



## Canada-United States Law Journal

Volume 25 | Issue

Article 34

January 1999

# Observation on a Presentation Given on the Comparative Tax Aspects of Technological Change in Canada and the United States

David L. Burn

Follow this and additional works at: <https://scholarlycommons.law.case.edu/cuslj>

 Part of the [Transnational Law Commons](#)

### Recommended Citation

David L. Burn, *Observation on a Presentation Given on the Comparative Tax Aspects of Technological Change in Canada and the United States*, 25 Can.-U.S. L.J. 225 (1999)

Available at: <https://scholarlycommons.law.case.edu/cuslj/vol25/iss/34>

This Speech is brought to you for free and open access by the Student Journals at Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Canada-United States Law Journal by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

## OBSERVATIONS ON A PRESENTATION GIVEN ON THE COMPARATIVE TAX ASPECTS OF TECHNOLOGICAL CHANGE IN CANADA AND THE UNITED STATES

*David L. Burn*<sup>\*</sup>

Good morning and it is a pleasure to see so many of you interested in discussing this important subject on a Saturday morning.

I am delighted to have been invited to talk to you today and my comments are in part developed as a result of my experience with Nortel Networks throughout the 1990s.

Nortel Networks is one of the world's largest suppliers of digital network solutions and the most broadly diversified developers of high capacity switching and optics technology. We have over 100 years of experience in building communications equipment and now we are at the heart of the Internet. In fact, over seventy-five percent of all Internet traffic travels over the Nortel Networks infrastructure. We are a global company in the top 100 in the United States and with a presence in over 150 other countries where we work with customers to build and deliver communications and IP (Internet Protocol)-optimized networks or what we call "Unified Networks." No other company in the world can deliver global applications and services that merge new and existing networking elements and technologies into a seamless open network. The Unified Networks approach gives our customers distinct advantages while simplifying network operations and reducing costs.

"Canada is open for business." It was Prime Minister Mulroney in the early 1980s who coined that phrase. Perhaps not coincidentally, around that time Canada entered into the business of offering incentives for R&D. The tax treatment of depreciation was more generous in Canada then, especially in the capital-intensive industries whereas today, in comparison to the U.S. system, Canada is more generous with R&D incentives. The Organization for Economic Cooperation and Development (OECD) has said that Canada probably has the most favourable system in the world, perhaps even too generous. Fortunately the Canadian government does not always agree with the OECD.

---

<sup>\*</sup> Mr. Burn is Vice President, Taxation at Nortel Networks, a position he has held since 1989. He is responsible for the company's worldwide taxation affairs, with professional staff located in ten locations. He is a 1996 graduate of the Queens University Executive Development Program. Mr. Burn speaks frequently for the Canadian Tax Foundation and various other tax programs.

In the United States, I believe there is a history of directly funded government finance of research, in the Defense industry for example, and when that is taken into account, the Canadian system is relatively less generous.

Last year, a commission set up by the Canadian government, known as The Mintz Committee, reported on the Canadian business tax system and found that it was not particularly competitive.<sup>1</sup> It recommended reducing the Canadian tax rate to thirty-three percent, which was felt to be an appropriate rate for Canada. For the non-manufacturers, today's rates in Canada are in the forty percent range. The commission was formed when Canada had a deficit problem, and as such, the Minister of Finance wanted a report that would be revenue-neutral. Unfortunately, in order to be revenue-neutral, there must be winners and losers. One of the losers would be R&D performers since R&D credit, which would have been reduced by twenty-five percent, was targeted as one of the revenue raisers. As yet, the Department of Finance has done nothing publicly with that report, nor has it done very much with business taxation for several years now which is something to Canada's detriment.

However, just as you in the United States are considering tax cuts, hopefully the growing fiscal surplus in Canada will also be similarly applied and the unpopular Mintz tax increase proposals will be unnecessary.

