CTBT Science and Technology Conference 2021 (SnT2021)



ID: P4.3-558 Type: e-Poster

in using RF link for intra-site communication at IMS waveform stations

Friday, 2 July 2021 11:45 (15 minutes)

Radio frequency (RF) systems are used at large number of IMS waveform stations for transmitting data and State-of-Health parameters from the array elements to the Central Recording facility. Main operation and maintenance challenges experienced over time are related to equipment obsolescence, aging, material deterioration or harsh environmental conditions. RF equipment must receive regular preventive inspections and maintenance in order to ensure stable radio links and to achieve expected reliability over years of operation. Unnecessary downtime can be avoided by implementing efficient technical solutions and by having regular maintenance of RF transmission equipment, by performing appropriate monitoring of critical parameters and by having recourse of qualified RF engineers for design, implementation and training of station operators. This paper describes the challenges faced with RF systems used at IMS waveform stations and focusses on the successes with operation and maintenance and on the solutions to mitigate the radio communication problems.

Promotional text

This paper describes the challenges faced with RF systems used at IMS waveform stations and focusses on the successes with operation and maintenance and on the solutions to mitigate the radio communication problems.

Primary authors: Ms STEFANOVA, Stefka (CTBTO Preparatory Commission, Vienna, Austria); Mr JOHANNSEN, Claus (CTBTO Preparatory Commission, Vienna, Austria); Mr BAZARRAGCHAA, Sergelen (Former CTBTO Preparatory Commission, Vienna, Austria)

Presenter: Ms STEFANOVA, Stefka (CTBTO Preparatory Commission, Vienna, Austria)

Session Classification: T4.3 e-poster session

Track Classification: Theme 4. Performance Evaluation and Optimization: T4.3 - IT, Power Systems and other Enabling Technologies