

**Through The Eye Of A Needle:  
Canadian Information Technology Professionals  
And The TN Category Of The NAFTA**

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September 1, 2000

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It has now been more than six years since the North American Free Trade Agreement (NAFTA)<sup>1</sup> took effect. The NAFTA has been undeniably beneficial for some industries and their workers, by lowering barriers to trade in capital, goods, and services and by facilitating the temporary entry of personnel. In other industries, in some of the most innovative and cutting-edge sectors, however, the implementation of the NAFTA has not kept up with the rapid pace of technological change and innovation.

This article seeks to place into context the provisions of the NAFTA governing the temporary admission to the United States of Canadian professionals for business purposes. Specifically, the article examines such admissions in light of two phenomena: (1) the dizzying evolution of the knowledge-based information technology (IT) industry in the past few years and the chronic difficulty faced by IT companies in locating qualified professionals to enable them to meet their strategic objectives and keep pace with this evolution; and (2) the emergence of Canadian IT professionals as a labor pool tapped with increasing frequency by U.S. IT companies that face such a hiring difficulty.

The specific focus of this article will be upon the Trade NAFTA (TN) category of the NAFTA, which permits the temporary entry of professional citizens of one NAFTA state party into the territory of another, and has proven to be the most frequently used avenue for Canadian IT professionals to take up employment in the U.S., and, more narrowly, upon the extraordinarily high level of difficulty encountered at present by such professionals in seeking admission to this country. In this latter respect, by examining four particular occupations, this article seeks to understand why the TN category has failed to fulfill its potential of providing a simple, rapid, and predictable mechanism for the entry of Canadian IT professionals to the U.S.

## THE HUNT FOR IT KNOWLEDGE WORKERS

Many readers of Interpreter Releases are already aware of the problems faced by U.S.-based IT companies in recruiting sufficient numbers of "knowledge workers" (the term generally employed by labor experts to refer to technologically educated employees), or the fact that such companies must look to knowledge workers from other countries to meet their hiring needs. Abundant literature has been produced on the subject, and the issue need not be dwelt upon here.<sup>2</sup> Immigration practitioners see examples of these facts on a daily basis. This situation has made the representation of IT companies rewarding for business immigration attorneys over the past few years, and will ensure that these heady days will be fondly remembered as a golden age in the practice of business immigration law.

The economic power and consequent political clout of IT companies in the U.S. has ensured that the industry's angst over the shortage of knowledge workers has been thrust into national prominence, and will soon replace the now rather dated concern over illegal immigration as the topic of uppermost importance in this country's ongoing immigration debate.<sup>3</sup> The high visibility of this issue has meant that any aspirant to high political office (as well as any polemicist worth his or her salt) who wishes to demonstrate an awareness of contemporary events must be informed about this issue and must be able to discuss it intelligently.<sup>4</sup> Further, the political process has been engaged by the IT industry to alleviate its

concerns. At a legislative level, numerous initiatives have been introduced, and continue to be introduced, to ease the hiring crisis concerns by reducing or removing the legal obstacles that impair the ability of IT companies to hire foreign knowledge workers.<sup>5</sup>

The focus of the debate over the need of the IT industry to maintain access to the pool of foreign knowledge workers, as well as of the legislative proposals, has been on the H-1B specialty worker nonimmigrant category. This is scarcely surprising, given the fact that this category has proven overwhelmingly to be the most frequently used avenue through which to obtain employment authorization for such foreign knowledge workers. Although the category is certainly not reserved exclusively for knowledge workers in the IT industry, it is not coincidental that Indian and Chinese citizens, who represent the most important pool of foreign knowledge workers for IT companies in the U.S., also comprise the most numerous constituency of H-1B workers, accounting for more than half of the total admissions permitted annually under this category.<sup>6</sup>

## CANADIAN IT KNOWLEDGE WORKERS

One development that has gone largely unnoticed in the national dialogue with respect to the IT industry's unsatisfied demand for knowledge workers is the emergence of Canada as an important repository of such knowledge workers. No one should be taken aback by this; Canada's geographical proximity, its cultural affinities to the U.S., the high level of technological education available at its universities, and the fact that it has its own well-developed IT industry make it seem quite natural that U.S. IT companies struggling to meet their hiring needs should view qualified Canadian professionals as particularly attractive resources.

The southward flow of Canadian IT knowledge workers has increased appreciably in the past few years, but has yet to awaken much interest in this country. This may be explained in part by the fact that their numbers do not yet approach the numbers of Chinese or Indians in the IT sector, and in part by the fact that the presence of Canadians in this country, and the threat they are perceived to pose to the domestic labor force, do not arouse the types of passions excited by the arrival of citizens of other nations.

- The Canadian IT Brain Drain

The lack of attention paid in the U.S. to the entry of Canadian IT knowledge workers into its work force stands in marked contrast to Canada's preoccupation with the subject. For some years now, Canadian scholars, political commentators, and journalists have bemoaned the country's "brain-drain" of technologically literate professionals to the U.S. Although such a brain-drain is not a novel development, it is generally agreed that the passage of the NAFTA has intensified the pace of this flight, and one Canadian scholar has gone as far as declaring that the true Perotian "sucking sound" created by the NAFTA was produced by the movement of jobs, not from the U.S. to Mexico, but from Canada to the U.S.<sup>7</sup>

There is an element of truth to this rhetorical flight of fancy; a 1996 study by the Canadian Advanced Technology Association found that 75 percent of electrical engineering and computer science students at the University of Waterloo in Ontario, intended to look for work in the U.S. after graduation.<sup>8</sup> Analysis of income tax data on tax filers leaving Canada to all destinations also revealed that individuals earning more than \$150,000 a year were seven times as likely to leave Canada as the average taxpayer. Those who had incomes between \$100,000 and \$150,000 were five times as likely to move.<sup>9</sup>

Overall, it has been estimated that Canada suffered a net loss of almost 20,000 professionals to the U.S.

between 1982 and 1996, resulting in an estimated lost investment to the Canadian taxpayer of C\$6.7 billion.<sup>10</sup> In the IT sector of the Canadian economy, the situation has been exacerbated by the "churning" problem perceived by some labor experts. One such expert has described "churning" as the departure from Canada to the U.S. of IT knowledge workers who are then replaced by Indian programmers from Bangalore. Even if the programmers who arrive during a given period outnumber the Canadian IT knowledge workers who are lost during the same period, factoring in the expense of settling such aliens and their families and the delay before these persons begin to earn and produce as much as the Canadians they replaced results in a significant loss to the country. It has been noted, for instance, that foreign-born professionals who entered Canada after 1967 were typically taking 10 to 15 years to catch up to the level of productivity of their Canadian-born peers.<sup>11</sup> The problem is aggravated further by the cost of the departure to the U.S. of such foreign-born workers, often within a short space of time of having obtained Canadian citizenship and therefore becoming eligible for the benefits of the NAFTA.

The shortage of IT knowledge workers in Canada has been recognized at a federal level, and resulted in the creation in May 1997 of Canada's Pilot Project for Software Professionals, which facilitated the entry into Canada of aliens working in certain designated software development occupations.<sup>12</sup> Most recently, the Canadian federal government has introduced a Temporary Foreign Worker Program to "speed up" the entry of skilled temporary foreign workers in order to "contribute to the development of a knowledge-based economy where Canada's competitiveness depends on getting both the right skills and the right knowledge at the right place at the right time."<sup>13</sup>

#### THE NAFTA: IMMIGRATION VERSUS TEMPORARY LABOR MOBILITY

As with most "free" trade agreements, the NAFTA seeks to remove or diminish artificial (i.e., legal) trading restrictions between its participant nations, the three nations that comprise the North American continent, and thereby to promote a relatively unhindered flow of capital, goods, and services between them. Although a consensus exists that such a free flow of capital, goods, and services is a desirable goal worthy of the three nations' collaborative efforts, the removal or diminution of each nation's immigration obstacles in order to facilitate the free flow of their citizens within the NAFTA zone was never seriously discussed during the negotiations that led to the signing of the treaty.

Although the facility of movement across the borders of a state party to a free trade agreement by nationals of another state party may well be seen as a natural or even necessary concomitant of a lowering of trade barriers to capital, goods, and services, the notion that citizens of one state party to the NAFTA should be able to enter the territory of another state party with the ease accorded to capital, goods, and services appears to have been decidedly inimical to the drafters of the NAFTA. In this respect, the NAFTA state parties never paid much attention to the possibility of adopting the European Union's model of virtually unhindered labor mobility (and, in certain circumstances, immigration) for citizens of its member nations.<sup>14</sup> In fact, the most significant aspect of the relationship between the NAFTA and immigration (understood in the common sense of a permanent physical displacement of a citizen of one country to another country) is that no such relationship exists; the NAFTA contains no provision allowing or even contemplating immigration between the three state parties.<sup>16</sup>

To the drafters of the NAFTA, then, "permanent employment" is not something to be promoted by the NAFTA, but something that apparently needs to be protected from the NAFTA. The preamble to the NAFTA also smacks of this isolationism: one of its laundry list of desiderata is that the state parties will "create new employment opportunities and improve working conditions and living standards *in their respective territories*."<sup>17</sup> Indeed, one of the most important motivating factors behind the U.S.'s

participation in the NAFTA was the belief that the lowering of trade barriers in Mexico would curb (mostly, but not exclusively, illegal) immigration from that nation by raising living and working conditions there.<sup>18</sup> Although it would be wrong to view the NAFTA as being driven by an anti-immigration impetus, the modesty of its aims with respect to the movement of persons, as opposed to capital, goods, and services, is not easily overstated.

