

Submission to:

Review of the Canadian Communications Legislative Framework

Radiocommunication

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Introduction

My name is Michael Connolly and I am the principal of MIDELCON Spectrum Consulting. I have been providing regulatory advice and assistance to the wireless industry in Canada since 2010 prior to which I had a 35 year career in the field of spectrum regulation with both the former Departments of Communications and of Industry. At the time of my retirement from the Public Service I was Director General of Spectrum Management Operations having responsibility for regional operations, regulatory policy and procedures, enforcement, licensing, spectrum auctions and the IT systems supporting the delivery of the spectrum program. During my career I was an ardent advocate of reform in spectrum regulation and my interest has continued unabated.¹

The current legislative review is an important initiative to bring much needed institutional improvements in a field of regulation having critical importance to Canadians. As put by a senior Industry Canada official “The efficient use and continued availability of radio frequency spectrum is critical for growth and innovation in the wireless sector but also across the economy as a whole. While difficult to estimate, benefits afforded by use of the radio spectrum to the economy are substantial and growing.”²

Given the economic and social import of spectrum it is disturbing that its use be governed by an anachronistic piece of legislation and in policy disarray. While the *Radiocommunication Act* dates from 1989 it is essentially an amended and renamed Radio Act and as such radiocommunication legislation has not been comprehensively revised since 1938.³ Further the *Radiocommunication Act* has been fairly described as “a grossly under-analyzed piece of legislation.”⁴ As such I am pleased to have the opportunity to share my views with the Panel whose work may assist greatly in correcting the disparity between current legislation on the one hand and modern norms for democratic and effective regulatory governance on the other. This modest submission is solely with respect to regulation of radiocommunication and corresponds to the Panel’s theme of renewing institutional framework.

This submission is organized along the following themes:

The Need for an Independent Regulator for Spectrum

The Need for Policy Coherence in Spectrum Regulation

The Need to Avoid the Fallacious Public Resource Paradigm for Spectrum

The Need to Adopt Best Practices in Radiocommunication Governance

¹ In 2000 the author was the recipient of the Head of the Public Service Award for Excellence in Policy for his efforts to introduce spectrum auctions notwithstanding the opposition of the “traditional bureaucracy”.

² THE STANDING SENATE COMMITTEE ON TRANSPORT AND COMMUNICATIONS, EVIDENCE, April 1, 2009. <https://sencanada.ca/en/Content/Sen/committee/402/tran/47126-e>

³ Canadian Telecommunications Regulatory Handbook, First Edition, 2012, page 9.

⁴ LIFE-MEDIA FOR A WIRELESS WORLD: PARTICIPATORY DEMOCRACY AND THE RADIO SPECTRUM IN CANADA AND URUGUAY, Evan Light, University of Quebec in Montreal, November 2012, page 139.

The Need for an Independent Regulator for Spectrum

As was identified by the Telecom Policy Review Panel (TPRP) in its 2006 Final Report, Canada's situation of having a political Minister as spectrum regulator is an anomaly amongst its OECD peers.⁵ The vast majority of comparable countries have recognized the benefits of having an expert, arm's length independent regulator. Appropriately the TPRP identified the role of the Government as one of high-level policy direction versus detailed regulation.

The need for, and advantages of, independent regulators are widely recognized across a number of diverse regulatory fields internationally and indeed here in Canada with radiocommunication being a notable and conspicuous exception. Properly constituted, independent regulators can provide expert, reasoned, transparent, fair and timely regulation.⁶

The TPRP expressed concern that "the department's decision-making processes may be susceptible to lobbying by interested parties and political pressure" and believed that "moving Industry Canada's spectrum management and regulation functions to the CRTC will lead to increased transparency and ensure due process".⁷ Numerous past examples of influence being brought to bear outside any public consultation process underline the TPRP's concerns.⁸ Similarly reports of behind the scenes intimidation of major wireless players by senior government officials do damage to the transparency, fairness and integrity required for a regulatory environment conducive to investment.⁹ Several studies (including one commissioned by Industry Canada itself) and papers have recommended that the regulation of radiocommunication in Canada move to an independent regulator.¹⁰

⁵ Telecommunications Policy Review Panel (TPRP), Final Report, 2006, page 5-22.

