Drone Policy

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1. Background

The use of drones, for both private and commercial use has increased significantly over the last few years, and there is now increasing demand for their use in surveying techniques.

Although the use of drones in the telecommunications business reduces risk, by preventing the need for working at height, it still presents several concerns and has the potential to cause damage to property and critical infrastructure and equipment. It also raises issues around the possibility of privacy and data protection breaches, resulting from Cellnex UK employees and/or members of the public being filmed during the surveying process.

2. Purpose and Scope

The purpose of this policy is to establish guidelines and regulations for the use of drones in surveying telecoms infrastructure on Cellnex sites within the United Kingdom. This policy aims to ensure the safe and responsible deployment of drones while maintaining the integrity and security of telecoms networks.

Cellnex UK has strict rules around permitting drones to fly over our sites and this policy sets out our approach to control and manage drone usage. We understand when and where drones can fly legally, but to fly drones on a Cellnex site an enhanced accreditation level must be achieved, this is to ensure competency of Drone Operators and Pilots, which is done for the protection of our critical infrastructure.

This policy is aligned with the Cellnex Occupational Health & Safety Policy and the Cellnex UK Policy Statement of Intent, Cellnex Data Protection and Information Security policies, the Cellnex UK Site Access Policy.

3. Definitions

Drone: A drone is an unmanned aircraft. Essentially, a drone is a flying robot that can be remotely controlled or fly autonomously using software-controlled flight plans in its embedded systems, that work in conjunction with onboard sensors and a global positioning system (GPS).

4. Roles, Responsibilities and Authorities

No drones may be flown over Cellnex UK sites without prior accreditation of the drone company and the pilot and explicit permission from the Site Access and SHE Teams. The accreditation and site access request process must be followed at all times as detailed in the Cellnex UK Site Access Policy.

Responsibility for compliance with the controls detailed within this policy sits with:

- The Cellnex UK Accreditation Team.
- The Cellnex UK Site Access Team.
- The Cellnex UK SHE Team.
- The Suppliers and Operators of Drone equipment.

- Anyone found to be operating drone equipment at any of our sites, without our prior accreditation or express permission, will be taken through the Breach Management process as detailed in section 8 of the Cellnex UK Site Access Policy.

4.1. Drone Accreditation

The requirements described in this policy are based on achieving full Cellnex UK accreditation for all drone operating companies, to perform drone surveys, as a trusted supplier.

To become a drone operating accredited company on Cellnex UK sites you must complete our "Get Accredited for Drones". A company cannot apply for drone accreditation without holding a valid Company Accreditation.
https://towerco.atlassian.net/servicedesk/customer/portal/4/group/29/create/357

Pilots must be accredited at an individual level with Cellnex UK but this cannot be achieved unless a company has a valid Company Accreditation & Drone Accreditation in place with Cellnex UK. Pilots should complete the "Get Accredited for Individuals".
https://towerco.atlassian.net/servicedesk/customer/portal/4/group/29/create/353

4.2. Drone Operating Companies & Pilots

4.2.1. A site access request in Agora is mandatory for all drone flights at Cellnex sites, both when flying the drone inside and outside the compound.

4.2.2. All drone operations for surveying telecoms infrastructure must comply with existing aviation regulations set forth by the Civil Aviation Authority (CAA) in the United Kingdom. Operators must obtain the necessary permits, licenses, and adhere to any additional requirements specified by the CAA and Cellnex UK.

4.2.3. All drone operations being carried out on Cellnex UK sites must comply with all Health & Safety regulations, including but not limited to, Work at Height Regulations 2005, Provision and Use of Work Equipment Regulations (PUWER) 1998.

4.2.4. Drone companies must possess a valid Operator ID which is displayed on all company owned drones.

4.2.5. Drone companies must have adequate specific drone insurance, and the named policyholder matches the name of the Operator ID.

