

From: D. Lindsay

There is clearly uncertain and often contradictory terminology used throughout the "Call for Comments" which becomes salient in this comment and in response to many of the questions asked. Some of the words are notable throughout this comment and are listed here for consideration without further definition beyond their ordinary meaning(s). Some words also require further definition or clarification of meaning within the context of this comment as will become clear in the reading of the entire comment and answers to the questions asked. It is hoped that this comment will be considered both valuable and helpful:

For example: safe; efficient; indigenous; platform; quality; secure; inclusive; minority; culture; local; adequate; accommodate; bridge; garner; broadcast; value; traded; generate; global; international; understand...

Also notable is the absence or diminution of terminology that is considered both valuable and helpful to note as included within this comment:

For example: protocol; unencumbered; individual; excellence; public; efficiency; truly; adequate; benefit; privacy; anonymity; pseudonymous; leadership; syndication; reconciliation; choice, service, analogue...

It should be enough to say that as a Canadian Citizen I am limited by that designation in the context of this comment. As a real or potential global partner, cultural minority, indigenous person, creator, producer; distributor, broadcaster, member of the public, community member, stakeholder; invisible minority; etc. the context of this comment takes on further significance.

Consider profanity. This is a public comment so its use is not appropriate if there were potential for its uncensored broadcast (or publication, as it were). But if one considers the cultural factors of the members of the Broadcasting and Telecommunications Legislative Review Panel for syndication, then humour may be a reasonable mode of communication even though humour has been outed recently on the public airwaves: Informally, consider what a colleague considering disability law might refer to a peer discussing a client with a diagnosis that colloquially each understands through mildly profane cultural terminology to be an "A\*\*h\*le!" There then may be a common understanding of the diagnosis without its specific mention. The humour in that is, perhaps, that the same term is used to describe the specified audience, both in jest and also in popular culture's general distaste for a chosen profession. By circular definition and common terminology, they (the inclusive pronoun) must contain some element of this condition and may be limited to some degree by its potentially disabling or discriminatory aspects. This comment considers the unique ability of each individual preparing recommendations based on this comment to be at the A-Star level in a foreign produced B-Movie watched by a global audience of, let's say, people like Hank and his acquaintances, their friends, and a few other minorities enjoying one of their official language odd-casts.

This Consultation Process is extremely important. I say that from a personal perspective rather than just another uninformed consumer caught up in an important yet alarmist issue about nothing. The reasons why this comment is an important individual expression should become obvious when considering the circumstances leading up to its formal publication. Those circumstances are generally salient to all aspects of this Call for Comments and are unlikely unique to myself, although some may in fact be.

Broadcasting in reasonable terms has one salient feature that is not likely obvious to most people considering this comment. That salient feature should be given due consideration in any recommendation that comes out of this process. The salient feature is that the broadcaster is generally only aware of the audience in a broad geographic or demographic sense as compared to awareness of the audience at the individual level. I want to emphasize the importance of this fact, as I understand it, for any legislative consideration. A related salient feature of broadcast is that the audience generally knows who the broadcaster is. This is an asymmetrical relationship where the responsibility of the regulated broadcaster is clear. My understanding is based on the medium of over the air public broadcast that is at the root of the Broadcast Act in my layperson view. The advent of Satellite and Cable have muddied this distinction to an extent in that subscription is a requirement, and further that choice of programming is communicated by the subscriber. What has never been obvious to a broadcast audience is that their viewing habits are monitored without their prior informed consent. It is my strong belief that in general terms, "broadcast" needs to protect, enhance, and in fact strengthen this asymetric relationship when considering legislative changes required to keep "broadcast" relevant when using the internet as a medium - which it should!

