CREATIVE COMMONS LICENSES:
OPTIONS FOR CANADIAN OPEN DATA PROVIDERS

Report by:

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I. Executive Summary

Creative Commons licenses, which are widely recognized as a de facto standard for sharing copyrighted works online, have the potential to help address the most prominent issue facing Canadian open data providers and data users: license proliferation. With many Canadian data providers adopting different and non-interoperable licenses, Canadian data users are often unable to combine datasets from different sources. Creative Commons licenses, on the other hand, are standardized for worldwide interoperability. The adoption of a Creative Commons license – or the adoption of a license interoperable with Creative Commons – can give users the ability to mix data with more than 400 million works already licensed under Creative Commons, including government datasets in jurisdictions such as Australia and New Zealand.

Canadian data providers have several options to tap into the interoperability of Creative Commons licenses, all of which provide benefits to data providers and data users:

• **CC0 Public Domain Dedication (or ODC-PDDL)**

  In most cases, a CC0 Public Domain Dedication is the best approach for government data providers. By placing a work as close as possible into the worldwide public domain, this license maximizes flexibility for the users – and thereby maximizes interoperability with other licenses.

  Even with the permissive grant that CC0 provides to the user, the terms still act to protect the core interests of the data provider. CC0 provides the datasets “as-is”, with no warranties or representations of any kind. Further, the data provider retains control over the license subject matter. For example, a government data provider is free to state that personal information does not form part of the CC0 subject matter, such that the CC0 terms do not apply (akin to the approach of the U.K. Open Government License).

  In Canada, the City of Surrey was the first Canadian government to adopt this approach, where it applied the equivalent ODC-PDDL license to its open data portal.

• **Creative Commons Attribution License (CC-BY)**

  The Creative Commons Attribution License is another highly-interoperable choice.
Given this license's popularity online, the terms are widely recognized and understood by users in Canada and around the world. It is also an approved license under the “Definition of Free Cultural Works” and the Open Knowledge Project's “Open Definition” project.

Although the original focus of the Creative Commons Attribution License was not specifically on data, this is not the case today. The Creative Common organization endorses and supports use of CC-BY for data, with governments in Australia and New Zealand fully on-board as government adopters of this license.

- **U.K. Open Government License**

Licenses modeled after the U.K. Open Government License, which the U.K. government intentionally crafted for interoperability with Creative Commons, have recently gained traction in Canada. Both the B.C. provincial government and the City of Toronto adopted licenses very similar licenses.

Although this approach provides an excellent alternative where neither CC0 nor CC-BY is feasible, Canadian data providers should keep in mind the very different legal landscape in Canada with respect to database rights. The reason that the U.K. opted for a custom license rather than CC-BY was because of the *sui generis* database rights that exist in the E.U.; however, no such database rights exist in Canadian law. Canadian data providers may find that CC-BY is more appropriate.

Where Canadian data providers do choose to adopt the U.K. model, they should try to maintain the U.K.’s approach of interoperability with CC-BY and, ideally, even make their licenses more interoperable with a few small changes. Although the U.K. license provides a minimal *intersective interoperability* with Creative Commons licenses, an explicit license term that establishes interoperability with Creative Commons would help increase interoperability and would simplify the user’s task in combining data and license terms.
II. Purpose

The purpose of this report is to discuss the feasibility of Creative Commons licenses as a solution to increase the interoperability of datasets across the different open data portals in Canada. Presently, open data licenses applied to Canadian open data portals are non-standardized and vary greatly from web portal to web portal. The incompatibility between the terms of different licenses often poses a major barrier to data users who need to combine data from multiple sources. Creative Commons licenses, as an international standard for openly sharing works, elicit a potential avenue to help address these interoperability barriers.

The analysis within this report seeks to study feasible routes for data providers to adopt Creative Commons licenses or attain interoperability with them, while still addressing the core needs and risk mitigation strategies of data providers.

III. Methodology

CIPPIC hosted a round-table for data providers at a Creative Commons salon held in Ottawa on March 30, 2012.¹ This conversation provided an initial opportunity to discuss the possibilities for Creative Commons licenses for Canadian data. It allowed the author to obtain an initial overview of some of the key issues and barriers facing open data providers.

Subsequent to the round-table, CIPPIC conducted informal conversations with some of the major providers of open data in Canada: governments bodies. CIPPIC discussed Creative Commons and open data licenses with representatives at all levels of government (municipal, provincial and federal). The feedback from these conversations provided insight on the paramount concerns of government bodies in openly releasing their works online and on the possibilities for the Creative Commons approach.

This report also builds upon prior knowledge and feedback that CIPPIC has received through participating in previous consultations on open data licenses.

IV. Background

A. Open data in Canada

The concept of “open data” refers to data made freely available in a widely accessible manner. To accomplish this goal, open data is generally released online under a permissive license that allows anyone to reproduce, adapt, and redistribute the data. Although the private sector sometimes releases open data, the open data movement most often centres around the practice of government bodies openly releasing public sector information.

