

Thirty years ago I proposed a possible logging mechanization system based on a portable skyline unit (PSU). Up to this time, unfortunately, this solution has not been seriously considered by leading experts in the timber industry. If we look back in history we can well remember the time when cable skidding apparatuses successfully competed with the tractor skidders at the felling site, particularly when working in unfavourable terrain and soil conditions. Later, however, the tractors prevailed. This was mainly because of the advent of the bulldozer and faster improved tractors. The units were obviously more promising in that they could be equipped with mechanical devices that would eliminate the need for manual labour at the felling site.

At present we have a significant number of Soviet devices and theoretical research projects which would make it possible to develop an automated cable felling unit. The problem is, however, that not a single institute involved in logging mechanization is carrying out experimental tests and trials on these devices. The units have been set aside as dead capital. Several variants of PSUs applying mechanized felling in flat areas and manual felling in mountainous conditions, are well known. The operative principle in such a unit is based on the utilization of two portable masts, one of which moves along the logging trail while the other moves along the spur road. A cable is strung between the masts and an automatic clamp shuttles along the cable. The trees are carried one by one at a height of from four to five metres. As the trees get to the main mast they are bundled together and then loaded onto logging trucks. Using this type of unit at the felling site would make it possible to harvest the trees comprising the upper story only, while the