

Telecommunications Policy Review Panel
Executive Summary **2006**



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Executive Summary and List of Recommendations



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Multimedia and Editorial Services Section
Communications and Marketing Branch
Industry Canada
Room 264D, West Tower
235 Queen Street
Ottawa ON K1A 0H5

Tel.: (613) 948-1554
Fax: (613) 947-7155
Email: multimedia.production@ic.gc.ca

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March 2006

The Honourable Maxime Bernier, P.C., M.P.
Minister of Industry
5th Floor, West Tower
235 Queen Street
Ottawa, Ontario K1A 0H5

Dear Minister,

In April 2005, our Panel was appointed to review Canada's telecommunications policy framework and recommend on how to modernize it to ensure that Canada has a strong, internationally competitive telecommunications industry that delivers world-class services for the economic and social benefit of all Canadians. In particular, the Panel was asked to recommend on:

1. how to implement an efficient, fair, functional and forward-looking regulatory framework that serves Canadian consumers and businesses, and that can adapt to a changing technological landscape
2. mechanisms to ensure that all Canadians continue to have an appropriate level of access to modern telecommunications services
3. measures to promote the development, adoption and expanded use of advanced telecommunications services across the economy.

The Panel drew on many sources of information and advice in conducting our review. We received almost 200 written submissions totalling many thousands of pages in response to our June 2005 Consultation Paper. These submissions provided valuable information, insights and proposals. We also benefited from presentations and discussions that took place at two policy fora in Whitehorse and Gatineau. Throughout the review, we consulted extensively with Canadian stakeholders and experts to seek their views, test ideas and explore options for our recommendations.

We were very encouraged by the high level of interest shown in the review by the telecommunications industry, consumer groups, community associations, research centres, other stakeholders and ordinary Canadians. Their contributions were very valuable, as were the contributions we received from departments and agencies of the federal government, the provinces and territories, and municipalities. We also found considerable international interest in the review, and we have drawn on the experience and advice of researchers, policy makers and regulators in other countries.

Thanks to the support our review received from all of these parties, we believe we have carried out our mandate as fully as possible within the ten months allotted — a relatively short period of time in which to conduct a fundamental review of such a broad set of issues.

Canadians have been leaders in telecommunications. As telecommunications and information and communications technologies generally become increasingly important contributors to productivity growth, economic competitiveness and social well-being, it is vital that we remain leaders. This will only be possible if Canada's telecommunications policy and regulatory framework is continuously reformed — so Canadians can reap the full economic and social benefits provided by the increasingly competitive telecommunications markets — while protecting the interests of consumers and contributing to the achievement of important Canadian social values.

In our report, we recommend means designed to better achieve these goals.



Gerri Sinclair



Hank Intven



André Tremblay

Acknowledgment

The Panel would like to acknowledge the many contributions made throughout its review process by the people and organizations who took an interest in our work.

First and foremost, we would like to thank those who made written submissions to the Panel. We received approximately 200 written submissions, totalling thousands of pages, many supported by useful studies and external data. Valuable submissions came from companies, industry and other associations, consumer groups and other non-government organizations, universities, academic experts and interested individuals. Others came from departments and agencies of the federal government, provinces, territories and municipalities. Many of the submissions were of very high quality — and all demonstrated that significant time, expertise, energy and resources were devoted to helping the Panel conduct its review. The ideas and analysis presented in the submissions provided solid input that was used in preparing our report and recommendations.

In addition to the written submissions, the Panel received very valuable input at two public policy fora. These events gave us an opportunity to listen to the views of experts from Canada and other countries on the issues set out in our terms of reference. The first forum on broadband access, which took place in Whitehorse, Yukon, on September 9, 2005, provided valuable assistance in understanding the issues faced in delivering broadband access across Canada — particularly “North of 60.” The second forum on telecommunications policy, held in Gatineau, Quebec, from October 24 to 26, 2005, assembled some of Canada and the world’s leading telecommunications and ICT experts. The high-quality presentations and lively debates at this event provided an excellent opportunity to explore and assess perspectives and international trends on the issues faced by the Panel.

As part of the review process, members of the Panel also met with policy makers, regulators and other telecommunications experts and stakeholders in Washington, D.C., London, U.K., Brussels, Dublin, Geneva, Paris, Tokyo and Seoul to obtain first-hand experience on the issues and concerns in other countries related to their telecommunications policy and regulatory frameworks. In addition, we received valuable information from the International Telecommunication Union, the Organisation for Economic Co-operation and Development, as well as policy makers and telecommunications stakeholders from a number of other countries. The assistance from Australia and New Zealand was particularly helpful. We are grateful to the government, regulatory, non-government and industry representatives who took time to meet with us and share their views on current telecommunications policy issues. In preparing our report and making our recommendations, we have drawn heavily on the experience of other countries, and wish to thank all of these friends of Canada for their generous contribution of time and insights.

The Panel also appreciated receiving information and advice from a wide range of Canadians during the course of its review, at a wide range of informal meetings and discussions during the ten months of our review. We learned from the valuable insights provided by consumers, First Nations organizations and other non-government organizations, government and regulatory officials, industry representatives and their professional advisors, and many other stakeholders in the future of telecommunications — and of Canada. We were repeatedly impressed with the importance that Canadians accord to the future of telecommunications policy and the role of information and communications technology in improving their lives.

The Panel was supported by a dedicated secretariat of government officials and consultants that included experts in telecommunications policy and regulation. The Panel would like to acknowledge the contributions made by all of the members of the secretariat and thank them for their dedication, patience, perseverance and unflagging support throughout the review process. Their work was essential in developing the Panel's report and its Consultation Paper, and in reviewing and assessing the numerous submissions we received, in organizing the Panel's policy forums, and arranging the meetings and briefings that took place throughout the review. We particularly appreciated their support throughout the lengthy working sessions and other discussions, extended conference calls, late-night meetings and multiple revisions to chapters and recommendations that were needed to produce our report.

This report would not have been possible without the hard work, insights and goodwill of a very large number of individuals. We apologize to those who have not been mentioned individually; we have avoided such mentions so as not to diminish the role of many other valuable contributors.

Gerri Sinclair
Hank Intven
André Tremblay

Ottawa

Executive Summary



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The Telecommunications Policy Review Panel believes Canada's telecommunications policy and regulatory framework has generally served Canadians well. It has resulted in industry performance and service levels that rank among the best in the world. However, telecommunications technologies and markets today are in the midst of a profound transformation, and the Panel believes the policy and regulatory framework should change to reflect the new environment.

Telecommunications markets are being revolutionized by the rapid adoption of Internet Protocol (IP)-based networks, broadband and wireless technologies and by the convergence of previously distinct information and communications technologies (ICTs). Over the past two decades, most Canadian telecommunications markets have completed the transformation from monopoly to competition. At the same time, there has been an increasing recognition that ICTs have become essential "general purpose technologies" that contribute to many aspects of Canada's economic prosperity and social well-being.

The innovative ICT products and services coming onto the market can provide significant benefits to Canadian consumers and businesses. However, they are challenging the relevance of some elements of Canada's telecommunications policy and regulatory framework, and they pose new risks to the international competitiveness of the Canadian economy.

The Panel concludes that it is time for significant changes to Canada's current policy and regulatory approaches, some of which date back to the early part of the last century. The Panel's report proposes changes to permit the Canadian telecommunications industry to respond more rapidly to new technology and market developments. These proposals seek to accelerate the pace of deregulation of competitive telecommunications markets and will rely more on market forces to achieve Canada's economic goals. At the same time, the proposals will strengthen and better target regulatory approaches to achieve important social objectives and protect consumers' interests in the more competitive environment.

Telecommunications Policy Objectives and Regulation

The Panel believes the telecommunications policy objectives set out in the *Telecommunications Act* should be clarified and applied consistently by all agencies of the Government of Canada. Outdated and inconsistent objectives currently set out in the Act should be eliminated. The new objectives should focus on three broad goals:

- promoting affordable access to advanced telecommunications services in all regions of Canada, including urban, rural and remote areas
- enhancing the efficiency of Canadian telecommunications markets and the productivity of the Canadian economy

- enhancing the social well-being of Canadians and the inclusiveness of Canadian society by meeting the needs of the disabled, enhancing public safety and security, protecting personal privacy and limiting public nuisance through telecommunications networks.

