flytnow

# DRONES IN CONSTRUCTION

Remote Site Inspection over 5G Network

Commercial drone history was created in the municipality of Lillestrøm, Norway when one of our partners Droneverkstedet conducted the very first remote construction site inspection over Telia's new 5G network.

Telia is the first to bring 5G in the city of Lillestrøm. This is the reason why the inspection became the first one that leveraged drones and 5G technology in that area.

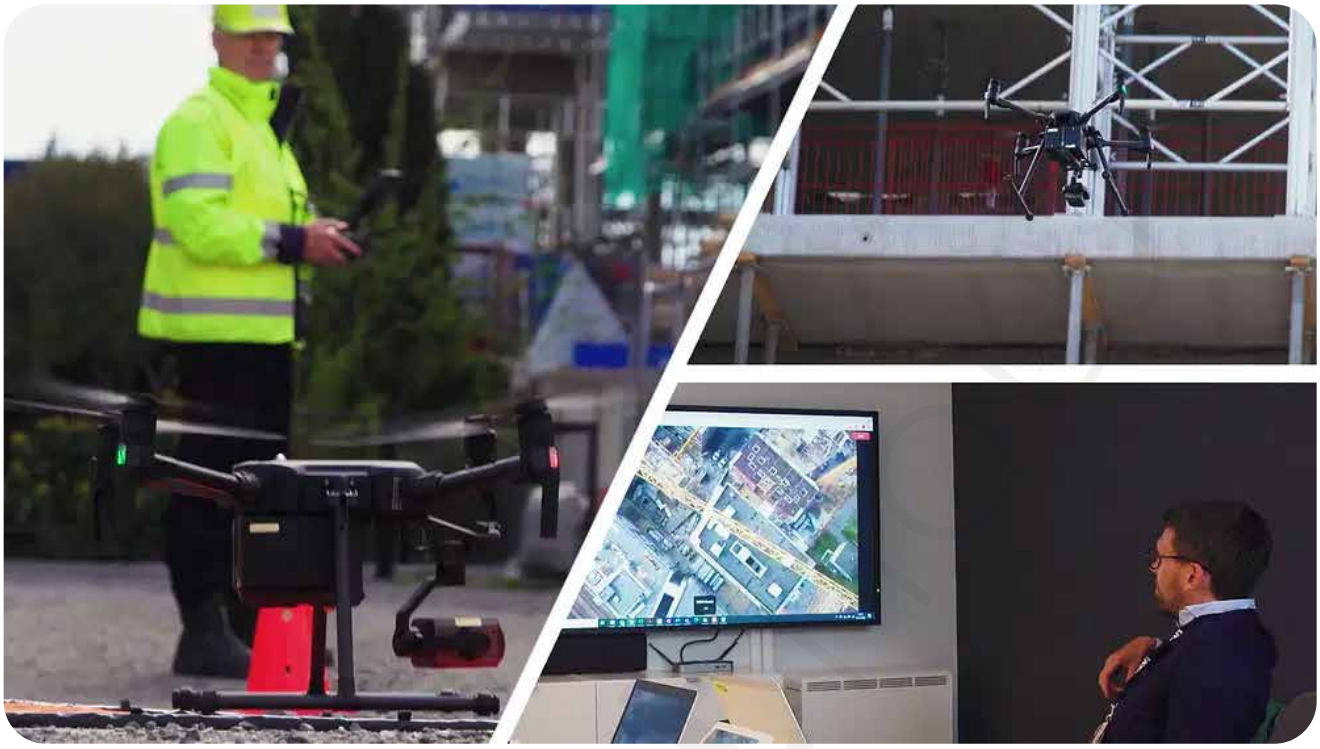
The rapid rollout of 5G networks across the world is expected to power an entirely new array of commercial drone applications, thanks to lower latency, higher bandwidth, and broader coverage.

## Why Use Drones for Construction Site Inspection?

A Norwegian construction company, HENT, sought to address the problems associated with the traditional inspection methods by using drones. These include:

- Quality or project managers are not always present on-site to supervise site inspections. As a workaround, video inspections are done and the footage is sent later to experts for their review. However, this approach often leads to requests for re-filming, since accurate information often fails to get captured.
- Inspections are often dangerous, especially, where people and machines are needed to climb places that are not safe or easy to reach; for example, using scaffoldings to reach the outer facades of a building.
- Manual inspections are time-consuming, subject to human errors, and increasingly expensive, due to labor costs and overhead.

