

Inferior installation leaves financial institution's equipment exposed



GPS timing equipment installation is a highly specialised skill

When customers contact Chronos Technology requiring support for their timing equipment, our team of specialist GNSS timing engineers with the experience of over 1500 timing installations, has increasingly noticed that equipment which has been installed by in-house or third party cable contractors is not always up to the high quality standard which is required for precise timing to run a high-performance network.

For example, a global Financial Institution with a number of timing servers providing PTP/NTP timing in its networks contacted Chronos to carry out a Sync Audit to ensure timing compliancy for MiFID II. A Chronos Sync Audit provides recommendations on how to improve areas of concern such how to measure poor sync, or poor design that could result in potential issues and failure scenarios; how to improve sync availability and redundancy and how to increase visibility of sync health. Following the Audit, Chronos was asked to support the equipment and to carry out an inspection of the installation which included the GPS antenna for referencing, lightning protection, and cabling in addition to the time servers.

Chronos discovered a number of issues arising from a shoddy installation which the customer had to address before a support contract could be agreed. The GNSS antennas had been poorly mounted with connections exposed to the weather and the fixings were inadequate. Lightning protection had not been considered in most cases, and where it had, there was no mechanical bonding to earth. Thus if the antenna was struck by lightning, the charge would take the most direct route to earth which would be the equipment and datacentre room.

In addition, where a number of lightning arrestors were co-located, they had been 'daisy-chained' to earth via a thin 2.5mm earth cable, seriously compromising other customers' installations and equipment. It was also

Installations Excellence from Chronos

[GPS timing equipment installation](#) is a highly specialised skill; our team of experts is here to help you get it right first time.

Prevent loss of network service and ensure business continuity by contacting the Chronos Installations Team.

noticed that an incorrect crimp tool had been used to terminate cable ends to the connectors resulting in poor electrical contact and water penetration exposing the customer's valuable assets to the elements and seriously compromising the life span of the equipment.

This shoddy installation exposed the Financial Institution's equipment to significant risk and potential loss of network service. It also incurred unnecessary additional costs.



CASE STUDY