⁶ For an excellent discussion see: OECD (2014), *The Governance of Regulators*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209015-en>.

⁷ Ibid, page 5-24. More recently the press has questioned why the political affiliation of an MP and the percentage of votes the MP received in the last federal election are factors in an ISED decision to approve an antenna tower placement. See: Un courriel interne du ministère de l'Innovation suscite la controverse, La Presse, December 16, 2018.

⁸ Some examples may be found here: Canadian Spectrum Management in Institutional Stasis, The Canadian Spectrum Summit, Ryerson University, Toronto, May 2, 2013. http://canadianspectrumpolicyresearch.org/wp-content/uploads/2013/05/2013-5-2_CDNspectrum_Michael-Connolly.pdf

⁹ Ottawa threatens to cut Telus out of wireless auction, Globe and Mail, April 25, 2014. <https://www.theglobeandmail.com/report-on-business/ottawa-threatens-to-cut-telus-out-of-wireless-auction/article18202648/>

¹⁰ Examples include: Study of Market-based Exclusive Spectrum Rights, McLean Foster & Co., August 31, 2007. THE END OF THAT '70s SHOW: Rethinking Canada's Communications Regulatory Institutions for the Twenty-first Century, October 2009, Atlantic Institute for Market Studies.

Mobile Wireless Market Performance in Canada: LESSONS FROM THE EU AND THE US, Navigant Economics.

The Internet Society of Canada proposes legislative reforms, July 14, 2017.

What about the Radiocommunication Act? The case for its reform, Konrad von Finckenstein and Philip Palmer, CARTT.CA, May 16, 2018.

Industry Canada as Economic Regulator, Richard Schultz, in How Ottawa Spends, 2011–2012, Trimming Fat or Slicing Pork?

Perhaps the most well-positioned and authoritative source on the merits of independent regulators (and by extension the demerits of ministerial regulation) is the Privy Council Office (PCO).¹¹ The PCO has described the sensitive situation of “administrative tribunals or other independent decision-making organizations carrying out quasi-judicial functions” due to their responsibility for “administering, determining, establishing, controlling or regulating an economic or business activity, or adjudicating cases that affect individual rights and benefits”. As the PCO explains “Governments delegate decision-making powers to these bodies, in part, to preserve public confidence in the fairness of the decision-making process” and that “Consistent with their quasi-judicial role, the organizations themselves are responsible for developing specific rules and procedures and for following them in their decision-making.” Further “The purpose of such structures is to balance Ministers’ accountability for overall policy development and utilization of public resources with the independence needed for these bodies to make specific decisions in a transparent, fair and non-partisan manner”. From this reasoning it is inescapable that, when the Minister of Industry engages in regulatory decision-making having a direct impact on rights, benefits and privileges as well as the economic and business activity of licensees exercising powers conferred by the *Radiocommunication Act*, decision-making in a transparent, fair and non-partisan manner suffers.

Direct regulation by a political minister also works to the detriment of those interested and affected parties whose limited resources do not permit the engagement of professional lobbyists to work the corridors of power. With “the Minister and the department tending to operate behind closed doors” the consequence is that “the opacity of the policy process results in a more pronounced advocacy deficit.”¹²

That the partisan interest of Ministers would undermine public confidence in the fairness of the decision-making process is not without empirical foundation. In 2013 there were a number of reports tying fundraising by the Conservative Party to the Harper government’s treatment of the “big three” wireless service providers.¹³

The Panel may wish to note in its recommendations that the worldwide majority view amongst Canada’s peers that regulation of radiocommunication is best placed in the hands of a competent, arm’s length

¹¹ See: Guide Book for Heads of Agencies: Operations, Structures and Responsibilities in the Federal Government, PCO, August 1999. <https://www.canada.ca/en/privy-council/services/publications/guide-book-heads-agencies-operations-structures-responsibilities-federal-government.html>

¹² A TALE OF TWO REGULATORS: TELECOM POLICY PARTICIPATION IN CANADA. *Journal of Information Policy*, 4 (2014): 1-22.

¹³ Conservatives use wireless decision to raise funds, *Globe and Mail*, June 4, 2013.