It is my observation that people do not generally understand that their choice to view a broadcast involves a trade of information as part of the process. In order to maintain relevance, a clear mechanism needs to be made available to both viewers and broadcasters that protects the general anonymity of the viewer while also identifying the broadcaster to the viewer/listener. The subscription model violates the reasonable expectation of privacy that, in my opinion, should be a clear mandate of those responsible for the regulation of broadcast using the internet as a medium. For example, if a broadcast is designated as "global" any Canadian, regardless of location should be able to enjoy that quality broadcast in privacy, subject only to local laws; if a broadcast is designated as "National" then there is only one of two potential pieces of information that require a mechanism of regulatory consideration for the carrier/distributor of the broadcast: either "Viewer in Canada or equivalent" otherwise "Viewer is Canadian or equivalent" At this point, none of the "platforms" provide mechanisms to facilitate this traditional norm which may be used as a baseline for future broadcast functionality. In fact, there are not really any "broadcast" platforms

available on the internet at his point for the simple reason that there is so much content available that it is difficult to consider the traditional form as relevant; perhaps it should be given consideration since this is an arguably important part of the CRTC mandate.

Another salient feature of broadcast is that it is time-based as in eight o'clock, eight-thirty in Newfoundland; this, arguably, is a culturally relevant societal aspect of broadcast that is worth preserving. It is difficult to say whether this feature is as important as it was relevant at one point in time. At this point, we have "emergency broadcasts" which are an attempt to replace the fact that few people are tuned in to a local radio or television station anymore. If you want to talk about "Canadian Culture" in terms of having the TV running in the background and everyone watching the same "American" sitcom following the news to shape coffee-time discussion at work the next day, there is a reason people are shifting away from broadcast. For one, it lacks the cultural meaning it once held. That said, as a medium, it is less obtrusive than "platforms" requiring interactivity to "keep viewing/listening" and what is really at the heart of the lack of a viable modern alternative is the result of bad infrastructure regulation. If that sounds like a leap, read on.

I mean no disrespect to any of the privileged and industrious parties that have been involved with building, maintaining, regulating, or making accessible the infrastructure that is used predominately for IP communications, but I do take exception to the way things have turned out as outlined in this comment. In my opinion, there was a lack of foresight by regulators, and a lack of relevant regulation for ensuring the primary mandate of the CRTC during the transition from traditional communications and broadcast services to the possibilities that are currently proving problematic today. What was missed when the regulator chose to forbear, in my opinion, was the change in the nature of the regulated companies from providing universal quality regulated services at a cost-plus basis to providing those (with no genuinely viable competition) in addition to making unregulated profit as the primary motive for innovation with the new mediums of IP and fibre. While successful by some measures (profit cycles), choices were made that have resulted in the evolution that we have witnessed to date. One of the most significant factors driving real competition was the decision to allow license-free spectrum (ISM etc.) that has become known as "wifi" which has even been adopted by actual carriers in areas where their unlicensed spectrum has gone unused for decades as has the implementation of the patent + spectrum encumbered technologies conjoined with mobile voice/text communications that are elsewhere highly profitable without significantly jeopardising higher incumbent revenue streams. Other licensed spectrum auctions have generally been a failure in terms of competition since the patent + hardware manufacturing necessary to make use of the allocations is driven predominately, if not exclusively, by foreign markets and the cost to entry is either too high or outbid and unused. In this comment I would like to point out that competition is one of those terms that is misused in the sense of friendly

competition or limited competition.