In addition to clarifying the policy objectives, the *Telecommunications Act* should establish the following new guidelines for government and regulatory action:

- 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.

All major government policies and regulatory measures should include a statement describing how they comply with these objectives and new guidelines.

Economic Regulation

Over the past 20 years, Canada's telecommunications markets have become increasingly competitive. In the large majority of today's telecommunications markets, competitive forces can be relied on to ensure that Canadians receive a wide range of services at prices and on conditions that are among the best in the world. Therefore, it is time to reverse the current presumption in the *Telecommunications Act* that all services should be regulated unless the Canadian Radio-television and Telecommunications Commission (CRTC) issues a forbearance order. This should be replaced with a legislative presumption that services will not be regulated except in specified circumstances designed to protect end-users or maintain competitive markets.

The report recommends comprehensive changes to the regulatory framework to accelerate the job of deregulating telecommunications markets, while retaining essential protections for end-users and for the maintenance of competitive markets. These changes include:

- removing the statutory requirement that all telecommunications services of telecommunications common carriers must be regulated unless the CRTC has forbore from regulation, and clearly limiting economic regulation to markets where a service provider has "significant market power"
- applying economic regulation symmetrically to all service providers, based on whether they have significant market power, regardless of the technology they use
- moving away from before-the-fact (*ex ante*) regulatory prescriptions to approaches that place greater reliance on after-the-fact (*ex post*) regulatory intervention, based on verified complaints of significant market problems

- phasing out economic regulation of all basic retail transmission services over a 12–18-month period, except in markets where there has been a specific ruling that significant market power continues to exist
- phasing out a range of current regulatory restrictions that affect the introduction and pricing of retail services, including pricing restrictions on discretionary retail services as well as restrictions on price differentiation and targeted competitive pricing
- when services remain subject to CRTC tariff regulation, replacing the current requirements for prior regulatory approval of tariffs with a provision that tariffs will automatically come into effect seven days after filing unless the CRTC suspends or disallows the tariff
- phasing out the current requirement that telecommunications service providers must make their “non-essential” facilities and services available to competitors on an “unbundled basis” at regulated rates, and replacing it with a system that creates better incentives to invest in the construction of new competitive telecommunications networks, with future wholesale arrangements for “non-essential” facilities and services based on negotiations between service providers rather than on regulatory prescription
- continuing the requirement that telecommunications service providers must make “essential” facilities and services available to competitors
- extending the regulatory rights of competitive local exchange carriers (CLECs) to include all local telecommunications resellers who agree to accept the related service obligations.

The report makes a number of other recommendations to reduce or eliminate the current level of CRTC economic regulation. However, such regulation would continue in markets where there is significant market power, such as in rural and remote Canadian markets. The report also recommends a new approach to control anti-competitive conduct in telecommunications markets on the basis of complaints made on an *ex post* basis, rather than by prescribing detailed *ex ante* restrictions governing the provision of services.

Telecommunications Competition Tribunal

After reviewing the strengths and weaknesses of the Canadian regulatory framework and comparing it with the frameworks of other member countries of the Organisation for Economic Co-operation and Development (OECD), the Panel has decided to recommend a new approach to dealing with competition issues in telecommunications markets. The Panel notes that the regulatory frameworks of most other OECD countries differ from Canada’s in a number of respects:

- There is greater reliance on the application of specific rules developed in modern competition law. By contrast, the competition-related powers of the Canadian *Telecommunications Act* grant the regulator a broad discretion to define and prevent whatever it considers to be “unjust discrimination” or “undue preference” in relation to the provision of services or charging of rates by carriers.

- Competition law is applied to the telecommunications sector by means of legislation and regulatory authorities that are specifically designed for telecommunications, rather than by relying on general-purpose competition law and authorities.
- There is better coordination between telecommunications regulators and competition authorities and between the laws and policies they apply than has been the case in Canada.

Based on its analysis of the Canadian and international experience, the Panel recommends establishing a Telecommunications Competition Tribunal (TCT) as a transitional mechanism to expedite the change from the traditional Canadian approach to telecommunications regulation to the more competitive deregulated approach recommended in the report.

The proposed TCT should not be a new government institution, but rather a joint decision-making mechanism involving the CRTC and the Competition Bureau. It should combine the telecommunications sector expertise of the CRTC with the competition policy expertise of the Competition Bureau. It should facilitate the application of conventional competition policy to the specific circumstances of telecommunications service markets. The TCT should operate as a telecommunications sector-specific competition authority, assuming responsibility to apply industry-specific competition law based on the civil provisions of the *Competition Act*. It should also become the single authority responsible for telecommunications merger reviews. The Competition Bureau should retain responsibility for the application of criminal and misleading advertising provisions of the *Competition Act*.

The mandate of the TCT should include:

- conducting market analysis to determine when specific telecommunications markets should be deregulated on the grounds that no service providers continue to hold significant market power
- ruling on complaints that basic retail services are subject to significant market power and should therefore be subject to CRTC economic regulation
- dealing with complaints that anti-competitive practices have resulted or are likely to result in a significant lessening or prevention of competition, based on the application of the principles of competition law as adapted to the circumstances of telecommunications markets
- dealing with certain other issues related to the application of competition policy to telecommunications markets, including the definition of “essential facilities” that must be made available by service providers to competitors.

Unlike the Competition Bureau, the TCT should have timely decision-making powers and remedies as well as specific telecommunications market experience. Unlike the CRTC, it should not generally establish restrictions on telecommunications market behaviour on an *ex ante* basis. Its mandate should be to apply *ex post* remedies to punish or control anti-competitive conduct in cases where it determines, based on the evidence, that such conduct has resulted or is likely to result in a significant lessening or prevention of competition.

The proposed TCT should have:

- three members, including senior members of the CRTC and the Competition Bureau and a chair appointed by the federal Cabinet
- a small administrative staff, headed by an executive director
- professional staff to be assigned by the CRTC and the Commissioner of Competition, depending on the skills and experience required for its caseload
- power to retain expert advisors on a temporary basis, where the requisite expertise is not available from the CRTC or the Competition Bureau.

In order to prevent duplication of resources, the TCT should rely on the legal powers and administrative regime of the CRTC. Reliance on the staff and other resources of the CRTC and the Competition Bureau should significantly reduce its costs of operation, relative to the costs of establishing a new regulatory institution.

The proposed TCT should be a transitional mechanism. The *Telecommunications Act* should include a sunset provision terminating the TCT's functions at the end of five years, unless there continues to be significant market power in a substantial number of telecommunications markets at that time. The Panel proposes a general review of telecommunications policy after five years. At that time, it should be possible to further reduce the regulation of telecommunications markets.

Technical Regulation

Technical regulation should ensure safe and efficient use of telecommunications facilities and promote rapid deployment of advanced telecommunications and ICT networks throughout Canada. In this regard, the CRTC's regulatory powers should be clarified to ensure that it can deal effectively and efficiently to resolve certain types of access disputes that can delay expansion of telecommunications infrastructure across Canada. These powers should include clear legal authority to:

- resolve disputes over rates or conditions of access to poles, towers and other support structures of electrical distribution companies, after consultation with any provincial or territorial regulator that has dealt with such matters in the relevant jurisdiction
- require sharing of towers for radio transmission equipment and prohibit exclusive rooftop arrangements by wireless service providers, both for environmental reasons and efficient service deployment
- resolve disputes over access to in-building wiring, ducts, risers, equipment rooms and other necessary facilities in multi-tenant buildings as well as other spaces necessary to locate wireline or wireless networks to serve the public
- resolve disputes over access to public property such as rights-of-way.

Regulation of the radio spectrum will be an increasingly important determinant of the rate of expansion of advanced ICTs throughout Canada. Recognizing the increasing dynamism and innovation in wireless telecommunications markets, Canada's trading partners are moving away from the old prescriptive models of spectrum assignment. Instead, they are increasingly relying on market-based approaches to regulate the radio spectrum. In addition, the convergence of telecommunications services has caused most other OECD countries to combine spectrum regulation with other telecom regulatory functions in a single independent regulatory authority.