We, at Nortel Networks, spend over three billion Canadian dollars on R&D, two billion dollars in U.S. funds. This is a substantial amount of money, and about half is spent in Canada, predominantly because Canada still has an abundance of great scientists and an attractive incentive program.

As such, we do approximately twenty-five percent of the industrial R&D that is performed in Canada, and we have announced that we will have some 15,000 computer scientists and engineers in the Ottawa area alone within the next two years.

The economic rationale for supporting R&D is fairly well-established. A dollar spent on R&D does have a payback of something on the order of \$1.80 in GDP terms. Thus, it is easy to support this particular tax expenditure. Also, Canada's patent rules are quite firm. Government-sponsored R&D is becoming more prevalent as the federal and provincial governments are clearly indicating support for anything which is going to increase the utilization of information technology within Canada. The words "innovation" and "productivity" appear frequently in Canadian policy papers.

Subsidies are sometimes proposed as an alternative, but I believe most people in business prefer a tax credit. It takes away the direct relationship

---

<sup>1</sup> For a review of findings by the Mintz Committee, see Joan L. Herpers, *Research and Development, A Corporate SR & ED Performer's Perspective*, 17 BUS. TAX REFORM 1-9 (Corporate Management Tax Conference, Canadian Tax Foundation, 1998).

between public money and the control of how one spends it. Notwithstanding that, there are a number of loan and partnership arrangements that the governments have with industry and, of course, university-funded programs. In Canada, when considering the tax credit, we talk of scientific research (SR) and experimental development (ED).

So what is R&D? It is a leading input into the process of innovation. There are three types: basic, applied, and experimental development. Experimental development attracts the most interest because that is where the discussion normally takes place with the tax authorities. What you may hear about the IRS and the depth of its audit of R&D claims has probably been said about Revenue Canada. On Monday of this week, we had a review of our R&D with Revenue Canada and it was quite encouraging to have one of their science advisors take me aside afterwards and tell me that our laser technology is the best example of scientific research that he had seen since he had been with Revenue Canada. The percentage of pure research versus experimental development is probably within the ten percent range.

Scientific research is defined by Revenue Canada as “work undertaken for the advancement of scientific knowledge with or without a specific practical application.” Experimental development is “work undertaken to achieve technological advances for the purpose of creating new or improving existing materials, devices, products, or processes, including incremental improvements.” Revenue Canada further defined it to include technical support.<sup>2</sup>

What exactly do Canadian companies get that makes them the recipients of one of the most generous R&D incentive systems in the world? Current and capital expenditures are both presently deductible in full. Canada also allows a write-off for a special purpose building (which would apply to wind tunnels, for example). Another useful feature is that taxpayers do not have to take the deduction in-year. If, for example, a company wants to make sure it can utilize foreign tax credits or the investment tax credits if they are expiring, it can actually defer claiming a deduction of the R&D incentives.

More important are the SR & ED tax credits which are based upon all of the qualifying R&D expenditures. Normally speaking, it is a twenty percent rate, although for small business it is a laudable thirty-five percent and, significantly, is refundable if the business is not in a taxpaying situation. This is of special importance in the start-up high-tech world. Going back to my ear-

---

<sup>2</sup> “Regulation 2900 of the Income Tax Act defines Scientific Research and Experimental Development (SR & ED). We developed Information Circular IC 86-4 (which is periodically revised) jointly with various industry groups, and issued it as the Department’s interpretation of Regulation 2900.” Revenue Canada, *IC86-4R2SUP2 Scientific Research and Experimental Development* (visited Aug. 9, 1999) <<http://www.rc.gc.ca/E/pub/tp/864r22et/864r22e.txt.html>>.

lier point about Canada being open for business, for those who did not actually have taxable income in Canada, it was initially a tremendous incentive because it was a refundable credit to all. Nowadays, the refundable credits only apply to small Canadian-owned corporations. The rules provide for the credits to be carried back for three years and forward for ten, which is actually more generous than Canada's loss carry-forward rules. Unfortunately, the credit itself is taxable when used so that the twenty percent credit is effectively worth, say, twelve percent.