The citizen-led initiatives that often promote open data espouse the benefits that open data can increase government transparency by allowing citizens to engage in their own analysis of government activities, it can maximize the efficient use of government resources by allowing citizens to re-use the work of public servants, and it can foster citizen participation through everyone building and benefiting from innovative and interactive software applications that utilize the data.

B. Municipal Open data

The open data movement has consistently and continually spread amongst Canadian municipal governments since 2009. The City of Vancouver was the first government body in Canada to formally endorse the principles of open data, passing a motion in May 2009 to support “Open and Accessible Data – the City of Vancouver will freely share with citizens, businesses and other jurisdictions the greatest amount of data possible while respecting privacy and security concerns”.

In 2009, the City of Nanaimo launched the first Canadian open data portal to allow citizens to readily and freely access government data. The City of Vancouver soon followed, implementing their open data motion with the unveiling of their own open data portal.

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2 See e.g. Dominique La Haye, “La Ville d’Ottawa compte devenir plus transparante” LeDroit (1 March 2010), online: <http://www.lapresse.ca>; MontréalOuvert, “Mission Statement” (accessed May 20120), <http://montrealouvert.net/>.
4 Carlito Pablo, "City of Vancouver could open data for all" Georgia Stright (10 September 2009), <http://www.straight.coml>.
5 City of Vancouver, "Vancouver Launches Open Data Catalogue" (15 September 2009), <http://data.vancouver.ca>.
City of Toronto then followed suit in the same year.

This trend of municipalities gained further momentum in 2010, with the cities of Edmonton, Ottawa and Calgary establishing their own portals to endow citizens with open access to government data.6 Today, well over a dozen municipal governments have embraced open data and are actively publishing municipal data on their websites.

Municipal open data web portals release data such as maps of streets and parks, transit routes, transit schedules, electoral boundaries and city budget information.7 Making use of this data, citizen software developers and small businesses have created a plethora of websites and mobile phone applications to make the data more accessible to the broader public. “Apps” and websites now exist to help determine waste disposal and recycling schedules, to obtain transit schedules, to locate skating rinks, and even to help promote and retrieve information on municipal elections.8

C. Federal Open Data

The Government of Canada launched a pilot open data portal in March 2011.9 Particularly strong in geospatial data, this portal offers more than 272,000 datasets.10 Users have actively started using this service, downloading more than 100,000 datasets since the portal’s launch last year.11

The federal government also recently released “Canada’s Action Plan of Open Government” in which Open Data and the government’s open data portal feature prominently as high priorities. The Government of Canada committed to expand the number of datasets over the next year and then roll out improved data standardization and a “next generation platform”

11 Ibid.
over the subsequent two years.\textsuperscript{12}

D. Provincial Open Data

Open data initiatives within provincial governments have also gained momentum recently. In July 2011, the Government of British Columbia opened Canada's first provincial open data portal.\textsuperscript{13} In addition to offering many datasets, B.C.’s portal also goes further to offer users a wide variety of government-created “Apps and Services”.\textsuperscript{14} These apps offer web interfaces where citizens can browse and search data in different ways that are appropriate to the data being accessed, thereby increasing the accessibility and usability of the data to the general public.

Other provinces are also considering open data portals. In Quebec, a parliamentary task force on Web 2.0 released a report in May 2012 with a first and foremost recommendation to establish an open data portal where citizens can access government data in free and open formats.\textsuperscript{15}

V. Creative Commons Licenses

Although no government data portals in Canada presently use Creative Commons licenses, these licenses are popular for government open data portals in other jurisdictions. The benefits they can provide merit careful consideration.

A. Overview of Creative Commons

Creative Commons is a non-profit organization that maintains and provides a free suite of legal tools to help enable the sharing of content and knowledge. Foremost, a set of standard licenses allows authors to readily apply a “some right reserved” license in replacement of the default “all rights reserved” position of copyright law.

Founded in the U.S. in 2001, Creative Commons has since evolved to span the globe.\textsuperscript{16}

Creative Commons affiliates in more than seventy jurisdictions worldwide work to provide

\textsuperscript{12} Ibid. at 8.
\textsuperscript{13} BC, DataBC Team, “The View from Day Two” (20 July 2012), <http://blog.data.gov.bc.ca>.
\textsuperscript{14} BC, DataBC, “Apps & Services” (accessed May 2012), <http://data.gov.bc.ca>.
\textsuperscript{15} Quebec, Groupe de travail sur le Web 2.0 du député Henri-François Gautrin, “Gouverner ensemble Comment le Web 2.0 améliorera-t-il les services aux citoyens?” (2012) at 71.
\textsuperscript{16} Creative Commons, “History” (accessed May 2012), <http://creativecommons.org/>. 
legal expertise, build communication channels with the public, and promote the organization's mission.\textsuperscript{17}

Creative Commons licenses are particularly popular online, where the “some rights reserved” approach has proved conducive to the rapid sharing that takes place on the internet. These licenses have quickly become a worldwide standard for sharing content, allowing authors to easily release works into the digital commons where users can legally download the works, adapt them, and re-share them. Overall, there are more than 400 million works licensed under Creative Commons.\textsuperscript{18}

The core groups of these Creative Commons license adopters are artists and musicians, authors of open education resources, and, increasingly, government providers of open data.