The Panel believes the increased convergence of wireless and wireline telecommunications and broadcasting technologies calls for a more consistent and unified regulatory approach. Such an approach could be facilitated by moving the current spectrum regulatory and licensing functions of the Minister of Industry to the CRTC. This move would be consistent with international practice. A recent OECD report recommends that Canada should adopt the same approach. This would increase the transparency of spectrum regulation and provide the CRTC with a better overview and insights into the wireless developments. It would also harmonize the policies and enhance the considerable regulatory expertise located in two regulatory institutions that currently function quite separately.

Prior to the transfer of spectrum regulation functions to the CRTC, Industry Canada should complete its current review of Canadian spectrum policy to:

- provide a clear policy mandate for the CRTC in exercising its new authority to regulate Canada's radio spectrum
- ensure consistency of the new policy with international best practices
- ensure Canada's ability to take leadership in the deployment of advanced wireless telecommunications services.

In developing the new spectrum policy, Industry Canada should take into account work completed as part of its ongoing spectrum policy framework review, and make certain to address the following areas:

- ensuring that adequate spectrum is available to meet demand for deployment of fixed and mobile broadband networks across Canada
- ensuring that licensed and licence-exempt spectrum is available for the Ubiquitous Canadian Access Network/Ubiquité Canada or U-CAN broadband access program recommended in Chapter 8 of this report
- relying as much as possible on market-based approaches to spectrum management
- recovering and "refarming" previously assigned spectrum that is unused or underutilized to accommodate new services
- moving toward establishment of market-based exclusive spectrum rights (i.e. the ability to buy, sell, lease spectrum holdings) and the elimination of barriers to the development of secondary markets in spectrum

- reviewing both current licence fees to correct fee imbalances that may exist among service providers and the application of market-based pricing approaches for non-auctioned licences
- streamlining and standardizing licensing processes
- continuing the use of regulatory approaches to increase the opportunity for Canadians to have an expanded choice of service providers, such as spectrum caps and reservations for new market entrants.

Social Regulation

The Panel recognizes the growing importance of telecommunications services in promoting the social as well as economic welfare of Canadians. It therefore recommends that the policy objectives set out in the *Telecommunications Act* should clearly recognize key social objectives, namely:

- promoting affordable access to advanced telecommunications services in all regions of Canada, including urban, rural and remote areas
- meeting the needs of the disabled, enhancing public safety and security, protecting personal privacy and limiting public nuisance through telecommunications networks.

Implementation of the social objectives of telecommunications policy should recognize the realities of the more competitive telecommunications markets. Where social regulation is used to pursue fairness and other social objectives, it should be competitively neutral and minimize distortions of the competitive process. Social regulation may be funded from within the industry if the cost is small, but should be funded from general government funds if the cost is large. For example, the latter approach should be used for major social programs such as the Panel's proposed U-CAN program for expanding broadband access to all areas of Canada.

To reflect the changing marketplace, the Panel also recommends amending the *Telecommunications Act* to impose an explicit obligation on incumbent telephone companies to continue to provide basic telephone service. The CRTC should be empowered to define such service and approve applications to discontinue service. This obligation should apply in all areas where the companies have network infrastructure available.

To ensure adequate protection for consumers in the new, market-driven environment, the Panel also recommends the establishment of a new form of "ombuds" office, to be called the Telecommunications Consumer Agency (TCA). The TCA should have authority to resolve complaints from individual and small business retail customers of any telecommunications service provider. The report proposes that the TCA should operate as a self-funding, independent, industry-established agency, subject to guidelines set by the CRTC. As is the case in other countries with similar models, telecommunications service providers should all be required to be members in good standing of the TCA.

The Panel considers it important to ensure that Canadian consumers are not denied access to the wide range of new and innovative Internet services. The report notes that there is a growing concern that increasingly deregulated telecommunications service providers could, for strategic

competitive reasons, decide to block or limit access to some Internet applications and content. Therefore the Panel recommends that the *Telecommunications Act* should confirm the right of Canadian consumers to access publicly available Internet applications and content by means of all public telecommunications networks that provide access to the Internet. This provision should:

- authorize the CRTC to administer and enforce these consumer access rights
- take into account any reasonable technical and efficiency constraints on providing such access
- be subject to legal constraints on access, such as those established in criminal, copyright and broadcasting laws.

The Panel believes telecommunications service providers in most cases have little or no incentive to interfere with customer access. However, the principle of open access to the Internet is sufficiently important that it justifies a new regulatory provision to ensure that it is maintained.

Information and Communications Technology Policy

ICTs will play an increasingly important role in the economic and social welfare of Canadians. There is a growing consensus among economists that ICT investment fosters productivity growth. This evidence should not be ignored by the Canadian government, since our national productivity growth is significantly lower than that of the U.S. There is a growing body of evidence that an important contributing factor to Canada's relatively weak productivity performance is our much lower level of ICT investment than that in the U.S.

Investing in ICTs by itself is no guarantee of higher productivity. The economic research suggests that productivity gains come through ICT investment when combined with investment in organizational transformation, including such areas as business process re-engineering, supply chain management, more efficient marketing and distribution practices, and workforce training. The economic evidence indicates that it is "smart adoption" of ICTs that is the essential precondition to increasing the productivity and competitiveness of the Canadian economy.

The Panel therefore recommends that the Prime Minister mandate the Minister of Industry to lead the development and implementation of a national ICT adoption strategy containing components aimed at:

- strengthening ICT adoption by all Canadian businesses, especially by Canada's small and medium-sized enterprises (SMEs)
- strengthening the linkages between ICT sector research and development (R&D) and the adoption of ICTs throughout Canada's economy and society
- enhancing the use of ICTs by governments to improve their efficiency and quality
- promoting ICT adoption skills development on a coordinated national basis
- developing security, confidence and trust in the online environment.

To increase the productivity of Canada's SME sector, the Panel recommends that the government should develop a tax credit to increase the rate of "smart adoption" of ICTs in this sector.

To support the development of these and other components of a national ICT adoption strategy, the report recommends:

- establishing a National ICT Adoption Centre within the federal government to conduct policy research and analysis on ICT adoption issues, to coordinate policies, programs and other measures aimed at promoting ICT adoption among federal government departments and agencies and with the provinces, and to be a lead advocate for the effective use of ICTs, particularly among SMEs
- establishing a blue ribbon National ICT Advisory Council, whose members would provide public and private sector leadership for the smart adoption of ICTs by Canadian governments, business and other organizations, as well as advice on measures to achieve the objectives of the national ICT adoption strategy.

Connectivity: Completing the Job

As part of its national ICT adoption strategy, the Panel recommends that Canada should set a clear goal of remaining a global leader in the deployment of broadband networks in all regions of the country, including urban, rural and remote areas. The Canadian government should establish an objective of achieving ubiquitous broadband coverage no later than 2010. Ubiquitous coverage should be defined as the same level of coverage that Canada has traditionally achieved for wireline telephone service; that is, broadband network access should be available to over 98 percent of Canadian households.

Canadian policy and regulation should recognize that vigorous competition in our telecommunications markets will continue to be the main driving force in maintaining Canada's global leadership in providing broadband access. However, the goal of achieving ubiquitous broadband coverage by 2010 will not be achieved without some government action, particularly in high-cost rural and remote areas.

Therefore, a specific, targeted, new government-funded infrastructure program should be developed to complete the job of expanding broadband coverage in areas that are uneconomic for commercial service providers. The purpose of this program should be to fill in the gaps of broadband coverage, where the market is not likely to provide coverage in the near future. A new "Ubiquitous Canadian Access Network" (U-CAN) program should be the successor to the current Broadband for Rural and Northern Development (BRAND) pilot program and the National Satellite Initiative (NSI).

The U-CAN program, to be developed in consultation with provincial and territorial governments, community organizations and service providers, should provide limited subsidies to selected service providers to complete the job of providing broadband coverage in unserved areas.

The Panel recommends that, unlike BRAND, the proposed U-CAN program should run a series of least-cost subsidy auctions to select financially and technically qualified service providers able to complete the jobs of providing backhaul network capacity and local access networks to uneconomic areas. The auctions should be competitively neutral, and bidders should be invited to propose the most efficient and effective technologies available to meet regional requirements. The report sets out detailed recommendations for the operation of the U-CAN program.

