

## **Aviation industry must embrace modern PTT technologies for more coordinated and efficient turnaround processes**

***By Magnus Hedberg, CEO, GroupTalk***

The global aviation industry is growing rapidly. Traffic volumes have increased by around six per cent per year for many years, which equates to a doubling of traffic every 12 years. New airlines, cheaper tickets, improved passenger experiences both on and off the planes, a change in consumer behaviour favouring experiences and air travel all contribute to this positive trend that I (and experts like IATA) expect will continue.

On the other side of the coin – if there is one – we have cities, airlines and airports caught off guard by the surprisingly high demand in air traffic and the necessities of stricter security measures. Airports have become congested. Increased competition and digitisation are squeezing profits and accentuate the need for lower expenses.

The industry is characterized by low profit margins, largely because of competition from budget airlines, which now accounts for a quarter of the world market. The growing competition forces airlines to focus on more efficient logistical solutions, cost savings and smarter customer interactions. The industry growth also means more and larger airports, which in turn requires increased efficiency and smarter solutions on the ground, in order to uphold important key success factors such as punctuality and swift turnaround.

### **Outdated turnaround routines**

An important factor for punctuality in aviation and efficient use of aircrafts is the successful coordination of the turnaround process at the gates, i.e. the process of loading, unloading, and servicing an aircraft. This process, normally between 25 minutes up to an hour, is a time-critical teamwork, based on efficient communication.

However, most ground staff at airports around the world still use traditional and outdated two-way radios (walkie-talkies) with a momentary button to switch from voice reception mode to transmit mode, when communication is taking place between the flight crew and the ground staff. Controlling the number of users and associated channels is complicated and time consuming. Quite often you can also notice people screaming, yelling and making gestures, trying to communicate with each other in this security critical working environment. These are ancient and inefficient communication tools, not suitable for an industry that wants to be in the technological forefront, aiming to be smooth and efficient and profitable. Remember, an aircraft only makes money when it is in the air!

### **Push-to-talk technology improves airlines' competitiveness**

There is huge potential to improve communication between the flight crew and ground staff with more modern, yet simple and user friendly, technologies. An increasing number of airline companies tend to abandon the ancient walkie-talkie communication solutions, replacing them with more modern communications solutions based on digital models such as the push-to-talk (PTT) over cellular phones, a service that enables subscribers to use their phones as walkie-talkies with unlimited range over the existing

mobile networks. PTT has several advantages:

- It is a cloud-based solution that allows communication directly through the users smartphones (and tablets/laptops).
- PTT enables simple and safe communication between employees through the push of a single button.
- It uses existing mobile networks, with no need to build and maintain your own network.
- The sound is much clearer than walkie-talkies which reduces the likelihood of misunderstandings.
- The administrator easily controls the number of users, associated channels and access.
- The solution can include push-to-talk accessories such as acoustic headsets and Bluetooth-based PTT buttons (i.e. hands-free).
- It is secure.
- It is a cost efficient solution (extremely cheap to buy and install – and can also reuse existing investments in two way radio equipment)

Most importantly, the solution is very easy to use. During a turnaround procedure, the flight crew connect their mobile phones and tablets to the push-to-talk group corresponding to the actual gate. Ground crew join the same talk group with their two way radios or smartphones, and communication is established between all functions to turn around the aircraft in the most efficient and safe manner. Having the service delivered as a managed service based on a service platform, makes the supplier responsible for operations and support of the service, and ensures that the service is delivered according to the stipulated Service Level Agreement (SLA).

### **“Best investment ever made”**

A real life example is Scandinavian Airlines, SAS. After internal studies had identified a major potential to improve communication between the flight crew and ground staff, SAS became one of the pioneers in [introducing a cloud-based PTT solution](#) at all its airports in Sweden in 2006, followed by Norway 2008 and in Denmark 2011. In total there are now 5,000 PTT users at 32 airports and 290 gates in three countries. The result can only be described as fantastic. The solution has improved communication in the turnaround process for SAS with results such as:

- Improved punctuality
- Improved competitiveness
- Reduced cost
- Dedicated staff and improved work environment

The return on investment (ROI) has been exceptional and SAS has become the most punctual airline in Europe. SAS claims that its choice of PTT solution (GroupTalk) is one of the best investments the airline has ever made – not only financially, but also from a customer- and employee satisfaction point of view.

SAS has also given its pilots and ground crew a worldwide WiFi pass, giving them access to 15 million hotspots around the world. The airline has become ‘paper free’ in favour of iPads on its flight decks. Here we see several new technologies working together; the (iPass) WiFi access enables PTT communications.

Smartphones are used to share information and status by both voice and text in order to improve accuracy, traceability and efficiency in communications. Text based communication adds traceability and clarity to PTT for an unbeatable combination. Automated machine-to-machine (M2M) communications is also gaining popularity as a supplement to PTT, e.g. for status updates like boarding and refuelling complete.

### **Time limited and defined project tool**

Aviation is perhaps the industry that can draw the most obvious benefits from the new advanced PTT group communications solutions. But PTT has also gained interest from organisations in other industries where instant group communications are instrumental, such as safety and security, construction/infrastructure, energy and retail.

An increasing number of companies appreciate the fact that the new solutions are cost efficient, scalable and flexible, that allow staff of various sizes to communicate, without having to make major new investments in communication systems.

Being able to link people working together in what can be described as 'time limited and clearly defined short projects' in a user friendly communications network gives them an opportunity to share information and resources in a way that they have not been able to do with their previous traditional communication devices.

PTT solutions based on standard smartphones and tablets/laptops make task group communications faster, more flexible, secure – and, not least – more cost efficient. It might be the single most efficient and beneficial measure that airlines and airports can implement in their quest for improved services and lower costs.

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