\textbf{B. Creative Commons in Canada}

Canada was one of the first countries outside of the United States to become involved with Creative Commons licensing. In 2004, CIPPIC and the Law & Technology Program at the University of Ottawa's Faculty of Law, Common Law Section, pioneered the “iCommons Canada Project” and introduced the first localized version of the Creative Commons license suite. This localized “port” was customized to reflect the nuanced differences of Canadian copyright law.

The most recent Canadian port of the Creative Commons license suite aligns to version 2.5. Released in 2006, this version of the license still attracts widespread use within Canada. However, several clarifications and improvements made to the Creative Commons version 3.0 suite are not found in this older version. For this reason, some Canadian authors also use the international “unported” version 3.0 licenses.

In March 2012, CIPPIC, BCcampus and Athabasca University formed a multi-stakeholder coalition to join the Creative Commons Affiliate Network as “Creative Commons Canada”. They now act as the official affiliate of Creative Commons in this jurisdiction. With the recent increase in popularity of Creative Commons licenses for data and a renewed focus on data in the ongoing development of a version 4.0 license, a stated focus of Creative Commons Canada is to explore and promote the ways in which Creative Commons legal tools can assist

\textsuperscript{17} Creative Commons’ “CC Affiliate Network” (accessed May 2012), <http://creativecommons.org/>.
C. Use of Creative Commons Licenses in Open Data Portals

Many governments presently use Creative Commons licenses for data. For example, the Creative Commons Attribution (CC-BY) license is the default and most common license for datasets found on the Australian open data portal and the New Zealand open data portal.\textsuperscript{20} In addition, many individual departments within both of these governments have adopted CC licenses. For example, the Australian Bureau of Statistics and Geoscience Australia release their data under CC-BY licenses.\textsuperscript{21}

However, there are presently no Canadian government data providers actively using Creative Commons licenses. Indeed, the license space for government data providers in Canada is a multiplicity of many different licenses, often developed in-house for each specific data portal – and often incompatible with one another. As this section discusses, the Creative Commons license suite could provide a solution to this problem.

D. Benefits of Creative Commons Licenses

Interoperability

The core benefit of Creative Commons licenses is the provision of a widely-accepted standard that can increase interoperability amongst different datasets. Creative Commons licenses are the \textit{de facto} standard for openly releasing artistic works and educational resources and they are potentially becoming a standard for data. Such a standardization of license terms is of paramount importance for ensuring interoperability between different sources of data, allowing users to combine, remix and re-share different datasets.

The base CC-BY license is interoperable with all the other licenses in the Creative Commons suite. That is, a user can re-license a derivative work that includes a CC-BY work under CC-BY-NC (non-commercial), CC-BY-SA (share-alike), CC-BY-ND (no derivatives), or any of the other CC licenses that combine these terms. Unlike many government open data portal

\textsuperscript{19} Creative Commons Canada, “CC Canada Roadmap” (16 February 2012), <http://wiki.creativecommons.org>.
\textsuperscript{21} Creative Commons, “Government” (accessed May 2012), <http://www.creativecommons.org>.
licenses that primarily cater to the government context of releasing data, Creative Commons licenses can be adopted for – and remain compatible with – works from governments, educational institutions, private sector organizations, and individuals. The licenses can apply to all copyrighted data, not just government data.

Most importantly, the adoption of a CC-BY licenses makes a dataset interoperable with all other datasets in the world that fall under the terms of a CC-BY license. The result is interoperability with an overall repertoire of more than 400 million works worldwide.²² Although a majority of these 400 million works are most likely not datasets, there is also no dearth of CC-licensed data. As previously noted, the Australian and New Zealand open data portals provide most of their data under CC-BY licenses. The U.K. government has also designed its Open Government License to be interoperable with works under CC-BY licenses.²³

Comprehensibility

Given the widespread popularity of Creative Commons licenses, the license terms are already familiar to many people. Creative Commons' easily identifiable symbol-system for the core license terms is immediately recognizable to many users of internet content.

Additionally, for those unfamiliar with the license terms, Creative Commons provides tools to help ensure that anyone can readily understand them, even without having a legal background. A user-friendly “license deed” accompanies each license and sets out the essential terms in plain language.