The Canadian SR & ED tax credit is embedded in our law as indeed are the provincial incentives, which are clearly preferable to the frustrating U.S. system of annual renewals. The resultant uncertainty must be detrimental to investment plans in the United States.

Rather than detail technical references this morning, I commend to you Revenue Canada's Web site and Interpretation Bulletin and Information Circulars dealing with R&D, which can be found there.<sup>3</sup>

Most provinces also have R&D incentives, and several years ago Ontario raised the stakes with its super allowance. It moved away from the credit regime perhaps because credits were taxable by the federal government. Ontario was giving an incentive which the federal government partially taxed away. That led to the development of the "super allowance" which is a deduction in calculating taxable income of twenty-five percent of qualifying expenditure plus an additional twelve-and-a-half percent deduction for expenditures over a base amount. For small business, there are some additional incentives

Quebec, just last month, also introduced an optional super deduction, which is elective. If it is to a corporation's benefit, they can take a credit in lieu of the deduction. The beauty of the Quebec system is that the credit is fully refundable to all performers, unlike the federal system.

Canada and Australia frequently compare each other's tax initiatives, so it is probably not coincidental that Australia is close to Canada in R&D performed, but many industrialized countries do not give meaningful R&D incentives. They, unlike Canada and the United States, may not even allow a full deduction for current year R&D expenditures and the expenditure has to be capitalized. Perhaps surprisingly, Canada is not at the top of the list in terms of the business expenditures spent on R&D as a proportion of GDP. In fact, it is quite low on the chart. Interestingly, Australia is down with Canada, also. One could say that Italy proves a point – they have got the worst incentives and the worst performance. By contrast, Japan, Germany, and France have a substantial amount of R&D spending taking place, even though it is

---

<sup>3</sup> See Revenue Canada's Homepage (visited Aug. 6, 1999) <<http://www.rc.gc.ca/E menuZZZ.htm>>.

not being significantly encouraged through the tax system. Government procurement policies may explain that and undoubtedly have influenced the spending level in France, for example.

Of course, it is not automatic that an R&D performer gets what the rules say. Revenue Canada is there to raise revenues, and it is not typically in a tax auditor's makeup to find ways to help a taxpayer (although in truth that stereotype is changing). The taxpayer is well-advised to provide adequate documentation to support the claim. A few years ago, Canada's Auditor General believed the cost/benefit of this incentive program was unclear and the Department of Finance has subsequently satisfied his concerns. The banks suddenly made news when they collectively submitted claims for substantial tax credits. That became a front-page story. Our banks do tend to be frequently criticized and the thought of banks qualifying for R&D instead of traditional performers offended a lot of people. Apparently, the banks are still attempting to get their claims approved. This, combined with a plethora of claims from new R&D performers, led to the system being stretched and complaints evolved about the administration of the system.

The result was that Revenue Canada was under attack from nearly all of its stakeholders because of the way the claims were being processed. Last year, in response, the Minister of Revenue called a meeting of those stakeholders, which he called "Building Partnerships." This was a very effective meeting that took place in Vancouver. The resultant action plan has really turned the whole process around for the R&D claimants. In the early days, they really did not know how to make a claim. Many, other than the large corporations, simply did not claim their R&D credits because the process was too complicated. R&D performers thought they would have to hire somebody to help them make their claim. In fact, it became a big business with the major accounting firms and others to develop the claims. They swamped Revenue Canada, which helped create the need for "Building Partnerships."

The government compounded the problem for Revenue Canada by bringing in some legislation that denied retroactive claims if they were not in by the end of the following fiscal period. As a result, a huge number of claims came in, many of them poorly documented, in a very short period of time. That caused difficulties, but at the end of the day, the various technology associations within Canada, and the major players such as Nortel Networks worked with Revenue Canada to refine the processes which built upon the action plan mentioned earlier. More than likely, that backlog has now gone. A sequel to the successful Vancouver initiative is planned for later in 1999.

