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Geodetic Infrastructure & Alignment –Planning and Studies

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In the last year some preliminary work on planning for the FCC has been carried out for both the geodetic infrastructure required and the survey and alignment activities. It is necessary to have the geodetic infrastructure in place before the civil engineering works start, some aspects even before the call for tender, and to start research into more precise techniques and instrumentation for the transfer of position from the surface underground.

Survey and alignment studies to date have primarily been focused on the hadron accelerator, but in the next few years they will turned towards the FCC-ee machine. The misalignment tolerance for this machine can drive both the geodetic infrastructure and the alignment system required. The current concept for the alignment system is that proposed for CLIC. Studies will be undertaken to consider alternative concepts that would still meet the lower precision required for the FCC-ee.

The current results from the planning analysis will be presented, together with details of the proposed studies.

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