Widely-Approved License Terms

When data providers set out the terms of a license, the decisions often come down to a choice between a small degree of risk for the licensor versus greater “openness” and flexibility for the licensee. When Creative Commons drafts its licenses, it holds world-wide public consultations and considers inputs from both authors and users, from a diverse array of stakeholder groups. Over the past decade, these consultations and refinements through several license versions have resulted in the mediation of a fair compromise between all of

²² See The Power of Open, supra note 32.
²³ See U.K., National Archives, “Open Government License for Public Sector Information” (accessed May 2012) [UK License], <http://www.nationalarchives.gov.uk>. 10
These interest groups.

This careful license development process has earned the CC-BY license acceptance as conforming to the “Definition of Free Cultural Works” and the Open Knowledge Project’s “Open Definition”. These recognizable approvals help give users confidence that the data they access is truly “open”.

Additionally, the license terms are legally sound across the globe. This is an important feature in the context of online sharing: a dataset published to an online open data portal is not just published to Canada, but rather it is published to the world. Creative Commons licenses are written, reviewed and refined by a team of affiliates from more than 70 jurisdictions worldwide. This team of legal experts ensures that the licenses are valid and interoperable everywhere. Without the expenditure and legal risk inherent in developing a new license, any data provider can simply apply well-developed Creative Commons license.

The terms of Creative Commons licenses also lend a data provider the certainty of having been tested in courts and upheld in several jurisdictions, including Australia, Belgium, the Netherlands, Germany and Spain.

E. Potential and Perceived Drawbacks of Creative Commons Licenses

Scope of the License is Limited to Copyrighted Works

A copyright holder, including a government institution, can apply a Creative Commons license to any copyrighted work. This includes any copyright-protected content that resides in a dataset or database (such as an individual document, photograph or map). It also includes a copyright-protected database itself. Unlike other jurisdictions where a separate license is sometimes necessary to deal with unique (“sui generis”) database rights, Canadian copyright law affords similar protections to “compilations” as it does to other copyrighted works.

However, it is important to note that there are some data to which Creative Commons licenses do not apply. The terms and restrictions within a CC license only apply to works protected by copyright. Therefore, in Canada, the terms will not apply to pure “facts”, nor to

26 Copyright Act, RSC 1985, c C-42, s. 2.
works in which no author invests any non-trivial “skill and judgment”.  

This result is primarily a consequence of the “originality” requirement in copyright law. Like most other jurisdictions, the Canadian government has made a public policy choice to not afford copyright protection to facts, thus keeping them in the public domain. This policy reflects the fact that everyone benefits from the broad dissemination and re-use of facts and scientific data. Even a “some rights reserved” approach of Creative Commons licenses could prove too restrictive and would not be an appropriate limitation on public domain facts. 

On the basis of this policy choice, this limitation of Creative Commons licenses should not be seen as highly problematic. This limitation is identical to that found in many other licenses. For example, the terms of the Government of Canada's open data license at data.gc.ca similarly only apply to “Data”, which the license defines as “data, metadata and related documentation expressed in a form that gives rise to Intellectual Property Rights” [emphasis added]. The U.K. Open Government License likewise only applies to “Information”, which the license defines to mean “information protected by copyright or by database right”. 

In some other Canadian open data portals, the terms of use do attempt to stretch wider than the scope of copyright law alone. However, in these cases, the additional scope beyond copyright relies on contract law and, in this case, the terms also become more difficult to enforce. Unlike the property-like scope of copyright law, these contractual obligations only apply to the users which agree to them. The principle of privity of contract establishes that contractual obligations only extend to the parties of the contract. Therefore, while the terms of use at these data portals may apply to the original website visitors, they will not necessarily apply to anyone else to whom the data is redistributed. 

Thus, Creative Commons licenses, like many other licenses, attempt to strike a fair and easier-to-enforce balance of applying only to the breadth of copyrighted material within open

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28 Copyright Act, s. 5(1) (“in every original literary, dramatic, musical and artistic work”).
30 UK License, supra note 27. Also note that the “database right” refers to the U.K.'s sui generis protection for databases, which does not exist in Canadian law.
31 See e.g. City of Vancouver, “Open Data Catalogue Beta v2: Terms of Use” (accessed May 2012), <http://data.vancouver.ca> (the terms broadly apply to “datasets” and to anyone “accessing the datasets”).
32 To establish a claim in spite of privity, a data provider would need to rely on a principle such as tortious interference with contract; however, no Canadian court has yet recognized such a claim in a website terms of use context.
data portals, leaving facts and unoriginal works to the public domain (where users have a high degree of freedom with these building blocks of knowledge). This balance does leave pure facts and unoriginal works outside of the purview of the license scope.

**Perception as a Non-Data License**

Several data providers with which CIPPIC consulted noted that they dismissed Creative Commons licenses relatively early on in their license selection processes, based on a perception that they are not “data licenses”. However, aside from the often-mirrored limitation that the licenses only apply to copyrighted works, this issue is a problem of perception alone: Creative Commons licenses are amenable to data and commonly used for dataset licensing.

