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Station Infrastructure Developments of the IVS

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The International VLBI Service for Geodesy and Astrometry (IVS) is a globally operating service that coordinates and performs Very Long Baseline Interferometry (VLBI) activities through its constituent components. The VLBI activities are associated with the creation, provision, dissemination, and archiving of relevant VLBI data and products. The operational station network of the IVS currently consists of about 40 radio telescopes worldwide, subsets of which participate in regular 24-hour and 1-hour observing sessions. This legacy S/X observing network dates back in large part to the 1970s and 1980s. Because of highly demanding new scientific requirements such as sea-level change but also due to the aging infrastructure, the larger IVS community planned and started to implement a new VLBI system called VGOS (VLBI Global Observing System) at existing and new sites over the past several years. In 2020, a fledgling network of 8 VGOS stations started to observe in operational IVS sessions. We anticipate that the VGOS network will grow over the next couple of years to a global network of 25 stations and will eventually replace the legacy S/X system as the IVS production system. We will provide an overview of the recent developments and anticipated evolution of the geodetic VLBI station infrastructure.