4.2.6. Drone companies must hold an Operational Authorisation (OA), which can be either a Pre-Defined Risk Assessment (PDRA01) or a Specific Operations Risk Assessment (UK SORA) replaced Operating Safety Case (OSC) license, this is irrespective of the weight of drones being piloted.

4.2.7. Drone companies must have a lone worker policy that covers lone working on Cellnex UK sites, and both site types must be considered (Structure/Rooftop), with specific guidance when lone working on a rooftop and rural locations.

4.2.8. All drone pilots must have a Flyer ID, irrespective of drones being used.

4.2.9. All drone pilots must have either a General Visual Line of Sight Certificate (GVC) and/or a certificate of competence, confirming the pilot has been assessed competent to fly drones issued by the Drone Company Accredited with Cellnex UK.

- Any drone pilot that does not have a GVC and the drone company has an internal/external means of assessing competency, the drone company must demonstrate that the pilot has been assessed for competency.
- Drone pilots cannot self-certify, if your drone company does not have the means to confirm competency you must obtain a GVC.

4.2.10. All drone pilots must be vetted to BS7858 and their approval certificates provided as part of their individual accreditation process.

- If a drone pilot is going through the vetting for BS7858, Cellnex accreditation can be applied for and Agora permits can be raised and works completed but the individual accreditation will stay "On Hold" until final confirmation of BS7858 has been provided to Cellnex.

4.2.11. Any pilot that attends a rooftop must have rooftop certification and issued with the relevant rooftop PPE including the correct RF monitor, and the course attended must be completed to the EUSR Syllabus and conducted by an EUSR accredited training provider.

- Rooftop Worker - Safety & Access
- EMF & RF Awareness
- First Aid at Height

4.3. General Site Rules

4.3.1. All drone operations will be split into 2 categories, Low Risk or High Risk which will be managed by the drone company who must determine which level their works falls under. The level is determined by the site type, its location, and the possibility of un-involved people/crowds entering their safety area.

4.3.2. When raising an Agora access request the following must be adhered to:

- Intervention Type - Survey.
- Intervention Place - Whole Site.
- Max Climb Height (m) – Add max height the drone will be flown too.
- Intervention Category – Audit.
- Need for Special Equipment – Yes.
- Special Equipment – Drone. (Future plans for "Drone - Low Risk Activity", "Drone - High Risk Activity" to be selected within "Special Equipment" field.
- SAR Description – (Current Process) Include in the SAR Description box the correct risk level, either Low Risk or High Risk.

4.3.1. Drone surveys cannot work alongside other suppliers, if site is booked, select alternative date, no date conflicts. You may be able to work in-conjunction with engineers from your own company. (videoing for promotional activities etc.)

4.3.3. At all times a pilot must have clear line of sight and be able to view the drone at all times, if this may not be achievable a second spotter technician must also attend.

4.3.4. All Agora access requests (SAR) regardless of risk level must contain the following documentation:

- Operator OA (PDRA01/UK SORA (OSC)
- Operator Insurance
- Pilot Certificate
- RAMS, which must include the following:
  - Drone model and weight, including details of any back up drones that may be used.
  - Site plan, showing an aerial overview image of site with a 50m radius ring around the site being surveyed.
  - Relevant NOTAMS (Notice to Airmen) information.

4.3.5. **Low Risk**: Where drone activity is carried out in areas of a low possibility of any un-involved people entering your safety area and where access onto a rooftop is easily accessible, i.e. via an internal staircase.

- Works can be completed by 1 technician under a PDRA01 and a GVC (Under a Lone Worker Policy).
- Structures located in a sub-urban area with a low number of properties (1-5) within your 50m radius. Instructions must be included in your RAMS advising the pilot to make reasonable endeavors to contact the residents to advise them of the activity being completed.
- Any rooftop that can be accessed via an internal staircase with access directly onto a flat rooftop (no climbing).

4.3.4 **High Risk**: This is works on rooftops accessed by a fixed ladder and any structures in an urban area or a location that is heavily populated.