This perception likely arises from several difficulties in the way Creative Commons licenses have dealt with the *sui generis* database rights (SGDRs) that exist in the European Union. Creative Commons licenses were originally designed only to address copyright, not other rights such as SGDRs. Although the most recent version 3.0 license suite waives SGDRs in the ported license for the European Union, it still does not positively license SGDRs on par with copyright.

In fact, this lack of SGDR licensing is the core reason that the U.K. developed its own Open Government License rather than simply adopting a Creative Commons license:

> The UK was able to draw on the work of public sector colleagues in Australia and New Zealand. Both countries have launched policies designed to open up government and make PSI [Public Sector Information] more readily available for re-use. They did this through the adoption of Creative Commons model licenses. The UK, however, decided to develop a new license -- the Open Government Licence. The main reason for this was that none of the existing Creative Commons licences extended to the licensing of works protected by the database right.\(^{33}\)

Creative Commons is looking to further address the European-context concerns in the next version of the license suite, which is presently under development. In the initial draft, the proposal is to directly license any existing SGDRs in the same manner as copyright.

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However, in Canada, this issue is moot. Our legal context in this respect is much more akin to the legal context of Australia and New Zealand: there are no SGDRs. Any Canadian government body can readily apply a Creative Commons license to data in the same manner that the Australian and New Zealand governments presently do so, without the need to license, waive or otherwise address SGDRs.

Some of the misconceptions of Creative Commons as a non-data license may also arise from an out-of-date FAQ published by the Open Data Commons which states that Creative Commons does not itself support Creative Commons licenses for data. On the contrary, it appears that Creative Commons has now worked with data providers for quite some time and actively endorses and supports the use of CC licenses for data.

**Perceived Loss of Control over Data**

In conversations, data providers indicated a paramount concern of losing control over the license and of their data. Governments are rightly concerned about any such loss of control: government organizations hold enormous amounts of sensitive personal information on their citizens.

To address and alleviate such concerns, Creative Commons licenses are crafted to allow the licensor to retain a high degree of control over the subject matter of the license. A licensor is free to specify the content which the license does or does not cover.

In this manner, any data provider can protect sensitive personal information using the exact same approach as the U.K. Open Government License, the B.C. Open Government License and the City of Toronto Open Data License. A data provider can simply not license this information. For example, in conjunction with a Creative Commons license, a government may wish to use a stipulation such as the following:

34 See Open Data Commons, “Licenses FAQ” (accessed May 2012), <http://opendatacommons.org> (“Why Not Use a Creative Commons (or Free/Open Source Software License) for Data(bases)?”).
35 See e.g. Sarah Hinchcliff Pearson, “CC Releases New Data FAQs” (11 January 2012), <http://creativecommons.org>.
All data – including their contents, metadata, and overlying dataset structures – are licensed under a Creative Commons Attribution 3.0 License, except for:

- personal information in the data;
- third-party rights the licensor is not authorized to license; and
- data subject to other intellectual property rights, including patents, trade-marks and official marks, and design rights.

Of course, the best place for control of personal information is at the point where the government releases data. It hardly requires stating that governments should never release data containing personal information on an open data portal, nor under an open license. However, if and when a government inadvertently releases such data, a constriction of the scope of a Creative Commons license could help prevent further dissemination.

As for control of the license itself, it is worth noting that the licensor remains in full control of whether to upgrade to any future versions of a Creative Commons license. There are no automatic upgrade or automatic compatibility provisions in CC-BY licenses. Moving to a new version requires explicit re-licensing under any new license terms. Thus, in licensing under Creative Commons, the licensor always knows the exact terms under which a work is placed and these terms do not change.

The licensor also “reserves the right to release the Work under different license terms or to stop distributing the Work at any time”, giving the licensor the freedom to always move to a different license (though the Creative Commons license will persist for past distributions).

VI. Use of the CC0 Public Domain Dedication in Open Data Portals

The Creative Commons CC0 Public Domain Dedication aims to place a work as close as possible into the worldwide public domain. Although there is no case law in Canada addressing the legal issue of whether an author can assign copyright at large to the “public domain”, rather than to a specific person, CC0 addresses this legal gray area through a three-tier approach.

37 See e.g. Creative Commons, “Creative Commons Attribution 3.0 Unported” (accessed May 2012), <http://creativecommons.org> [CC-BY] (contains no automatic upgrade clauses).

38 Ibid.
First, CC0 establishes a full waiver of copyright and related rights. This is most likely effective under Canadian law, but may not be fully enforceable in other jurisdictions, such as where a licensor cannot waive moral rights. Second, where such a waiver is ineffective, CC0 falls back to a fully permissive copyright license. Third, CC0 additionally falls back to a non-assertion of rights.

