

efficiently reoriented to civilian use. In the Soviet case, a study of the defence base and alternative uses for its facilities began some six months *after* conversion had begun at the industry level. In August 1989, the USSR Congress of People's Deputies set the end of the year as the deadline for an elaborated programme. A year later, the state law on conversion finally was passed but in the view of many reform-minded economists, its vague and conservative provisions hold out little hope for redeeming the promise of conversion.

One reason for the absence of a comprehensive programme no doubt stems from the urgency of the worsening economic crisis. Soviet planners have asserted that the economy simply could not afford the two years which alternative-use planning requires. But conversion planning would also require more decentralized decision-making at the enterprise level and the removal of the traditional secrecy regulations which pervade the defence industry. As even Gorbachev has complained, such regulations act as a barrier to information and technology flows to the civilian sector. Predictably, such institutional change has been resisted by entrenched interests within the military-industrial bureaucracy which seek to preserve the centralized and privileged position of the defence sector. Rather than allowing initiative and direction from below, the defence establishment has fought successfully to maintain planning from above. In effect, conversion has been implemented by those elements which are least interested in its success: Gosplan, the Military Industrial Commission, and the defence ministries. Under their combined influence, conversion has been carried out by *ad hoc* administrative decrees without the benefit of either legislation or public accountability.⁵ Despite two years of conversion activity, the basic questions of which plants are best suited to conversion, how they are to be financed, and to what they should convert, have remained unanswered.

This centralized approach to conversion has had serious repercussions for the defence industry. In the absence of rational preparation, the impact of ongoing defence cuts has been impossible to predict let alone remedy. Many defence enterprises were apprised of the changes to their production profile only three to six months in advance and the new orders were not accompanied by alternative sources of supply or investment. Likewise, scant attention was paid to existing enterprise capacities so that many highly specialized and technologically sophisticated plants were compelled to produce rudimentary consumer goods: shoes instead of MIG-29 engines or dried fruit packaging instead of combat helicopters. In some cases, the irrationality of this approach was

compounded by a failure to take into account the impact of new consumer targets on still binding defence production quotas. As a result, enterprises halted their defence production to meet pressing civilian orders only to face stiff fines for non-fulfilment of the defence plan. Such continued centralized constraints and the neglect of actual enterprise feasibility have worked to create some of the very economic and social dislocations which conversion seeks to avoid.

Financing and Supply

The Soviet defence industry has traditionally owed its survival to an elaborate system of generous subsidies and guaranteed state purchases. As a result, Soviet defence enterprises have been spared the Soviet economy's systemic inefficiencies of distribution bottlenecks and supply scarcities. Unlike other sectors of the economy, defence has enjoyed a priority position in resource allocations and unique horizontal ties which have allowed enterprises to circumvent many of the bureaucratic rigidities of the command system.

With the onset of conversion, however, this preferential arrangement has been steadily undermined. Defence enterprises now must cope not only with significant losses in defence production revenues and the erosion of traditional supply networks, but also with new state orders for consumer goods for which adequate sources of financing and supply have not been made available. Much of the money that was initially freed by defence cuts was not translated directly into funds for conversion but instead went to other claimants such as the budget deficit. In fact, during the first year of conversion, there was no additional funding whatsoever because Soviet planners believed that conversion would be self-financing.

The Soviet experience, however, has proven that centrally-planned conversion is a very costly exercise. Despite decades of massive financial injections, many branches of the defence industry are hindered by outdated capital stock. According to one defence representative, up to one-third of the industrial equipment in the Soviet aerospace industry was built before 1940. Among civilian enterprises absorbed by the defence ministry in 1988, the figure is 60%. Even among those enterprises with relatively modern equipment, defence planners have quickly discovered that the technological gap between weapons system production and consumer goods assembly lines cannot be easily nor cheaply bridged.