munists, minority socialists: 4,570,000 members in 1983; the CISL, traditionally grouping Catholic workers and linked to the Christian Democratic party in recent years, with a growing number of politically noncommitted workers (3,005,000 members); and the UIL-socialists, minority social democrats, and republicans (1,300,000 members).

² That is, within the maximum inflation targets (set in the 1983 agreement) of 13 percent in 1983, 10 percent in 1984, and 7 percent in 1985.

³ Indeed, this is the major argument used by scholars and courts claiming that these decrees are unconstitutional in that they militate against the principle of trade unions' freedom of negotiation by substantially altering the functioning of a previously negotiated system of indexation without the full consent of the parties involved. Those who defend the constitutionality of the decree point out that under Decision 142 of 1980, the court should reject these objections. They maintain that while union consent is a condition of effectiveness, it does not constitute a necessary or sufficient condition of legitimacy.

How are Japanese unions responding to microelectronics-based automation?

WILLIAM EARLE KLAY

Japan, a world leader in the development and production of electronics technology, is now attempting to transform itself into an "information society"—one in which virtually all social institutions fully utilize, and are profoundly affected by, computer-based technology.¹ Not surprisingly, the growing impact of microelectronics-based automation is causing widespread concern among Japanese unions. Rather than dealing piecemeal with the many effects of the new programmable automation technology, they are developing multiple, integrated strategies which include an increased emphasis upon contractual protections and a desire to assume a role of international leadership.

Japanese unions do not oppose the introduction of the technology, but they are greatly concerned about the possible adverse effects that microelectronics could have on workers. Of the 554 unions surveyed by the Japan Institute of Labor, 53.6 percent of the unions said they were "in favor as a rule" toward the adoption of the technology while only 2 percent were "opposed as a rule," and 36.6 percent said it was "unavoidable." More than half of the unions said that they had already conducted some sort of negotiations about microelectronics technology issues, and most union leaders expected the technology to spread rapidly. Anticipating the automation of offices as well as factories, the unions said that the "growth of surplus labor" would be the greatest problem in both the manufacturing and clerical sectors.²

In Japan, there are four major nationwide organizations of labor unions, commonly known as national centers. These are: Sohyo (General Council of Trade Unions of Japan), Domei (Japanese Confederation of Labor), Churitsuroren (National Federation of Independent Unions of Japan), and Shinsanbetsu (Federation of Independent Unions of Japan). All four national centers have adopted written guidelines related to microelectronics-based technology, with those of Domei, Sohyo, and Churitsuroren being particularly broad in scope.³

These guidelines generally promote a continuation of the policies established in the landmark written agreement of March 1, 1983, between the Nissan Motor Workers' Union and the Nissan Motor Co., previously cited in the *Review*.⁴ The provisions of that agreement included a commitment to consultations between union and management in advance of introducing new technologies into the workplace; job and wage protection through the renouncement of layoffs, dismissals, or downgrading of positions; an employer commitment to provide necessary training and education; and protections for safety and health. It is now evident, however, that many Japanese union leaders consider that agreement to be only a beginning.

Domei, the national center with the largest number of private sector workers, has agreed upon specific action guidelines to be implemented or negotiated at each enterprise, industrial, subnational, national, and international level. While stressing the importance of predecision joint consultations and consensus building at all levels, Domei calls for the negotiation of a labor-management agreement on technological innovation in each enterprise. All of its action guidelines are based upon five "basic principles:"

- "Progress of Human Society and Acknowledgment of Welfare." The intent of this principle is to assure that the new technology serves social and economic progress, and that it promotes general welfare for all of society.
- "Establishment of Principle of Assessment." The principle of assessment is that the impact of technology on the worker is to be assessed *prior* to the introduction of microelectronic equipment into the workplace, and that necessary policies to ease the transition are to be decided in advance.
- "Securing Social Equity." Domei is concerned that the benefits of microelectronics-based technology might not be fully shared with workers and that the technology might "widen the gaps among workers, industries, and regions," not merely within Japan, but among nations as well. It is, therefore, "essential to establish a rule of distributing the fruits of technological innovation equitably."
- "Improvement in Worker's Participation and Labour-Management Consultation." Arguing that the new technology deeply affects not only the employment relationship, but all of society, Domei says it is essential to the building of "a public consensus" that labor-management consultation on these issues become a universal practice and that worker representation be included in setting the directions for national science and technology policy.
- "Establishment of International Cooperation." Realizing that Japan's economic success is causing stress among its

William Earle Klay is an associate professor in the Department of Public Administration, Florida State University.

major industrial competitors, Domei is concerned that "the advancement of the ME [microelectronics] revolution" might isolate Japan from the rest of the world. Therefore, ". . .it is vital that Japan, where ME [microelectronic] equipment is being introduced more rapidly than anywhere else, should take the initiative for establishing international cooperation."