Ottawa’s wireless strategy: consumer agenda that’s not quite complete, *Globe and Mail*, June 7, 2013.

<https://www.theglobeandmail.com/report-on-business/a-consumer-agenda-thats-not-quite-complete/article12432610/>

Tories blur public policy and partisan politics, *The Star*, August 21, 2013.

https://www.thestar.com/news/canada/2013/08/21/tories_blur_public_policy_and_partisan_politics_tim_harper.html

Bay Street no longer matters in Ottawa, *Maclean’s*, November 6, 2013.

<https://www.macleans.ca/news/canada/bay-street-no-longer-matters-in-ottawa/>

The Canadian Wireless Debate is Over: How the Incumbent Carriers Lost the Support of the Government, Michael Geist Blog, June 5, 2013.

<http://www.michaelgeist.ca/2013/06/wireless-debate-over/>

independent regulator operating under rules of procedure designed to ensure transparency and fairness.

The Need for Policy Coherence in Spectrum Regulation

In announcing this Legislative Review the Government erred when it stated that the *Radiocommunication Act* “is constructed in a manner that takes the objectives of the Telecommunications Act as its own”.¹⁴ This misconstrues what the *Act* actually says. As the TPRP noted “Currently, there is no requirement for the Minister of Industry to exercise powers under the *Radiocommunication Act* or the *Department of Industry Act* in a manner that is consistent with Canada’s telecommunications policy objectives.”¹⁵ Similarly the Internet Society of Canada, in supporting the inclusion of the *Radiocommunication Act* in the current Review, noted that “It is dissociated from the goals of the Telecommunications Act. The Minister “may” but is not obliged to consider the objectives of the *Telecommunications Act* in administering the *Radiocommunication Act*.”¹⁶ In contrast the CRTC “shall” exercise its powers with a view to implementing the policy objectives of the *Telecommunications Act*.¹⁷ Of course even if the Minister were obliged to consider the objectives of the *Telecommunications Act* there would still be the problem that they are in dire need of “clarification and updating” and that some are “overlapping and inconsistent, while others are vaguely worded”.¹⁸ Indeed as the TPRP also observed the lack of clarity in the objectives is such that they can be used “to justify arguments in support of a very wide range of different and often conflicting regulatory actions”.¹⁹

The sole test of whether the Minister of Industry is acting with a “proper purpose” when exercising powers accorded by the *Radiocommunication Act* would appear to be that doing so is “for ensuring the orderly establishment or modification of radio stations and the orderly development and efficient operation of radiocommunication.”²⁰ This construction harkens to the 1938 *Radio Act* origins which “focused on the licensing of radio apparatus and the prevention of interference”.²¹ Notwithstanding this narrow focus, over time policy and regulation under the *Radiocommunication Act* has experienced a remarkable amount of scope creep that has overlapped with economic regulation by the CRTC but without the benefit of the transparency and due process required of the latter.²²

¹⁴ BROADCASTING AND TELECOMMUNICATIONS LEGISLATIVE REVIEW, TERMS OF REFERENCE.
<http://www.ic.gc.ca/eic/site/110.nsf/eng/00001.html>

¹⁵ Ibid, page 2-14.

¹⁶ The Internet Society of Canada proposes legislative reforms, July 14, 2017.

¹⁷ *Telecommunications Act*, s.47.

¹⁸ TPRP Report, Chapter 2.

¹⁹ Ibid, page 2-5.

²⁰ *Radiocommunication Act*, s.5.(1).

²¹ Canadian Telecommunications Regulatory Handbook, First Edition, 2012, page 22.

²² Industry Canada as Economic Regulator, Richard Schultz, in *How Ottawa Spends, 2011–2012, Trimming Fat or Slicing Pork?*²² It is also surprising that the Minister of Industry has tilled CRTC soil to the extent we have witnessed given Parliament’s stipulation in the *Department of Industry Act* that the Minister’s powers, duties and functions do not extend to those assigned by law to any other department, board or agency of the Government of Canada.
Department of Industry Act, 4.(1).

In 2006 the Governor in Council issued the first and only Direction to the CRTC.²³ “A policy direction is a tool available to the government through the Act to provide policy guidance to the CRTC on how it should exercise its regulatory mandate.” This Direction was with respect to the implementation of the Canadian Telecommunications Policy Objectives. Of note the Direction directed that the CRTC:

- rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives, and
- when relying on regulation, use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives.