- Any structure that has the potential for un-involved people/crowds entering the safety area at any time.
- Any rooftop accessed via a fixed ladder is classed as Working at Heights (WAH) and requires at least 2 rooftop certified technicians wearing suitable PPE and carrying the correct RF monitor.
- Any Drone operation using a sub 250g drone to mitigate using a UK SORA (OSC), the RAMS must include:

- Drone model and weight, including any back up drones that may be used. (CNX Requirement).
- Site plan, showing an aerial overview image of site with a 50m radius ring around the site being surveyed. (CNX Requirement)
- Confirmation of number of technicians to attend. (CNX Requirement)

4.3.4.1 **Rooftop Access:**

- Pilots must always stay on the flat roof surface they are operating from and stay at least 2m from any unprotected edge. They must never climb on any pitched roofs, or walk over any added fragile roof surfaces, i.e. any sheeted roof surface, roof lights, metal sheets, glass panels, chipboard panels, slated or tiled areas.

4.3.4.2 **Structures:**

- If the drone used is below 250g and the need for controlling un-involved people entering the safety area is required. This **may** require at least 2 technicians.
- If the drone used is over 250g and the need for controlling un-involved people entering the safety area is required. This **will** require at least 2 technicians and shall be operated under a UK SORA (OSC).
- **Second Person/Spotter:**
  - **Structure -** If a second person will be attending a structure they must be accredited and added to the Agora permit and included in your RAMS.
  - **Rooftop –** All technicians attending a rooftop must be accredited and added to your Agora permit and have suitable rooftop training and wearing required PPE.

4.3.5 **Basic Requirements for Drone Operations**:

4.3.6 Drones shall not fly within a radius of 5m from any infrastructure equipment, unless the drone operator holds a UK SORA (OSC) license, have raised a Drone – High Risk Activity agora permit, and permission is obtained from the Cellnex UK SHE Team.

4.3.7 For sites where permission has been granted which are in close proximity to residential areas, the drone company's license restrictions must be considered and an approved method used to inform local residents of the drone operational areas.

4.3.8 Drone companies must comply with the Data Protection Act 2018 and other relevant privacy laws while conducting surveys. Any data collected, including images and footage, must be handled in strict accordance with data protection legislation. Drone companies shall not intentionally capture images or footage of individuals without their explicit consent, except where such capture is necessary for the telecoms infrastructure survey and does not infringe on individuals reasonable expectations of privacy. Any unintentional capture of personal data such as images of individuals, must be treated in accordance with data protection laws, and measures implemented to minimise the risk of such occurrences.

4.3.9 Before conducting drone operations, drone companies must conduct a Privacy Impact Assessment (PIA) to identify and mitigate potential risks to privacy. The PIA should assess the necessity and proportionality of the data collection, ensuring that it is limited to what is essential for the telecoms infrastructure survey.

4.3.10 Where applicable, drone companies shall provide clear and accessible information to the public regarding the purpose, extent, and duration of the drone operations, emphasizing the protection of privacy. In cases where public engagement is necessary, operators must actively communicate their adherence to privacy laws and reassure the public about the responsible use of drones.

4.3.11 Drone companies must ensure ongoing compliance with privacy laws. Any identified breaches of privacy laws or data protection principles must be reported to the Information Commissioner's Office (ICO) and other relevant authorities as required by law.

4.3.12 Any data gathered by the drone company shall be treated as confidential by the drone company and shall only be used for the purpose intended by the survey.

4.3.13 Drone companies must be trained in emergency procedures and have a plan in place for scenarios such as equipment failure, loss of control, or unexpected weather changes, as detailed in the Air Operations Manual (AOM). In the event of a drone malfunction, drone companies must prioritise the safety of people and property, and report the incident to the appropriate authorities.

4.3.14 All drones must have omni directional collision avoidance functionality and this must be switched on and set to a minimum of 5 meters during use.