Policy-making and Regulatory Institutions

A number of changes should be made to the structure and process of Canada's federal policy-making and regulatory institutions to bring them into line with better practices of other OECD countries and to facilitate implementation of the proposed new policy and regulatory framework. These changes include:

- drawing a clearer line between policy making and regulation, and improving the effectiveness of the institutions performing those functions
- enhancing Industry Canada's policy-making capabilities to provide more timely and in-depth advice to the Minister of Industry on legislation, policy directions and reviews of telecommunications and ICT policy, which should be conducted every five years, and establishing a policy research program to provide better Canadian research and data in support of informed policy making in the telecommunications and ICT sectors
- streamlining and increasing the professional capacity of the CRTC by:
 - reducing the number of commissioners from 13 to five members (at least in the telecommunications area)
 - compiling short lists of qualified candidates for CRTC positions, recruited through open national competitions based on professional experience and qualifications
 - increasing compensation for commissioners and selected expert telecommunications staff to market-based levels
- giving the CRTC clear authority and sufficient budget to retain expert consultants at market rates, where they are required to provide specialized expertise or to avoid regulatory delays due to heavy workload requirements
- transferring to the CRTC Industry Canada's remaining regulatory and licensing functions involving international submarine cables, satellite orbital slots and telecommunications equipment.

Other procedural reforms recommended in this report deal with:

- expediting the CRTC's decision-making process
- empowering the CRTC and the TCT to impose administrative monetary penalties to enforce telecommunications laws
- putting greater reliance on alternative dispute resolution by the CRTC

- making greater use of public notices and consultations on proposed policies and regulatory actions by Industry Canada and the CRTC
- removing licensing requirements for service providers that do not have significant market power and replacing them with simple registration requirements
- updating the CRTC's Telecommunications Rules of Procedure, and bringing them into line with the proposed new regulatory framework
- reviewing and rationalizing the structure of licence and regulatory fees charged by the CRTC and Industry Canada.

Implementation

The Panel suggests that the government should implement its recommendations in two phases:

- In the first phase, the government should issue policy statements endorsing the development of a national ICT adoption strategy as well as the implementation of a new regulatory framework, and take steps to reform the policy-making and regulatory institutions. In addition, it would use its powers under the *Telecommunications Act* to issue a policy direction to the CRTC to interpret the policy objectives of the Act in a manner that is broadly consistent with major reforms recommended in the Panel's report.
- During the second phase, recommendations requiring changes to existing legislation should be implemented.

Afterword

In an Afterword to this report, the Panel deals with an issue that was not part of its mandate but is inextricably related to it — the future evolution of Canadian broadcasting policy.

The Panel believes the same technological and market forces that drive the need for changes in telecommunications policy also generally apply to Canadian broadcasting policy. Prime among these are the widespread deployment of IP-based services on telecommunications, cable and wireless networks, and the resulting convergence of broadcast distribution markets with telecommunications markets. These trends call into question the sustainability of some of the current approaches to broadcasting policy and regulation and their impact on the future evolution of the telecommunications industry.

The Panel believes it is important to develop effective policies to promote the presence of Canadian content in the converging broadcasting and Internet spaces. Those policies should be designed to advance the development of advanced broadband networks by the cable industry as well as the traditional wireline and wireless telephone industries. The policies should recognize that all these industries are developing increasingly powerful and integrated broadband networks. These networks will all be able to deliver a wide range of content and applications, irrespective of their current classification as “broadcasting” content. Consumer demand will increasingly replace government regulation as the prime driver in the evolution of these advanced networks and of the content they provide. Canada's future broadcasting policies

should recognize these technological and market trends. Canada should develop sustainable policy and regulatory approaches to ensure that its cultural and content production communities can take advantage of technological and market trends and not be undermined by them.

To this end, the Panel proposes a comprehensive review of Canada's broadcasting policy and regulatory framework. It proposes that this review should be conducted by an independent group of experts. One important goal of the review should be to develop a more consistent and competitively neutral regulatory approach to the rapidly converging broadcasting and telecommunications industries. The Afterword lists issues that the Panel feels should be addressed as part of this review.

The Afterword also deals with Canada's telecommunications foreign investment rules. The Panel concludes that liberalization of the restrictions on foreign investment in Canadian telecommunications common carriers would increase the competitiveness of the telecommunications industry, improve the productivity of Canadian telecommunications markets, and be generally more consistent with Canada's open trade and investment policies.

The Afterword notes that the investment restrictions have been maintained in large part due to concerns about the impacts on Canadian broadcasting policies. In particular, there have been concerns about the impacts on Canadian broadcasting policy of increased foreign investment in Canadian cable and satellite broadcast distribution undertakings (BDUs). The Panel notes other areas of significant concern about such liberalization, including impacts on Canadian head offices, employment of high-tech personnel in Canada and national security.

The Panel suggests that the proposed broadcasting policy review should resolve issues related to the separation of Canadian broadcasting "content" policy from policies for the "carriage" of telecommunications. Such a separation has been effected in telecommunications policies in the European Union and elsewhere. If implemented in Canada, such a separation would permit creation of symmetrical foreign investment rules for traditional telecommunications carriers as well as the BDUs that now operate in the same telecommunications markets.

Pending completion of this review, the Panel proposes a phased liberalization of restrictions on foreign investment in telecommunications service providers that are not subject to the *Broadcasting Act*.

The first phase should replace the currently inflexible restrictions on foreign investment with a "public interest" test to review new foreign investments in specific telecommunications markets. Such investments should require approval by the federal Cabinet under a new provision established in the *Telecommunications Act* to protect Canada's important strategic and security interests. In the first phase, it is proposed that investments in market entrants and telecommunications common carriers holding less than a 10-percent share of any relevant telecommunications market should be presumed to be in the public interest, unless there is evidence to the contrary. The second phase, involving further liberalization, should follow completion of the proposed broadcasting policy review.

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Chapter 2 Policy Objectives and Regulation

Recommendation 2-1 The Canadian telecommunications policy objectives as currently set out in the *Telecommunications Act* should be clarified to:

- (a) set out the objectives of Canadian telecommunications policy, and
 - (b) provide guidelines for regulatory and government action to achieve these objectives.
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Recommendation 2-2 Section 7 of the *Telecommunications Act* should be removed and replaced with the following:

*“Canadian Telecommunications Policy and Government
and Regulatory Guidelines”*

“7. It is hereby affirmed that telecommunications performs an essential role in enabling the economic and social welfare of Canada and that Canadian telecommunications policy is based on the following objectives:

- (a) to promote affordable access to advanced telecommunications services in all regions of Canada, including urban, rural and remote areas;
 - (b) to enhance the efficiency of Canadian telecommunications markets and the productivity of the Canadian economy; and
 - (c) to enhance the social well-being of Canadians and the inclusiveness of Canadian society by:
 - (i) facilitating access to telecommunications by persons with disabilities;
 - (ii) maintaining public safety and security;
 - (iii) contributing to the protection of personal privacy; and
 - (iv) limiting public nuisance through telecommunications.”
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Recommendation 2-3 The *Telecommunications Act* should be amended by adding the following immediately after proposed section 7:

“7.1 The following guidelines shall be applied in implementing the telecommunications policy objectives:

- (a) market forces shall be relied upon to the maximum extent feasible as the means of achieving the telecommunications policy objectives;
 - (b) regulatory and other government measures shall be applied only where
 - (i) market forces are unlikely to achieve a telecommunications policy objective within a reasonable time frame, and
 - (ii) the costs of such measures do not outweigh the benefits; and
 - (c) regulatory and other government measures shall be efficient and proportionate to their purpose and shall interfere with the operation of competitive market forces to the minimum extent necessary to meet the objectives.”
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Recommendation 2-4 The *Telecommunications Act* should be amended by adding the following immediately after proposed section 7.1:

“7.2 All policy documents, decisions, orders or other means of introducing or amending significant government or regulatory measures shall:

- (a) specify the telecommunications policy objective that is advanced by the policy or measure;
- (b) demonstrate compliance with the statutory guidelines for achievement of Canada’s telecommunications policy objectives.”

Recommendation 2-5 Amendments should be made to the *Radiocommunication Act*, the *Department of Industry Act* and other relevant federal legislation to ensure that all government departments and agencies that implement telecommunications policies, programs or regulatory measures act in a manner that promotes the achievement of Canadian telecommunications policy objectives and complies with the implementation guidelines as set out in the *Telecommunications Act*.