Wifi has essentially been the only real competition driving innovation and that is because it was essentially free from the encumbrances common to the carriers etc. It allowed backbone, rural and remote access, in-home consumer convenience, and ability to serve low-income demographics that were priced out of the closed market of carriers. Perhaps with the recently tabled Auditor General's report addressing some of these deficiencies with respect to the CRTC and ISED use of funds, the Broadcasting and Telecommunications Legislative Review Panel (A-Stars) will have some incentive to accelerate the development and adoption of open protocols which respect the real needs of Canadians regardless of the status quo in terms of access. Now that the current challenges are before us without having had the opportunity for significant domestic innovation, aside from closed market innovations, the opportunity that presents itself is once that respects the civic responsibilities of Canadians while assuming that the reconciliation (in this context I mean telcos to citizens, not Canada to First Nations) will be forthcoming -- as, it is noted, 5G is impending upon us. Another assumption that may be prudent in this whole process, particularly with respect to the growing population that is questioning the validity of current technological progress in its implementations, is that it may be a false assumption that current assumptions can proceed without due diligence in the face of accelerating technological developments that conflate longstanding civil norms. If Canada is to be a socialist democracy, which culturally it is to some degree, but in fact it is a representative democracy, there may be some incentive to leading the solutions to current challenges by example so that abstractions such as "minority language" and "diverse cultures" can continue to hold some meaning as we seem to be thrown into a situation where the economy of finance overshadows, to a large degree, the real economies of goods and services developed, produced, and consumed in Canada. Perhaps the new "broadcast" is more akin to the former broadcasting seed than a French Canadian series on Metis in the Yukon on CBC. Perhaps we need to seed our country with something that is not Cisco or Huawei but that is innocuous to both and respects our laws and the more complicated digital rights of citizens such as myself. Then there is the issue of bandwidth.

Broadcast traditionally uses a limited amount of "bandwidth" per "channel" to deliver a signal to many recipients simultaneously. Because everyone has the potential to be a broadcaster (let's forbear with the regulatory issues for a moment) there have been two significant limitations to broadcast-type use of the internet. One is obviously bandwidth, the other has been IP4 address space and related allocation inequities. Things like multicast are subject to these limitations and for the moment they are not meaningful solutions. Here I would like to include in my comment a proposal that may help to determine what infrastructure Canadians should be able to expect in the "assumed" all-connected future of tomorrow. It is based on the following assumptions that replace all existing metrics for bandwidth allocation from the erlang onwards. The

first assumption is that technology has now exceeded our biological limits of visual perception in terms of screen-based viewing (people in general cannot see all of a 4x video) and with mathematics we can generally encrypt and compress a fair representation of that using inexpensive, reliable, dedicated hardware that can replace much of the existing infrastructure while also providing access to many devices (including carrier devices). The second assumption is that each person (citizen, etc.) can only watch one thing at a time (probably not quite true). The third assumption is that everyone can be a broadcaster at the same time (here is me dancing and this is what I'm dancing to). The fourth assumption is that everyone is connected all the time (who wants that!). The fifth assumption is that people like to be with other people. So what I propose is that with those five assumptions, it becomes self-evident upon diverse consultation that a new model for the internet backbone can be envisioned where the following hold true: Every person can simultaneously communicate (full duplex 4k) with one other person 24/7/365 (the proposed modern basic service mandated by the CRTC independently); people can still do this in a family of 10 or at a party of 20 (or even in a theatre with 30 screens); there are no limitations on bandwidth and no reservations for future capacity;

OKay so in the real world, there is only one person with all the content; everyone watches their content; they show different content to every person; that is the potential mess we have now. How is that mitigated? Well, the most obvious suggestion is that they put their content in our cloud (yes, and help pay for our devices to hold it). Then everything just works and we can tweak the bells and whistles without bothering about things like net neutrality and bandwidth management except where we really need to implement technical ITMPs - economic ITMPs should be done away with as they have been abused in the name of competition. Basically, \$1x/month per line (anywhere, home, pole, business) and open all but emergency communication spectrum up for local fixed/mobile use with regulatory enforcement at the local level (modern protocols should deal with real congestion). There is no bandwidth scarcity where there are fibre optics that are underutilized and that needs to be the number one priority. So what about the boogeymen? Go find them, they aren't online in Canada anyway.

Now for the real meat (or edameme). The device that needs to be broadcast needs to do all the right things. It needs to be owned by the person trusting it, and that means individual Canadians. It needs to be able to tell some service (that is mutually trusted) to tell some service (that is a regulated broadcaster) that I am a Canadian and I want to watch X regulated broadcast for free or Y version that is paid for by some service (that is also mutually trusted). Advertisers need to be considered just the same way as regulated broadcasters and anyone should be able to be a regulated broadcaster with their a-la-carte menu, ads, or live offerings available at the same place. It is a whole rethinking of how things work, but it is modern and people will like it. People cut their cords because of high costs, poor programming choices and unwanted advertisements. People are cutting their internet for the similar reasons.