# How HENT Improved Their Inspection Operations Using Drones and Telia's 5G Network



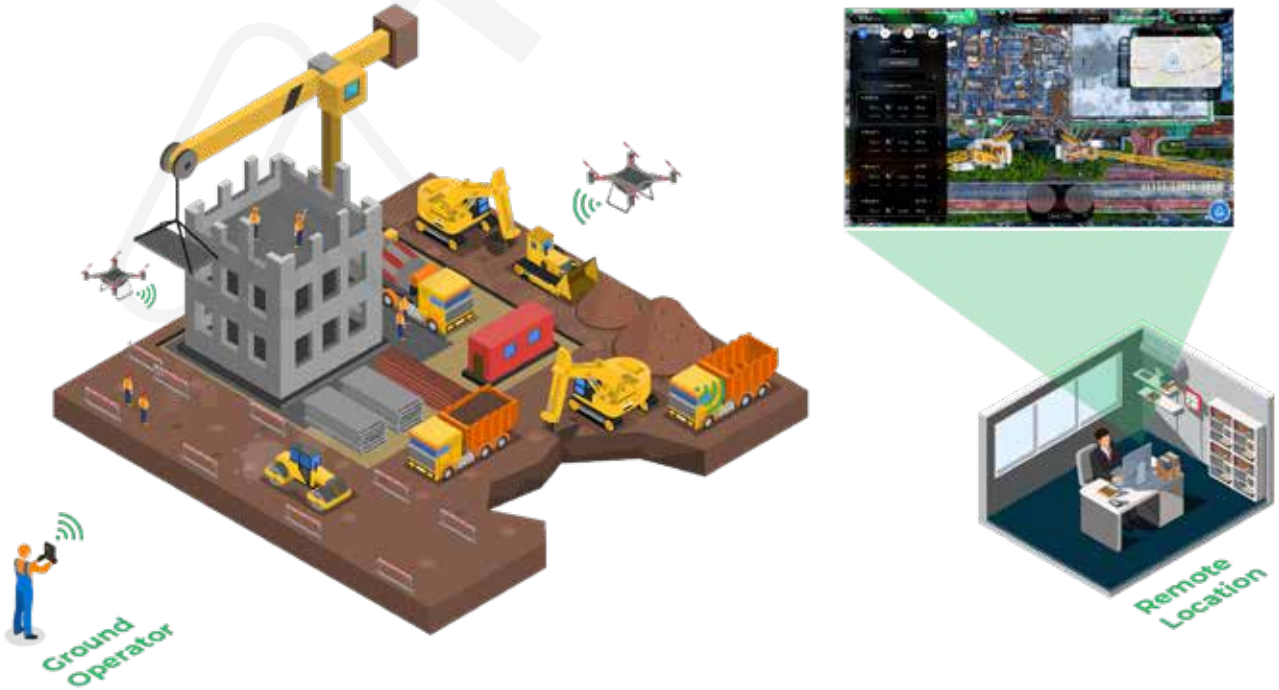
HENT employed the services of one of FlytBase's partners, Droneverkstedet, to inspect the outer facades of one of their residential projects using drones. Jørn W. Howlid, an experienced and certified drone pilot conducted the operation successfully and live-streamed the video using the FlytNow platform over Telia's high-speed 5G network.

This aerial inspection operation proved that conducting construction site inspections using drones is a compelling choice because of the following reasons:

- During the aerial inspection, the pilot was able to share the live, high-quality video-stream from the drone with the project manager and quality manager sitting several kilometers away, in near real-time. All the stakeholders were constantly in touch so that the pilot could position the drone and its camera simultaneously. Due to the live feedback available for the pilot from the remote viewers, the inspection happened flawlessly without any re-filming thus saving a significant amount of time and money.
- The drone pilot was able to maneuver the drone safely to places of high altitude, and other dangerous places for humans, without the need for any type of lifting equipment.
- The drone's high definition camera, coupled with FlytNow's low latency video streaming capability over a high-speed cellular network like Telia's 5G, provided exceptional clarity to the remote viewers. The clarity in videos enabled viewers to identify items as small as the screws they had used in the past.
- The entire operation happened with far better speed and accuracy as compared to traditional, manual ways of doing site inspections.

Learn how Telia 5G enabled this entire operation without any hassle and difficulties.