Much of the plan deals with the efficient resolution of claims. Joint industry-Revenue Canada training is an interesting development because it gives taxpayers the opportunity to work with Revenue Canada and help ensure that they have a very well-trained staff. That is a win-win situation. In fact, Revenue Canada's science advisor is normally an industry specialist and acceptable to the company.

Canadian corporate taxpayers have also had some success in court. During the past year, there have been three cases which have been decided in favour of the taxpayer. The first one, *RIS Christie*, was really a case of how much documentation was necessary to support the claim.<sup>4</sup> In fact they virtually had no documentation available. It was Revenue Canada's contention that, if a petitioner does not have enough material available to enable it to repeat the process, then it does not have enough to support its claim. Fortunately, the Federal Court of Appeal came down with fairly useful words that, if the technical advancement occurred, that infers that testing itself must meet the prescribed rules. These words are undoubtedly going to be repeated.

The technological advancement issue is encompassed in a case involving Northwest Hydraulics.<sup>5</sup> The company needed to convince Revenue Canada of advancement in the field of science and technology so it could get the claim through. In this case, Revenue Canada contended that Northwest was merely doing routine engineering. Northwest contended, however, that because it was a world leader, its routine engineering could be considered advanced science to the rest of the world. The Canadian tax court went along with that argument, acknowledging the fact that Northwest was indeed a world leader. Revenue Canada would be setting an unrealistically high standard which would discourage scientific research in Canada if their arguments had prevailed.

The last case, *Data Kinetics*, is a tax court case demonstrating a Revenue Canada attempt to limit R&D incentives.<sup>6</sup> Revenue Canada wanted to subdivide a project into smaller pieces and then determine that only a small piece qualified for R&D, but the majority of the project did not. The company was leasing a computer in the United States and paying for the telecommunications to hook up to that mainframe, but the actual research and software development activity was taking place in Canada. The court ruled that the mainframe was an integral part of the Canadian SR & ED project, and therefore, the project as a whole had to be considered, as opposed to trying to rule that the piece which was performed outside of Canada and the related expen-

---

<sup>4</sup> See *RIS Christie, Ltd. v. Her Majesty the Queen* (1999), 99 DTC 5087.

<sup>5</sup> See *Northwest Hydraulics, Ltd. v. Her Majesty the Queen* (1998), 98 DTC 1839.

<sup>6</sup> See *Data Kinetics, Ltd. v. Her Majesty the Queen* (1998), 98 DTC 1877.

ditures incurred did not apply. We call this theory of partitioning off small pieces the “bubble concept.” This case certainly burst that particular bubble.

Canada’s tax environment is generally considered to be uncompetitive compared with most countries with whom we compete. The taxes borne by most companies in recent years have increased dramatically. Canadians usually think only of the income and corporation taxes, yet two-thirds of our business taxes are from property and sales taxes.

Fortunately, when Canada introduced its value added tax, called the Goods and Services Tax (GST) about a decade ago, a serious burden on Canada’s manufacturers and exporters was lifted. A number of provinces in eastern Canada have now harmonized their sales tax systems and they enjoy a distinct advantage when attracting and retaining business when compared to Ontario and provinces to the west – with the significant exception of Alberta which does not levy a sales tax.

The next subject that I wanted to touch upon is the skills gap in Canada because it is a serious concern. There is some government support, for example, the Ontario government now matches funds contributed by business for university programs designed to produce the kind of graduates we were seeking. But Canada is losing its human capital, especially highly educated and skilled people. The people that we are looking for are in tremendous demand worldwide. There is a shortage, and we are not competitive enough. An obvious reason for that is the Canadian personal tax rate. On earnings of \$40,000 (U.S.), Canadians are paying fifty percent tax rates. That means the person on the production line of General Motors is paying fifty cents of every overtime dollar in income tax. Given that, in the United States, taxpayers do not even start paying the top rate until they are making over a quarter of a million dollars, and even then it is a lower rate, the cost of competing to provide equal after-tax income is prohibitive.