Finally, the internet still works for everything else and if there is no compelling reason to buy some service offering there is plenty of other content available. The key for people is to be able to get rid of the tracking and transfer their communications bill to the people who make the content they choose to support. If demographics data is transferred to a third party (for ad-supported content), that needs to be temporal and not linked to individual Canadians. Get it yet? This is not science fiction, it is not impossible, it is about as hard as giving everyone health cards and flu shots - oh wait!

So onto the questions. The answers provided in this comment as a layperson and numbered as follows with respect to ordering of questions (not repeated) in Appendix B: Questions as set out in the Terms of reference:

1.1 If the legislative tools are in place, they are not being utilized as per the Auditor General's recent report and my personal experience which includes living and working in rural, remote, and "Indigenous" communities. The incentives are used by incumbents to provide the minimum improvement for premium incentives. Smaller independent business, non-profit, and for-profit providers are burdened with the fallout of the minimal improvements and are forced to base their entire operations off of high cost, low performance fibre connectivity. Instead of developing a great network to connect communities, they often build a mediocre network that matches the low service level provided. The CRTC should mandate that at least one unimpeded fibre optic pair entering and leaving a community is supported for local development efforts. 100G equipment is relatively inexpensive. Why do we have telcos providing 30M fibre service to the only infrastructure competitor in the community. Where is the information that communities need to change this? What legislative tools aren't available that are needed to ensure communities can access unfettered connectivity to adjacent communities regardless of the state of "last mile?"

1.2 I think we need 5C Canadian wireless, not 5G the kitchen sink casts a shadow on the neighbours pet robot wireless. There are highly problematic issues with the scenario contemplated in this question and there are not the tools that can be trusted to provide governance of things that can't be governed because they are toy pets and toothbrushes. People are very concerned with the issues that keep arising time and again and going back to my earlier comments, the suggested baseline for "broadcasters" could also go a long way towards triangulating devices transmitting and receiving within a person's proximity, and in particular their home. People are concerned with all kinds of things, but for starters, a device should identify itself if requested or be identifiable upon request. That said, it's not obvious to most people how to tell when their TV is talking to their phone or as was recently on CBC their "security" cameras are "broadcasting" to the world. It is my opinion that there is value to ubiquitous access to high quality networks, but it is also necessary to ensure that

people "own" their data and are "aware" of who is accessing it without exception. This is a huge question with no obvious answer other than "make them visible" so they don't start governing themselves. Perhaps that is inevitable, but in the meantime, any organization collecting data needs to be disclosing such to those it is collecting from and not in fine print in some obscure terms of service. There are serious problems here that I don't believe are being taken seriously by regulators if this question is being asked for a report due in 2020.

2.1 Yes legislative changes are warranted to promote competitiveness, "innovation" and affordability. For one, as mentioned, bandwidth should not be reserved, the interactive map of infrastructure clearly needs to be developed in a way that not only shows what infrastructure is available, but what costs, bottlenecks, governance mechanisms, privacy protections (for citizens, not telcos), etc. are in place, These changes should not be complicated, but should be accessible. In terms of competition, there is really nothing that can help in Rural and Remote areas without full transparency of a fully regulated monopoly or some other form of restricted monopoly that does not compete with local initiatives. It is ridiculous that a company can wholesale what it sells but gets to choose what and when it sells and use its monopoly in existing infrastructure to "cream" customers and basically make competition unviable without significant changes. If a \$10/month copper line is all that has been installed for the last 50 years, whatever upgrades to make it work with data should be included in that price, as should the upgrades to replace that component with fibre. Replacing it with wireless is weaseling around the issue of what does it really cost and why are we paying what we are paying, and how can we pay the actual content providers rather than just the phone company. It is really hard to tell who is filling who's pockets when it seems like the customers pay a lot, the government throws in a lot, pretty much everything is on public property and advertisements for \$0.12/Mbps/Mo for transit past a community are not accessible to those in a community (it's more like \$5 or \$20) and it can't be that copper line.

