SPEAKING NOTES FOR PRESENTATION: IMPROVING LABOR MARKET INFORMATION - SKILLS ROUNDTABLE, February 27, 2001

First of all, I would like to start by thanking the organizers for giving me this opportunity to express my point of view related to the development of improved labor market information.

I will concentrate on infrastructure needs:

- These are often overlooked and under funded
- They require a long-term commitment and are politically not very exciting. They are however, absolutely essential for the production of good systems of labor market analysis, the production of labor market information, career information, job matching, the selection of immigrants, statistics.

I will focus on:

- A REVIEW OF THE EXPERT PANELS' COMMENTS REGARDING MONITORING SYSTEMS
- SOME THOUGHTS ON THE NATURE OF THE WORLD OF WORK
- THE NEED FOR SKILLS INFRASTRUCTURE
- THE NECESSARY ROLE OF THE NATIONAL OCCUPATIONAL CLASSIFICATION
- THE NEED FOR STABLE AND CONTINUOUS FUNDING AND SUPPORT OF OCCUPATIONAL RESEARCH AND DEVELOPMENT

With regard to understanding the labor market the Expert Panel comments included the following (My bolding):

- We Must Improve Monitoring Systems. From discussions held with leading authorities, it can be concluded that Canada's labour market monitoring systems, although among the best in the world, will have to improve in order to keep pace with economic and technological change.
- Suggest that the basis for data collection must shift away from occupational titles and focus more specifically on the skill sets actually required for any given often rapidly changing occupation.
- The question of skills versus occupations is also central to our discussions of Canada's labour market monitoring systems. Many of the labour market monitoring and projection tools, especially those featuring quantitative statistics, are primarily

occupation-based. Some skill-based data sets exist, but are still in their infancy and cannot be used easily to monitor labour market dynamics.

- Should We Focus on Skills or Occupations? The distinction between skills and occupations is important. A skill is the ability to perform a task, while an occupation is the label attached to a job or kind of work requiring a given set of skills Unfortunately, the skills and attributes employers seek seldom come in neat occupational packages and, increasingly, those employers are looking for more than just technical or scientific capabilities
- Occupational labels, which can be quite static (despite the best efforts to incorporate changes), cannot do justice to the constantly evolving and expanding mix of technical, management and essential skills and attributes sought by employers.
- There is a strong sense that current occupational classification systems are too **slow in** capturing and describing new occupations, many of which are connected to emerging technologies in newer sectors. Even with occupational titles that remain constant over time, the duties and skills required of individuals in these occupations are likely to be changing continuously. The statistics on these occupations may not capture very important skill changes unless the skill sets that are integral to various occupations are regularly monitored and updated.
- Equally important will be enhancing Canada's capacity to analyse labour market information and put it to use.

Relevant Actions recommended by Expert Panel:

To strengthen our capacity to understand labour markets, by

- identifying and documenting the skills required in science and technology occupations;
- encouraging stakeholders to adopt standard definitions, measurements and terminology in relation to skills;

1.1 The Panel recommends that the Minister of Human Resources Development Canada, in collaboration with the Minister of Industry (as Minister responsible for Statistics Canada), proceed with the highest priority in 2000 to identify and document the essential technical and non-technical skills required in scientific and highly technical occupations.

WORLD OF WORK

- THE WORLD OF WORK IS IN FACT MADE UP OF JOBS SORT OF LIKE A POPULATION DENSITY MAP the dots all being jobs.
- ITS MOSTLY DISORGANIZED
- OCCUPATIONS ARE ARTIFICIAL CONSTRUCTS THEY HELP US TO MAKE SENSE OR TALK ABOUT WORK. More of less useful depending on the commonality between jobs range from well established occupations such as teachers to simple collections of jobs with little in common- e.g. traditional manufacturing jobs (Textile worker)
- THERE IS A LOT OF INFORMATION ENCODED WITHIN THE DEFINITION OF AN OCCUPATION-
- SKILLS DESCRIBE FACETS OF WORK THAT ARE NOT NORMALLY INCLUDED IN THE SENSE OF OCCUPATION. They too help us UNDERSTAND THE WORLD OF WORK.

THE NEED FOR SKILL-BASED INFORMATION

This need has been recognized for a long time - Nothing to debate in this regard. The value of skill-based systems has been recognized and worked on within HRDC for over twenty years. It was need was recognized in the Labour Market Development Task Force in the 1980s.

Skill based information is important in the fields of job matching and detailed labor market analysis. Standard skill sets provide a common language for studying and discussing skills.

The Expert Panel Identifies 5 Different Types of Skills:

- Essential Skills
- Technical Skills
- Management,
- Leadership,
- Contextual Skills

Its recommendations are limited to the first two as are my comments.

Technical Skills

 HRDC has some of the information required to develop a system of technical skills.