Recommendation 2-6 The Canadian Radio-television and Telecommunications Commission should be empowered to directly regulate all telecommunications service providers to the extent necessary to implement the Canadian telecommunications policy objectives.

Chapter 3 Economic Regulation

Recommendation 3-1 The regulatory framework for Canada’s telecommunications sector should rely on competition and market forces rather than on economic regulation, to the maximum extent feasible.

Recommendation 3-2 There should be a clear separation between economic and social regulation, with clear identification of the objectives of the regulation and the measures designed to achieve them efficiently, rather than using economic regulation to pursue social objectives.

Recommendation 3-3 The *Telecommunications Act* should be amended by removing the current legislative presumption that telecommunications services must be regulated unless the CRTC makes a decision to forbear, and replacing it with a presumption of deregulation whereby

- (a) economic regulation shall apply only if there is a finding that a service provider has significant market power, and
- (b) retail telecommunications services shall be offered without the need for tariff filings or similar *ex ante* measures in markets where there is no significant market power.

Recommendation 3-4	The approach to forbearance established in section 34 of the <i>Telecommunications Act</i> should be replaced. New provisions should state that, upon application by any party, telecommunications markets subject to economic regulation should be reviewed. Where the review concludes that there is no longer any significant market power in a market, restrictions on price increases should be discontinued.
Recommendation 3-5	There should be a transition period of 12 to 18 months, during which time services that are currently subject to economic regulation shall continue to be subject to such regulation until there has been an opportunity to examine whether there is significant market power in markets for these services.
Recommendation 3-6	Economic regulation of retail basic transmission services should be retained or instituted only if there is a finding that a service provider has significant market power in the market for such services.
Recommendation 3-7	Discretionary services should not be regulated to prevent price increases, but subject only to constraints on anti-competitive conduct.
Recommendation 3-8	<p>(a) Currently forborne retail services should continue to be unregulated. Any current conditions on forbearance should be reviewed and maintained only if significant market power is found.</p> <p>(b) New basic transmission services should be subject to a presumption of no economic regulation.</p> <p>(c) It should be open to any party to request a review of the existence of significant market power in any telecommunications market. If the review finds that a service provider has significant market power in the market, the next step should be to examine whether competition law, as adapted to telecommunications services, is sufficient to protect the interests of customers and prevent anti-competitive conduct. If it is not, then the service should be subject to economic regulation. If the review finds no significant market power, the service should be deregulated.</p>
Recommendation 3-9	Provision should be made for reclassifying a retail service from a discretionary to a basic transmission service, and vice versa. The usual tests should be applied when a service is reclassified from discretionary to basic transmission in order to determine whether it shall be subject to economic regulation.
Recommendation 3-10	All forms of economic regulation should be applied symmetrically to all telecommunications service providers having significant market power in any telecommunications market.
Recommendation 3-11	A price cap framework should be used when economic regulation of retail services is necessary, and enforced on an <i>ex post</i> basis by means of an annual filing or in response to a complaint by a customer or a competitor.

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- Recommendation 3-12** There should be no prohibition on price differentiation and targeted pricing unless they are part of a practice that is determined to be anti-competitive conduct.
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- Recommendation 3-13** The current standards for price regulation as set out in section 27 of the *Telecommunications Act* are too general and allow for too much discretion. They should be replaced by more specific measures targeted at consumer protection and control of anti-competitive conduct.
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- Recommendation 3-14** Control of anti-competitive conduct in telecommunications service markets should be guided by competition law principles, suitably modified to take into account the specific features of the telecommunications service industry.
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- Recommendation 3-15** A working group should be established and comprised of members drawn from both the CRTC and the Competition Bureau as well as independent experts. The working group should draw upon competition law principles and knowledge of the telecommunications industry, as soon as reasonably feasible, to develop specific guidelines for the application of competition policy to the industry, including
- (a) specification of the types of practices that could constitute abuse of dominance, and
 - (b) guidelines for market definition and analysis of significant market power.
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- Recommendation 3-16** Telecommunications service providers should continue to file tariffs for services that are subject to economic regulation. These tariffs should be open to public inspection.
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- Recommendation 3-17** Tariffs for regulated services should be subject to a negative disallowance process, in that they would automatically come into effect seven days after they are filed, unless they are suspended or disallowed by the CRTC, in which case the CRTC should provide
- (a) the reasons for a suspension or a disallowance, and
 - (b) an indication of when a final decision on a suspension will be made.
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- Recommendation 3-18** A telecommunications service provider should be allowed to discontinue a regulated service only if authorized by the CRTC. A telecommunications service provider of a deregulated service should be able to discontinue service without authorization, provided that reasonable notice is given to customers.
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- Recommendation 3-19** The regulatory framework should continue to require owners of essential wholesale facilities to make them available to competitors at regulated wholesale rates. Regulatory requirements to provide non-essential wholesale services or facilities should be phased out in order to provide increased incentives for innovation, investment and more widespread construction of competing network facilities.
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- Recommendation 3-20** The *Telecommunications Act* should be amended
- (a) to provide for the creation of a category of essential facilities, including ancillary services, that should be subject to a regime of mandated supply at regulated rates, and
 - (b) to establish a process whereby this category of services can be kept up-to-date.
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- Recommendation 3-21** A working group of CRTC and Competition Bureau members should be established as soon as possible to develop recommendations to the CRTC on the definition of essential facilities and its application to today's telecommunications networks.
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- Recommendation 3-22** A regular review of the essential facilities category should be conducted at least every three to five years.
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- Recommendation 3-23** Existing mandatory wholesale arrangements, including mandatory resale of retail services, should remain in place during a transition period. The transition period should be three to five years for most non-essential services or facilities, with consideration given to a longer period for certain non-essential, co-location services because of their typically high, one-time costs. The transition arrangements should be developed by the working group of the CRTC and Competition Bureau.
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- Recommendation 3-24** Following the transition period for phasing out mandatory wholesale arrangements, only essential facilities and interconnection services should remain subject to mandatory access requirements and regulated pricing.
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- Recommendation 3-25**
- (a) Tariff regulation should not apply to new, non-essential wholesale services, and should be removed from existing non-essential wholesale service arrangements, including the resale of regulated retail services, following a three-to-five-year transition period.
 - (b) The *Telecommunications Act* should be amended to require the filing of tariffs for wholesale services only for essential facilities and ancillary services and for interconnections services. Tariffs should be filed for existing non-essential facilities during the transition period to phase them out.
 - (c) The Governor-in-Council should issue a policy direction to the CRTC stating that regulating the availability and pricing of new, non-essential facilities and ancillary services is inconsistent with policy objectives set out in section 7 of the *Telecommunications Act*, particularly paragraphs (f) and (g).*

* These objectives of s. 7 state:

- (f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective;
 - (g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services;
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Recommendation 3-26 Section 29 of *the Telecommunications Act* should be amended to give the CRTC clear authority to mandate interconnection arrangements and interoperability between all public networks when the CRTC is satisfied that

- (a) there is a significant public interest in requiring the interconnection, and
- (b) market forces and commercial negotiations are unlikely to result in efficient interconnection and interoperability on reasonable terms and in a timely manner.

Recommendation 3-27 Primary responsibility for regulating interconnection, including resolution of interconnection disputes, should remain with the CRTC.

Recommendation 3-28 The CRTC should retain power to regulate the prices as well as other terms and conditions of wholesale access or interconnection where

- (a) these have been mandated, or
- (b) there is a dispute involving commercial access or interconnection.

Providers of mandated wholesale access or interconnection services should be obliged to file relevant tariffs with the CRTC.

Recommendation 3-29 The CRTC should undertake a public review of its incremental costing methodology as soon as possible.

Recommendation 3-30 Resellers in the local telecommunications services market who choose to undertake all the obligations of a competitive local exchange carrier should have all the regulatory rights and obligations applicable to competitive local exchange carriers.

Chapter 4 Telecommunications Competition Tribunal

Recommendation 4-1 A new Telecommunications Competition Tribunal should be established operating as a type of “joint panel” of the CRTC and the Competition Bureau to address competition issues in the telecommunications sector.

Recommendation 4-2 The Telecommunications Competition Tribunal should be a transitional regulatory mechanism. Its mandate should terminate after five years, unless there continues to be significant market power in a substantial number of telecom markets.