3.1 Net neutrality is important. But it is not so important that it justifies maintaining low quality networks to maximize profits while parallel networks carry other services. The best network may require some ITMPs but if a community is paying a higher rate to receive data than some company is paying to provide a free service (surreptitiously collecting data) then the party involved on both ends has a credibility issue. This is particularly salient when the content involved in provided by some third party without remuneration. The current situation is a mess with the terms "content provider" "service provider" "consumer" "user" "app" "platform provider" etc. being so convoluted that it is hard to know what to do. I strongly believe that any carriers or networks should be required to peer and that the costs should be explicit. The principles are only relevant if the backbone is utilized to its full potential rather than limited to whatever might maximise profit for the carrier operating it (and competing with itself at both ends).

4.1 This question is confusing. Consumer protection rights may be important, accessibility should not be required in legislation however those who chose to access should be certain that their rights are legislated in terms that compliment their citizen's rights which are being muddled. When people buy things, they expect to be able to use them without maintaining a relationship with the seller. When something "requires internet access" that should be specified very clearly as to specifically what access is required, who is accessing what, when, and how. In all cases, the who when and how should be auditable and transferable to an unrelated third-party provider. Proprietary stuff should really be banned in this environment.

5.1 People should generally have "off" buttons. When devices are "on" they should be immune from identification by random passive devices. The current environment is less than ideal. I think there is room for innovation here, but it should be innovation in the public interest meaning that there should be no encumbrances to implementation other than natural ones. It is very hard to find the right balance and I think that ISED and the CRTC need to work transparently on developing a solution that actually does a really good job at mitigating the risks of exposure (meaning protecting privacy and freedom of movement) while not relying on central agencies and law enforcement to oversee everyone's movements (via the telco or whatnot). There should be some provision to reveal safety and security concerns both afterwards and in real time, but this needs to be something new and something Canadian. The possibilities are of course limited to whatever might be out there so it seems that it would need to be something that people can opt-in to but not necessarily go all-in on. For example, Hypothetically, I might not want to share my location data with my spouse or anyone, but in case someone needs it for some serious reason, I would want my spouse (and lawyer, etc.) to know or someone else depending on the circumstances. This is obviously a tough balance but people do not like the idea of being constantly surveilled as that represents a non-free environment. At the same time, because devices are transmitting all of the time it is important that this communication is not readily available to just anyone who happens to be in the area (or on the moon). I think that devices should include an identification but not a location. The identification should be encrypted by the user and decryptable by the user as well as some trusted third party. Obviously some devices won't do that, so the third party should be identifiable to some regulatory source also in the transmission. This should probably happen at random intervals and the device should probably produce such a transmission upon request. I'm guessing this may be hard to implement outside of a global standard, but I also believe it should be optional. If it is not used, then perhaps people should generally be aware that the device exists along with its location. So basically, third party says I know who's device that is then it is left alone (and perhaps unlawful to track) otherwise it should be on a local map or just obvious beaconing like most current devices. I think this becomes more important now that there are so many potential devices being put in the environment.

6.1 I don't know if the Auditor General's Office went far enough in recommending that changes be made. I think what is important is that people can use the technologies they want to use and the protocols should deal with contention in a way that ensures basic functionality even under crowded situations. There should be some bands that are used for safety as a priority and the protocols should respect that (similar to weather radar). Basically, if you get this "signed" packet, verify the signature and "comply" or just stop using the channel if you can't verify the signal (and continue on another). As far as publishing every device on a public map that does not participate in an accepted (Canadian) trust-based privacy protection scheme, perhaps that map should only be accessible to individuals and perhaps only in local areas of habitation, etc. Basically at this point we can't even get decent coverage maps, but it would be a worthwhile project just to pilot. Here's your open hardware 10G fibre/freespectrum device that lets you receive Canadian "broadcast" using our great new global protocol and here's all the Canadian Content (and stuff around you if you opt-in). Oh and it can rebroadcast local CBC/etc. on low power DTV/FM if it can't pick it up any so you and your neighbour can still watch TV with rabbit ears and listen to the radio even if you don't have a computer.