For scientific data, the Creative Commons organization recommends the CC0 Public Domain Dedication in preference to the ordinary Creative Commons licenses. Creative Commons also notes that there are important reasons for governments to consider CC0, such as increased government transparency and removing all uncertainty for potential users of the data.

The CC0 Public Domain Dedication is similar to the Open Data Commons Public Domain Dedication and License (ODC-PDDL). A government provider can use either the PDDL or CC0 to substantially the same effect. While some government internationally, such as Norway, have adopted the CC0 waiver, the PDDL was the first first public domain dedication to gain traction in Canadian open data portals: the City of Surrey currently applies the ODC-PDDL to its open data.

In Canada, the CC0 license has also found uptake within some non-government data providers. For example, Canadensys, a project and website operated by the Université de Montréal Biodiversity Centre, publishes their biological specimen data under CC0.

A. Benefits of the CC0 Waiver

Many of the same benefits which apply to Creative Commons licenses also apply to the CC0 Public Domain Dedication. In addition, by even further removing copyright restrictions in a work, CC0 maximizes flexibility for the data user. Most importantly, this also maximizes interoperability: a work under a CC0 waiver is interoperable with nearly any other work – even works under much more restrictive license terms.

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39 Creative Commons, “CC0 1.0 Universal” (accessed May 2012), <http://creativecommons.org> [CC0 Waiver].
40 Ibid.
41 Mike Linksvayer, “CC and data[bases]: huge in 2011, what you can do” (1 February 2012), <http://creativecommons.org>.
42 Creative Commons, “Data” (23 April 2012), <http://creativecommons.org>.
CC0 also greatly reduces the necessity of a user to conduct a detailed study of license terms, or obtain legal advice, on how to provide attribution, modify a dataset, or combine a dataset with other works. Under CC0, no attribution is required and a user can confidently engage in almost any ordinary use or re-use of a dataset under the wide set of permissions granted.

B. Potential and Perceived Drawbacks of the CC0 Waiver

A concern that data providers expressed to CIPPIC with respect to CC0 was, again, a perceived loss of control over the data. As previously discussed with respect to ordinary CC licenses, this concern has merit. Unlike CC-BY and other licenses, the CC0 does not even have a termination clause that could come into effect upon breach of the license terms (and there exist few terms that could even be breached).

Still, risk-adverse lenses of government legal teams may tend to over-state this risk. There is only a small degree of risk for legal liability and the government can continue to protect personal information in the same manner as other commonly-applied licenses.

Risk of Liability

Neither the Norwegian government, nor the City of Surrey, has yet faced any legal action in respect of their data released under CC0 or PDDL. As well, even with the wide breadth of public domain data released in the U.S. – where there is no crown copyright and all government-produced data is in the public domain – the authors could find no evidence of any lawsuits stemming from open data.

The CC0 is also not without a disclaimer. The terms specifically identify that the author provides the work “as-is” and without any representations or warranties of any kind. This language helps to curtail any possible claim based on a statutory or implied warranty.

Government marks

Some open data licenses presently in use in Canada aim to protect government marks with an explicit ban on using government marks. For example, the Government of Canada’s open

45 Ante at 14.
46 CC0 Waiver, supra note 12.
47 Ibid.
Although the CC0 provides no such restriction, it achieves much the same effect by only applying to copyright and associated rights, with a term in the CC0 even explicitly clarifying that no “trademark or patent rights” are affected. That is, CC0 does not waive or license any trade-mark rights. Government marks will remain strongly protected under the “official marks” provisions of s. 9(1) of the Trade-marks Act.  

**Personal Information**

As with the regular Creative Commons licenses, CC0 leaves the licensor with full control over the subject matter of its terms. A data provider can even apply a restriction similar to the one previously discussed for CC-BY in order to keep personal information and other non-releasable material outside of the CC0’s scope:

All data – including their contents, metadata, and overlying dataset structures – are released under the CC0 1.0 Universal Public Domain Dedication, except for:
- personal information in the data;
- third-party rights the releasor is not authorized to waive or license; and
- data subject to other intellectual property rights, including patents, trade-marks and official marks, and design rights.

Additionally, CC0 does not waive privacy rights. Both statutory and common-law privacy protections continue to apply to datasets released under CC0.

**VII. Interoperability with Creative Commons Licenses**

Dataset users often require the ability to combine datasets from different cities, provinces and/or countries. Unfortunately, the lack of interoperability between dataset licenses in Canada means that users are often unable to do so, as many of the presently-used open data licenses do not permit such mixing. In fact, the popular “share-alike” clause that currently subsists in many municipal licenses makes these datasets entirely non-interoperable with almost any other license – including with other municipalities that use even a slight variation

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49 Government of Canada License, supra note 29.
50 Trade-marks Act, RSC 1985, c T-13, s. 9(1).
of the original license terms.\textsuperscript{51}

With each new open data portal that uses a custom, in-house license for its data, the problem of “license proliferation” only increases. Not only are many different data licenses non-interoperable with one another, but it can become very difficult for dataset users to understand their obligations and risks under all of these different license regimes.