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- Recommendation 4-3** The Telecommunications Competition Tribunal should be comprised of three members as follows:
- (a) the Vice Chair, Telecommunications of the CRTC or another CRTC commissioner appointed by the CRTC,
 - (b) the Commissioner of Competition or one of the Competition Bureau's senior staff appointed by the Commissioner, and
 - (c) a third member to be appointed by the Governor-in-Council in accordance with the new recruitment and selection process for new CRTC telecommunications commissioners as recommended in Chapter 9.
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- Recommendation 4-4** The Governor-in-Council's appointee to the Telecommunications Competition Tribunal should act as its chair.
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- Recommendation 4-5** Each member of the Telecommunications Competition Tribunal should have one vote, and decisions should be made by a majority of votes.
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- Recommendation 4-6** The Telecommunications Competition Tribunal should be constituted as an independent quasi-judicial regulatory authority empowered to make rulings on matters within its jurisdiction that have the same force and effect as CRTC decisions or orders.
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- Recommendation 4-7** The Telecommunications Competition Tribunal should have all *Telecommunications Act* powers available to the CRTC and all *Competition Act* powers available to the Competition Tribunal in civil cases.
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- Recommendation 4-8** The Telecommunications Competition Tribunal should be staffed, to the greatest extent possible, by employees of the CRTC and the Competition Bureau. The CRTC and the Commissioner of Competition should be directed to assign personnel with the appropriate expertise to work under the direction of the Telecommunications Competition Tribunal in support of its mandate, as required by the Telecommunications Competition Tribunal from time to time.
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- Recommendation 4-9** The Telecommunications Competition Tribunal should also be empowered to retain a small secretariat of managers and support staff to carry out its functions.
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- Recommendation 4-10** The Telecommunications Competition Tribunal should be granted clear authority and sufficient budget to retain outside expert consultants at market rates when required to provide specialized expertise or to meet heavy workload requirements.
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- Recommendation 4-11** Personnel assigned by the Commissioner of Competition or the CRTC to support the Telecommunications Competition Tribunal should have access to confidential information filed with it and should be permitted to share such information with other officials at the Competition Bureau or the CRTC to the extent necessary to perform their duties at the Telecommunications Competition Tribunal. Where information is filed in confidence with the Telecommunications Competition Tribunal and the claim for confidentiality is accepted by the Telecommunications Competition Tribunal, protection should be extended to any disclosure of the information to other officials of the Competition Bureau or the CRTC.
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- Recommendation 4-12** Upon request by the Commissioner of Competition in the course of an investigation under the *Competition Act* involving the telecommunications sector, the CRTC or the Telecommunications Competition Tribunal should be required to provide assistance to the Competition Bureau in the form of personnel (subject to resource constraints) and to provide any information in their possession that may assist in the investigation or market analysis.
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- Recommendation 4-13** The Telecommunications Fees Regulations should be amended to provide for recovery of the Telecommunications Competition Tribunal's annual operating expenses from the telecommunications industry.
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- Recommendation 4-14** The Telecommunications Competition Tribunal should have exclusive jurisdiction to determine the following matters:
- (a) applications for deregulation of services in telecommunications markets on the basis that significant market power does not exist,
 - (b) complaints of anti-competitive conduct in all telecommunications markets, other than the terminal equipment market,
 - (c) determinations on which services should be subject to mandated wholesale access services and establishment of the regulatory regime applicable to such services,
 - (d) applications for re-regulation of services in telecommunications markets where significant market power is alleged to exist, and
 - (e) reviews of mergers involving telecommunications service providers.
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- Recommendation 4-15** The Telecommunications Competition Tribunal should define telecommunications markets and assess whether significant market power exists in accordance with competition law principles.
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- Recommendation 4-16** The Telecommunications Competition Tribunal should be granted exclusive jurisdiction over civil allegations of anti-competitive conduct in the telecommunications sector. Mechanisms should be put in place for consultation among the Telecommunications Competition Tribunal, the CRTC and the Commissioner of Competition to determine which institution should exercise jurisdiction in borderline cases.
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- Recommendation 4-17** Mechanisms should be put in place to enable the CRTC and the Commissioner of Competition to refer telecommunications competition issues to the Telecommunications Competition Tribunal when they arise in the context of broader proceedings that are properly within their respective jurisdictions, and for the Telecommunications Competition Tribunal to refer issues of a technical, rate-setting or social nature to the CRTC for determination or implementation.
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Chapter 5 Technical Regulation

Recommendation 5-1 The wording of subsection 43.(5) of the *Telecommunications Act* should be expanded to ensure that the CRTC has a clear power to resolve disputes and order access to support structures constructed on, over, along or under public or private property of all descriptions. These access rights should be defined to include the right to install, maintain, repair and operate transmission facilities as defined in the Act. Subsection 43.(5) should be amended to ensure that it applies to support structures owned by electricity utilities, municipalities and other parties.

Recommendation 5-2 The CRTC should be empowered to resolve disputes over the terms and conditions of access between telecommunications service providers or broadcasting distribution undertakings and third-party owners of support structures, including, but not limited to, support structures owned by electricity utilities, municipalities or other parties. Under this new regime, parties should be required to attempt to reach agreement on access, failing which the CRTC should be empowered to resolve any disputes and order access on terms and conditions, including rates, that are binding on both parties.

Recommendation 5-3 The CRTC, prior to making an order to resolve a dispute involving access to support structures owned by an entity that is provincially regulated, should be required to consult with any provincial regulator that has ruled on the relevant terms and conditions of access.

Recommendation 5-4 The wording of subsections 43.(2) and (3) of the *Telecommunications Act* should be expanded to ensure that the CRTC has the power to resolve disputes and order access to public property of all description. These access rights should be defined to encompass the right to install, maintain, repair and operate all “transmission facilities” as defined in the Act. The CRTC’s power to order remedial action in subsection 43.(4) should include access for the purposes of maintaining, repairing or operating transmission facilities, as well as constructing or installing them. Subsection 43.(4) should also be clarified to empower the CRTC to establish and enforce principles of general application that can be used by parties to negotiate broad-based municipal access agreements, which can then be brought to the CRTC for review or dispute resolution if parties are unable to reach agreement.

Recommendation 5-5 The CRTC should be empowered to regulate and promote the sharing of antenna towers used for telecommunications purposes, resolve disputes regarding tower access, and enforce its regulations in an effective and timely manner.

Recommendation 5-6 The CRTC should be empowered to prohibit wireless carriers from entering into exclusive arrangements for locating telecommunications antennas on rooftops and, in those cases where building owners and wireless service providers are unable to agree on terms and conditions of access, should be empowered to resolve the dispute on such terms as it considers appropriate, with its rulings binding on the parties.

Recommendation 5-7 The CRTC should be empowered to establish guidelines for access to multi-unit buildings, including guidelines for the pricing and terms and conditions of access. Telecommunications service providers and building owners should be required to negotiate access arrangements in accordance with such guidelines.

Recommendation 5-8 The CRTC should be empowered to resolve disputes between telecommunications service providers and building owners respecting access to multi-unit buildings, including access to the building itself from the property boundary, as well as in-building wiring, related ducts, risers and equipment rooms, for purposes of providing telecommunications services to tenants and other users in the building. When the CRTC exercises this jurisdiction, its ruling respecting terms and conditions of access should be binding on the parties.