As for corporate tax rates, a manufacturing company in Canada will have a rate of approximately thirty-six percent depending upon provincial allocations and as such some will say that our rates of tax in Canada are competitive. They usually forget, or are unaware of, the Foreign Sales Corporations (FSC), which can reduce the tax rate of a U.S. exporter significantly below thirty-six percent.<sup>7</sup> There may be some state tax, but certainly the states where many would invest do not have any state income taxes. Even with the deduction for the Canadian manufacturing and processing credit, a Canadian

---

<sup>7</sup> The Foreign Sales Corporation program (FSC), originally sponsored by the U.S. Department of Commerce, and now funded via the Tax Reform Act of 1984, provides “for a reduction in income taxes on net foreign profit realized from exports.” See *Welcome to the World of Foreign Services Corporations* (visited June 22, 1999) <<http://www.exportfsc.com/aboutfsc.html>>.



business is disadvantaged. The Canadian service company has a tax rate of forty percent or more, so they are particularly uncompetitive. The conclusion is obvious, and the Mintz Committee and the Canadian Conference Board, among others, have confirmed that the corporate tax rate is one of the top deterrents to investment. As a result, Canada's poor record of encouraging foreign investment during the nineties is a matter of record.

What does Canada need to drive innovation in the next century? It needs to be competitive. All too many people in government think "competitive" means "broadly the same." Last month, Congressman Bill Archer (R-TX) was talking about his view of a competitive tax system. The Chairman of the House Ways and Means Committee was advocating that a competitive system is one clearly tilted in favour of the United States.

Canada needs to keep its R&D incentives the best in class. It also needs a better environment for commercializing the gains arising from R&D by incenting the financing of resultant initiatives and encouragement to keep the exploitation thereof in Canada. There has been much discussion on what that means in terms of lower capital gains tax rates, and other positive changes during this conference. I was reading a newspaper in Tunisia recently. The headline confirmed that for all Tunisian corporations with initial public offerings (IPOs), the tax rate would be cut by fifty percent for the five years after the IPO. Perhaps Canadian newspapers will be running similar stories in the 2000s.

Certainly, public policy is focusing on the exploitation of innovation and enhancing productivity and there is a growing awareness of Canada's loss of human capital. We cautiously look forward to a new and appropriately tilted playing field.

Slide 1

**NORTEL  
NETWORKS**

**TAX ASPECTS OF  
TECHNOLOGICAL CHANGE  
A CANADIAN PERSPECTIVE**

David L. Burn  
April 17, 1999

© Nortel Networks - 1999

Slide 2

**Canadian R&D Incentive Program**

- Canada is open for business
- OECD describes Canada as having the most generous R&D tax incentives of any industrial country
- Canada's definition of R&D is consistent with OECD's

**NORTEL  
NETWORKS**

© Nortel Networks

Slide 3

<b>1997 R&amp;D Performers in Canada (CDN\$K)</b>		
	<b>R&amp;D Expenditure</b>	<b>R&amp;D as % of Revenue</b>
<b>Nortel Networks Corporation</b>	<b>3,142.1</b>	<b>14.7</b>
<b>Pratt &amp; Whitney Canada. Inc.</b>	<b>420.0</b>	<b>24.7</b>
<b>Merck Frosst Canada Inc.</b>	<b>265.3</b>	<b>40.4</b>
<b>IBM Canada Ltd.</b>	<b>224.0</b>	<b>3.0</b>
<b>Newbridge Networks Corporation</b>	<b>185.7</b>	<b>13.5</b>
<b>Atomic Energy of Canada Limited</b>	<b>167.4</b>	<b>46.3</b>
<b>Ericsson Communications</b>	<b>159.9</b>	<b>27.5</b>
<b>Magna International Inc.</b>	<b>137.9</b>	<b>1.8</b>
<b>Bombardier Inc.</b>	<b>131.2</b>	<b>1.6</b>
<b>Corel Corporation</b>	<b>123.9</b>	<b>34.4</b>

