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Introducing GIS (Geographic Information Systems) in asset and maintenance management at CERN

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During the past 10 years GIS and Geographic Information has entered our everyday lives and has been made available to the public through the well-known Google Maps.
The CERN Geographic Information System has naturally followed this technical evolution and moved from a confidential management of topographic data to a web based display of Infrastructure and assets location, switching from 10 to 1000 users per day.
Since the floor plans of the infrastructures have been geolocalised and are available by floor, many assets managers at CERN have found an interest in mapping their equipment in such tool.
In a context where contracts and maintenance technician follow a significant turnover, finding the exact location of equipment can be an important loss of time.
GIS capabilities not only allow users to find the position of an asset in one click, but also provide a robust environment to share spatial information, establish relationship between assets and help decision making. The intuitive web interface is also becoming naturally a portal to access information scattered in diverse databases and systems.
Through practical cases, we have demonstrated that the interfacing of GIS and CMMS can save up to 50% of time in some maintenance operations. In the case of assets critical for the functioning of the accelerator, it can be a significant gain.
Now that almost 150 000 assets are georeferenced in the CERN GIS, we are at the beginning of the use of its spatial analysis power to get direct applications like organising work spatially, optimising spatial repartition ⋯Other new challenges are also arising like the establishment of reliable update processes for geolocation, better integration with other maintenance tools and on-field data collection.
The fact that the system has established itself as a standard demonstrates its usefulness and we can bet that geolocation systems such GIS are going to play a growing role in the future of asset management and maintenance at CERN.

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