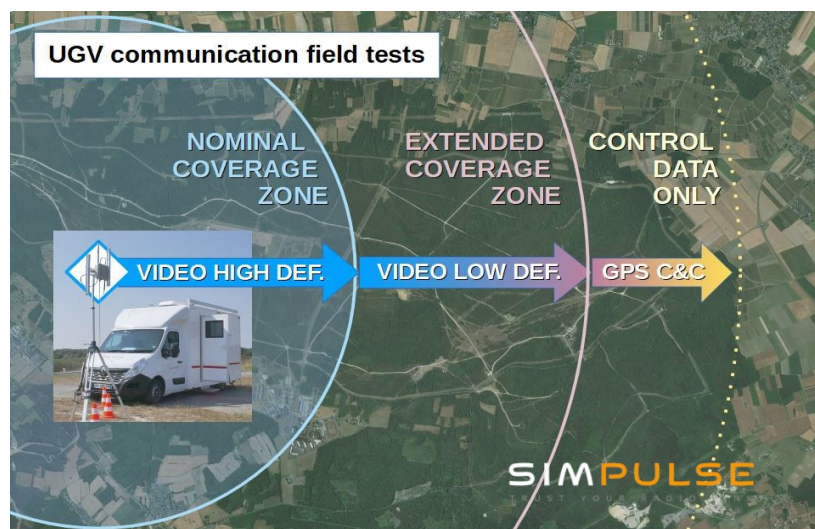




**SIMPULSE, in collaboration with INTRA Group, demonstrates the capabilities of its SL200 radio link to greatly extend the intervention area of remotely operated robotic systems**



*Palaiseau, France, October 14th 2021*

**SIMPULSE, provider of embedded Software-Defined Radio (SDR) solutions for innovative professional communications systems, confirms the effectiveness of its SL200 radio link in the field.**

**During an operation conducted in collaboration with INTRA Group, intervention group that can be mobilized in case of nuclear accident with dedicated robots, SIMPULSE's SL200 radio link maintained the video transmission in an area 4 times larger than the nominal one. Usually, in conventional digital transmission systems, a sudden link break occurs when the nominal coverage is exceeded.**

SIMPULSE is known for the performance of its long-range radio links for drones capable of transmitting HD video over 80 km in Line-of-Sight (LOS) using only 600 mW of radio power.

The INTRA Group has expertise in techniques and remote interventions using robotic devices in the event of a nuclear accident in the facilities of its three member companies: EDF, CEA and ORANO (formerly AREVA).

During tests in a rural environment in collaboration with the INTRA Group, SIMPULSE has proven the effectiveness of its SL200 radio link applied to terrestrial robots. For INTRA Group's remotely operated applications, transmitting video is the main function of a radio link. It is essential for exploring the site, for manipulating objects, as well as for piloting and guiding the robot. The risk identified is losing the use of the robot when it exceeds the range of the radio link.

In conventional digital transmission systems, the link is suddenly broken as soon as the limit of nominal coverage is exceeded. SIMPULSE pushes back the limits of this technology by implementing in its products a behavior similar to analog systems without abrupt cut-off: when the vehicle leaves the nominal transmission area, a lower data-rate and more robust radio link is maintained. This link is used for the transmission of a context video at lower resolution that allows to continue the mission. **The intervention area can thus be multiplied by 4.**

Beyond that area, when the video can no longer be transmitted, a very robust and lower data-rate link is still ensured, with transmission of GPS coordinates and commands & control of the vehicle. It is thus possible to drive the machine back to the nominal coverage area.

*"The result of this test allows us to consider setting up very long-distance video links with a very robust transmission link. It is a strategic point for the INTRA Group. »* noted the **Expert Engineer of the INTRA Group**.

*"INTRA Group's robotics expertise has enabled us to demonstrate the unrivaled robustness of our radio link in extreme conditions, and to adapt our technology to these environments."* points out **Emmanuel Hamman, CEO of SIMPULSE**.

### **About SIMPULSE**

SIMPULSE offers embedded Software-Defined Radio (SDR) solutions for innovative professional communication systems. SIMPULSE's radio links are the answer to professional applications that operate in highly mobile conditions and require a power-optimized, robust and secure solution, either in very disturbed indoor or urban environments or on very long distances.

SL200, SIMPULSE's flagship product, is already deployed today in many long-range and highly mobile data and video applications, and in a wide variety of dedicated radio links.

SIMPULSE is headquartered in the Paris-Saclay Research and Business cluster, Palaiseau, France.

[Visit SIMPULSE at Milipol Paris 2021, the event for Homeland Security \(19-22 Oct. 2021\) stand 5N 089](#)

For more information, visit [www.simpulse-sdr.com](http://www.simpulse-sdr.com).

### **About INTRA Group**

Since its creation in 1988, the 'Groupe d'INTervention Robotique sur Accidents' (INTRA), located on EDF Chinon NPP premises in France, has been tasked to CONSTITUTE, OPERATE and MAINTAIN a fleet of robots and equipment capable of intervening 24 hours / 24 hours in the place of man in case of a major nuclear accident in and around its founding members' industrial sites.

The INTRA Group has developed expertise in the field of remote operation and therefore constitute a center for expertise and inventorying techniques and remotely operated equipment liable to be called up to mitigate a crisis.

For more information, visit <https://groupe-intra.com>.

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