

# ENABLING the connected world

## BGAN M2M benefits

- 1 Reliable network—99.9% satellite and ground network availability
- 2 IP-based network with two-way encryption to integrate securely with existing IT infrastructure
- 3 Worldwide coverage—farms will stay connected even outside of cellular coverage
- 4 Easy to set up and maintain, with no requirement for specialist staff or training
- 5 Cost-effective flexible pricing options for consistent budget planning and control

## PinC Agro

### Agricultural monitoring solution harnesses BGAN M2M to ensure safety and efficiency in farms

#### The challenge

The health and wellbeing of crops and livestock under a farmer's care are two crucial elements when it comes to success in the agriculture sector. One of the most significant investments a farmer makes is in the specialist buildings for the farm. Greenhouses, stables and grain silos all provide a fundamental part of a farmer's operations and any faults or damage to them can seriously impact the wellbeing of animals, the quality of the product and ultimately the revenues that a farm generates.

For Chris Salimans, a modern farmer in the country with several locations across the Netherlands, reliable monitoring and alarms on buildings to provide notification of any faults are critical in maintaining the welfare of his animals. However, while many alarm systems can be operated successfully over cellular services or land-lines, the remote

locations of some of his farms, coupled with concerns over the reliability and performance of these networks, present challenges in consistently monitoring faults.

He explains: "We house livestock in controlled environments so it's important to maintain these to ensure the well-being of animals is of the highest calibre. However, power outages for example from lightning strikes and consequent high temperatures can quickly present a dangerous situation. As a sector, it's important to farm responsibly and we need to be doing everything within our power to prevent cases of animal suffocation. Therefore, confidence in remote monitoring and alarm systems is crucial and, as such, reliable technologies that provide immediate warnings are vital, especially for farms that are made up of dispersed and remote locations that can't be reached by staff instantaneously."



"The Inmarsat BGAN M2M service has given us precisely the reliability, cost effectiveness, security and ease of use that we were looking for to protect our customers' assets. Inmarsat stood out for its reliability and universal coverage. When the welfare of animals is at stake, the need for real-time monitoring and an always available flow of information is crucial. No animal should die of process failure."

Peter Post, Manager at PinC Agro

PinC Agro, a member of the Achmea Insurance Group, developed AgroAlarm®, a solution designed to ensure farmers are notified if anything happens to their buildings. The solution enables secure, reliable monitoring and alarm notifications for intensive farming. Every 60 seconds sensors installed in farm buildings send a status message to the central HQ where the solution is controlled. This 'keep alive' message notifies the system when something is wrong. If the signal is not received, an alert is sent to the farmer or a nominated contacts. If this alert is not acknowledged, the system will then alert electrical technicians or the relevant emergency services.

However, reliability concerns of the analogue network being used prompted PinC Agro to consider alternative forms of connectivity and the company engaged with Network Innovations with a list of criteria for this.

## The solution

With resilience, robustness, availability and coverage high on the agenda, Network Innovations subsequently recommended Inmarsat's BGAN M2M service, powered by Inmarsat's global 3G satellite network.

BGAN M2M provides a reliable, IP-based real-time connectivity service that seamlessly integrates into any network.

It supplies a reliable, always available service to the entire AgroAlarm® network, even for farms located in rural areas where cellular connectivity could not provide the continuity of service PinC Agro were looking for.

Peter Post, Manager at PinC Agro said: "The Inmarsat BGAN M2M service has given us precisely the reliability, cost effectiveness, security and ease of use that we were looking for to protect our customers' assets. Inmarsat stood out for its reliability and universal coverage. When the welfare of animals is at stake, the need for real-time monitoring and an always available flow of information is crucial. We're happy to say that Inmarsat's service has delivered just that. Farmers can now rest assured that they will be able to achieve full visibility of any location, no matter how remote it is."

## The results

Chris Salimans implemented AgroAlarm® to monitor the ventilation within buildings on his farm, to measure whether the emergency power is on or off, and to determine the temperature in his stables and other buildings. His previous alarm system used analogue lines, however, as he was looking for a more dependable service, he switched to AgroAlarm® due to reliability provided by the satellite connectivity.

He explains the benefit of using AgroAlarm®: "As a farmer, the advantage of using

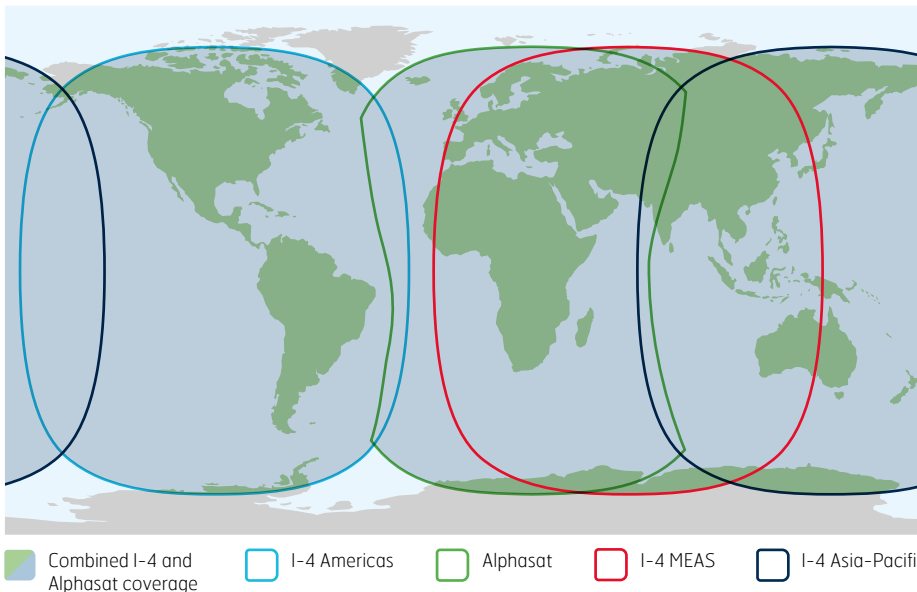
AgroAlarm® is that you always get notified, under any circumstance, if something is amiss. We have multiple locations on the farm so it's impossible to be everywhere at the same time and, without this service, it would take significantly longer to notice damages or faults, which could then increase the loss suffered from a power outage or over-heated stables. Animal welfare is paramount and this service means that we can constantly keep this a top priority."

Since Inmarsat has been providing the connectivity for AgroAlarm®, the solution has been deployed across multiple farms in the Netherlands and has continued to serve with efficiency, which gives farmers peace of mind that their assets are protected. And, as the service is expected to have an operational lifetime well into the 2020s, BGAN M2M will continue to serve efficiently and effectively for many years to come.

## About Inmarsat

Inmarsat plc is the leading provider of global mobile satellite communications services. Since 1979, Inmarsat has been providing reliable voice and high-speed data communications to governments, enterprises and other organizations, with a range of services that can be used on land, at sea or in the air. Inmarsat operates in more than 60 locations around the world, with a presence in the major ports and centres of commerce on every continent. Inmarsat is listed on the London Stock Exchange (ISAT.L). For more information, please visit [www.inmarsat.com](http://www.inmarsat.com).

## Inmarsat I-4 network coverage



This map depicts Inmarsat's expectations of coverage following the commercial introduction of Inmarsat's fourth L-band region. It does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions.

## How to buy

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