- The elements that make up the detail of the Electronic Labor Exchange (ELE) provide a starting point. However, they have been developed separately for each occupation, and are not consistent across occupations.
- This is a lot of work Development of a world-class system will be time consuming and costly. Development and national validation would be required. I don't think there are models from other countries that could serve as a template. Canada is really a leader in studying work and developing systems to explain it.
- There would have to be a very careful needs analysis to understand precisely how these skill sets would be used. Especially important would be the level of specificity required. If it is too general it will have the same problems as occupation it will not precisely identify what is necessary. If it is too specific, it will result in thousands of skills that would be un-usable. Issues of data collection would have to be addressed.
- Assuming all this is done, the skill sets should probably be related to both occupation and industry.

Essential Skills

- Essential Skills have been already been developed for lower skill levels. They have yet to be developed for professional, technical and trade occupations.
- This is a lot of work and must be based on in-depth, consistent studies of work. It is not simply a question of identifying the requirement for a skill but also for determining the level and type of application.
- This work is important not just for labor market analysis but also for students, teachers, and workers.
- It may lead eventually to a common understanding of what skills are necessary for general types of work as well as individual occupations.

This research and development may go a long way towards dealing with the issues of literacy that the Minister mentioned last night.

THE QUESTION of SKILLS VERSUS OCCUPATION

- I think this is a non-issue - Several people mentioned it to me. In some passages of the Expert Panel's report, there seems (*to some*) to be an implication that there is a conflict between the concept of occupation

(and classification) and skills. I did not get that impression. In my opinion these concepts are in fact complementary.

• It's about STRUCTURE AND FLEXIBILITY

Classification provides the structure, framework and context.

Skills (and knowledge) allow us a detailed look without the pigeonholing that occurs when occupations are defined very specifically. (As was done previously in the Canadian Classification and Dictionary of Occupations (CCDO))

THE NOC remains the CORNERSTONE OF LMI

As mentioned by the Expert Panel, the NOC is very highly regarded around the world.

- The NOC represents a new approach to occupational classification. The classification structure of the previous system, the Canadian Classification and Dictionary of Occupations (CCDO), was rather like that of an encyclopedia; it provided a logical organization of occupations. The structure was designed to provide a means of systematically organizing and coding jobs and occupations.
- The objective for the NOC was more ambitious. The new classification was designed to provide a map of the world of work that would help labour market analysts, researchers, counselors, students and educators understand, not just the content of occupations, but the relationships between occupations. These relationships were to be based on empirical rather than theoretical observations.
- The NOC is based on four principles of classification: skill level, skill type, interoccupational mobility and industry. Every unit group (four-digit level) was designed on the basis of skill level and type of work.
- The design principle regarding 'inter-occupational mobility' was as follows: 'mobility between occupations within a unit group should be greater than mobility to any other unit group'. Further, the placement of unit groups within the skill types of the Matrix was designed to illustrate paths of inter-occupational mobility.
- The information regarding potential inter-occupational mobility is most commonly not explicit, but rather inherent within the NOC structure.
- 'Industry' was applied, as a classification principle, when occupations could be
 best understood within that context. This was the case for production workers in
 manufacturing and processing occupations as well as for workers in agriculture,

fishing, mining and forestry. There is little inter-occupational mobility outside the industry and career paths are characterized by movement within a specific industry and often within a company.

The NOC Matrix -a framework for understanding the world of work-

- Because every unit group, minor group and major group has been classified
 according to common skill levels and skill types, it is possible to present the NOC
 as a Matrix with the 4 skill levels presented vertically and the 10 skill types
 horizontally. Within this Matrix, all major and minor groups are plotted.
- The skill types at the broadest level were designed to reflect labor market realities such as occupations dominated by systems of internal progression or occupations dominated by particular types of university or college training. As a result, the Matrix provides a framework for understanding the functioning of the world of work. That is why it is so popular internationally.

THESE FEATURES OF THE NOC ARE UNIQUE TO CANADA.

THE EXPERT PANEL MENTIONED THAT USERS MUST BE GIVEN THE HELP NECESSARY TO UNDERSTAND THE MONITORING SYSTEMS - I AM NOT SURE THAT USERS OF THE NOC FULLY UNDERSTAND OR UTILIZE MANY ASPECTS OF THE NOC. I SUSPECT MANY USE IT AS THE OLD CLASSICATION WAS USED – SIMPLY A LIST OF OCCUPATIONAL TITLES.

FUNDING

I think Canada should be proud of what they have achieved in this field. If the occupational systems are to be maintained and enhanced, it will have to receive consistent and reliable funding. This is a very specialized area of research and it is important to maintain the capability within HRDC.

The development of technical and essential skills is certainly something that HRDC can do within its mandate. As with the development of the NOC work must proceed closely with the Provinces/ Territories and the private sector.