**NORTEL**  
NETWORKS

#McGraw-Hill

Slide 4

- | <b>Government Support of R&amp;D</b>                                       |  |
|--|--|
| <ul style="list-style-type: none"><li>• <b>Economic Rational</b></li></ul> |  |
| <ul style="list-style-type: none"><li>• <b>Types of Support:</b></li></ul> |  |
|  | <ul style="list-style-type: none"><li>Patents</li><li>Sponsored R&amp;D</li><li>Procurement of new technologies</li><li>Subsidies</li><li>Tax incentives</li></ul> |
- NORTEL**  
NETWORKS
- #McGraw-Hill

Slide 5

**What is R&D?**

- **BASIC RESEARCH** - experimental or theoretical work undertaken to acquire new knowledge without any particular applications or use in view
- **APPLIED RESEARCH** - original investigation directed primarily towards a specific practical aim or objective
- **EXPERIMENTAL DEVELOPMENT** - systematic work drawing on existing knowledge and directed at producing new materials, products, processes and systems, or substantially improving existing ones

**NORTEL**  
NETWORKS JHocaine5

Slide 6

**R&D - CICA/GAAP Definition**

- **Research**
  - planned investigation undertaken with the hope of gaining new scientific technical knowledge or understanding. Such investigation need not be directed towards a specific practical aim or application
- **Development**
  - the translation of research findings or other knowledge into a plan or design for new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use

**NORTEL**  
NETWORKS JHocaine6

Slide 7

**SR&ED - Revenue Canada Definition**

- **Scientific Research**
  - Work undertaken for the advancement of scientific knowledge with or without a specific practical application.
- **Experimental Development**
  - Work undertaken to achieve technological advances for the purpose of creating new, or improving existing, materials, devices, products or processes, including incremental improvements thereto.
- **Technical Support**
  - Work with respect to engineering, design, operations, research, mathematical analysis, computer programming, data collection, testing and psychological research, which is commensurate with the needs, and directly in support of, the work described in research and experimental development.

**NORTEL NETWORKS** JH020407

Slide 8

**TAX TREATMENT OF SR&ED**


<b>Deductions</b>	<b>Credits</b>
<ul style="list-style-type: none"><li>• Current expenditure: 100%</li><li>• Capital expenditures: 100%</li><li>• Special purpose buildings - 100% write-off</li><li>• Deduction can be postponed to create taxable income</li></ul>	<ul style="list-style-type: none"><li>• Base: all expenditures</li><li>• Rates: 20% generally, 35% for certain small businesses; one-half rate for certain equipment used for both R&amp;D and other purposes</li><li>• Refundability for some</li><li>• 3 year carry-back; 10 year carry-forward</li><li>• Taxable</li></ul>

**NORTEL NETWORKS** JH020409

## Slide 9

<b>SR&amp;ED PROGRAM LEGISLATIVE REFERENCES</b>	
•	<b>Deduction of current &amp; capital expenditures ss 37(l)</b>
•	<b>Indefinite carryforward of deduction SS 37(l)</b>
•	<b>Investment Tax Credit - deduction from taxes payable SS 127(9)</b>
•	<b>Definition of SR&amp;ED - Regulation 2900(l)</b>
•	<b>Revenue Canada's Technical Guidelines - IC-86-R3</b>
•	<b>Revenue Canada's Interpretation bulletin on SR&amp;ED IT-151R4</b>
•	<b>Revenue Canada's Web Site <a href="http://www.rc.gc.ca/sred/">http://www.rc.gc.ca/sred/</a></b>
 <span style="float: right;"><small>J.Hodgson@w9</small></span>	