As far as the cross-border movement of the citizens of state parties is concerned, all the NAFTA seeks to achieve is a regime of temporary labor mobility.<sup>19</sup> To that limited effect, Chapter 16 of Part Five of the NAFTA established a scheme of reciprocal undertakings by each state party to permit the entry in preferential status of "business" persons who are nationals of another state party. Implicit in the NAFTA is the notion that such mobility must be ancillary to the movement of capital, goods, and services, and not a good in itself. Making it quite clear which is the cart and which the horse, Article 1602 ("General Principles") of the NAFTA imposes upon each state party a general obligation to apply "expeditiously" the labor mobility measures of Chapter 16 "so as to avoid unduly impairing or delaying trade in goods or services or conduct of investment activities[.]"<sup>20</sup>

As with its predecessor, the United States-Canada Free Trade Agreement of 1989 (CFTA),<sup>21</sup> the NAFTA's scheme governing the cross-border mobility of persons encompasses only four categories of nonimmigrants: (1) business visitors; (2) traders and investors; (3) intracompany transferees; and (4) TN professionals (referred to as Trade Canada (TC) professionals under the CFTA). Any state party nationals not covered by these categories, such as tourists, journalists, and students, must apply for admission to another state party without invoking the NAFTA's "preferential" admission process.

- The TN Category

The TN category of the NAFTA requires each state party to grant temporary entry to "a business person seeking to engage in a business activity at a professional level in a profession set out in Appendix 1603.D.1 [of the NAFTA]." <sup>22</sup> This appendix provides a lapidary inventory of 63 professions with corresponding minimum educational credentials and alternative experiential requirements. Only persons coming to work "in" one of these enumerated professions may be accommodated under the TN category; a person coming to work in the U.S. in an unlisted profession may not enter in TN status, regardless of the fact that his or her job has been recognized as a profession or a specialty occupation by the INS in another context.

Of the four nonimmigrant categories included in the NAFTA's immigration scheme, only the TN category, like the TC category before it, does not have a direct analogue in the general statutory scheme of immigration to the U.S. The TC category was not, nevertheless, an entirely novel creation; its antecedent was the H-1B category, as refined by the Immigration Act of 1990. The TN category retains a strong fundamental resemblance to the H-1B category, because both categories contemplate the admission of persons of professional standing who will engage in professional-level activities.

The TN category offers Canadian professionals four obvious advantages over the H-1B category, however, whose combined effect can be interpreted as providing the entry in "preferential" status guaranteed by the NAFTA. First, an applicant for this status need not file, and obtain approval of, a nonimmigrant petition with an INS Service Center before entering the U.S. He or she must instead present an application at a port of entry or pre-flight inspection station,<sup>23</sup> where processing generally takes no longer than three hours. Because processing times for H-1B petitions extend up to 90 days or more at some Service Centers, this provides a significant benefit.

Second, Canadian TN applicants are not required to obtain approval of a labor condition application from the Department of Labor (DOL). This again saves valuable time, and allows employers to avoid the irksome salary posting and record-keeping requirements of the H-1B category.<sup>24</sup>

Third, the TN category, unlike the H-1B category, does not impose a maximum period of stay of six years. Technically, a Canadian professional may hold TN status indefinitely, as long as he or she continues to be employed in an appropriate profession and continues to demonstrate that his or her stay will be "temporary."

Fourth, and perhaps most importantly, there is no limitation on the number of Canadian nationals who may be admitted in the course of a fiscal year.<sup>25</sup> At present, the H-1B category imposes a limitation of 107,500 new admissions for fiscal year 2001, which will begin on October 1, 2000.<sup>26</sup>

Despite its claims to facilitate the "preferential" entry of professionals into the territory of a state party, the NAFTA, and the TN category in particular, has proven to be an imperfect mechanism for the admission of Canadian professional IT knowledge workers to the U.S. The following discussion will examine the most troublesome aspects of the TN admission process for such workers, focusing specifically on the TN professions most commonly applicable to these workers.

Engineer. Appendix 103.D.1. of the NAFTA includes "Engineer" as one of the professions in which a business person seeking admission under the TN category may engage. The minimal educational requirement for a Canadian engineer is a baccalaureate degree or a provincial license.<sup>27</sup> Unsurprisingly, given the wide variety of engineering specializations associated with the IT industry, the Engineer classification of the TN category has proven to be one of the most frequently used by Canadian knowledge workers entering the U.S. in TN status.

One of the most significant difficulties experienced by IT professionals seeking admission in TN status as engineers is the task of convincing the INS that the particular discipline in which the applicant specializes is a true engineering discipline. This is particularly the case when the engineering specialization at issue is a relatively new or emerging one, and the governmental or academic recognition of this specialization has not kept pace with its evolution as an acknowledged professional specialization by business and industry. Software engineering is a case in point. Although few persons in the IT industry would seriously argue that software engineering is an established and recognized engineering specialization, no state at present requires a license of software engineers,<sup>28</sup> and only a handful of universities, colleges, and technical schools offer degree courses or majors formally designated as software engineering ones, generally offering instead only degrees in computer science or computer engineering to the aspiring software engineer.<sup>29</sup> In the TN context, applications for software engineers have been denied on the basis that software engineering, unlike such traditional disciplines as electrical, mechanical, and chemical engineering, is not a true engineering profession. Although the tendency to deny TN applications on this basis appeared for some time to be on the decline, a recent spate of such denials at the ports of entry suggests that it is alive and well.

The Service's stance toward software engineers may be explained in part by a deeply rooted belief, based on outdated notions about traditional industry and the manufacturing process, that engineers build or help build tangible products and structures, as well as by the Service's reliance on such sources as the DOL's *Occupational Outlook Handbook*, which buttresses such beliefs.<sup>30</sup> This text does not specifically refer to software engineering as an engineering specialty, and appears to use recognition by a professional society as the touchstone of true engineering, admitting only 25 "major specialties" of engineering, all of which have corresponding professional associations and/or licensure requirements.<sup>31</sup>

Earlier versions of this document did not even refer to software engineering, recognizing only computer engineer, computer scientist, and computer systems analyst as professional computer-related occupations.<sup>32</sup>

Although it is possible that the difficulty experienced in accommodating software engineers under the TN category may give way to a growing recognition of this discipline as a valid engineering specialty, it is by no means clear that other less established engineering modalities peculiar to the IT industry will be sympathetically received by the Service. A TN application prepared for a person working in one of these modalities (including, for example, firmware engineering, usability engineering, quality assurance engineering, verification engineering, product design engineering, and middleware engineering) is at present unlikely to succeed without subsuming the modality under a recognized engineering specialty.

Although the NAFTA is unequivocal that a person seeking admission under the NAFTA's TN category as an Engineer must have obtained the appropriate level of degree or a license (showing equivalent professional experience is not permissible), nothing in this treaty, a statute, caselaw, or regulation specifically mandates that the degree or license held by the applicant for admission be in a discipline or field identical or even relevant to the profession in which admission is sought.<sup>33</sup> The INS's *Inspector's Field Manual*, to which most Service officers will turn when adjudicating a TN application, is silent on this issue.<sup>34</sup> The Service's now-defunct Draft NAFTA Operations Instructions did state, however, that:

Excepting a few specific occupations, Appendix 1603.D.1. does not state that a degree in the particular field is required for qualification as a Professional. Officers should use good judgment in determining whether or not a degree in an allied field may be appropriate.<sup>35</sup>

This is an entirely reasonable position; a requirement that an individual's degree or license be in a discipline or field related to the TN profession in which admission is sought may reasonably be read into the NAFTA, and the fact that the NAFTA does not specifically link each Appendix 1603.D.1. profession with an academic discipline or field of licensure can be explained by a desire to avoid inflexibility in the TN admission process, and should certainly not be seen as an invitation to seek entry for individuals who hold degrees or licenses in disciplines or fields that bear no rational relation to the profession in which admission is sought. INS officers adjudicating TN applications may therefore justifiably turn away an applicant with a degree or license that in no way matches the profession in which the applicant will work, but may also permissibly admit applicants with degrees or licenses that do not match the specific profession involved, but are in disciplines or fields germane to the job duties typically performed by members of that profession, or that involve substantial course work related to the performance of such duties.

In the engineering context, however, the tendency of Service officers reviewing TN applications from Canadian IT knowledge workers for admission as engineers has been to go further and insist on a complete identity between the relevant engineering specialization and the degree held by the applicant. Thus, applicants for admission as electrical engineers are generally required to hold degrees in electrical engineering; computer engineers must hold degrees in computer engineering, and so on.