7.1 Perhaps the CRTC needs a reboot to play a bigger role in facilitating citizen services more generally and regard the telecommunications market as a monopoly that needs to be regulated more closely and audited more accurately under the same sort of scheme that will help deal with IoT issues. Basically they should be paid to hook people up, fix things that break, and improve capacity for all users. They should be kicked out of retail and wholesale should be cost plus. CRTC should work with ISED and others to ensure that Canadians have the right tools to operate independently and have access to high quality infrastructure and content and the tools to manage, find, pay for accessing them. We need to build this ourselves because we are Canadian and the rest of the world doesn't care but anyone that wants to sell internationally to our market will be able to participate as easily as paypal or whatnot. Build it and they will come. It is just something worth doing and like the CBC itself, etc. it is a matter of cultural relevance. Just because it is easy to follow suit with whatever the FCC does, that doesn't mean we can't do our own thing too. It's just like our softwood lumber and people grumbling about shipping raw logs. Let's build our own ICs and hardware and run some of our own stuff -- all in the open, all done right, no big companies involved, just some productive Canadian capability stuff that might not make a ton of money, but should help with some of the relevant challenges at hand. Just let the NFB pay to film the whole thing and call it Canadian Content and give it to schools.

7.2 In general, policy seems to be something that government uses to break every law it can so I doubt that it's the right balance so while I've seen some positive things, I

think there is room for improvement in terms of moving from policy direction to independent and pro-active development of actual policy that sets into motion timely actions that puts Canadians ahead of the curve on Canadian issues. The government is just going to spend money on what it always spends money on and make policies that change as little as possible unless it really gets a clear message that there are important things that need to happen now and let's get them started now and not wait until some report in 2020.

8.1 This was discussed in some detail in the background section. The key here is providing a framework for anonymity for listeners/viewers of Canadian content and delegating the sharing of demographic details on an opt-in basis with broadcasters -- it also means kicking the infrastructure into the present while stopping the stops of those who need to get it moving along more efficiently.

8.2 For one, forget all platforms and build a Canadian one for Canadian Content regardless of the language -- First Nations languages and unofficial minority language programming is important too. It would be an honourable undertaking.

9.1 I'm not familiar with the objectives, but I think my answers to 7.1 8.2 should be added to the list. What, Canadians compete!?

9.2 Again, without the list in front of me, I'm guessing my objective would be at the top of my list of objectives.

9.3 Expand capabilities to build the infrastructure solution that addresses the issues relevant to this call and start working on that now with people such as myself who wanted to build a better search engine when the fibre was run to my community in the 90s but just couldn't manage over the dial-up that was all that was made available.

10.1 Bow in. Play the role. Steal the show.

10.2 To the CRTC I give thee that power herein. Instead of armoured cars for export, let's make civil radios that work without unnecessary foreign dependencies. We've got a ton of work to do to regain our place of relevance as a peaceful nation and instead of trying to keep up with the Jones, let's innovate here. For one thing, as a Nation of Nations we have a lot to say and we need to be that change that leads the world to a better place. We can't promote a culture of the 70s in 2020 but we can promote the multicultural aspects of our Nation while being respectful of the new discourse that is

forming as we transition from a resource-based nation to a resourceful nation. There is so much culture that we could be promoting but the best way to protect that future is to get on with the implementation. The math is there, it's not rocket science, we're a little lost it seems, but that just means we find our way by being polite and saying sorry we missed the boat last time around, but we got this now!