As previously discussed, one way to address interoperability problems is for data providers to apply the CC0 waiver or a standard Creative Commons license. Works under these licenses are interoperable with each other because they come under the exact same license terms. As well, in addition to achieving the previous-discussed benefits, applying an already widespread CC license mitigates license proliferation.

However, where a Creative Commons license will simply not work for a data provider, there are other options to still achieve interoperability with CC-licensed works:

- Adoption of a license with terms carefully crafted to attain interoperability with CC licenses (the U.K. approach); or
- Adoption of a license with an explicit interoperability provision.

With more than 400 million works licensed under Creative Commons, a dataset's interoperability with Creative Commons under one of these methods would open up a wide expanse of works with which a user could mix and remix a dataset.\textsuperscript{52}

A. Definition of Interoperability

Before proceeding to discuss options for increasing interoperability, it will be useful to briefly set out several definitions on the types of license interoperability.

For the purposes of this report, we define the type of compatibility between licenses as follows:

- **Incompatible:** A new work that includes material under License A and License B cannot be redistributed under any license, due to conflicting obligations for redistribution.

\textsuperscript{51} See David Fewer & Kent Mewhort, "Analysis of Share-alike Obligations in Municipal Open Data Licenses" (12 October 2011), <http://www.cippic.ca> (CIPPIC’s analysis on the interoperability problems associated with share-alike).

\textsuperscript{52} The Power of Open, supra note at 18.
• **Intersective compatibility:** A new work that includes material under License A and License B can be redistributed only under the combined terms of License A and License B. Downstream users only receive the rights that intersect between the two licenses and they are bound by the union of the obligations under the two licenses.

• **One-way compatibility:** A new work that includes material under License A and License B can be redistributed under License A, but not License B.

• **Two-way compatibility:** A new work that includes material under License A and License B can be redistributed under License A or License B (or can be dual-licensed under each).

Interoperability involves several other nuances, such as differences in the scope of interoperability. This depends on factors such as whether a new work is a derivative work or merely a compilation; however, a more detailed examination of these issues is outside of the scope of this report.53

**B. Making License Terms Interoperable with Creative Commons**

The U.K. carefully ensured that the terms of its U.K. Open Government License did not conflict with CC-BY and, as non share-alike licenses, both the CC-BY and U.K. Government License allow a “piling on” of license obligations.54

The U.K. Open Government License and the CC-BY therefore attain intersective compatibility. When users create compilations or derivative works that include both datasets under the U.K. Open Government License and datasets under CC-BY, they can redistribute under the combined terms of both licenses.

In the author’s opinion, the U.K. license does not achieve the higher interoperability with CC-BY of either either one-way compatibility or two-way compatibility – and it is unclear whether the drafters aimed for either of these higher degrees of interoperability. Slight differences in the wording and scope of obligations result in the license obligations not entirely overlapping. For example, the U.K. Open Government License includes an obligation to “ensure that you do not mislead others or misrepresent the Information or its source”; however, there is no

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53 CIPPIC has plans to further study interoperability issues in a future report.

54 *UK Approach, supra* note 17 at 1.
directly parallel provision in CC-BY.\textsuperscript{55} On the other hand, the CC-BY license requires attribution of the title of a work where supplied, but no such obligation exists under the U.K. Open Government License.\textsuperscript{56}

However, the close alignment of the majority of the license terms does make it easier for users to comply with both sets of obligations. For example, a core requirement of both licenses is a flexible attribution obligation. The CC-BY license requires users to attribute the party or parties which the licensor designates for attribution and “to the extent reasonably practicable, the URI\textsuperscript{57}, if any, that Licensor specifies to be associated with the Work”.\textsuperscript{58} The U.K. license similarly requires users to “acknowledge the source of the Information by including any attribution statement specified by the Information Provider(s) and, where possible, provide a link to this licence”.\textsuperscript{59} Therefore, users can list both attributions in a similar manner.

In order to give downstream users notice of their actual obligations, the author of a work derived from works under both licenses needs to provide notice of all of the combined obligations. A simple notice to this effect is likely sufficient – for example, if re-distributing the derivative portion of the work under CC-BY:

\begin{quote}
This work is licensed under the Creative Commons Attribution 3.0 License. This work contains, or is derived from, work licensed under the U.K. Open Government Licence v1.0, the terms of which continue to apply.
\end{quote}

Interestingly, other provisions of the U.K. license carefully avoid piling on too many obligations that could conflict with the terms of other open licenses and thereby reduce the license’s general interoperability. Foremost, rather than create obligations such as forbidding the use of personal information, the license simply pulls this material outside of the license scope with a statement that the license “does not cover the use of personal information (amongst other categories of information). This way, if the government inadvertently releases personal information, it can still try to claw it back through an assertion of copyright; at the same time, no further restriction is introduced into the license itself.