Recommendation 5-9 Industry Canada should develop a new spectrum policy to provide clear direction to the CRTC in exercising its new authority to manage and regulate Canada's radio spectrum. The new policy should take into account the work completed by Industry Canada as part of its ongoing spectrum policy framework review, and should ensure that the following areas are addressed:

- (a) availability of adequate spectrum to meet demand for deployment of fixed and mobile broadband networks across Canada,
 - (b) availability of licensed and licence-exempt spectrum for the U-CAN program recommended in this report,
 - (c) reliance on market-based approaches to spectrum management as much as possible,
 - (d) 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,
 - (e) recovery and "refarming" of previously assigned spectrum that is unused or underutilized in order to accommodate new services,
 - (f) review of current licence fees to correct fee imbalances that may exist among service providers, separating where practical cost-recovery fees from those fees charged for the use of a limited public resource, and applying market-based pricing for non-auction licences,
 - (g) streamlining and standardization of licensing processes, and
 - (h) continued use of regulatory mechanisms such as spectrum caps (aggregation limits) where spectrum is scarce in order to provide an opportunity for new entrants to acquire spectrum and for Canadians to have an expanded choice of service providers.
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- Recommendation 5-10** The authority to regulate Canada’s radio spectrum and to license its use should be transferred from Industry Canada to the CRTC.
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- Recommendation 5-11** Industry Canada and the CRTC should form a joint working group to plan the transition and integration of spectrum regulation, management and related functions to the CRTC, and to develop a mechanism for ongoing coordination between the two organizations on spectrum policy development.
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- Recommendation 5-12** The regulation of telecommunications equipment and devices should be transferred from Industry Canada to the CRTC. The CRTC should continue to rely primarily on industry organizations to administer equipment certification programs, including authorized certification bodies.
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- Recommendation 5-13** Programs related to the regulation of telecommunications equipment and devices should be reviewed by Industry Canada prior to the transfer from Industry Canada to the CRTC to eliminate any unnecessary regulation.
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Chapter 6 Social Regulation

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- Recommendation 6-1** The *Telecommunications Act* should be amended to impose a clear obligation on incumbent telephone companies to provide basic telephone service in areas where they have available network infrastructure. Approval by the CRTC should be required for an incumbent telephone company to abandon such basic telephone service.
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- Recommendation 6-2** A new Telecommunications Consumer Agency should be established with authority to resolve complaints from individual and small business retail customers of any telecommunications service provider.
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- Recommendation 6-3** The proposed Telecommunications Consumer Agency should be a self-funding, independent, industry-established agency. The agency’s structure and functions should be determined by the CRTC.
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- Recommendation 6-4** All telecommunications service providers should be required to be members in good standing of the proposed Telecommunications Consumer Agency.
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- Recommendation 6-5** The *Telecommunications Act* should be amended to confirm the right of Canadian consumers to access publicly available Internet applications and content of their choice by means of all public telecommunications networks providing access to the Internet. This amendment should
- (a) authorize the CRTC to administer and enforce these consumer access rights,
 - (b) take into account any reasonable technical constraints and efficiency considerations related to providing such access, and
 - (c) be subject to legal constraints on such access, such as those established in criminal, copyright and broadcasting laws.
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Chapter 7 Information and Communications Technology Policy

Recommendation 7-1 Under the leadership of the Prime Minister, the federal government should develop a national ICT adoption strategy focused on using ICTs to increase the productivity of the Canadian economy, the social well-being of Canadians and the inclusiveness of Canadian society.

Recommendation 7-2 The Prime Minister should mandate the Minister of Industry to develop and implement a national ICT adoption strategy in collaboration with key federal, provincial, territorial and municipal government colleagues as well as high-level representatives from the private, public and not-for-profit sectors, with the following objectives:

- (a) strengthening ICT adoption by Canadian businesses, particularly small and medium-sized enterprises,
- (b) strengthening the links between ICT sector research and development and ICT adoption,
- (c) enhancing ICT adoption by governments,
- (d) promoting development of ICT adoption skills on a coordinated national basis,
- (e) improving security, confidence and trust in the online environment, and
- (f) achieving ubiquitous access to broadband networks and services.

Recommendation 7-3 The Prime Minister should mandate the Minister of Industry to establish a National ICT Adoption Centre within Industry Canada to

- (a) benchmark Canada's performance in the adoption and effective use of ICTs,
- (b) conduct policy research and analysis on issues related to ICT adoption in the private and public sectors, in order to inform discussions and support new initiatives related to ICT adoption,
- (c) coordinate policies, programs and other measures aimed at promoting the smart adoption of ICTs within the federal government with the provinces to avoid overlap and duplication of effort,
- (d) be a lead advocate for the effective use of ICTs, particularly among small and medium-sized enterprises, and
- (e) manage the deployment of the U-CAN program (see Recommendation 8-4).

Recommendation 7-4 The Minister of Industry should establish a high-level National ICT Advisory Council comprised of select federal, provincial and territorial ministers as well as leaders from the private sector, universities, research institutions, consumer groups and communities to provide ongoing advice on the development and implementation of the national ICT adoption strategy.

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- Recommendation 7-5** The federal government should introduce an ICT adoption tax credit targeted at small and medium-sized enterprises and having the following features:
- (a) it should apply to investments in ICT assets and to complementary expenses related to ICT adoption,
 - (b) it should define ICT assets broadly as including computers, communications equipment, software and computerized manufacturing equipment,
 - (c) complementary expenditures related to the effective adoption of ICTs such as costs related to ICT training, organization change and process re-engineering necessary for ICT adoption should be eligible for the tax credit,
 - (d) in order to increase its effectiveness and reduce the associated tax expenditures, the ICT adoption tax credit should apply only to incremental ICT adoption costs, and
 - (e) the credit should be fully refundable when no tax is payable.
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Chapter 8 Connectivity: Completing the Job

- Recommendation 8-1** As a key part of its national ICT strategy, the federal government should
- (a) ensure that Canada remains a global leader in the deployment of broadband networks, and
 - (b) immediately commence a program to ensure that affordable and reliable broadband services are available in all regions of Canada, including urban, rural and remote areas, by 2010 at the latest.
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- Recommendation 8-2** The federal government should continually monitor technological developments in the telecommunications sector, assess their economic and social implications, and adopt policies to ensure that Canada continues to be a leader in the deployment of advanced telecommunications services.
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- Recommendation 8-3** Federal government policy should recognize that market forces
- (a) will continue to expand the availability of broadband access across the country, but
 - (b) will not on their own achieve the policy objective of deploying ubiquitous broadband access by 2010, particularly in rural and remote areas.
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- Recommendation 8-4** A specific, targeted government subsidy program, the Ubiquitous Canadian Access Network/Ubiquité Canada or U-CAN program, should be established to ensure that broadband access is made available to Canadians in areas where commercial operators are not providing service and are unlikely to do so for economic reasons.
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- Recommendation 8-5** The U-CAN program should aim to complete the job begun by BRAND of providing ubiquitous broadband throughout all regions in Canada that the market is not likely to serve on its own by 2010.
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- Recommendation 8-6** The budget allocation for the U-CAN program should be based on the projected costs of providing broadband connectivity to the remaining unserved areas of Canada. The funds should be assigned based on the projected cost of achieving such connectivity in each region.
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- Recommendation 8-7** The U-CAN program should be flexibly designed and implemented to reflect the needs of stakeholders in regions to be served, including governments, communities and the private sector.
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- Recommendation 8-8** U-CAN broadband expansion initiatives should be implemented only after coordination with those involved in other broadband expansion programs of the private sector, federal government departments and agencies as well as other levels of government.
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- Recommendation 8-9** The U-CAN program administrators should develop broadband expansion initiatives in consultation with community members and organizations who can help define community access needs.
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- Recommendation 8-10** The U-CAN program should not promote the duplication of existing or planned network facilities with networks that are subsidized by municipal, provincial or federal government funds. However, investment and subsidies by public bodies such as municipalities should not be discouraged in areas where the market fails to provide broadband access.
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- Recommendation 8-11** When subsidies are provided to network operators to expand backhaul networks into previously unserved areas, such operators should be required as a condition of obtaining the subsidy, or by regulation
- (a) to provide transmission services to other local service providers who wish to serve the areas, and
 - (b) to provide these services at rates that are discounted to reflect the subsidies received.
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- Recommendation 8-12** Contracts entered into between the U-CAN program and providers of backhaul services should specify the technical, operational and financial requirements that must be met to ensure that the points of presence provided by backhaul operators are open to other service providers on a fair and reasonable basis. These specifications should include such matters as
- (a) physical access to buildings and other facilities,
 - (b) performance quality standards,
 - (c) high standards of security and scalability,
 - (d) collocation and modification of equipment, and
 - (e) rates for access and interconnection.
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- Recommendation 8-13** The U-CAN program should provide subsidies to broadband network providers by means of least-cost subsidy auctions.
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- Recommendation 8-14** Auctions should be run for large service areas at a time, in order to increase efficiencies of service provision. These service areas should be designated in consultation with provincial or territorial governments, after assessing current and planned coverage of existing broadband network operators.
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- Recommendation 8-15** In most cases, the U-CAN program should hold separate auctions for the backhaul network and local access facilities within each unserved area. Such auctions should generally be held at the same time.
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- Recommendation 8-16** The U-CAN program should enter into contracts for access and backhaul services with the service provider who
- (a) demonstrates it has the necessary technical and financial qualifications to successfully deploy and operate the broadband backhaul or access service for the duration of the contract, and
 - (b) submits the lowest bid for the subsidy it requires to implement and operate the project.
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- Recommendation 8-17** Sufficient amounts of appropriate spectrum should be made available on a licensed or unlicensed basis to service providers who are awarded subsidies under the U-CAN program.
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- Recommendation 8-18** Recipients of U-CAN broadband access subsidies who fail to provide service on time and in accordance with U-CAN contract specifications should forfeit the subsidy and any spectrum assigned to them, and should be subject to contractual penalties. The U-CAN program should then hold a new auction to serve the area and reassign the related spectrum.
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Recommendation 8-19 The U-CAN auction process should be technologically and competitively neutral. Private sector service providers as well as regional and community organizations should be permitted to participate in the auctions, provided that they can demonstrate technical capability and financially sustainable business plans.

