The H2020 European Project CLONETS: clock services over optical-fibre networks in Europe

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Résumé

Time and frequency transfer methods based on optical fibre links techniques have demonstrated excellent performances. They are a key technology for very demanding application in metrology and science, e.g. optical clock comparisons, and also for applications in industry and society. They are complementary and/or alternative to radio- and satellite-based transfer.

The H2020 project CLONETS (http://www.clonets.eu) is a coordination and support action started in January 2017, and it aims at accelerating the take-up of the fibre link technology by industry, research and society. One of the main targets is to prepare the deployment of a permanent pan-European fibre network, providing high performance clock services to European research, and supporting wider services to industry and society.

CLONETS brings together a wide consortium of National Metrology Institutes (NMIs), academic research groups, National Research and Education Network providers (NRENs), an internet exchange and small and medium-sized high-technology companies.

The main objectives include collecting information on needs, studying industrial and societal applications, providing training, developing a conceptual design of the network and defining strategical agendas for technology transfer to industry and design and development of the network, to support future work.

Presented on behalf of the CLONETS project participants.

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