



Report on Resilience First - Intel Webinar 27 November 2020

'Airport Innovation – The Game Changer'

Key-note Speaker:

Graham Bolton, Chair, British Aviation Group and Global Practice Leader, Aviation, Mott MacDonald

Innovation Speakers:

Mahesh Goenka, Director Product Management, Affirmed Networks

Silvia Kuo, Sales Manager, Gorilla Technology

Jay Faulkner, Business Development Executive, GPC Systems

Chair:

Syamak Nazary, Global Sales Director IoT Transportation, Intel Corporation (UK)

Key Messages

- The pandemic has affected nations and airlines to differing degrees, and the UK has not been as severely impacted as other countries. Recovery would be based on a combination of bubbles, corridors, testing and vaccines. However, the situation has permanently changed and there were realities to consider when analysing how the recovery will take place:
 - Aviation was fundamentally beneficial to society and made a significant contribution to communities and employment. It brought access to health and education, as well as socio-economic benefits. The pandemic has shown how we struggle in many respects when flying is curtailed.
 - Consideration of the environment was important and this would influence the drive in the airline industry for less pollution and noise. This would feed into new solutions.
 - In terms of economics, the industry has been scarred by the pandemic. Without government help, the industry was in survival mode. Hence, it was imperative to focus on operating costs, reskilling and rebalancing the person/machine interface.
- The technology advances needed to allow a 'game change' were at the macro, medium and micro levels. At the macro level, it was necessary to renew aging systems, which would help the environment, and introduce new, smaller types of vehicles including drones. At the medium level, digital twinning and new forms of sensing and AI would be needed to make assets work to the full. At the micro level, individual technology could help reduce the risks to passengers, crew and ground staff.
- Covid has been a catalyst for change and would allow us to find new benefits for the environment. In terms of enablers, the importance of data and the associated digital

infrastructure would be at the heart of operations but decisions would have to be made on ownership, sharing, security and structures. Automation (e.g. algorithms) would play a key part.

- In terms of the shape of an airport, three aspects were likely to change: air mobility with new forms of traffic, a blurring of boundaries between the airport and the urban environment, and energy infrastructure.
- Airport Use Cases (from **Affirmed Networks**) showed a greater need for security, reliability and mobility. Wifi was insufficient and private wireless networks were the solution. Examples were given on how to monetise systems at airports through Managed Service Providers. (Contact: maresh.goenka@affirmednetworks.com)
- Intelligent Video Analytics and Recorder (IVAR) (from **Gorilla Technology**) was an all-in-one platform for facial recognition, behaviour analysis, vehicle detection and business intelligence. IVAR can help with facility sanitation/safety, control at transport access points, a touchless customer experience, and data security and endpoint protection. (Contact: silviakuo@gorilla-technology.com)
- 3D Dimensioning data capture for measurement in supply chains (**GPC Systems**) was demonstrated in the context of measuring freight. Single camera capture allows for accurate dimensional measurement and works in real time or offline. (Contact: jayfaulkner@gpcsl.com)

The speakers answered a series of questions from the participating audience.

The full video recording can be found [here](#).

The presentation slides can be found [here](#).

Speakers' Biographies

Graham Bolton

With over 25 years' experience in the aviation sector, Graham has been involved in the strategic planning, design and delivery of projects at airports around the world, including Heathrow, Dubai, Istanbul, Hong Kong and Seattle.

He joined Mott MacDonald from Atkins where he was market director for aviation while he has also previously led Arup's European aviation business. Graham is also the current chairman of the British Aviation Group, which promotes engagement across and collaboration within the aviation supply chain.

Mahesh Goenka

Mahesh leads the LTE and 5G cloud products at Affirmed Networks (a Microsoft Company). He has more than 20 years of experience in wireless telecom domain from 2G, 3G, 4G to 5G.

He has held various positions in engineering and product management with deep hands-on and business experience. In his past role as product manager, he led virtualized wireless packet core and drove launch of carrier grade mobile packet core on public cloud like Azure. Currently, he heads the 4G & 5G edge cloud products and strategy based on Azure edge zones for private cellular networks.

Silvia Kuo

Silvia Kuo is experienced in Business Development and Account Management in the US, Latin America, Europe and Asia.

She is currently in charge of identifying technology partners for Gorilla Technology in Europe and Latin America, to integrate their Edge AI solutions and create mutually-beneficial partnerships.

Jay Faulkner

Jay Faulkner is a business development executive for GPC Systems. He works with clients on a global basis to understand their challenges surrounding item dimensioning, and construct solutions using innovative 3D depth camera technology to drive efficiency gains.

His background is within the supply-chain technology sector, specifically surrounding data capture solutions. Over the past few years, he has delivered projects within but not limited to the following areas including barcoding, EPOD, Track and Trace, Route optimisation, WMS, asset management, general mobility and bespoke development.

Syamak Nazary

Mak works with Intel's global non-automotive transportation eco-system covering the railways, fleet management, traffics infrastructure, sea and airport segments. He has over two years of experience in end-to-end IoT projects working with device manufacturers to end customers.