

Helmut Hissen – Detailed Submission on Draft Plan

To Whom It May Concern:

Re: Canada Open Government Action Plan, 2016 - ?

From the perspective of somebody who

- a) has spent several decades building software, software interfaces, data visualizations, network based services in private industry, research, and government;
- b) has an ongoing involvement with the information technological developments reshaping our world as well as a pretty good idea of what is around the corner;
- c) has three children, aged 14, 9, and 7, who, with their cohorts, are going in inherit whatever we are creating here;
- d) has an interest in making our democratic society more functional, effective, fair, and transparent at all levels;

... I have this to say with respect to Canada's Open Data/Information/Government effort:

Please choose your priorities wisely and keep it simple.

- 1) Focus on your unique ability and responsibility to set national standards while being agile enough to evolve with the information industry.
- 2) Back these standards by creating an open source eco system of boiler plate API libraries and a modest set of use examples and reference implementations, with your primary role being facilitation and certification of interoperability (especially with your own services and/or data sets), favouring vendor-independent open source options wherever possible.
- 3) Implement your own internal and external higher level government services on top of 'open' public facing lower level data/service access APIs whenever possible
- 4) In terms of national infrastructure, focus on your unique ability and authority to only implement services which cannot be reasonably implemented by the private sector. Important categories to consider here are:
 - a) information subscription services which require use or knowledge of confidential information you already have,
 - b) the authentication of senders and/or subscribers;
 - c) the certification of content according to the standards you maintain;
 - d) digital signature or data escrow services using the sovereign nation as the ultimate secure and trusted network entity (think: block chaining);
 - e) national trusted cloud based services necessary to allow long overdue retooling of paper based work flows within and peripheral to government

5) Beyond the standard and national information infrastructure level, focus your efforts on encouraging, promoting, and publishing sensor-to-citizen type success stories (using an environmental science example) or amazingly-improved-government-responsiveness stories to raise awareness and to encourage others to put your data sources or services to new creative uses.

6) Consider in what circumstances your citizens' ability to access open data sources would be better served by promoting digital literacy through improved relevant education rather than focussing on the data supply for a world wide anonymous audience.

If you find yourself needing to decide what types of information to make available first, consider giving priority to

1) any factual or scientific information in your domain that

a) forms the basis for a necessary informed public dialog on a list of important TBD issues (examples: global warming, costs of medical service);

b) has ongoing and demonstrated practical uses for Canadians (weather, amber alerts);

c) is generally considered controversial and sometimes assumed to be filtered (example: real time radioactivity measurements);

d) publication of which is generally known to make elected officials or senior government employees uncomfortable;

e) tracks illegal activity or activity that is not in the public's best interest (this may require legislative easing of privacy restrictions where necessary);

2) any information that relates in any way to "where the money goes" or "where the money comes from", with emphasis on completeness, standards, and continued consistency and transparency across organizational boundaries, tying funding flow to certifiably clear and accurate accountability data if necessary.

The Auditor General would always be a good source of guidance in deciding what information (sourcing, distribution, and standards) to prioritize.

I would also like to add a word of caution. While the idea of open data/information is immensely powerful and promising, please consider that information (data, code, and its relating technologies) are completely value-neutral, and that we share this new well connected world with players who do not necessarily have the Canadian public's best long term interests at heart:

- Would you be able to shut down or disable some of all open data sources or government APIs if necessary without shutting down the country?

- How would you know (and convincingly demonstrate to your citizens) the continued integrity of data and/or related services?

- What measures could be put in place to protect the selection, availability, and integrity of such services and information from political interference when factual or scientific data conflict with political ambition or convenience (think: decision based evidence making)?
- What measure would be put in places to assure your citizens that use of these public resources poses no risk to their own liberty and freedom to express their dissent or to seek out information and use information in a way that could be seen to challenge their government (think: profiling based on open data access)?

In summary, your near term goal should be the establishment of a secure and effective infrastructure, a sort of Canada API, for a genuinely useful, practical, digitally enhanced communication channel between informed citizens and their responsive government, by, first

- building public awareness that such a channel exists (using the most useful and appealing usage scenarios you can find and implement reliably and in short order), then
- fostering the expectation of its continued availability and growth (think Canada apps), and finally
- start working towards formalizing the availability of access to such data and services by all citizens as a basic right.

In the long term, you would then ideally settle into a maintenance mode of adjusting what roles you play as a data and service provider, and what data sources and/or services you offer, in the most secure and cost effective way possible, as long as it does not displace equally capable private sector alternatives, and only as far as it materially supports your primary goal: to be responsive to the needs of the citizens, and to enhance your citizens's ability to access meaningful information that was gathered on their behalf and paid for with their tax contributions.

Thank you for giving me the opportunity to provide input on these matters. I am delighted to see our own government make such a deliberate and thoughtful effort to use information technology in all its new powerful forms to serve its citizens.

regards

Helmut Hissen

ps: "... Meanwhile the poor Babel fish, by effectively removing all barriers to communication between different cultures and races, has caused more and bloodier wars than anything else in the history of creation." --Douglas Adams, HHGTTG