Domei calls for the establishment of a new national quadripartite organization, including labor and public interest representation as well as government and management, to set the basic directions for Japan's science and technology policy. It also plans to promote the adoption of international fair labor standards which would, Domei hopes, be based upon principles such as the ones it has adopted. At the national level, Domei calls for a major research institute devoted solely to the prior assessment of problems associated with the implementation of microelectronics-based technology.

At the enterprise level, Domei intends to negotiate compulsory prior consultation beginning with the planning and designing stages. Specific objectives include increased incomes and shorter working hours, employment stability, and employer provided training opportunities through an inhouse "lifelong vocational training system." Particular emphasis is placed upon the protection of opportunities for women and older workers.

Even though it is not a common practice for Japanese employers to impose layoffs, unions are clearly concerned that the new technology might cause this to eventually happen. Denki Roren, the Japanese Federation of Electrical Machine Workers' Unions, has developed guidelines and a model agreement covering the introduction of microelectronic systems. It states, "Where there would be a direct impact on employment through personnel reductions, the union should express opposition to the entire concept of microelectronic technology and prevent the company from implementing its plans."⁵

All of the national centers are concerned about the protection of safety and health and the stresses associated with working long hours at video display terminals, as well as with robots, which have caused fatal accidents on rare occasions. The survey of the Japan Institute of Labor, mentioned above, revealed that microelectronics-related safety and hygiene issues have invoked intensified negotiations. Unions are concerned that the introduction of machine-regulated working conditions would be especially stressful to workers.

In this regard, Sohyo's guidelines are the most stringent. This national center, with by far the largest number of public employees in its ranks, fears that unrestricted use of microelectronics technology could cause increased authoritarianism and invasions of privacy. Sohyo recognizes that management has a need to gather information to monitor the overall speed and status of work that is being performed but, at the same time, Sohyo wants to prevent such computergenerated information from being used in personnel decisions about the performance and pay of any individual employee. Its guidelines, therefore, call for the prohibition of management's use of computer monitoring to oversee and evaluate the performance of individual workers. It also rejects the practice of pay differentials based on individual differences in ability to work at a computer. Sohyo's policy is that any use of computer-generated data about an individual requires prior approval of the individual and the labor union.

From an international perspective, the most problematic aspect of microelectronics technology is its potential to replace labor. Japanese unions recognize that this potential, one that might be realized sooner in Japan than in any other country, could jeopardize employment opportunities in that country. At the same time, they realize that rapid adoption of the technology in Japan could undermine the economies and employment of other nations, especially in less developed countries where labor intensiveness is an important element of international competitiveness. To avert unemployment in Japan, they are actively promoting economic expansion, especially through labor-management cooperation, to assure a flexible and motivated work force. Domei's guidelines, for example, call for the achievement of sustained real growth of 5 percent in the Japanese economy. Whether Japanese unions can successfully follow a dual policy of averting domestic unemployment through the promotion of economic expansion and, at the same time, promote the international adoption of labor standards to avert such unemployment in other countries, remains to be seen.

---FOOTNOTES-----

¹ See Report of the General Policy Committee of the Social Policy Council, *The Information Society and Human Life* (Tokyo, Social Policy Bureau, Economic Planning Agency of the Japanese Government, March 31, 1983); also, Yonenji Masuda, *The Information Society as Post-Industrial Society* (Tokyo, Institute for the Information Society, 1980), printed in the United States by the World Future Society, Bethesda, MD.

² Microelectronics and the Response of Labor Unions (Tokyo, Japan Institute of Labor, March 1984), tables 9 and 26.

³ "Sohyo's Guidelines in the Interest of Regulating VDT Labor," *Inochi* [*Life*] (Tokyo, Sohyo, July 1985) (in Japanese); "Harmony Between New Technology and Mankind—Domei's Position to ME Revolution" (Tokyo, Domei, January 1985); "Employment Questions Accompanying ME Based Transformation: Towards Symmetry (A Proposal)" (Tokyo, Churitsuroren, September 1983) (in Japanese); "VDT Guidelines," *Activity Policies for 1985*-86 (Tokyo, Shinsanbetsu, adopted at 35th Regular National Convention, July 1984) (in Japanese).

⁴ Steven Deutsch, "International experiences with technological change," Monthly Labor Review, March 1986, p. 39.

⁵ Denki Roren, "Guidelines for Securing Employment and Achieving Humane Working Conditions in the Microelectronics Era" (Tokyo, Japanese Federation of Electrical Machine Workers' Unions, 1985), p. 15. The use of such emphatic language is a signal to management that union leaders' concerns must be viewed seriously, for it implies the ultimate sanction of a work stoppage, something which both sides usually strive hard to avoid.