This approach has the virtue of simplicity and certainly makes for the rapid adjudication of TN applications, in keeping with the aspiration toward "transparent criteria" for admission. The Service's formalistic analysis is an inadequate means, however, of assessing the approvability of TN applications by professionals working in some engineering specializations within the IT industry, including, once again, software engineering. Most software engineers today hold degrees in computer science, and an education in this discipline is regarded by many IT companies as the most desirable preparation for employment in this industry. Holding a degree in computer science nevertheless exposes the applicant

for TN admission as a software engineer to denial (even if software engineering is accepted as a legitimate engineering specialty) on the basis that his or her degree is not an engineering one. However improbable such denials may seem to anyone acquainted with academic courses of study in computer science and the strong affinity between what is learned in such courses and the professional duties undertaken by software engineers, such denials occur with sufficient frequency to create an operational risk for U.S. companies wishing to hire Canadian software engineers through the TN process.

Earlier versions of the *Occupational Outlook Handbook* identified computer or electrical engineering as the appropriate educational disciplines for computer engineers, and computer science as the relevant discipline for computer scientists, and it is not unreasonable to consider that such a determination may well have something to do with the Service's antagonism toward software engineers with computer science degrees. Such antagonism may be a thing of the past, however, because the most recent edition of the *Occupational Outlook Handbook* appears to have moved with the times by not only implicitly recognizing software engineering as an engineering discipline, but also explicitly noting that software engineers are likely to hold degrees in computer science.<sup>36</sup> In a recent decision, the INS's Office of Administrative Appeals overturned the denial of an H-1B petition for a software engineer with the equivalent of an undergraduate degree in computer science, noting that "the use of computers is an integral part of the contemporary study of engineering."<sup>37</sup> These are clearly positive developments, and may well lay to rest the problems encountered by software engineers with computer science degrees.

This edition of the *Occupational Outlook Handbook* has created a novel problem, however, by recognizing hardware engineering as a computer-related occupation, and indicating that computer or electrical engineering are the appropriate academic disciplines for this occupation.<sup>38</sup> This apparently innocuous observation has caused a new hazard for software engineers. Very recently, a trend among INS offices at the Canadian border to deny TN applications for software engineers with computer engineering degrees has emerged. The basis for such denials appears to be an opinion (voiced orally by more than one Service officer) that, in accordance with the prescriptions of the *Occupational Outlook Handbook*, persons with computer engineering degrees are more appropriately classified under the NAFTA as Hardware Engineers or Computer Systems Analysts than as Software Engineers.

What can such companies do to forestall or minimize such a risk, at least until the Service becomes better educated about the connection between computer science and software engineering (or between software engineering and computer engineering)? Seeking an alternative nonimmigrant category (such as the H-1B nonimmigrant category) that is not so susceptible to rigid and mechanical adjudication will generally not be an attractive option, given the lengthy petition process involved and the breakneck speed at which most IT companies operate. Such companies and their counsel are better advised to invest additional time in the preparation of the applicant's TN application, describing and explaining the applicant's course work and drawing the Service's attention to the fact that the software engineering duties involved in the relevant position will require the application of the knowledge acquired by completing this course work. In addition, secondary evidence that the IT industry employs software engineers with degrees in computer science or computer engineering, in the form of industry journals, job advertisements, and other publications, may be presented in an effort to persuade the INS officer to exercise his or her "good judgment." Reference to sources most favored by the Service, such as the *Occupational Outlook Handbook* and the *Dictionary of Occupational Titles*, may be advantageous, but can often be perilous, because such sources are sometimes more part of the problem than the solution.

Computer Systems Analyst. Appendix 1603.D.1. of the NAFTA lists Computer Systems Analyst as one of the professions for which admission in TN status is permissible. For admission as a Computer Systems Analyst, a Canadian must have a baccalaureate degree or a post-secondary diploma (no specific discipline is indicated for either). If only a postsecondary diploma is held, three years of experience must

also be shown. Because no licensure system yet exists for Computer Systems Analysts, a license requirement does not apply. Evoking strongly the description of a Computer Systems Analyst's duties in the *Occupational Outlook Handbook*, the *Inspector's Field Manual* describes a Computer Systems Analyst for TN admission purposes as "an information specialist who analyzes how data processing may be applied to the specific needs of users and who designs and implements computer-based systems... [and] stud[ies] the organization itself to identify its information needs and design[s] computer systems which meet those needs."<sup>39</sup>

The INS appears to grant more latitude to Computer Systems Analyst TN applicants with respect to the academic disciplines in which they hold educational credentials than it does to applicants as Engineers. Although computer science appears to be the preferred discipline for Computer Systems Analysts, the Service has exhibited a willingness to admit applicants with degrees and/or postsecondary diplomas in a range of formal disciplines that involve the study of computerized information systems, such as information technology, information processing, computer technology, and even database management.

The most significant problem IT companies have encountered with respect to the admission of Canadian Computer Systems Analysts under the NAFTA concerns individuals whose job descriptions, work experience, or educational background identifies them, in the Service's view, as computer programmers. The NAFTA and the INS's regulations are silent as to the eligibility of computer programmers as Computer Systems Analysts; the *Inspector's Field Manual* states forcefully, however, that the Computer Systems Analyst category "does not include programmers."<sup>40</sup> The *Manual* does state, however, that "[a]lthough the systems analyst will do some programming, the TN category has not been expanded to include programmers."<sup>41</sup> This sentence may provide hope that computer programmers will one day be accommodated as Computer Systems Analysts under the NAFTA; at present, however, the Service will deny a TN Computer Systems Analyst application for an individual who is deemed to be a computer programmer. In fact, INS officers can be expected to be keenly aggressive in reviewing TN applications to identify any reference to computer programming that can precipitate a denial, and plenty of practitioners can attest to the poisonous effect such a reference will have on a TN application for a Computer Systems Analyst.

To what is this aversion to computer programming as an activity unworthy of professional status owed? The ineligibility of computer programmers for TN status was certainly not an issue discussed in the negotiations that led to the NAFTA, and the U.S.'s stance in this regard appears to be entirely unilateral. The most plausible explanation is the INS's traditional reluctance, in a wider context, to view computer programmers as professional employees. Despite the fact that the Service's Administrative Appeals Office has held that computer programming is a professional endeavor,<sup>42</sup> this attitude appears to be well-entrenched in the psyche of INS officers, and is exhibited most commonly outside the context of the TN admission process in a frequent refusal to consider computer programming as an H-1B specialty occupation.

The Service's skepticism toward computer programmers may be based, once again, on this agency's reliance on such publications as the *Occupational Outlook Handbook* as normative sources to be referred to in determining the duties, experience, and academic qualifications required by a given occupation. Although the most recent edition of the *Occupational Outlook Handbook* recognizes that the majority of computer programmers hold four-year degrees in computer science, it also notes that 40.5 percent of computer programmers in the U.S. do not hold baccalaureate degrees.<sup>43</sup> This and other observations concerning the education of computer programmers have apparently been seized upon by the INS as proof of its conviction that computer programming does not invariably require the possession of a baccalaureate degree and is therefore not a professional occupation under the NAFTA. Whatever its basis, the Service's distaste for computer programmers in the TN context appears to be peculiar to this

agency; neither the Canadian nor the Mexican immigration authorities appear to consider evidence of computer programming to be ruinous to a TN Computer Systems Analyst application.

Scientific Technician/Technologist. Scientific Technician or Technologist <sup>44</sup> is the only profession enumerated in Appendix 1603.D.1. that does not require the possession of a Baccalaureate/Licenciatura degree, a license, a postsecondary diploma or certificate, or a specified number of years of professional experience. Rather, a person applying for admission as a Scientific Technician or Technologist must demonstrate two largely unquantifiable qualities: (1) theoretical knowledge of any of the following disciplines: agricultural sciences, astronomy, biology, chemistry, engineering, forestry, geology, geophysics, meteorology or physics; and (2) the ability to solve practical problems in any of those disciplines, or the ability to apply principles of any of those disciplines to basic or applied research. <sup>45</sup>

The lack of a concrete educational or experiential requirement, as well as the INS's (not entirely groundless) suspicion that the classification of Scientific Technician/Technologist is frequently used as a subterfuge to accommodate individuals who are inadmissible under any other TN profession, has meant that TN applications for admission as a Scientific Technician/Technologist are routinely reviewed with heightened scrutiny. An IT company wishing to employ a Canadian in TN status as a Scientific Technician/Technologist must therefore be careful to present evidence that the applicant possesses the necessary theoretical knowledge of an IT-related engineering discipline, as well as the requisite problem-solving or research abilities. Such knowledge or ability can be demonstrated through a variety of means. The *Inspector's Field Manual* states broadly that an "attestation" from a Canadian employer or the prospective U.S. employer or "other documents" are acceptable. <sup>46</sup>

As a practical matter, however, a TN application for admission as a Scientific Technician/Technologist that is supported only by a letter from the company wishing to employ the applicant and a traditional one-page résumé is unlikely to pass muster. Such an application should be supported by an expanded résumé, which summarizes the applicant's employment history, describing in some detail the specific projects and tasks performed by the applicant, with a view to establishing that the required knowledge and abilities are possessed. The application may be further strengthened by letters from the applicant's past employers that confirm that the employment history described in the résumé is accurate, as well as evidence of any technical courses taken (bearing in mind the perils associated with computer programming). The basic impression that should be conveyed is that the Scientific Technician/Technologist is a professional, and not merely a skilled technician. Even the applicant's personal appearance and bearing may be factors taken into account in determining that the applicant is a professional.

