERN – W3C joint development

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Summary

We are proposing to link CERN software development based on web standards to the relevant W3C activities and Working Groups. In this way, CERN will be playing a role in the Web technology/standards world.

2019 is the 65th year of CERN, the 30th year since [Sir Tim Berners-Lee](#) invented the Web, the 25th year since he founded the Web Consortium [W3C](#) and the 10th year since he launched the [Web Foundation](#). These are perfect occasions for establishing an official CERN-W3C technical link for the benefit of the Organisation and the field.

Specifically:

- a. The [CERN Open Data Portal](#) makes available 400 Terabytes of real LHC experiment data for Education (Data Visualisation, Histograms, Master Classes) & Research (Virtual Machines, Analysis program running, discovery, validation) purposes. The project may profit from a collaboration with the [Dataset Exchange](#) W3C Working Group (DXWG), due to its work on the Data Catalogue Vocabulary, cross-service interoperability and application profiles' standardisation.

Information on effort by [Dave Raggett](#)/W3C: One hour teleconference per week and three face to face meetings spread throughout the year. The DXWG uses GitHub for issues and document updates, email and a wiki.

- b. Many CERN-developed applications ([the CERN Document Server](#), [Indico](#), [Invenio](#), [Zenodo](#)) about documents and data require Authentication and Authorisation restrictions and apply Web Access Control (WebAC). The W3C [WebAC](#) work is advanced and actively used in software development with various projects. This W3C experience can give advice to and receive input on use cases from CERN software developers.

Information on effort by [Melvin Carvalho](#)/W3C: Regular interactions, mostly in chat rooms (e.g. gitter) and GitHub (issues), in addition to mailing lists and wikis.

These collaborations will bring the following benefits:

1. Our developers will contribute to the Web standardisation effort.
2. CERN will enjoy technical benefits, via expertise sharing, in these resources-limited times.

¹ This is the replacement of [the 2014 proposal](#). These other candidate collaboration areas, e.g. [The Web of Data](#) still stand and can be considered.

3. Symbolically, the Web's birthplace will be present in its evolution.