Case Study on Siretta's SNYPER-LTE Graphyte submitted by Environment Agency

The Environment Agency is an executive non-departmental public body, established in 1996 to protect and improve the environment. The organisation operates across England and employs approximately 10600 employees.

The work carried out is varied and ranges from regulating major industry and waste, managing the risk of flooding, monitoring water quality and resources and protecting the conservation and ecology of the natural environment. The organisation states its mission as: We work to create better places for people and wildlife and support sustainable development.

Gateway Electronic Components Ltd (www.gatewaycando.com) have been working with the Environment Agency supplying a range of products that help their team to conduct the research, monitoring and data collection tasks that allow them to fulfil the objectives of the organisation.

Products supplied to the Environment Agency by Gateway have included antennas from the Siretta range; Mike, Tango and Oscar antennas have all found a place in the Environment Agencies upgrade of their infrastructure. In addition, the Environment Agency have equipped many of the team involved in monitoring and data collection with a **SNYPER-LTE Graphyte** Signal analyser.

The Environment Agency work in many remote locations where there are no hard-wired lines available so cellular connectivity is the only solution. The organisation is always looking for ways to improve the cellular signal strength in those areas and ensure they have a reliable signal whatever time of day or week.

The **SNYPER-LTE Graphyte** allows the user to identify the strongest cellular signal in any geographical location, the user can choose to run one survey or conduct a number of sequential surveys over a period of days, weeks or even months to establish the most reliable signal at different times of day or night, week or weekend.

The **SNYPER-LTE Graphyte** can be left in the field unmanned and can be pre-programmed to run a series of sequential surveys at chosen intervals. Once the surveys have been completed the operator can collect the unit from the field and download the survey information to their laptop in a variety of formats including html and csv formats, which enable them to clearly identify the most reliable signal over a period.

From there the Environment Agency can make an informed decision about the mobile operator to use for that location. The analyser reports on multiple cellular signals across 2G, 3G and 4G giving the user a complete map of the cellular options in any given area.

By ensuring the team have access to a **SNYPER-LTE Graphyte** the Environment Agency have been able to deploy monitoring equipment into remote locations without the need to trial multiple cellular providers, saving time and money and ensuring they can react quickly in emergency situations.

Siretta
Enabling Industrial IoT

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But why did the Environment Agency make the decision to use the Siretta SNYPER-LTE Graphyte model?

Lee Jones, Telemetry Officer at the Environment Agency, commented "There were a couple of key factors, first the Environment Agency are currently running a project to migrate all existing monitoring sites, approx. 5500 in all, from circuit switched PSTN fixed landline and GSM communications to M2M IP non-steered roaming cellular communication. Once migrated, our telemetry outstations at these monitoring sites will operate over either 2G or 4G depending on the outstation type.

The **SNYPER-LTE Graphyte** was an ideal solution for us as it can assess signal over 2G, 3G and 4G as and for each of the 4 networks that our roaming SIM can make use of. The **SNYPER-LTE Graphyte** allows us to assess if the signal is suitable to carry the migration and to assess how many sites have no signal for which we will need a different solution. The second factor was the added functionality around sequential surveying; having had experience of using the Siretta **SNYPER-LTE Graphyte** model we knew it was a reliable piece of kit that reduced the time we spent analysing signal strengths. The added functionality of sequential, unmanned surveys, that the **SNYPER-LTE Graphyte** brought, was the key factor in deciding to role out the model to the team.

Gateway and Siretta worked together to ensure stocks were made available on the shelf to meet our demands and ensure orders could be delivered on a "next day basis."