The Policy Direction was said to be "a significant step forward in making Canada's telecommunications regulatory system more modern, flexible and efficient," that would help “to ensure that Canada's telecommunications industry is internationally competitive and successful and is shaped to best support our ever-evolving and rapidly changing telecommunications needs."

However the Policy Direction does not apply to the Minister of Industry yet the Minister has had numerous occasions to exercise powers accorded under the Radiocommunication Act, including in areas that are the purview of the CRTC, while citing the furtherance of the Objectives but without having to comply with, or even have regard to, the provisions of the Direction.

In 2007 the Minister announced revisions to the Spectrum Policy Framework for Canada.²⁴ Its Enabling Guidelines paralleled the thrust of the Policy Direction:²⁵

- Market forces should be relied upon to the maximum extent feasible.
- Regulatory measures, where required, should be minimally intrusive, efficient and effective.
- Regulation should support the efficient functioning of markets by:
 - permitting the flexible use of spectrum to the extent possible;
 - harmonizing spectrum use with international allocations and standards, except where Canadian interests warrant a different determination;
 - making spectrum available for use in a timely fashion;
 - facilitating secondary markets for spectrum authorizations;
 - clearly defining the obligations and privileges conveyed in spectrum authorizations;
 - ensuring that appropriate interference protection measures are in place;
 - reallocating spectrum where appropriate, while taking into account the impact on existing services; and
 - applying enforcement that is timely, effective and commensurate with the risks posed by non-compliance.

²³ P.C. 2006-1534 December 14, 2006. Also the accompanying press release: Canada's New Government Issues Policy Direction to CRTC that Calls for Greater Reliance on Market Forces, December 18, 2006.

²⁴ Speaking Points, The Honourable Maxime Bernier Minister of Industry, 2007 Canadian Telecom Summit, Toronto, June 13, 2007.

²⁵ Spectrum Policy Framework for Canada, September 2006.

The similarity between the wordings of the Framework and that of the Policy Direction was not by accident and was alluded to by the Minister in his announcement.

Additionally the Framework addressed the manner in which regulation under the Radiocommunication Act would be exercised:

- Regulation should be open, transparent and reasoned, and developed through public consultation, where appropriate.²⁶

The Framework was “Issued under the authority of the Radiocommunication Act” as setting out “the guiding principles for the Canadian Spectrum Management Program” in the expectation that it would “provide the appropriate foundation for Canada’s evolving communications needs”. However the truth of the matter is that the Framework was not binding upon the Minister who was to remain unfettered by “mere policy” in the exercise of the powers accorded under the Radiocommunication Act. Indeed the record shows that the provisions of the Framework have been only infrequently and selectively cited in a manner designed to support regulatory decisions taken without regard to the full intent and meaning conveyed therein. Similarly the Minister routinely receives representations outside of ISED’s consultations and has taken a number of important files to Cabinet colleagues shrouded in secrecy in a process that is by design neither open nor transparent.

The Review should strive to ensure that the regulation of radiocommunication must have regard to established policy objectives and must adhere to rules of procedure designed to ensure a fair, open and transparent process. As noted by the TPRP “it should generally be the role of government to establish general policies, and the role of the telecommunications regulator to implement these policies in an independent and transparent manner”.²⁷

Similarly the Review should strive to ensure that the regulation of radiocommunication be subject to the same policy guidance applicable to telecommunications:²⁸

- Market forces should be relied upon to the maximum extent feasible as the means of achieving Canada’s telecommunications policy objectives.
- Regulatory and other government measures should be adopted only where market forces are unlikely to achieve a telecommunications policy objective within a reasonable time frame, and only where the costs of regulation do not outweigh the benefits.
- Regulatory and other government measures should be efficient and proportionate to their purpose and should only minimally interfere with the operation of market forces to meet the objectives.

The Need to Avoid the Fallacious Public Resource Paradigm for Spectrum

For virtually the entire history of spectrum regulation the radiofrequency spectrum in Canada and elsewhere has been referred to as a “resource” and often a “natural resource” and/or a “public

²⁶ The “where appropriate” was added by an editor late in the drafting. It begs the question “When would it not be appropriate to develop regulation through consultation?”!

