

Creating a self-service network for airport digitalization



Note: This picture is not representative of end-customer

Athonet, a Hewlett Packard Enterprise acquisition delivered private 4G and 5G to amplify and secure airport communications



The client is one of the largest European airports. The need was to have a connectivity solution that would guarantee complete coverage throughout the airport area.



TRANSPORTATION & LOGISTICS

the challenge

For airports, high efficiency and speed of operation are required to increase passenger volume, meet new safety standard and insure mission critical communication. Serving more than 200000 workers of the Paris Airport's platform, operated by Hub One, was needing a convergence of all existing technologies, reliable and performant. Thus Athonet proposed a new 4G and 5G platform enabling services for a large number of activities and devices, covering the different business needs of the Airport.

the solution

-  **PRIVATE LTE/5G SOLUTION**
-  **SECURITY AND RELIABILITY**
-  **VOICE AND SECURE COMMUNICATION AND MC-PTT**
-  **FULL COVERAGE**

the result

- Coverage on all the airport's areas (external, buildings and also cargo areas and technical galleries)
- Strong redundancy
- Multiplicity of end-customers
- The risk of infrastructure saturation is eliminated
- High-performance communications infrastructure that will support all current and future applications
- The network is highly secure, the number of users is known and controlled

INTRODUCTION

The airport's private cellular network is designed to meet its demands for wide area coverage, redundancy, and high service levels. The Paris Airport has replaced legacy Tetra and DECT radio networks that were nearing end of life and is complementing their existing Wi-Fi networks operated by Hub One to provide greater capacity, higher-speed mobility, and wide area outdoor coverage.

DESCRIPTION

Hub One adopted a private LTE/5G solution from Athonet. After more than a year of trials, the private network demonstrated that it met the broadband communications, full mobility, reliability, and security requirements. The facility, and Hub One chose to move forward and implement a production network. Athonet's mobile core network platform delivered high reliability and self-service capabilities for the airport IT staff sponsor.

In this way, professional operators at Ile-de-France airports have a high-speed service, allowing both traditional and specific telephony uses (for example group calls, emergency calls), but also file exchanges, real-time photos or video. Some of these voice and data uses have a critical component. The 4G/5G network is an essential resource for the operational performance of the airport platform, allowing in particular the optimization of the coordination of stakeholders or the lifting of doubt.

In addition, the implemented network makes possible to envisage new uses around the Internet of Things, through the radio connection of many sensors (environmental, maintenance, passenger flow).

Finally, this same mobile cellular network can be used for short-distance communications with an aircraft on the ground or during taxi phases, in order to exchange operational or entertainment files.

Athonet is supporting Hub One strategy to be a private mobile operator, connecting the large spectrum of companies, granting an irreproachable Passenger Flow, and minimizing at the maximum the Aircraft turn around.



BENEFITS OF DEPLOYMENT

In the three Paris airport, the Athonet Private 4/5G network is serving a multiplicity of critical needs: from the mission critical like public safety, to the business critical for the plane turn around and proactive maintenance, insuring runway safety to avoid dramatic accidents. This multiplicity of context, companies, criticalities, is served by this unique 4G/5G platform. The Athonet implemented solution is also enabling the possibility for Hub One to propose a real “As a service” catalog, optimizing the results, thanks to its implementation and the number of APIs available.

The LTE network is essential resource for the safety, security and operational performance of the airport platform. It is supporting the business uses of professional actors, such as:

- The provision of a PMR solution for ADP Group staff ensuring the support of the population and the management of airport operations, on a daily basis as well as in crisis situations;
- Data collection of the baggage sorting system and personnel performing maintenance.
- The connectivity of the staff of the ADP Group’s partner companies, entrusted with tasks such as managing people with disabilities and reduced mobility.
- Providing means of communication to aircraft rescue and fire-fighting services (SSLIA) that respond to runway overruns or crashes, for example.
- The provision of means of communication for personnel, in particular those of Air France, in charge of the management of interventions around aircraft, the management of baggage and passenger information.
- The connectivity provided to airlines for short-range communications with aircraft on the ground or during taxi phases, in order to exchange operational files (for example flight generated data) or entertainment files (for example video catalogues on request).
- The provision of a PMR solution for all companies (car rental companies, hotels, freight companies, meal preparation companies, etc.) with such needs on airport rights-of-way.



Hub One presence on the airport platform permits the adaptation of everyday uses and to address not only the Paris Airport, but also all the companies, like car rental or catering, granting also those companies to grow their own business.

Management of the criticality of services, multiplicity of end-customers, end-to-end cellular services are enabled by the 4G/5G technology used. This technology is offering secure communication by design, with full redundancy, enabling the construction of mission critical services, with a granted very high performance, high availability, granted thanks to the redundancy if each network function.

The advantages consist of a network that is fully self-contained and has no dependency with the outside world. This is particularly suitable for mission critical networks so that the network can keep running regardless of events such as loss of connectivity with the outside world.

CONCLUSION

Thanks to Athonet deployed solution, Hub One is able to tackle efficiently their objectives, opening the different services with great flexibility and shortening the go-to-market required by the ecosystem and adapt the solution to the end-user use case . The day-to-day operation and user activation in real time is boosting the business which took off.

Performances, so key in Mission Critical and Business Critical system, are concrete and confirms the promises of an extraordinary system stability.

“With the private LTE/5G network, we have a secure, high-performance communications infrastructure that will support all current and future applications. We have a large facility to cover with employees moving around constantly, so using a mobile network made much more sense than using Wi-Fi.”

— **Grégoire de La Crouée**, Hub One’s Mobile Pro Business Line Director

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know more?

contact us to discover how we can improve your
services thanks to our Core

contact us

Athonet is a leader in private cellular network technology delivering a mobile core to enterprises and communication service providers to connect applications, devices and radios.

With more than 18 years of experience in delivering 4G/5G mobile core solutions to customers and partners in every region of the world, Athonet supports key industries where network control, mobility, security, performance, and cost are important for business outcomes.



a Hewlett Packard Enterprise acquisition

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