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## LOFAR: reasons to be cheerful pt. 3

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The Low Frequency Array is a new radio telescope that offers a number of unique and innovative capabilities for the astronomical community. These include dynamic real-time processing, rapid response to triggers and independent parallel observations with multiple beams. Construction and commissioning of the array is well underway. When completed, LOFAR will consist of 36 stations located in the North-East of the Netherlands and a total of at least 8 stations in Germany, France, the United Kingdom and Sweden.

LOFAR makes use of many technologies under consideration for the Square Kilometre Array: phased array antenna stations with both analogue and digital beamforming, flexible high speed digital signal processing and extensive software development resulting in automated processing pipelines that deliver science products to its users. Involvement in complex collaborations with both academic and industrial partners, multiple public procurement rounds and experience with mass production and the logistics of system integration should all prove useful for the SKA project. LOFAR has also needed to find a balance between scientific scope, technical feasibility and financial boundary conditions, which the SKA now also has to grapple with.

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