Despite the importance of showing that the applicant has the knowledge and abilities required for this classification, the most common stumbling-block with respect to the application of Scientific Technicians/Technologists for TN admission has been the need to show that the applicant will perform the type of work specified for this classification under the NAFTA. Scientific Technician/Technologist is one of only two Appendix 1603.D.1. professions for which a specific mandate with respect to the duties to be performed is provided. <sup>47</sup> Under footnote five to this Appendix, Scientific Technicians/Technologists "must" be seeking admission to another NAFTA State Party to "work in direct support of professionals in agricultural sciences, astronomy, biology, chemistry, engineering, forestry, geology, geophysics, meteorology, or physics." <sup>48</sup> The interpretation of this deceptively simple language has proven to be highly problematic in practice, and the Service's application of this mandate has resulted in the denial of substantial numbers of TN applications for Scientific Technicians/Technologists. The difficulties encountered by Scientific Technicians/Technologists applying for admission under the NAFTA generally revolve around the construction of the crucial phrase "in support of" and the equally important term "professionals" employed in footnote five.

The operative phrase of footnote five's description of the type of work to be undertaken by Scientific Technicians/Technologists is "in direct support of [.]". This phrase may seem quite unambiguous on its face, but it continues to provide a basis for the denial of TN applications, usually because of a divergence between the respective interpretations of it by the INS and the applicant. The Service appears to require several components to a determination that an applicant's work will be "in direct support of" one of the specified classes of professionals.

First, the applicant's work must be subservient in nature; that is to say, it should not be an end in itself or in any way result in the production of a completed product by the Scientific Technician/Technologist alone (or in cooperation with someone who is not a professional). Here, a fine line must be drawn between establishing that the applicant is a person of some accomplishment who can be considered to have achieved professional standing, and showing that he or she will not assume the level of responsibility of a professional.

Second, the applicant's duties must be ancillary to the work of a professional; he or she must assist such a professional in the performance of his or her duties (the fact that "direct" support is required implies that there must be no intermediaries between the Scientific Technician/Technologist and the professional).

Third, a connection must be drawn between the Scientific Technician/Technologist's work and the work done by the professional to be supported. This will require the applicant and/or the company wishing to employ him or her to explain precisely how his or her work is related to the work done by the relevant professional, and, more specifically, how the work of the applicant will be beneficial or useful to the work of this professional. Bearing in mind the abilities prescribed by Footnote Five for Scientific Technicians/Technologists, the applicant's work should generally consist of the resolution of practical problems encountered by the professional, or of the conduct of basic or applied research.

Fourth, a connection should be drawn between the applicant himself or herself and the professional to be supported. Although there is no requirement that the professional being supported be employed by the company seeking to employ the Scientific Technician/Technologist, some Service officers require that a hierarchical chart be produced and that this chart depict the applicant as being directly subordinate to, or reporting directly to, an identified professional or set of professionals. This does not reflect a uniform or even consistent practice among INS officers, however, and generally the identification of the professional or professionals who will be supported (or even of only his, her, or their job titles) will suffice.

Footnote Five to Appendix 1603.D.1. also uses the term "professionals" <sup>49</sup> to designate the only class of persons who may receive the benefit of the Scientific Technician/Technologist's support. Precisely who are and who are not "professionals" under the terms of Footnote Five can present a difficult issue, and is something of which anyone preparing a Scientific Technician/Technologist TN application should be mindful. The Service requires, reasonably enough, that the person or persons being supported be working in one of the professional disciplines cited in Footnote Five. For purposes of a TN application prepared for a Scientific Technician/Technologist coming to work for an IT company, this will generally mean that the "professionals" to be supported must be working in an engineering discipline related to the IT industry; if the application indicates that the applicant will be working in direct support of Computer Systems Analysts, a denial should be expected, even though such persons are considered professionals under the NAFTA.

The INS also seems to require that the engineer or engineers to be supported be shown to be professionals under the standards applied for TN admission. Thus, even though this individual or

individuals may not be applicants for TN admission, the Service's practice appears to be to demand a showing that he, she, or they be admissible under the rigid criteria it applies to TN applications for engineers. The practical result is that a TN application for a Scientific Technician/Technologist should be accompanied by the degree diplomas or certificate(s) of the professional engineer or engineers who will be supported, in order to establish that this person or persons are "professionals" in the sense understood by the Service in the TN context. This means, as discussed above, that such an application must establish that the engineer or engineers to be supported hold degrees in engineering disciplines.

And here the can of worms opens. A Scientific Technician/Technologist application for an individual who will be supporting a software engineer may well be denied on the basis that the person being supported is not a true professional. Even if such a software engineer is deemed a professional, if he or she holds a degree (even an advanced degree) in computer science (or, more recently, in computer engineering), the application may be unsuccessful, because, as discussed above, such an engineer would fail the Service's test for TN admissibility. Similarly, an application that involves the support of an engineer who lacks a degree but has many years of professional experience (and may be in H-1B or even O-1 status) may also be denied on the basis that such an engineer is not a professional.

Management Consultant. Appendix 1603.D.1. also lists "Management Consultant" as a profession for which entry in TN status is permitted. In the IT context, this profession has acquired increasing importance in this savagely competitive industry, where strategy and the ability to think strategically are everything. As new companies strive to develop organizational policies and processes that will enable them to develop and attain their technological, corporate, and fiscal goals, and established companies perceive the need to reinvent themselves strategically in order to adapt to this rapidly evolving business environment, they increasingly seek the services of Management Consultants (sometimes referred to as "Thought Leaders" in today's business parlance) to provide the necessary guidance. Although Management Consultants are seldom IT knowledge workers in a strict sense, they must generally possess considerable technical insight and understanding in order to provide effective services, and are certainly among the most coveted resources for IT companies.

Applications for Management Consultants under the TN category are considered second only to applications for Scientific Technicians/Technologists in their level of difficulty. The Service's strictness with regard to the approvability of such applications can be explained in part by a well-founded suspicion that this classification, like the Scientific Technician/Technologist classification, is vulnerable to abuse by persons otherwise inadmissible under the NAFTA. Among such persons in the IT sector are the large numbers of individuals with academic backgrounds in non-technical disciplines such as Business Administration who will serve IT companies in managerial and executive roles, but who are magically transformed at the Canada-U.S. border into Management Consultants. TN applications for Management Consultants are therefore subject to close review by INS officers, and additional care needs to be invested in their preparation by the U.S. entity and its counsel.

The most common defect of TN applications for Management Consultants is a failure to describe the type of duties that the INS expects a Management Consultant to perform. The *Inspector's Field Manual* notes in this respect that Management Consultants:

provide services which are directed toward improving the managerial, operating, and economic performance of public and private entities by analyzing and resolving strategic and operating problems and thereby improving the entity's goals, objectives, policies, strategies, administration, organization, and operation.<sup>50</sup>

This classic description of a Management Consultant's duties (which, once again, tracks closely the

language of the *Occupational Outlook Handbook* <sup>51</sup>) is frequently overlooked in the preparation of TN applications, which often endow the applicant with a level of executive or managerial authority, and involvement in the decision-making process of the U.S. entity, that would generally not be held by a Management Consultant, whose purpose should not be to run the company, but to observe its workings and suggest how these may be improved. <sup>52</sup>

The NAFTA requires that a TN Management Consultant have either a baccalaureate degree (in no specific discipline) or "equivalent" experience. Such equivalent experience is five years of experience as a management consultant or in a "field of specialty related to the consulting agreement." <sup>53</sup> These can be established through a detailed résumé or, preferably, through letters from former employers if the individual has not been self-employed. If the applicant has been self-employed as a consultant, then letters from entities receiving the benefit of his or her consultation would be appropriate. Although the NAFTA allows persons new to the field of management consultation to be admitted as Management Consultants, the Service can be expected to be skeptical of an application for a person who has had many years of industry experience, but has never before served in a consultative role.

No other guidance with respect to the qualifications of the Management Consultant, or the duties that he or she must perform, is provided in the NAFTA. By referencing a "consulting agreement," however, Appendix 1603.D.1. appears to presuppose the existence of an agreement or contract between the U.S. entity and the TN applicant, and suggests by implication that only Management Consultants serving such companies or organizations on a contractual basis are admissible.

Discussing the relationship between the Management Consultant and the U.S. entity, the *Inspector's Field Manual* makes explicit what is implicit in Appendix 1603.D.1.:

Management Consultants are usually independent contractors or employees of consulting firms under contracts to U.S. entities. They may be salaried employees of the U.S. entities to which they are providing services only when they are not assuming existing positions or filling newly created positions. As a salaried employee of such a U.S. entity, they, [sic] may only fill supernumerary temporary positions. On the other hand, if the employer is a U.S. management consulting firm, the employee may be coming temporarily to fill a permanent position. <sup>54</sup>

What sense can be made of this awkward paragraph? Most obviously, it uses terms that are normative, not descriptive. The INS is not describing what Management Consultants are for an inspecting officer's edification; it is prescribing dogmatically what type of Management Consultant can be admitted, and what type must be excluded. In this respect, the *Manual's* section on Management Consultants differs from the Canadian government's Interpretive Note to Appendix 1603.D.1. discussing this profession, which is couched in far more permissive terms. <sup>55</sup>

The *Inspector's Field Manual* appears to state that generally (unless a management consulting firm is part of the equation) only a Management Consultant who is under contract (i.e., in a non-salaried capacity) to a U.S. entity will be admissible. A salaried Management Consultant may be admissible, but not if he or she is (1) assuming an existing position, or (2) filling a newly created position. What exactly does that leave? The answer, of course, is the arcane "supernumerary" employee category, which many companies (and their counsel) confidently invoke in their TN letters of support, but whose true meaning remains murky.