## Slide 10

<b>Ontario R&amp;D Incentives</b>	
<b>Deductions</b>	<b>Credits</b>
<b>R&amp;D Super Allowance</b> <ul style="list-style-type: none"> <li>• <b>Mandatory deduction</b></li> <li>• <b>Base: average R&amp;D expenditures of previous 3 years</b></li> <li>• <b>Rate: 25% up to base and 35% on incremental expenditures, CCPCs - 35% up to base and 52.5% on incremental</b></li> <li>• <b>Not taxable</b></li> </ul>	<b>Ontario Innovation Tax Credit</b> <ul style="list-style-type: none"> <li>• <b>Available for smaller CCPCs on R&amp;D current expenditure and 40% of capital expenditures</b></li> <li>• <b>\$2M limit on R&amp;D expenditures</b></li> <li>• <b>Rate: 10%</b></li> </ul>
 <span style="float: right;"><small>J.Hodgson@w9</small></span>	

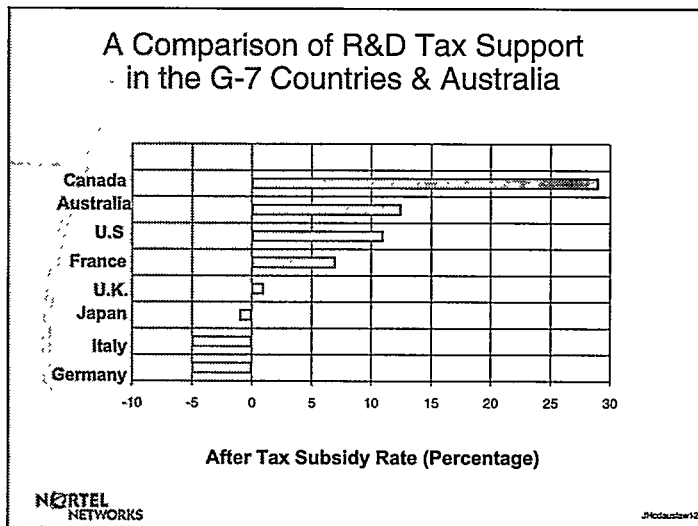
Slide 11

### Quebec R&D Incentives

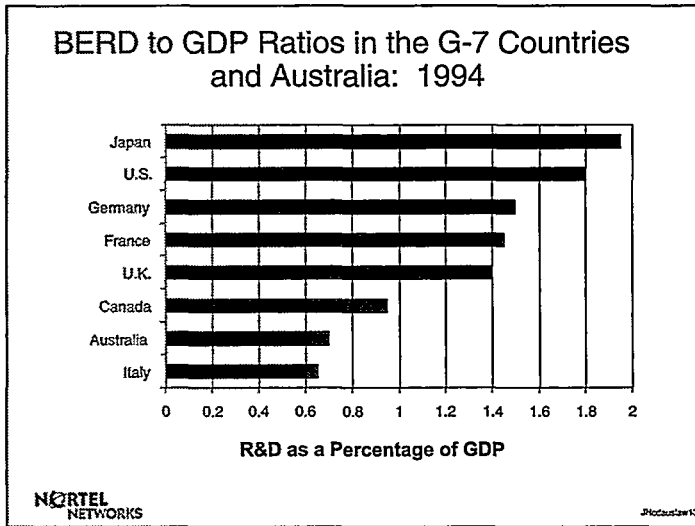
Deductions	Credits
<ul style="list-style-type: none"><li>• Elect to take a Super-deduction for R&amp;D salaries</li><li>• 230%, 460% for small business</li><li>• Cannot create a loss</li></ul>	<ul style="list-style-type: none"><li>• Available on R&amp;D salaries and eligible expenditures</li><li>• 20% up to 40% for small business</li><li>• Fully refundable</li></ul>

**NORTEL NETWORKS** JH04022911

Slide 12



Slide 13



Slide 14

### Administration of SR&ED Program

- Continuous tightening of R&D legislation
- Retroactive application of administrative policies
- Increasing demands for detailed documentation

**RESULT**

- Reduction in the attractiveness of the R&D program
- Reduced predictability of program

