Kurosawa Typewriter:
Domestic Japanese-language Printing Telegraph

This Japanese-language printing telegraph was made entirely domestically and was a purely domestic product that was assembled in Kamata. The practical use of the Japanese-language printing telegraph was a great achievement in the Japanese telecommunications industry. Since then, newspapers, including the Ministry of Communications, have adopted this Japanese-language printing telegraph machine, and as a result, Japan's telecommunications business has dramatically increased in speed and efficiency. In 1917, two Kana typewriters were delivered to the Osaka Central Telegraph Bureau, and were used as telegraph kana typewriters.

Telex Service Started:
Subscriber Telegraph Equipment

Nippon Telegraph and Telephone Public Corporation opened Japan's first telex (subscribed telegraph service) between Tokyo and Osaka on October 15, 1956, and it then spread throughout the country. Communication overseas was also realized by connecting to international telex. At that time, the standard keyboard layout and its sign were established for the inconsistent keyboard layouts that had been created between dedicated users from the start of the service. A code arrangement that allows easy conversion between Japanese-language 6-unit codes and European-language 5-unit codes and connection with international telex was realized by providing a converter. They worked closely with KDD on measures to realize a connection on April 1, 1958. The telex has a channel with KDD around the world and has been well received.

Elastic Optical Network Technology

The importance of elastic optical networks is recognized not only in academic fields but also in industry, and active research and development is being carried out worldwide, with international standardization progressing. In 2012, a flexible grid was proposed that allows for adaptive optical spectrum resource allocation (G.694.1), and furthermore, the basic concept of elastic optical networks was proposed for the first time in the world, including the

addition of the frame format specification OTUCn for 100 Gb/s super optical channels to the G.709 recommendation, and this has created a great trend in related research fields.