To have a TN application for a Management Consultant approved, the right relationship between the

applicant and the U.S. entity therefore needs to be established. If the U.S. entity is not a consulting firm, it must be shown that the Management Consultant will serve in a contractual capacity, and the contract itself should be available for inspection. If no such contractual relationship exists, and the U.S. entity is not up to the perplexing task of showing that this position is neither an existing one nor a newly created one, then it must be proven that the Management Consultant will be a supernumerary employee. The term "supernumerary" is not a term of art in a legal sense, and appears to have no precise legal meaning. No federal or state statute or regulation construes the term, and a search through all reported case law, whether state or federal, in this country identified no meaningful discussion of the term.<sup>56</sup> In common usage, "supernumerary" refers to being in excess of the usual, proper, or prescribed number, but associated with a regular body or staff.<sup>57</sup> Any application for a TN Management Consultant that will be employed as a salaried employee of a U.S. entity must be careful to state clearly that the applicant will be a supernumerary employee, who, although on the company payroll, will somehow stand apart from the main corpus of employees, and will not be incorporated into the regular hierarchy of this entity. Given the lack of a firm legal standard governing what constitutes supernumerariness, employers and their legal counsel can enjoy a fairly free rein in explaining to the Service how the aspiring Management Consultant will qualify as a supernumerary employee, but it cannot be taken for granted that the mere mention of this term in the TN letter of support will satisfy the Service. Indeed, the use of the term unaccompanied by any explanation in a TN letter of support is likely to produce a refractory attitude on the part of an inspecting INS officer.

## CORPORATE RESTRUCTURINGS AND THE TN CATEGORY

Although the principal focus of this article is on the admission process for TN applicants, a brief examination of the post-admission effects of corporate restructurings upon TN nonimmigrants is appropriate, in view of the astonishingly high incidence of mergers, acquisitions, spin-offs, and other corporate restructurings that distinguishes today's IT industry. In an environment obsessed with stock exchange performance, established companies attempting to maximize shareholder value are constantly seeking to acquire, or merge with, other companies whose technologies, innovative approaches, and sometimes human assets (those knowledge workers again) can enhance their competitiveness. Conversely, many fledgling companies in this industry (particularly among the "dot-com" community) appear to exist only for the day when they will attract the attention of a larger company and be acquired.

In such a setting, U.S. employers face a challenging task in ensuring that their nonimmigrant employees maintain their lawful employment-based immigration statuses; given the high numbers of such nonimmigrant workers in today's IT companies, this task should be taken seriously, and a target company's compliance with immigration law is nowadays increasingly viewed by the acquiring company's counsel as a material issue in the "due diligence" process that precedes any acquisition or merger.

The complexities involved in determining the effect that a corporate restructuring will have on nonimmigrant members of a work force have not gone unexamined by the INS or the immigration bar, and a modest jurisprudence has evolved over the past few years governing these issues and the steps that need to be taken to ensure that nonimmigrant employees of a company involved in a corporate restructuring maintain their lawful statuses in this country. None of the Service's memoranda or advisory opinions addressing the effects of corporate restructurings, or of the secondary articles discussing this issue, has focused on the situation of TN nonimmigrants employed by a U.S. entity that is involved in such a restructuring, however.<sup>58</sup> The Service's TN regulations do not expressly deal with this subject, and the TN sections of its *Inspector's Field Manual*, which are concerned solely with initial admissions

and readmissions, are silent on this.

The regulations do contemplate situations in which TN nonimmigrants may "change," "add," or "transfer to" a new employer, however. Although the Service appears to have envisaged the mobility of TN nonimmigrants from one employer to another, and may not have had in mind corporate restructurings when it drafted these regulations, the provisions governing such changes, additions, or transfers may readily be applied to a restructuring context. The Service's TN regulations do not explicitly allow the fairly generous practice of permitting employees affected by a corporate restructuring to remain employed pending the approval of amended petitions to notify the Service of the material change in such employees' employment.<sup>59</sup> The relevant section of the regulations states plainly that a TN employee wishing to change or add a U.S. employer after admission must file a new I-129 petition with the Nebraska Service Center, together with the appropriate supporting documentation and the relevant information concerning the employee's new employment. Employment with a different or additional employer is not permitted until the Service approves the petition.<sup>60</sup> Canadian TN employees are allowed to bypass the obligation to file a petition simply by leaving the U.S. and being readmitted with documentation from the new employer, thus avoiding the current processing period of 90 days or more.<sup>61</sup> The Service's TN regulations are liberal in requiring "no action" (i.e., no petition and no readmission application) for TN nonimmigrants (whether Canadian or Mexican) who "transfer" from one branch or office of an employer to another, regardless of their geographical remoteness from each other, as long as the same services are provided by such TN nonimmigrants.<sup>62</sup> This falls short of the generosity accorded to nonimmigrant transferees admitted under the L blanket, however, and a transfer to a separately incorporated company, even if this company is a member of the same corporate family, can only be accomplished through the petition or readmission mechanisms referred to above.<sup>63</sup>

## THE FAILURE OF THE TN CATEGORY

What conclusions can be drawn from a review of the performance of the TN category of the NAFTA as a vehicle for the admission of Canadian IT professionals to the U.S.? Arguably, the TN category is not functioning as effectively as it could or should. The unqualified boon to cross-border labor mobility between the U.S. and Canada promised at the inception of the NAFTA has never materialized, and what we have today is a needlessly complicated admission system that is fraught with pitfalls and often arbitrarily implemented, and continues to produce an unacceptably high number of denials of applications by admissible professionals. The problems with the TN category have never been more acute than today, and the perils associated with the NAFTA's admission process have received widespread international attention. In a recent survey of immigration to the U.S., *The Economist* noted:

The contradictions in America's immigration laws are becoming increasingly awkward to live with. Canada is getting cross with a partner who insists on ever freer trade but keeps on erecting barriers at its frontier. Some people ask whether a trade block need necessarily involve the free movement of labor as well as that of capital and goods.<sup>64</sup>

It would of course be an exaggeration to assert that this category has proven to be an outright failure, because large numbers of such professionals have been admitted, and continue to be admitted, to this country to serve U.S. companies in the IT sector. More reasonably, the TN category may be considered a limited failure, in the sense that it has not proven to be a wholly reliable, predictable, or consistently administered method through which to secure the services of Canadian IT knowledge workers. In this regard, the TN category is deficient in three basic respects.

The first problem is one of policy, or, more accurately, of the lack of an unambiguous policy inherent in

the NAFTA to promote and facilitate the mobility of citizens of one state party into the others. The NAFTA (arguably because of the specter of large-scale immigration into the U.S.) is simply too timorous and ambivalent about the issue, and its lack of a clear vision or unequivocal organizing principle with regard to such mobility has resulted in the contradictory tip-toeing of Article 1601, which sends a decidedly mixed message to INS officers as to which imperative should be uppermost in their minds as they review TN applications. Article 1601, as noted above, avers "the desirability of facilitating temporary entry" and "the need to ensure border security and to protect the domestic labor force" as policy imperatives that apparently stand on an equal footing with each other. To most minds<sup>0</sup>, such imperatives do not sit easily with each other, and it is not unreasonable to consider (as some Service officers apparently do) that one can only be served at the expense of the other.

The second problem is a structural one. By operating through a static enumeration of professions and corresponding educational and experiential requirements, the TN category provides an overly rigid framework that lacks the elegance necessary to take proper account of the heterogeneity of professional occupations within today's IT industry. Unlike the H-1B category, whose principal virtue is a remarkable elasticity that permits the accommodation of a wide, highly diverse, and ever-growing range of occupations, the TN category offers IT professionals only a limited number of sharply circumscribed openings whose requirements must apparently be matched exactly in order for an application to be successful. This is becoming an increasingly difficult task for IT companies to perform, operating as they do in a rapidly expanding industry, where the almost monthly emergence of new and transformative technologies is (and must be) paralleled by the almost as frequent emergence of new professional occupations and specializations created to cater to these technologies. A cursory review of the employment opportunities listed on the websites of the leading IT companies identifies an astonishing multiplicity of job categories, each with its own discrete and highly specialized set of duties. While only a few years ago such a review might have identified only openings for several different classes of software and hardware engineers, programmers, developers, and systems analysts, the job seeker today is faced with a plethora of vacancies for Product Evangelist, Localization Specialist, Web Architect, Web Development Engineer, Interface Designer, Streaming Engineer, and Build Engineer, to cite but a very few.