**NORTEL NETWORKS** J:\kocustaw14



Slide 15

### **Revenue Canada's Response to Concerns**

- **June 1998 meeting of Revenue Canada and Industry representatives - Building Partnerships**
- **Action Plan:**
  - Make R&D program more independent with focus on science and incentives
  - Establish joint steering committee to oversee implementation of plan
  - Establish sector-specific committees to develop issues sheets, standards, and interpretation guidelines for their sectors
  - Develop communications package covering R&D audit process and taxpayer's rights
  - Develop code of rights, obligations, and responsibilities for stakeholders

**NETEL NETWORKS** JMcCauley16

Slide 16

### **Revenue Canada's Response (Con't)**

- **Action plan (cont'd.)**
  - Focus on preventing disputes through better communication
  - Establish a standard mechanism for dealing with informal disputes
  - Clear outstanding disputes about past claims
  - Improve timelines and openness of formal appeals
  - Joint industry-Revenue Canada training. Industry associations to play a role in developing training material for science auditors
  - Improve the auditing process
  - Clarify documentation requirements
  - Explore options to focus on process rather than individual projects

**NETEL NETWORKS** JMcCauley16

Slide 17

**SR&ED: Recent Canadian Court Cases**

- Documentation
  - RIS - Christie
  
- Technological Advancement
  - Northwest Hydraulic Consultants
  
- SR&ED Project
  - Data Kinetics

**NORTEL NETWORKS** J.Medina@nw17

Slide 18

**Other Factors Influencing Effectiveness of R&D Incentives**

- **Canada's fiscal environment is perceived as less inviting than those of its competitors**
- **Total tax burden of Canadian corporations as a percentage of GDP has increased significantly over the last 30 yrs.**
- **Two-thirds of total corporations taxes are property and sales taxes**

**NORTEL NETWORKS** J.Medina@nw18

### Innovation Gap

- Analysis by the OECD suggests Canada has an innovation gap
- Canadian government is committed to supporting innovation
  - Investment in education
  - Modernization of universities, colleges, research hospitals and not-for-profit research institutions
  - Technology Partnership's Canada
  - Federal Government's recent budget recognized the R&D tax credits as an important instrument for encouraging R&D
- Ontario government is supporting university enrolment in high-tech studies - Access to Opportunities program

**NORTEL**  
NETWORKS J:\McGowan\19

### Canada is Losing its Human Capital

- Employers need highly educated and skilled people
- Employees need intensive training and continuous learning
- Specifically, we need to recruit new employees with the necessary grounding in mathematics, information technology and problem solving
- It is its getting increasingly difficult to find these people
- Canadian universities are seeing their graduates wooed by U.S. companies - the Brain Drain

**NORTEL**  
NETWORKS J:\McGowan\20

## Slide 21

### Brain Drain - Major Cause

- Canadian personal income tax system
- Canada's top rate of 50% at about US\$40,000
- U.S. top Federal rate of 39.6% (plus state tax) at US\$278,450

**NORTEL NETWORKS** JH020401v01

## Slide 22

### Corporate Tax Rates

<b>CANADIAN</b>	
Federal Tax Rate	38
Provincial Abatement	(10)
M&P Deduction	<u>(7)</u>
	21
Surtax	<u>1.12</u>
	22.12
Prov. (not deductible)	13
	<u>35.12</u>
<b>U.S.</b>	
Federal	36
State (deductible)	2
FISC	<u>(5)</u>
	<u>33%</u>

**NORTEL NETWORKS** JH020401v02

Slide 23

**Perception**

- **Conference Board Survey of Transnationals:**
- **Corporate tax is as one of the top impediments to investment**

**RESULT**

Canada's share of global inward foreign direct investment fell by more than half over 10 years

Concurrent vigorous drive by Canadian companies to invest abroad

**NORTEL NETWORKS** JHCoCuslaw93

Slide 24

**Canadian Requirements in the 21st Century**

- **A competitive tax system**
- **R&D tax incentives remain best in class**
- **Better tax environment for commercializing and adopting innovation**

**NORTEL NETWORKS** JHCoCuslaw94