²⁷ Ibid, page 5-22.

²⁸ Ibid, Executive Summary, page 4.

resource". Why this is the case has been explained thusly: "These comparisons have been used widely and repeatedly not so much because they are valid, but because they are easy to understand and provide a sort of imaginary physical form for something that distinctly lacks such form." Consequently "Throughout the history of the electromagnetic spectrum as a communication medium, the parameters of use and regulation have been built upon seemingly unquestioned assumptions that serve to further entrench the status quo."²⁹

The spectrum as natural and/or public resource paradigm is ubiquitous and pervasive throughout the literature and the practice of spectrum management. Ministers of Industry will sometimes invoke this paradigm by attributing their actions as consistent with their stewardship of the public spectrum resource. Yet nothing in Canadian legislation confers public ownership nor resource status to radio frequencies although the *Broadcasting Act* reflects the popular paradigm when it assumes as fact that radio frequencies are "public property".³⁰ The fact that the radio frequency portion³¹ of the electromagnetic spectrum is regulated does not bestow it with status as a resource no more than the visible portion being regulated to prevent pollution of the night sky near observatories nor the ionizing portion being regulated to protect public health and safety. Indeed anyone claiming that light and nuclear radiation are public resources would be rightly ridiculed.

The popular paradigm of spectrum as a publicly owned natural resource is a powerful one that shapes our thinking and influences policy. It evokes sentiments that reinforce the long tradition of "command and control"³² regulation and resists the suggestion that spectrum users should enjoy a measure of usage rights notwithstanding that there is a rich and well-reasoned literature supporting the notion and an undeniable international trend in this direction. It can also close our minds to, and even cause us to suppress, different ways of thinking and new concepts in spectrum regulation.³³

There is no such natural resource.³⁴ Radiocommunication is a phenomenon of physics wherein electromagnetic waves propagate through space while conveying energy. Our knowledge and technology permits us to exploit the phenomenon to accomplish a great many ends. The origins of the natural resource paradigm date back to a time when the state of technology was such that transmissions had to be separated in frequency for receivers to discern them and the number of such frequencies was limited. The state of radio engineering has advanced considerably such that we can now distinguish the wanted transmission in not just the frequency domain but also in time, space, angle of arrival, polarization, coding and modulation. Radios are no longer "dumb" but capable of

²⁹ Ibid, Evan Light, pages 86 and 226.

³⁰ S.3.(1)(b)

³¹ The *Radiocommunication Act* defines that portion as being "electromagnetic waves of frequencies lower than 3 000 GHz".

³² "Command and control" spectrum regulation has also been referred to as "Mother may I...".

³³ A conspicuous example of this: In 2007 the Minister announced that he had "initiated a study of market-based exclusive spectrum rights" (Ibid – Speaking Points, 2007 Canadian Telecom Summit). The contractor delivered this study to Industry Canada on August 31, 2007 (Ibid - Study of Market-based Exclusive Spectrum Rights). Industry Canada did not release the study until October 2008 (long after having received several Access to Information requests) out of concern that the report's recommendations were incompatible with the notion of spectrum being a public resource invoked by the subsequent Minister as part of the AWS-1 auction policy announcement.

³⁴ For a fulsome and well-reasoned refutation see Spectrum is not a scarce natural resource, Pierre de Vries, February 10, 2017, <https://deepfreeze9.blogspot.com/2017/02/spectrum-is-not-scarce-natural-resource.html>

autonomously sensing the environment, consulting databases, adapting their technical parameters, seeking out wanted signals and avoiding interference.