Recommendation 8-20 There should be effective tracking and periodic evaluation of the U-CAN program, and improved tracking and evaluation of other ongoing federal government broadband and connectivity programs.

Chapter 9 Policy-making and Regulatory Institutions

Recommendation 9-1 The government should ensure that the *Department of Industry Act* grants the Minister and the department a clear mandate and sufficient powers to effectively lead national telecommunications as well as information and communications technology policy development.

Recommendation 9-2 Industry Canada should make a multi-year commitment to fund ongoing policy research to support improved policy making and regulation in the telecommunications and information and communications technology sectors. Research grants should be awarded by a qualified, independent panel, and the research results should be made publicly available in a timely manner.

Recommendation 9-3 Telecommunications data collection and reporting should be improved in the following manner:

- (a) The CRTC should continue, for at least five more years, to publish annual reports on the status of competition in Canadian telecommunications markets and on the deployment and accessibility of advanced telecommunications infrastructure.
- (b) The CRTC, Industry Canada and Statistics Canada should form a working group to determine requirements for additional data to support improved regulation, research and policy making, and to determine which institution should collect the information.
- (c) The CRTC should conduct a public consultation to determine if additional data should be collected from telecommunications service providers and how best to make industry data available in a timely manner.

Recommendation 9-4	The Minister of Industry should be mandated by legislation to undertake a comprehensive review of telecommunications policy and regulation every five years.
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Recommendation 9-5	The policy direction power should be transferred into a more effective policy-making instrument by <ul style="list-style-type: none">(a) requiring the government to issue a public notice containing a proposed direction and the reasons for it and giving the public a reasonable opportunity to comment on it,(b) repealing the current requirement to refer a proposed policy direction to parliamentary committees for review, and(c) repealing the Cabinet power to review individual CRTC telecommunications decisions.
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Recommendation 9-6	The <i>Canadian Radio-television and Telecommunications Commission Act</i> should be amended to reduce the number of CRTC commissioners from 13 to 5. The five commissioners should deal with both telecommunications and broadcasting matters. Any additional commissioners who might be appointed for broadcasting regulation purposes should not deal with telecommunications matters.
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Recommendation 9-7	The government should adopt an open, professional recruitment process for CRTC commissioners who are responsible for telecommunications regulation.
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Recommendation 9-8	The <i>Canadian Radio-television and Telecommunications Commission Act</i> should be amended to include a requirement to advise incumbent commissioners, no later than six months prior to the end of their appointed term, on whether or not they will be reappointed and, if so, the length of their new term.
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Recommendation 9-9	There should be increased flexibility to set compensation levels for commissioners and a small number of expert staff positions at market levels, including the potential for performance-based incentives, to permit the CRTC to attract and retain highly qualified individuals to meet the professional requirements of the proposed new regulatory framework.
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Recommendation 9-10	The CRTC should be granted clear authority and sufficient budget to retain outside expert consultants at market rates when they are required to provide specialized expertise or to meet heavy workload requirements.
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- Recommendation 9-11** The CRTC should establish and adhere to published performance service standards for the various forms of regulatory proceedings it runs. These standards should be developed in consultation with the telecommunications industry and the public.
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- Recommendation 9-12** When the CRTC proposes to introduce or to change a regulatory approach or rule, it should routinely publish a notice seeking comments on specific proposals or options being considered. The notice should set out the background and the supporting rationale for the proposed approach or options.
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- Recommendation 9-13** The *Telecommunications Act* should be amended to grant the CRTC power to levy administrative monetary penalties at levels similar to those under the *Competition Act*. The CRTC should also be granted specific power to make related non-monetary orders designed to enhance the deterrent effect of the penalty.
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- Recommendation 9-14** The *Telecommunications Act* should be amended to remove the need to obtain the consent of either the Minister or the CRTC to initiate a prosecution under the Act.
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- Recommendation 9-15** The *Telecommunications Act* should be amended to authorize the CRTC to refer possible offences under that Act or any other telecommunications legislation to the Attorney General of Canada for investigation and possible prosecution.
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- Recommendation 9-16** The *Telecommunications Act* should be amended to increase the fines for offences under the Act to levels similar to those in the *Competition Act*.
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- Recommendation 9-17** The government should review the *Telecommunications Act* to link potential fines for offences more directly to the gravity of the offence committed and to add a due diligence defence in appropriate cases.
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- Recommendation 9-18** The *Telecommunications Act* should be amended to provide that, in any civil court proceeding, a CRTC decision regarding the liability of a telecommunications service provider for a breach of the Act or regulatory measures established under the Act should be *prima facie* evidence of such liability.
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- Recommendation 9-19** The *Telecommunications Act* should be amended to ensure that it does not place limitations on the right to sue for damages in the courts for a breach of the Act or a breach of contract.
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- Recommendation 9-20** The *Telecommunications Act* should be amended to repeal the requirement to obtain leave to appeal a decision of the CRTC to the Federal Court of Appeal on any question of law or of jurisdiction.
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- Recommendation 9-21** The *Telecommunications Act* should be amended to ensure that the CRTC has the power to mandate alternative dispute resolution both by the CRTC itself and on an outsourced basis in appropriate cases.
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- Recommendation 9-22** The CRTC should replace the obligation to file detailed studies and other documentation to justify applications for tariff approvals with a regime under which applicants certify compliance with a list of relevant regulatory requirements.
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- Recommendation 9-23** The CRTC should establish a single code of the regulatory rules that apply to telecommunications markets by consolidating and updating rules now contained in various decisions, orders, rules, regulations, public notices, circulars and other documents. This consolidated approach to rule making should be applied prospectively in the case of new CRTC rules. In the case of the CRTC's existing rules, the consolidation should be completed within three years.
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- Recommendation 9-24** The *Telecommunications Act* should be amended to provide that anyone operating telecommunications facilities is entitled to obtain a certificate of registration as evidence of its authority to operate as a telecommunications service provider in Canada.
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- Recommendation 9-25** The requirement to obtain a licence under the *Telecommunications Act* to provide basic international telecommunications services should be repealed and replaced with a simple registration regime.
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- Recommendation 9-26** The requirement to obtain a licence under the *Telecommunications Act* to construct or operate an international submarine cable should be repealed and replaced with a simple registration regime.
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- Recommendation 9-27** The CRTC should review, update and consolidate its *Telecommunications Rules of Procedure*. The updated Rules should include changes required as a result of implementing the recommendations of this report.
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- Recommendation 9-28** The CRTC should review its *Rules of Procedure* at least every five years, and update them continuously.
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- Recommendation 9-29** The CRTC should enact a rule or regulation establishing the criteria for the awarding of costs in proceedings before it. The criteria should be based on the principles that costs shall be awarded to successful complainants in clear cases of inappropriate behaviour and against them in clear cases of frivolous complaints.
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Recommendation 9-30 The government should review the issue of public interest group participation in telecommunications regulatory proceedings. Funding for such participation should come from a multi-year commitment by government to subsidize such participation, rather than costs awards imposed by the CRTC on individual telecommunications service providers.

Recommendation 9-31 The *Telecommunications Fees Regulations*, 1995 should be amended so all telecommunications service providers are required to pay a *pro rata* share of the annual costs of CRTC and TCT telecommunications activities. Shares should be calculated using the same approach and exemptions as are used under the existing subsidy regime for local residential service in high-cost areas.