10.3 Canadian legislative tools have no power over platforms and devices that Canadians use to access content. That is why we need to implement something viable in the marketplace that Canadians will be able to access regardless of what device they use. I use Linux. I have refused to use Windows or Adobe (Flash) personally for a very long time. Take a lead from Google - you don't have to. The point is that developing a compelling platform that is based on standards and not limited by vendor whims (which may not care much about Canadian Content) and incorporating that into Canadian Infrastructure which is sorely in need of some regulating and voila! Canadians start going to Broila! It has all the Canadian Content live, relevant streams without ads that people don't want and works on our infrastructure (and by extension your device). It is so easy and so functional for Canadians that they demand all that other stuff from the other streaming services be available though it because they don't want to sign up for 15 different services, they just want to watch CBC news and watch the odd movie or maybe that great new show. Point is, I killed my TV in 1995 and for good reason. Someone gave me a Kodi box in it's heyday when I had no money to spend on anything and it was far better than anything that any service currently offers. People that can't be bothered with the hassle of subscription services are looking for something that meets the Canadian Content needs and the rest will follow. If the platform works for us, it can be adapted to work for others too and if we produce anything marketable, people will find a way to access the content. If people want to get paid for making new content then there needs to be a willing buyer and sometimes it might just be better to pay for it ourselves and let the rest of the world watch it and weep. The important thing is that not all Canadians use Platform A or Platform B (French or English). Some people just want their

TV to still work -- FM is going to be a thing again. If it is well designed and built around Canadian Infrastructure and unencumbered by vendor restrictions, it will work on everything that Canadians use. People still talk to each other. If it's good enough for Canada eh! maybe other people will catch the hint.

11.1 No. Canadian News content is very biased and caters to its listeners providing entertainment and a limited narrative. People rely on other sources to get information and they are generally not very good at telling what's what, so they talk to each other. There must be legislative provisions in place that hinder the discourse at the behest of certain players but it has always been my experience that many Canadians don't watch Canadian news because it's irrelevant fluff. I've always found this to be fortunate and it is probably one of the reasons that I am commenting on these topics.

Having grown up with textbook Canadian discourse only to discover that much of what was left out was left out in a way that made some of the content less believable, I question the term "culture" in the context of news. You can tell something important is going on when there is nothing on the news.

11.2 As mentioned, it would be news if local news was actually relevant. I think focussing on infrastructure, dealing with IoT honestly, building a content platform based on Canadian made infrastructure that resolves some of the real challenges and gives people a voice (yes, in both official languages too) would make a difference in terms of identity. If someone can use their old FM radio to pick up CBC from their neighbor's "redistribution platform" that is cool. This stealing internet BS is what is wrong with what we have going on right now. It's okay if the phone company provides free wifi, but I digress. Local news is a tough sell when there are so many ways to get information. Basically, we need to do something radically different and truly Canadian. I'm not the only one who's full of ideas on how to put a lot of things into something that is worthwhile, but I'm not going to say just do what the states do because they are facing a lot of the same issues and I think we can take the lead on this if we choose to do it the Canadian way -- figure that out.

12.1 Binaurally, English in the right ear and French in the left. Just call it Canadian and people will get the gist. Actually not calling it a principle would even help. In fact, everyone pretty much thinks the Indians are on the right track so unless it helps in the big picture, cultural diversity is just another sham work for assimilation into an ideal Canadian discourse. The point of diversity is that it is diverse, not just different. Law itself tends to be very binary. It's the budget or the aboriginal budget. It's Canadian or French Canadian. It's in the News or it's not. The main way to get diversity is through a participatory process. The greater the opportunity for participation, the more diverse the process will be. The more rigid the process, the less opportunity there is for participation. Basically building the tools for content creation and distribution is not a huge task, but it is one that leads to a great opportunity for participation. Building it from scratch without vendor encumbrances means that people will be able to continue supporting its development to include all the diverse needs for content creation, distribution, etc.

13.1 I don't know what the mandate of the CBC is other than to maintain its relevancy. It has some good programming, but I don't watch it because as I said, I killed my TV in 1995 and the few times I've attempted to watch something on the CBC online, it was so full of annoying irrelevant advertising that could not be skipped though that I just didn't bother. If CBC is using advertising to support itself, good luck. There is way more than enough money being sucked into the Telcos to support ad free programming as it is. People make content because it is worthwhile. Basically, people that don't want to watch irrelevant ads should not have their time wasted by a National

Broadcaster. People are sick of ads. If they need something, they know that already. If producing content can only be done by hawkiiing commercial products, it's time to re-think that in this era of "let's do something worthwhile" I mean even on the news articles, comments are disabled for anything that is slightly controversial. What kind of diverse discourse is that?