Whether frequencies are assigned on an exclusive basis or whether they are to be shared is itself a fundamental regulatory determination that considers a host of technical and market factors. These regulatory decisions should be based on the evidence at hand and not pre-ordained or biased by a slavish adherence to a need for resource husbandry which in the past has led to regulation taking a much too conservative approach and regulatory practices becoming “a major bottleneck for availability of radio spectrum for emerging wireless services, devices and applications as a result of its contributions to current radio spectrum artificial scarcity and underutilization problems”.³⁵

In all probability the Panel will receive submissions invoking the spectrum as public resource paradigm as a rationale for the need for continuing government intervention. These should not be accepted at face value lest we lock regulation in a less technically sophisticated and inappropriate past.³⁶

This is not to say, however, that there are not sound reasons for regulating the use of the radio frequency spectrum for indeed there are many primary of which is the management of interference. However the manner in which interference is managed must be based on a new paradigm - one that recognizes new technologies and investment imperatives and that moves regulation away from the “command and control” tradition necessary for the conservation of a public spectrum resource. New forward-looking institutional arrangements should be designed to provide an environment conducive to innovation and investment. In formulating new legislation Canada should embrace a new governance process wherein government policy and regulation better aligns with, and recognizes the necessary and valuable role of, private actors in realizing desirable social and economic goals as well as the potential of technology to increase the utility and capacity of spectrum many fold.³⁷

Radiocommunication regulation should have as its principal focus the optimal social and economic use of spectrum and should exclude other considerations that are better dealt with in a technologically neutral manner identical to that applicable to non-radio related issues.³⁸ An Industry Canada commissioned report put it thusly: “Managing spectrum technical complexity appropriately is difficult enough without conflating the challenge with other policy issues such as content diversity, universal access, or industry structure. While these other issues remain valid policy concerns, they need to be addressed separately and independently from the question of how to manage shared access to the radio

³⁵ Dynamic Spectrum Access: A New Paradigm of Converting Radio Spectrum Wastage to Wealth, INTERNATIONAL JOURNAL of ENGINEERING TECHNOLOGIES, Jide J. Popoola et al., Vol.2, No.3, 2016.

³⁶ Even in the less technologically sophisticated past there are many examples (depressingly so) of innovations that were delayed or entirely suppressed by regulation “in the public interest”. Although citing examples set in the United States, Hazlett has recounted a number of high profile regulatory bungles (many replicated in Canada) in his book *The Political Spectrum*, Thomas W. Hazlett, Yale University Press, 2017.

³⁷ For an excellent discussion see: *Radio spectrum management: from government to governance*, Analysis of the role of government in the management of radio spectrum, Peter Anker, Delft University of Technology, 2018. <https://repository.tudelft.nl/islandora/object/uuid:6a75532e-e5df-4ad0-a984-e24639462676?collection=research>

³⁸ For example matters of competition may be best handled by the Competition Bureau “rather than through “handicapping” the competitive process, including spectrum auction caps”. See *An Assessment of Spectrum Auction Rules and Competition Policy*, Steven Globerman, Fraser Institute, August 2013.

frequency spectrum while providing appropriate interference protection. The focus of spectrum management should be on providing adequate interference protection in a market framework.”³⁹

Adhering to dated paradigms contributes to a general reluctance to adopt new regulatory approaches better suited to changing technology business realities. In 2006, the TPRP noted:⁴⁰

“The Panel supports the intent of the spectrum policy framework review and recognizes that, like other countries, Canada has been moving toward adopting some market-based approaches within its predominantly prescriptive framework for spectrum management. The Panel notes, however, that the move toward adopting market-oriented approaches has been tentative.”

The TPRP encouraged further evolution along these market-based approaches with respect to the Framework recommending:⁴¹

- reliance on market-based approaches to spectrum management as much as possible,
- establishment of market-based exclusive spectrum rights (i.e. ability to buy, sell and lease spectrum holdings) and elimination of barriers to the development of secondary markets in spectrum,

As mentioned earlier, the subsequently revised Spectrum Policy Framework did indeed espouse a greater reliance on market forces and support for facilitating secondary markets for spectrum authorizations as well as other complementary measures. However this policy orientation was non-binding and as it turned out short-lived. Command-and-control regulation reasserted itself through the decisions and policies of subsequent Ministers.

Regulatory micro-management of radiocommunication is prevalent at both at the assignment (e.g. licensing) level as well the allocation (use) level. Canada’s going-forward paradigm should permit market-based outcomes and the rapid adoption of intelligent radio devices capable of spectrum self-management.⁴²

³⁹ Ibid, McLean Foster & Co., page 83.

⁴⁰ Ibid, page 5-20.