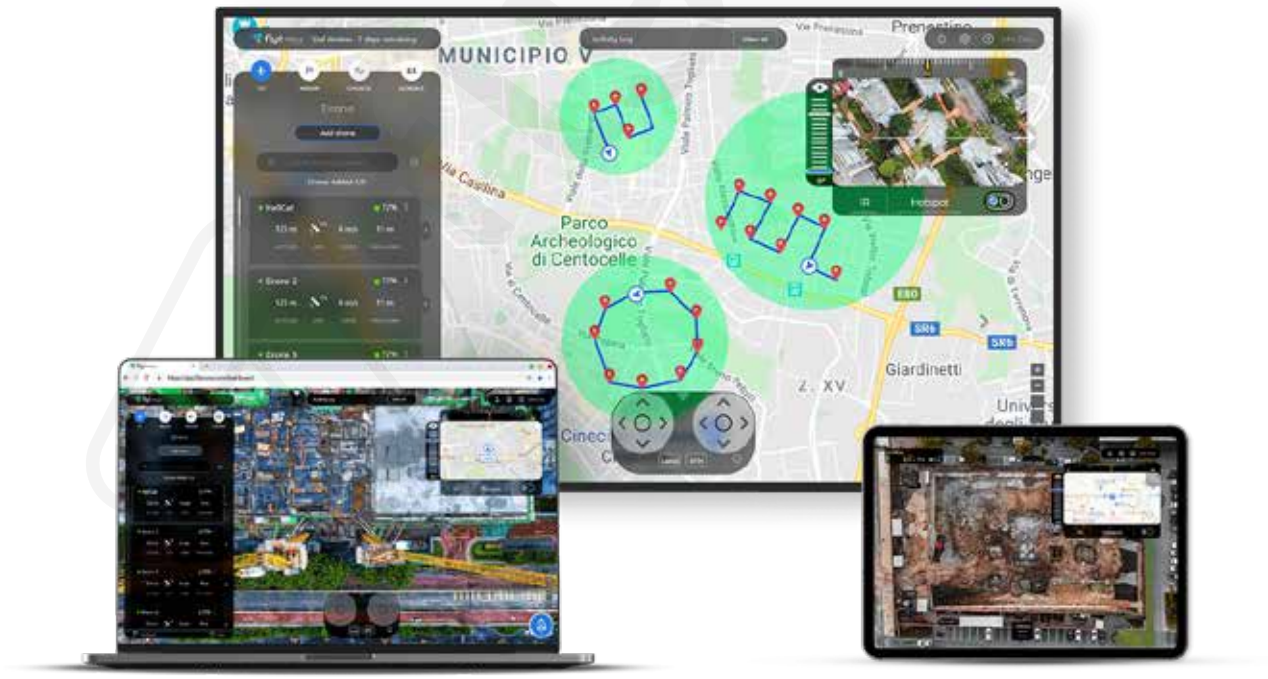
## How FlytNow Enabled a Better and Safer Site Inspection



The success of the HENT operation was made possible by the design and capabilities of the FlytNow remote drone operations platform, whose features are as follows:

- FlytNow is a cloud-based application i.e. it can be accessed from a web browser over the internet. During the site inspection, the pilot used Telia's high-speed 5G network to stream the live video directly to the viewers, this made possible because FlytNow is accessible on most popular web browsers and it uses the HTTPS protocol.
- FlytNow has its own mobile app that makes connecting to most DJI drones extremely easy. The app is called FlytOS Mobile and it integrates with a DJI drone via the RC. The app connects the drone with FlytNow and facilitates the streaming of live video and telemetry to the FlytNow dashboard. During the HENT aerial inspection, it was this app that leveraged the 5G network to stream the data. Refer to our Get Started guide to know more about the app.
- The low latency HD quality video streaming capability of FlytNow helped remote stakeholders thoroughly assess the outer facades of the building. Moreover, they also had the ability to remotely control the camera gimbal, to specifically target certain aspects of the structure for detailed inspections.

## Summary




HENT, with the support of Droneverkstedet, effectively leveraged the FlytNow platform utilizing Telia's 5G network to create a far better inspection experience than the manual alternative, with direct savings of time and costs.

# What's Next?

Leverage FlytNow for remote aerial site inspections. Customers can add their drone fleets, fly them autonomously, create flight plans & coordinate missions, set geo-fence and checklists, view and store live video footage and integrate drone operations into an existing system. To exlore further capablities, try FlytNow for free today.

To explore partnership opportunities please visit: https://flytnow.com/partner/.

Schedule a 30-min free consultation with our expert to learn more about the FlytNow Drone Delivery Software Solution, contact us at https://flytnow.com/contact/

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