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Private LTE networks will form the basis for all future critical operational communications (including critical IOT) for airlines and all vertical sectors

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Abstract

Converged mobile private networks for operational and business-critical communications are now mandatory to keep pace with the global digitization of vertical sectors. The LTE (private) is a breakthrough and a first step before the 5G revolution and the generalization of IOT on this perimeter. It is the new challenge today for vertical sectors and mainly for Air France KLM to be able to provide the best connectivity with the best SLAs to be as aligned as possible with business needs. After a work since 2012 (date of creation of Association of AGURRE) to obtain Private LTE spectrum for business critical communications, and after a trial at the roissy airport since 2017, Air France received with Aeroport de Paris and Hub One the authorization by Arcep (the French Regulator) to use 40 MHZ in the band 38 (2.6 GHz TDD) for 10 years. The deployment of this infrastructure starts in 2020 to finish in 2021. It will be a common RAN sharing deployement with Aeroport de Paris and Hub One and separate LTE cores for each side. It will be the first deployement of the word in this model for an airline in 2 airports (Roissy and Orly) and after this first deployment, all of the actual and segmented (Wifi + Tetra) business critical communications will use this infrastructure (data, voice). We will also implement Video next years to improve more and more the productivity on the ground. In parallel of this deployment, Air France KLM starts discussions with all actors of IOT and also 5G including Air France KLM businesses to lunch POCs on this kind of infrastructure. These technology developments will enable Air France and KLM to have the most efficient and secure Hubs in the world and the most prepared for the digital revolution taking shape with the 4.0 industries. That includes connected aircraft, predictive maintenance and even the autonomous vehicles of tomorrow. At the End Air France KLM will be prepared for the breakthrough with the arrival of new technologies (5G, IOT, VR AR, AI, Automation, …) for the smart Airport and mainly for Air France KLM the smart Airlines. It is key to remain always one step ahead.

Biography:

Christian Regnier is the Enterprise Technical Architect about Critical connectivity in Air France KLM CIO Group. He is also co-founder in 2012 and member of AGURRE association (Association des Grands Utilisateurs de Réseau Radio d'Entreprise - association of main users of PMR). One of the goal of AGURRE is to lobby the government and regulator to obtain spectrum for the own operational use. He works for Air France since 1999 after work in a telecom provider and integrator

Speaker Publications:

1. Co-Creation in 2012 of an association AGURRE (association of main users of PMR) to lobby the government and regulator to obtain LTE spectrum for our own use.
2. Launch in November 2016 of one of the first Private LTE experiments at Charles de Gaulle Airport (CdG) in 2.6 GHz TDD in production..
3. International Critical Communications AWARD (Greatest advance in the Migration to Critical Broadband) in June 2019 in Kuala Lumpur

2nd International Conference on Aerospace, Defense and Mechanical Engineering; Webinar- August 17-18, 2020.

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