⁴¹ Ibid, page 5-21.

⁴² For examples of proposals which may permit “individual spectrum licensees to develop win-win solutions without having to invoke time-consuming regulatory processes” see Unlocking Spectrum Value through Improved Allocation, Assignment, and Adjudication of Spectrum Rights, The Hamilton Project, DISCUSSION PAPER 2014-01, MARCH 2014.

In summary:

Contrasting Paradigms		
	Backward Looking	Forward Looking
Objective	Orderly development	Maximum Social and Economic Benefit
Premise	Spectrum as natural resource	Spectrum as factor of production
Challenge	Spectrum is scarce	Radio coexistence requires administrative, economic and technological effort
Focus	Interference Avoidance/Conservation of Spectrum	Capacity Maximization/Intensive Use
Regulatory Practice	Command and Control	Enabling Market Driven Outcomes
Technology Choices	Regulator Determined (= Regulatory Lag)	Market Determined (= Rampant Innovation)

The enormous challenge facing the Panel in catalysing a paradigm shift in radiocommunication regulation is underscored by this observation:

“The extent to which actors within the spectrum policy system and those that interact with it lack substantial knowledge about their primary object of orientation demonstrates an important and widespread educational problem. Indeed, the capacity of society to think about the spectrum in, not just a new way, but in any way at all, is more limited than I had ever imagined.”⁴³

The Need to Adopt Best Practices in Radiocommunication Governance

The adoption of properly constituted independent regulators and the establishment of coherent and consistent policy are themselves amongst the recognized best practices of regulatory governance and will, by their very nature, entail yet others. What follows here are a few other specific practices that are lesser in scope but important for their contributions to transparency, regulatory certainty and the accountability of the regulator. In most cases the advantages and supporting rationale are obvious in the very nature of the practices themselves and need little elaboration.⁴⁴

1. Preparing on an annual basis a draft work plan describing its anticipated radiocommunication regulatory activity for the following five years. Members of the public should have a period to make any submissions with respect to the draft work plan which would be considered prior to finalization of the plan. The regulator would prepare an annual report detailing progress against the plan.

⁴³ Ibid, Evan Light, page 232.

⁴⁴ A collection of best practices assembled by the ITU may be found in Annex 3 of its publication Handbook on National Spectrum Management, Edition of 2015. https://www.itu.int/dms_pub/itu-r/opb/hdb/R-HDB-21-2015-PDF-E.pdf

2. Developing policy directions to the regulator with respect to radiocommunications in open public consultation. The regulator's annual report should address progress against any measurable goals specified in such policy directions.
3. Maintaining a spectrum licence registry that is readily available online and usable without requiring sophisticated data manipulation skills. The registry should facilitate academics, technical and policy research by supporting queries on a broad range of technical and administrative parameters. The registry should maintain historical records of spectrum trading activity.⁴⁵
4. Providing for the delegation of specified regulatory powers and functions of the regulator to other parties.
5. Providing for the establishment of an expert advisory panel to the regulator in technical matters.
6. Establishing service standards for the performance of routine regulatory functions with results against such standards reported annually. To the extent that the regulatory functions relate to the provision of services or the conferral of licences to which fees apply the performance standards should also be subject to the provisions of the Services Fees Act.
7. Requiring that any standard or procedure or other document that is incorporated by reference into any rule, regulation, order, or licence condition be publicly available.

⁴⁵ Policy analysis is "difficult to conduct with data as it is currently provided" by ISED. See Analysis of Canadian Wireless Spectrum Auctions: Licence Ownership and Deployment in the 700 MHz, 2500 MHz and 3500 MHz Frequency Ranges, Kris Joseph, University of Alberta, <https://crtc.gc.ca/eng/acrtc/prx/2018joseph.htm>

Closing Words

"..... we should have an eye to simplicity and clarity in the overall regulatory system – an objective that will serve the public well, but also serve a wider interest in offering a positive environment for investment, innovation and creative businesses.

"Above all, and whatever approach is taken, the acid test will remain the ability of the system and its individual elements to build and sustain public trust."

Ofcom chief executive Ed Richards; speech to the Oxford Media Convention - 2012



*First we shape our institutions,
then they shape us.*

Winston Churchill