\textsuperscript{55} UK License, supra note 23.
\textsuperscript{56} CC-BY, supra note 37.
\textsuperscript{57} A Uniform Resource Identifier (URI) is an identifier pointing to a resource – most often, this is a web address such as “http://www.cippic.ca”.
\textsuperscript{58} Ibid.
\textsuperscript{59} UK License, supra note 23.
As a final step to increase interoperability, the post-amble to the license states:

These terms have been aligned to be interoperable with any Creative Commons Attribution Licence, which covers copyright, and Open Data Commons Attribution License, which covers database rights and applicable copyrights.

This statement beneficially provides courts guidance in interpreting the provisions in a way that does not conflict with CC-BY.

This U.K. approach of ensuring that license terms do not conflict with CC-BY, aligning the core terms to the obligations in CC-BY, limiting the overall number of obligations in the license, and including an interpretive aid in the post-amble, all help this license achieve interoperability with CC-BY.

C. Designating a License as Interoperable with Creative Commons

Although the above U.K. approach for interoperability is commendable and a vast improvement over no interoperability at all, the intersective compatibility achieved still imposes a major burden on users. Anyone redistributing a derivative work that incorporates the two licenses needs to familiarize themselves with both licenses and abide by the legal obligations of both. Given that understanding and abiding by the terms of even a single license can require expensive legal advice, this piling on of terms with each additional license is no small hurdle. With each user further downstream who wishes to use a derivative work along with additional datasets, license terms continue to pile on and the complexity continues to increase.

It is possible to create a wider one-way or even two-way interoperability through a similar approach of carefully constructing and aligning license terms. If the more restrictive of two licenses entirely encompasses the obligations of the other license, one-way compatibility is achieved. If the terms entirely overlap, two-way compatibility is achieved.

However, attaining compatibility in this fashion is very difficult in practice. Different wording of obligations almost always creates slight differences in the scope of rights and obligations. Generally, this approach only works if the same drafter writes the terms of the two different licenses. For example, CC-BY is one-way interoperable with CC-BY-SA (Creative Commons Attribution ShareAlike) because the CC-BY-SA license includes all of the exact same terms.
that are found in CC-BY.

Therefore, where a licensor desires a higher degree of interoperability with another license, the best way to achieve this goal is to explicitly allow users to redistribute derivative works and compilations under the terms of the other license. Several popular open source software licenses adopt this approach of designating other compatible licenses. For example, the Mozilla Public License Version 2.0 (MPL2.0) allows users to distribute compilations under an enumerated list of “Secondary Licenses” (which it defines to include GPLv2, GPLv3 and others):

If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

If a data provider adopted the model of the U.K. Open Government License, but added a clause such as the above, this could increase the license's interoperability with CC-BY from intersective compatibility to one-way compatibility. For example, the clause could set out:

If a derivative work or compilation includes information under this license and one or more works under a Creative Commons Attribution 3.0 (or later) license, You may distribute such derivative work or compilation under the terms of the Creative Commons Attribution 3.0 license alone.

In this case, users that receive the data directly from the data portal, or receive an unmodified copy of the data, would need to follow the exact customized terms of the U.K. Open Government License. However, where a user creates a new work from the data or creates a compilation that includes the data, that user could then redistribute the work under the slightly-different terms of CC-BY alone.

**VIII. Conclusion**

A CC0 (or ODC-PDDL) license provides the most benefits to users through granting them the highest degree of freedom to use and adapt data from an open data portal.

Moreover, CC0 is at least one-way compatible with nearly all other licenses. Although CC0 may be slightly less protective to the licensor as some other licenses, it still imparts only a low degree of risk. Licensors can still protect the personal information of citizens by removing such data from the scope of the license with a specific statement to this effect.

Where the CC0 approach remains infeasible for a data provider, CC-BY licenses provide a widely-accepted alternative that still gives users a high degree of flexibility. Endorsed by Creative Commons as an ideal license for data, CC-BY is recognizable and understandable to users, widely interoperable, and carefully drafted for legal soundness.

In other cases where an in-house license is absolutely necessary, a data providers can still attain many of the benefits of Creative Commons licenses by making the license interoperable with CC-licensed works. This is the approach that data providers adopted for the U.K. Open Government License, the B.C. Open Government License and the City of Toronto Open Data License.

Although this last approach achieves minimal intersective compatibility with CC-licensed works, a minor improvement to the license terms could achieve a higher degree of interoperability that would avoid the need for users to navigate the complexities of piled-on obligations from two different licenses. A specific clause designating compatibility with CC-BY would beneficially allow users to redistribute a derivative work or compilation with under the terms of CC-BY alone, thereby reducing the complexities for downstream users.