The third problem is one of process. The internal rigidity of the TN category invites a literalism on the part of INS officers at the ports of entry that has become the most significant hazard involved in applying for TN admission. As discussed earlier, the overwhelming tendency among such officers is to insist that an applicant's proposed job title and description mirror exactly one of the professions listed in Appendix 1603.D.1. This attitude is unsurprising, given the apparently inflexible terms of Chapter 16's TN provisions, but it represents a fundamental misunderstanding of the liberal spirit in which the NAFTA's provisions should be read. Although there is no legislative history to support this view, it is more probable, given the broad aims of the NAFTA, that the drafters of the NAFTA wished the professions enumerated in Appendix 1603.D.1. to be interpreted as a series of broad occupational categories rather than as the narrow openings apparently envisaged by the INS.

Much of the difficulty involved in the use of the NAFTA to facilitate the admission of foreign employees appears to be traceable to a tension inherent in Article 1601 of the NAFTA. This is not the explicit and obvious tension between the aim of "facilitating temporary entry" of citizens of one state party into the territory of another and the objective "to protect the domestic labor force and permanent employment" discussed above, but the more subtle tension between the facilitation of temporary entry and the establishment of "transparent criteria and procedures" to aid such temporary entry. Although these pieties are in apparent harmony, the latter, in practice, operates to undermine the former. The aspiration toward transparent criteria and procedures for admission is motivated by a legitimate desire to establish an uncomplicated inspection process that demands little analysis and can be handled rapidly by Service officers at the ports of entry, thereby serving the NAFTA's objective of facilitating the free flow

of capital, goods, and services among the state parties. The result has been the simplistic scheme offered by Appendix 1603.D.1.

Ironically, far from easing the passage of qualified professionals into the U.S., the very simplicity of this "transparent" scheme has made it susceptible to an unforgivingly strict interpretation by reviewing INS officers that continues to produce a disturbingly high number of denials of TN applications for admission. Here, the Service must be called to task. An examination of the internal deficiencies of the NAFTA only partially explains why it is not functioning satisfactorily as a vehicle for the admission of Canadian IT knowledge workers. A more complete and honest explanation must recognize the Service's role in the TN admission process. The virtually unfettered discretion granted to Service officers at the ports of entry to deny or approve TN applications means that such officers are generally at liberty to bring to this process their individual biases and prejudices. Too often, the responsibility for adjudicating TN applications is entrusted to Service officers who lack adequate training, and whose principal motivation, arguably in violation of Article 1602 of the NAFTA, is not to promote the free flow of services, but, misunderstanding or ignoring the NAFTA's basic function of providing temporary labor mobility rather than facilitating immigration, to protect the U.S. work force. Although such a motivation is by no means illicit, given the aims expressed in Article 1601 of the NAFTA, the review of TN applications too often ceases to be a fair and objective evaluation of the merits of such applications, and becomes instead a search for a technicality, however minor, upon which a denial can be based.<sup>65</sup>

This, then, is Chapter 16's basic paradox: the TN category's biggest benefit—port of entry adjudication—has become its biggest hazard. As many practitioners will confirm, the admission of eligible Canadian professionals in TN status cannot be taken for granted. Indeed, the readiness of some Service officers to punish minor or technical imperfections in TN applications with outright denials (something that is made easy by the simplistic black-and-white scheme offered by the TN category) has made TN application at a port of entry a perilous proposition, with virtually no margin for error. Uncannily, as the importance of the TN category to U.S. IT companies has grown because of such factors as the reaching of the annual limit on H-1B admissions, so has the Service's stance on the admission of IT professionals hardened, to the point where no IT professional, however well-qualified, should feel that the admission process is a simple formality.

The Service conducts no liaison meetings to discuss its processing of TN applications at the ports of entry, so its motivation in apparently raising the bar on TN applications remains a matter of speculation. Rumors of summit meetings between the Free Trade officers at the northern ports of entry to increase the stringency of review for TN applications have been heard, but no official confirmation has followed. The Service's current confrontational stance toward TN applicants may, however, be symptomatic of a wider phenomenon noted by scholars in the context of free trade agreements. In an era when states are ever more eager to cooperate with each other to achieve economic integration by lowering trade barriers and relaxing controls over cross-border economic exchange, some are intensifying their efforts to police cross-border flows of persons.<sup>66</sup> The reason for this antinomy may be fairly simple: as states perceive an erosion in their sovereignty by the lowering of such barriers and the relaxation of such controls, they react by reaffirming their sovereignty through the exclusion of citizens of other nations. Thus, while states embrace free market initiatives that de-territorialize their economies, they simultaneously attempt to reassert their territorial authority over population flows from without. As Saskia Sassen has pointed out, despite the relaxation of barriers to the flow of goods, information, and capital, when it comes to regulating the movement of people, "the national state claims its old splendor in asserting its sovereign right to control its borders."<sup>67</sup>

Assuming that the current state of the system for the admission of Canadian professionals to the U.S. in TN status presents a situation that needs to be corrected, what mechanisms are available to achieve such

a correction? Because the denial of TN applications is generally not appealed to an administrative or judicial appellate level, no body of precedential case law discussing and refining the types of issues discussed above will or can develop to shape the INS's decision-making process or to establish consistency in the Service's approach to such issues.<sup>68</sup> Article 1606's "Dispute Settlement" mechanism does provide for the initiation of proceedings under Article 2007 of the NAFTA to remedy a state party's refusal to grant temporary entry to the citizens of another state party, provided that a "pattern or practice" is involved and that all administrative remedies have been exhausted.<sup>69</sup> No such proceedings have ever been initiated by any state party, and it is unlikely that Canada will initiate proceedings of this type against the U.S., for reasons of basic comity, and given the fact that the NAFTA continues to provide the prime vehicle for this country's southward brain-drain. A less vexatious avenue for the improvement of the TN admission process is provided by Article 1605 of the NAFTA. This establishes a non-adversarial "Temporary Entry Working Group" comprised of representatives of each state party, whose basic function is to consider the development of measures to facilitate further the temporary entry of business persons.<sup>70</sup>

Cognizant of the problems experienced by Canadian professionals seeking admission to the U.S. under the TN category, the American Immigration Lawyers Association (AILA) has proposed to the INS that the Temporary Entry Working Group exercise its authority to enlarge the number of IT-related professional categories enumerated in the NAFTA.<sup>71</sup> The specific professional categories proposed by AILA include the following: Computer Database Administrator; Computer System or Software Administrator; Computer Systems or Software Analyst; Computer Hardware or Software Engineer; Computer Programmer; Electrical or Electronics Engineer; Engineering, Mathematics, or Natural Sciences Manager; General Manager or Senior Executive.<sup>72</sup> Clearly, such an expansion would go a long way toward remedying the problems discussed throughout this article, but no indication has been given as to the progress being made to adopt or reject AILA's recommendations. The Service is entirely correct in responding to AILA that it cannot act alone to amend the NAFTA in the manner requested, however.<sup>73</sup>

## CONCLUSION

In its administration of the TN status, the INS, and, by extension, the U.S., have erected a non-tariff barrier to trade that conflicts with the letter (as expressed in Article 1602) and the spirit of the NAFTA.<sup>74</sup> The heightened review imposed on such applications and the Service's alacrity in denying them continues to have an increasingly damaging effect on the competitiveness of U.S. companies attempting to benefit from the sizable pool of IT workers north of the border. Less importantly, the current state of affairs also compromises the credibility of practitioners representing such companies. Despite the difficulties in the TN admission process discussed throughout this article, the general public perception of this process is still that it is virtually automatic, and that problems only arise through poor planning.<sup>75</sup> When a TN application is denied (however arbitrary or questionable the denial), the immediate reaction of some clients is to blame the unfortunate attorney for sloppy work and often no explanation of the complexities inherent in the admission process or of the prevailing hostile climate for TN applications will mollify the upset applicant, who often has left his or her Canadian employer and sold his or her home in Canada.

At present, the TN category of the NAFTA is in danger of becoming what economists term a negative externality. A negative externality occurs when the exercise of a right by one party to a transaction imposes an uncompensated-for cost on a third party not directly involved in the transaction. This is precisely what happens when the Service erects obstacles to the admission of IT professionals in TN status. The denied professional is left with an unpleasant retreat from the border, and a loss in

competitiveness is caused to the U.S. company wishing to employ the applicant. These are not the most significant costs of the present pattern of TN denials at the Canadian border, however. The harms that also deserve consideration are the chilling effect on future TN applications by other companies (which already appears to be setting in), as well as, in a wider context, the potential for a variant of a traditional trade war with Canada, whose attention the INS's actions, as noted above, have not escaped.

And what are the benefits of the Service's intransigence? The protection of the U.S. work force, some would claim, and, possibly, the preservation of the integrity of the NAFTA by ensuring that its abuse is prevented. Yet it is difficult to show that the Service's implacable stance toward TN applications serves to promote either of these objectives effectively or, indeed, that a sufficiently serious situation exists with respect to the threat posed to the U.S. work force or to the misuse of the NAFTA to warrant the Service's contrarian posture. It may also be claimed that the legitimate objective of preventing fraud is served by the Service's rigorous processing of TN applications; in a world where counterfeit educational diplomas, forged employment verification letters, and bogus corporate documentation have become more and more commonplace, it is hard to see, however, how a crackdown on TN applications by IT companies wishing to fit a professional position unfamiliar to the Service within the narrow parameters provided by the TN category serves this objective to a useful extent.