13.2 I'm just going to say, adopt open protocols.

13.3 See earlier answers about infrastructure-based approach. The thing that is needed is public syndication and fact-based news that is not subject to copyright.

13.4 As mentioned, by developing an open platform that is based around forcing excellence in infrastructure designed to address modern challenges, something worthwhile can be achieved - that is Canadian for Canadians and the rest of the world may take note.

13.5 The same way as for non-indigenous or indigenous Canadians. There is a whole lot of well-meaning, but outdated and counterproductive legislation that needs to be replaced with high-quality accessible participatory media that is inclusive and accessible enouce to draw a diverse set of voices and viewers. Basically, I'd go on a rant here about something going on outside the CBC and not a mention in the news, but as the saying goes, Don't trust the government, just ask an indian. If you want to make things real -- and I've heard and seen some great things on CBC, basically, maybe just do what I suggested earlier, but just for the "Indigenous Communities" I mean I know some that had fibre run all through them and were sitll limited to 1Mbps -- it is ridiculous. Basically, reconciliation as I understand it is something that non-indigenous Canadians need to do. Being honest would be a good start. Let's see all the financial data available as a Sankey diagram!?

13.6 Uh maybe the same thing as last year? English is the defacto trade language of the world. I don't think it needs protecting. I think French is fine. Basically, you should open up your entire archives and make them accessible to all Canadians (and whatever else would be bothered to watch them) and let the internet build a platfroma around them instead of hoarding them.

14.1 No, I don't think there seems to be much efficiency or effectiveness in my experience, but then I have high expectations and I've been let down on the Telecommunications side. I think without addressing the infrastructure bottlenecks (planned scarcity/reserve capacity, lack of local peering, parallell networks on the

same infrastructure, etc.)

14.2 I think that if the government actually knows what needs to be done and the CRTC doesn't then there is a big problem. I think Canadians should oversee all this more transparently. The Auditor General's report was telling and I think someone needs to say if you do infrastructure, you don't sell content/services because the infrastructure should provide the best service possible so that actual services can be delivered.

14.3 As mentioned, providing a mechanism for anonymity/pseudonymity and temporal demographic basic data to relieve viewers of broadcast from misunderstood data collection practices.

14.4 Yes, I think so, but to utilize them requires thinking outside the box and building a new one that helps update the infrastructure for the majority of Canadians so they can receive broadcast and leverage that to serve the rest of Canadians and the global marketplace.

14.5 I think I've described this well enough already, but the key here is without discrimination. Think Net-neutrality, but with a overhauled network that works exactly the same for a small community based business as a large telco/cableco on the same fibre. I know it is not the 90s anymore, and acceptable use policies are a bit out of date for internet, but there is a gap between infrastructure that is being utilized and infrastructure that is laying in waste or used counterproductively. If I told you that there was great digital content in all of the underutilized or inefficiently routed fibre lines, could you find them? Maybe the library or the NFB has a list. Maybe the CBC has a few archives? The point is that people don't want a list of all the content, they want access to all the content that seems to be hoarded off somewhere. While the common wisdom is that you can't give away all the old stuff because nobody will buy/watch the new stuff, there is a lot of old stuff that could probably use some critique and the fact is people are limited in their income to a large extent. Basically, I'm amazed this question is here. Maybe it all got lost? That would be sad. If not, and you make it all available, people will start sharing it and that will help preserve it. You can try bittorrent. Usually when people have no money or it is too much hassle to pay for a show, that's where they go - sort of like a public library - sort of like reliable infrastructure, easily accessible high quality content accessible to all Canadians - oh wait, that's starting to sound like someone's mandate. True it's supported by sharing recorded broadcast/media rather than ads, but rumour has it that it is the people that use it that also pay the most for new content.