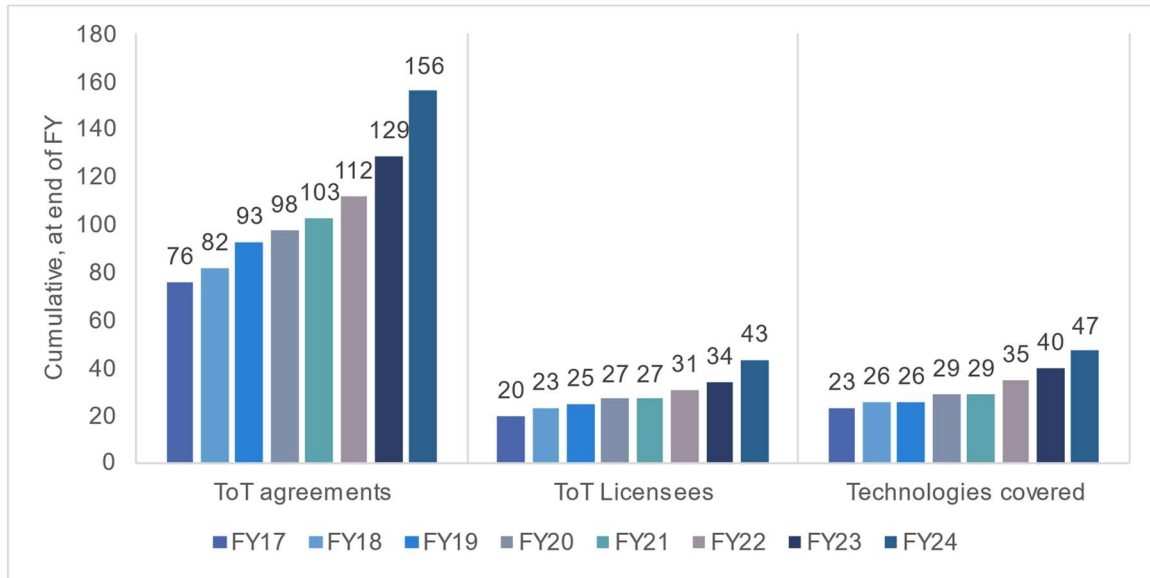


years, along with the number of licensees and number of technologies covered. As shown, the pace of signing deals has increased recently, largely due to a 5G push.

Figure 3: CDOT technology transfer (ToT) agreements in place at end of fiscal years (2017-24)



Source: CDOT

Note: FY24 figures are from the CDOT website, accessed on 10 July 2024. We assume the figures refer to end-FY24.

Some of the more significant deals signed in the last couple of years include the following:

- June 2022: CDOT partners with Galore, VVDN and WiSig; Galore is developing 5G RAN macro and micro base stations, VVDN is developing open RAN products, WiSig is working on MIMO antennas. These are among CDOT's earliest 5G partners in the private sector as part of a new "Make in India" push.
- July 2022: CDOT signed deal with ITI to create a "Make in India" stack for upcoming 4G and 5G opportunities in India. Will explore government clients in India and export markets. In May 2023, a consortium of TCS, ITI, Tejas and CDOT won a \$1.8B tender from BSNL for 4G networks.
- August 2023: CDOT signed a consortium agreement for 5G RAN with several partners: Lekha Wireless, Signaltron, Sooktha Consulting, and Resonous Technologies. This is the second agreement under CDOT's 2022 collaborative research program (CCRP-2022). CDOT will be the business incubator and facilitator by providing funding and necessary infrastructure for testing etc.

Other vehicles for CDOT influence on telecom technology

In the last few years, CDOT has come to play a key role in facilitating collaborative research related to the "Make in India" policy program. That's done through three specific programs: the CDOT collaborative research program (CCRP), the Telecom Technology Development Fund (TTDF), and the Entrepreneur Cell (EC) program. As CDOT [says](#), "these three programs are aimed to fast-track the development of telecom and associated technologies" in India. CDOT's role as the implementation agency of TTDF is most important. The TTDF acts like a venture capital fund, aiming to eventually increase domestic production of telecom equipment. TTDF currently gets minimal funding, INR 500 crore per year, or about US\$62M. This is tiny, even if focused on one technology space. Consider quantum communications, for instance, a current focus of CDOT's TTDF. In January 2022, a Swiss startup called Terra Quantum [raised](#) US\$60M in Series A funding; that's for a single company, albeit a promising one. But, a little cash goes