In the context of traditional immigration process and policy, nativist and overly restrictionist views are to be regretted; in the context of a free trade agreement, they are to be deplored, negating as they do the very impulse that led to the creation of the agreement. Through its hard-nosed attitude to the admission of Canadian professionals, the U.S. is beginning to look increasingly out of step with its NAFTA partners, as well as with the rest of the first-world economic community, for whom interdependence and cooperation at all levels of economic activity are today taken for granted. This situation may of course change; as a new more forward-looking administration that recognizes the need for such interdependence and cooperation and, like the present Canadian administration, understands the importance of the IT industry to this country's continued prosperity takes charge early next year, we can reasonably expect things to change for the better. As matters stand today, however, the liberal spirit of the NAFTA, at least in the context of the TN category for Canadians, seems somehow to have fallen by the wayside.

## FOOTNOTES

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<sup>1</sup> North American Free Trade Agreement, U. S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 296, 612 (entered into force Jan. 1, 1994) (hereinafter "NAFTA"). For an account of the business immigration components of the NAFTA, see Etherington & Hawley, "Hiring Professionals Under NAFTA," 97-2 Immigration Briefings (Feb. 1997); see also *Understanding Immigration Under NAFTA: A Comprehensive Guide for Practitioners and Businesses* (Federal Publications 1994); Vázquez-Azpiri, "Northern Exposure: The Unfulfilled Promise of the Trade NAFTA Category for Canadians," 75 Interpreter Releases 613 (May 4, 1998); Reich, "NAFTA Applications for Canadians 1999," in II 1998-99 *Immigration and Nationality Law Handbook*, Murphy & Novick, eds., (AILA 1999), at 201-214.

<sup>2</sup> See, e.g., "21st Century Worker Shortages: Hearings Before the Committee on Education and the Workforce and the Subcommittee on Oversight and Investigations," 106th Cong. (Feb. 17, 2000) (statement of Elizabeth C. Dickson, Human Resources Specialist and Member of Global Mobility Team, Ingersoll-Rand Co.), available at

[http://www.house.gov/ed\\_workforce/.../106th/oi/wrksht21700/dickson.htm](http://www.house.gov/ed_workforce/.../106th/oi/wrksht21700/dickson.htm) (noting the fact that the number of bachelor's degrees in computer science awarded in the U.S. declined from 42,200 in 1986 to 24,800 in 1995 and the "skills gap" between U.S. IT knowledge workers and IT knowledge workers from China, India, and some Soviet bloc countries). See also Masters and Ruthizer, *The H-1B Straitjacket: Why Companies Should Repeal the Cap on Foreign-Born Highly Skilled Workers*, 00-5 Immigration Briefings (May 2000); Papademetriou, "The Global Fight for Talent," *Washington Post*, Mar. 21, 2000, at A25 (citing the U.S.'s "cherry picking of international tech talent" as an "enormous" competitive advantage); Kukis, "Shortage of High-Tech Workers Threatens Economic Growth," *United Press International*, Apr. 11, 2000; Kundu, "The H-1B Cap Will Move Jobs Overseas," *Employment Policy Foundation, Survey Findings*, Apr. 12, 2000 (citing the Computing Technology Industry Association's claim that 269,000 IT jobs are going unfilled, costing U.S. businesses \$4.95 billion in lost productivity). For a contrary view, see Galvin, "Tapping a Natural Resource," *Seattle Times*, Apr. 11, 2000, at C1 (citing Labor Secretary Alexis Herman's view that the IT skills shortage can be solved by training unemployed and underemployed U.S. workers).

<sup>3</sup>. See Saracevic, "The New, New Politics; Silicon Valley Courts Candidates with Money, Advice," *San Francisco Chronicle*, Feb. 20, 2000, at B1; Geewax, "Importing Workers: Lawmakers Grapple Over Tech Visa Cap: A Federal Issue: Congress Worries That Employee Shortages in Key Jobs Could Harm the Booming Economy," *Atlanta Constitution*, Mar. 12, 2000, at 1D.

<sup>4</sup>. Nearly all of the candidates in the recently concluded campaign for nomination as a presidential candidate have voiced an opinion about the relationship between the IT industry and the pool of foreign knowledge workers. See, e.g., 76 Interpreter Releases 41 (Jan. 10, 2000); "Candidates on the Issues: Immigration," *Associated Press*, Jan. 14, 2000. Both George W. Bush and John McCain have energetically taken up the cause of increasing the admission of foreign knowledge workers.

<sup>5</sup>. See, e.g., 77 Interpreter Releases 518 (Apr. 17, 2000).

<sup>6</sup>. *Statistical Yearbook of the Immigration and Naturalization Service*, 1997.

<sup>7</sup>. DeVoretz, *People Aspects of Technological Change: Immigration Issues, Labor Mobility, The Brain Drain, and R&D-A Canadian Perspective*, 25 *Can.-U.S. L. J.* 67 (1999).

<sup>8</sup>. "Brain Drain and Unfilled Jobs," *Gazette* (Montreal), Oct. 25, 1997.

<sup>9</sup>. "Brain Drain and Brain Gain: the Migration of Knowledge Workers Into and Out of Canada," *The Daily* (Statistics Canada), May 24, 2000.

<sup>10</sup>. "Where the Grass is Greener: the Lure of the South is Irresistible and Worrying," *The Economist*, July 24, 1999.

<sup>11</sup>. *Id.* See also DeVoretz at 71.

<sup>12</sup>. These included embedded systems software designer, software products developer, MIS software designer, multimedia software designer, senior animation effects editor, software

developer-services, and telecommunications software designer. The Canadian Pilot Project for Software Professionals is described online at <http://www.visacanada.com/knowledge/non-imm/software.htm>. See also Frankel & Endelman, "Go North Young Man, Go North: Working Temporarily in Canada from an American Perspective," 77 Interpreter Releases 81-82 (Jan. 14, 2000).

13. "Supporting Jobs in the High-Tech Sector," Citizenship and Immigration Canada news release, Jan. 21, 2000.

14. See generally, "The European Union v. the United States Under the NAFTA: A Comparative Analysis of the Free Movement of Persons Within the Regions," 49 Syracuse L. Rev. 1343 (1996). Interestingly, the abolition of immigration obstacles within the European Union has not enabled European IT companies to escape their own hiring difficulties. Such companies are increasingly looking to Indian and Chinese nationals to meet their hiring needs, with problematic social consequences. A recent initiative by the German government to allow the entry of skilled software programmers from outside the European Union provoked a strong reaction from the more extreme elements of that nation's polity, who have adopted the slogan "Kinder statt Inder!" (Children, not Indians!). "Europe's Immigrants: A Continent on the Move," *The Economist*, May 6, 2000, at 26-27.

15. The NAFTA provides the prime example of the phenomenon Sassen refers to when she states that "these labor circulation agreements have been uncoupled from any notion of immigration, even though they involve a version of temporary labor migration[.]" S. Sassen, "Losing Control? Sovereignty in an Age of Globalization," (Columbia University Press, New York, 1996) [hereinafter Sassen], at 88. The omission of immigration from the subjects discussed during the NAFTA's negotiations has been criticized by various commentators, most of whom have lamented the NAFTA's lack of mechanisms discouraging migration from Mexico to the U.S. See, e.g., Nelson, "NAFTA: Immigration Issues Must Be Addressed," 27 U.C. Davis L. Rev. 987 (1994). See also Massey, "March of Folly: U.S. Immigration Policy After NAFTA," 27 *The American Prospect* 22-23 (Mar.-Apr. 1998).

16. NAFTA Art. 1601.

17. NAFTA Preamble [emphasis added].

18. Johnson, "Free Trade and Closed Borders: NAFTA and Mexican Immigration to the United States," 27 U.C. Davis L. Rev. 937 (1994).

19. The limited focus of the NAFTA and this treaty's delicate counterpoint with immigration are discussed in a number of scholarly articles. See, e.g., Fuller-Jacobs, "Labor Mobility and the North American Free Trade Agreement," 1 San Diego Justice J. 289 (1993); Yost, "Human Resources in the Canada/U.S. Context and in a Changing World: The Impact of NAFTA on Human Resources," 22 Can.-U.S. L.J. 211 (1996); Gal-Orr, "Labor Mobility Under NAFTA: Regulatory Policy Spearheading the Social Supplement to the International Trade Regime," 15 Ariz. J. Int'l & Comp. Law (1998).

20. NAFTA Art. 1602. Of course, the apparent dichotomy set up between services and persons is arguably illusory, because the former are generally embodied in the latter. Sassen at 88.

