

What will the future landscape look like?

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In this talk, I will try to look ahead to the international scientific landscape a decade from now, in which we expect EISCAT_3D and other proposed new infrastructures to be operating. While fundamental science will still be the strongest driver for how our new facilities will run, we can expect a new emphasis on operations, based on collaborations with an emerging new generation of monitoring and forecasting services. New operating paradigms will enable multiple radar experiments to take place at the same time, on the same system, with resources shared. This will facilitate monitoring modes that can sit “in the background” and can be promoted when the right conditions appear. Such new capabilities could, for example, substantially affect how activities such as World Day programmes are run. Greater connectivity, real-time data distribution and improved interaction between data and models, should be able to drive a much more dynamic coordination between multiple facilities, even outside intervals in which formal joint experiments exist. I will discuss how such collaborations could be realised in practice and what kind of infrastructure would need to be put in place to make them possible.