21. U.S.-Canada Free Trade Agreement, Jan. 2, 1988, H.R. Doc. No. 216, 100th Cong., 2d Sess. (1998); 27 I.L.M. 281 (Mar. 1988). The TN category has been codified at 8 USC § 1184(e).
22. NAFTA Appendix 1603. D. 1.
23. 8 CFR § 214.6(e)(2). The regulations provide that U.S. Class A ports of entry, U.S. airports handling international traffic, and U.S. pre-clearance/pre-flight stations may accept TN applications for admission.
24. These requirements are imposed upon Mexican nationals entering the U.S. in TN status. See 8 CFR § 214.6(d)(2)(i).
25. A limit of 5,500 is imposed on Mexican citizens entering under this category, however. See 8 CFR § 214.6(d)(7)(i).
26. INA § 214(g), 8 USC § 1184(g); 8 CFR § 214.2(h)(8)(i)(A). The 115,000 cap was reached during the 1999 and 2000 fiscal years, and will almost certainly be reached again next year, barring the approval of legislation to increase this limit. It is likely that the cap will continue to be reached in subsequent years, assuming sustained economic growth.
27. If the engineer, regardless of nationality, has completed his or her education in Mexico, a Licenciatura degree is acceptable, as is a license issued by a state of Mexico or of the U.S.
28. I am indebted to my colleague, Juli Gammon, for pointing out that the Texas Board of Professional Engineers plans to impose a license requirement on software engineers. See <http://www.main.org/peboard/sofupdt.htm>.
29. Most Canadian universities continue to offer baccalaureate degree programs designated as "Computer Engineering" or "Computer Science" programs. In the fall of 1998, however, McMaster University began offering a degree in software engineering. In the fall of 1999, the University of Calgary followed suit by introducing a bachelor of science degree in software engineering to accompany its degree in computer engineering, and, in the same semester, Carleton University introduced a bachelor of engineering degree in software engineering to accompany its bachelor of engineering degree in computer systems engineering.
30. U.S. Dep't of Labor, Bureau of Labor Statistics, Bulletin 2520, *Occupational Outlook Handbook* (Jan. 2000) [hereinafter *OOH*], at 85 ("Engineers design products, machinery to build those products, factories in which those products are made, and the systems that ensure the quality of the product and efficiency of the workforce and manufacturing process"). It should be noted, however, that the NAFTA places software on the same plane as industrial equipment and machinery by noting, in Appendix 1603.A.1. of Chapter 16 that software is something upon which after-sales service may be performed by persons in B visitor status. NAFTA Appendix 1603.A.1.
31. *Id.*
32. U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 2450, *Occupational Outlook Handbook* (Apr. 1994), at 92-93.

33. This lack of specificity contrasts with the Service's position on the education to be held by aliens in the H-1B category. Such education must be "in a specific specialty." 8 CFR § 214.2(h)(2)(ii).

34. The Service's *Inspector's Field Manual* is reprinted in Gordon, Mailman & Yale-Loehr, *Immigration Law and Procedure* (rev. ed. 1992) [hereinafter G., M. & Y-L]. The *Manual* is likely to provide the primary source of guidance to Service officers, because the Service's Operations Instructions will eventually be replaced by a series of field manuals. See 77 Interpreter Releases 93-95 (Jan. 14, 2000).

35. Preliminary Draft INS Revisions for the North American Free Trade Agreement Operating Instructions (undated), at 9-10. The text of these Draft Operations Instructions is closely similar to the text of the *Inspector's Field Manual*, but they have never been considered binding on the Service, which at one point went so far as to deny their existence. 71 Interpreter Releases 1151 (Aug. 29, 1994).

36. *OOH* at 111.

37. *In re Aditi*, Case No. LIN 99 2435 0365 (AAO May 23, 2000).

38. *Id.*

39. G., M. & Y-L. § 15.5(f)(2)(H), at 15-59.

40. *Id.*

41. *Id.*

42. *Matter of Precision Programming, Inc.*, Case No. EAC 92 202 51006 (Apr. 2, 1993), reported in 70 Interpreter Releases 702 (May 27, 1993).

43. *OOH* at 115.

44. If there is a difference between the terms "Technician" and "Technologist," this is not elucidated in the NAFTA or the *Inspector's Field Manual*. The *OOH* does not discuss any difference, and, while recognizing a broad class of Technicians, refers only to Clinical Laboratory, Cardiovascular, Electroneurodiagnostic, Nuclear Medicine, Radiologic, and Surgical Technologists. *OOH* at ix-xi.

45. NAFTA Appendix 103.D.1.

46. G., M. & Y-L. § 15.5(f)(2)(A), at 15-57.

47. The other is Medical Laboratory Technologist. See NAFTA Appendix 1603.D.1., n. 3.

48. NAFTA Appendix 1603.D.1., n. 5.

<sup>49</sup>.No particular importance should be attached to the use of the plural here, and it is unlikely that a TN application for a Scientific Technician or Technologist who will be supporting a lone professional would be denied on this basis.

<sup>50</sup>.G., M. & Y-L. § 15.5(f)(2)(G), at 15-58.

<sup>51</sup>.*OOH* at 69.

<sup>52</sup>.As a result of this function and its implied temporariness, the INS is often reluctant to readmit Management Consultants who have been present in the U.S. for two years or longer in TN status.

<sup>53</sup>.NAFTA Appendix 1603.D.1.

<sup>54</sup>.G., M. & Y-L. § 15.5(f)(2)(G), at 15-59.

<sup>55</sup>.Canadian Dept. of Foreign Affairs and International Trade, *Cross-Border Movement of Business Persons and the North American Free Trade Agreement (NAFTA)*, available on the Internet at <http://www.dfait-maeci.gc.ca/nafta-alena/cross-e.asp>.

><sup>56</sup>. Surprisingly, only two very dated judicial decisions contain more than a passing discussion of the status of supernumerary employees. See *Bowman v. United States*, 1858 U.S. Ct. Cl. LEXIS 42 (defining a supernumerary army officer as an officer whose corps or battalion has been reduced, and who has no command and is discharged from actual service); *Oklahoma Ry. Co. v. Carlton*, 1935 Okla. LEXIS 914 (supernumerary employees not entitled to workmen's compensation).

><sup>57</sup>. *The Random House College Dictionary* (1975), at 1319.

><sup>58</sup>. See, e.g., INS Central Office Memo. CO214H-C, CO214I-C (Oct. 22, 1992), reported on and reprinted in 69 Interpreter Releases 1448 (Nov. 9, 1992) [generally referred to as the Hogan Memorandum]; INS Central Office Memorandum HQ 70/6.2-P (Aug. 27, 1996), reported on and reprinted in 73 Interpreter Releases 1231 (Sept. 16, 1996) [generally referred to as the Aleinikoff Memorandum]; Paparelli & Haight, "Business Metamorphoses: The Effect of Changed Circumstances on U.S. Employers and Nonimmigrant Workers," II 1993-94 *Immigration and Nationality Law Handbook*, Murphy & Novick, eds., (AILA 1993), at 70-80; Hader & Syfert, "The Immigration Consequences of Mergers, Acquisitions, and Other Corporate Restructurings: A Practitioner's Guide," 24 N.C.J. Int'l L. & Com. Reg. 547-599 (1999).

<sup>59</sup>.8 CFR § 214.6(g)(i).

<sup>60</sup>. *Id.*

<sup>61</sup>. 8 CFR § 214.6(g)(2)(ii).

<sup>62</sup>. 8 CFR § 214.6(g)(3).

<sup>63</sup>. *Id.*

64. "Give Me Your Tired, Your Confused," *The Economist* Mar. 11, 2000, at 9 (American Survey). See also "Canadians Feel Frost at Border," *Business Week*, May 4, 1998, at 48.

65. To its credit, the Service has attempted to instruct its officers reviewing applications under the NAFTA to "maintain the highest standards of objectivity, courtesy, and professionalism" in reviewing such applications. "Processing of Applicants for Admission Under the North American Free Trade Agreement," INS Central Office Memorandum HQINS 70/6.2.23 (Oct. 20, 1999) (issued by Robert L. Bach, Exec. Assoc. Comm'r, Policy and Planning).

66. See generally, Andreas, "Escalation of U.S. Immigration Control in the Post-NAFTA Era," *Pol. Sci. Q.* 113 (Winter 1998-99).

67. Sassen at 59.

68. The Service has recently attempted to introduce some formality into the TN denial process by recording its interview of denied applicants, and issuing Form I-160A, "Notice of Refusal of Admission/Parole into the United States," which memorializes the denial and the bases for it.

69. NAFTA Art. 1606.

70. NAFTA Art. 1605. This article also permits the Temporary Entry Working Group to consider the granting of benefits to spouses of business persons admitted under the NAFTA for longer than one year.

71. Minutes of AILA's INS HQ Adjudications Liaison Meeting, Sept. 21, 1999, reprinted in 18 AILA Monthly Mailing No. 10 (Nov. 1999), at 973-74.

72. *Id.* At this year's AILA annual conference, Jacquelyn Bednarz, the INS's Special Assistant to the Executive Associate Commissioner for Policy and Programs, indicated that two new professions would be added to Appendix 1603.D.1. in the near future: Actuary and Plant Pathologist.

73. *Id.* at 974.

74. See generally Yost, "Human Resources in the Canada/U.S. Context and in a Changing World: The Impact of the NAFTA on Human Resources," 22 *Can.-U.S. L. J.* 211 (1996).

75. See Tower, "Knowledge Speeds U.S. -Canada Border Crossing," *Journal of Commerce*, Mar. 2000, at 9.