4.3.15 Low battery return-to-home must be set at 15%, depending on the operation, but the drone should recognise when it needs to return to home before its battery depletes.

4.3.16 Failsafe return-to-home (RTH) must be implemented, from loss of signal to the controller, and the drone must have a function to initiate the return to home. RTH height should be set to a minimum of 10m above the height of the structure prior to take off.

4.3.17 Drones should carry automatic frequency change capabilities so that, if interference is detected, it will automatically change from 2.4GHz to 5.8GHz.

4.3.18 As part of each site access request, before each drone operation, drone companies must conduct a thorough risk assessment that includes factors such as weather conditions, airspace congestion, and potential impact on services. The assessment should be documented and kept on record by the drone company.

4.3.19 Drone companies must provide evidence that they have assessed the potential EMF/RF impact associated with the survey of the structure/rooftop, specifically; how and if, it could negatively have an impact on the operation of the drone and how, if applicable, they mitigated for that impact, i.e. RF shielding.

4.3.20 In the case of any incidents or unexpected events during drone operations, immediate notification must be made to Cellnex UK using the Cellnex UK Escalation Process listed on the website under the Code of Practice and the CAA.

4.3.21 Non-compliance with this policy and relevant regulations may result in penalties, fines, or suspension of drone operating licenses. Enforcement measures will be conducted by Cellnex UK, the CAA and other relevant authorities.

4.3.22 Operations near sensitive areas such as airports, military installations, and critical infrastructure or No Fly Zones (NFZ) must comply with additional restrictions imposed by the CAA and is done so at the responsibility of the drone company. This includes securing the correct permissions, permits and any associated costs.

4.3.23 **Specific Operations Risk Assessment (UK SORA) (previously OSC)** – Operators holding a valid UK SORA (OSC) may fly drones closer than 50m of the infrastructure (but may vary depending on the Portfolio):

4.3.24 **Portfolio Procedures:**

Arqiva:

- All drone requests are deemed High Risk.
- Agora access permit raised as standard, RAMS documents will be reviewed by Cellnex UK's SHE Team.
- Number of technicians attending to be confirmed in RAMS approval process.
- Drone Company MUST select "Need for Special Equipment – Yes" and "Special Equipment – Drone" when submitting a Site Access Request (SAR) in Agora.
    - When future changes are made in Agora, within "Special Equipment" there will be the option to select "Drone – High Risk Activity" & "Drone – Low Risk Activity.
    - Current process, Include in the SAR Description box the correct risk level, either Low Risk or High Risk.
- Cellnex UK Site Access Team must submit RAMS/Drone documents to Cellnex UK SHE Team via JIRA.
- Drone company RAMS to be task specific and to include the following set up and procedure guidelines.

High Complexity Surveys:

- A demarcation area around the structure being surveyed must be established and appropriate signage (barriers if required) are to be sited at access and egress points.
- When conducting surveys within the broadcast aperture space (High RF fields) or capturing the entire structure as part of a digital twin survey, the following shall apply.
    - **Initial Flight Check**:
      Conduct a preliminary flight over the structure to verify that RF interference does not affect drone operation.
    - **Collision Avoidance Settings**:
      Set drone's collision avoidance system to a minimum of 5m horizontal and 5m above the highest point of the structure.

- **Interference Assessment Flight**:
  Pilot to start the flight at a horizontal distance of 10m from the structure. Ascend to the highest point and fly around the structure while maintaining the 10m horizontal distance to confirm there is no RF interference.
- **Incremental Approach**:
  If no interference is detected, the pilot to start an incremental flight travelling closer to the structure at various heights but flying no closer than 5m horizontal distance to the structure.
- **Survey Commencement**:
  Once the pilot confirms that RF interference is not affecting drone performance, the planned survey may proceed.

Low Complexity Surveys: Procedure to be confirmed by Arqiva

- A demarcation area around the structure being surveyed must be established and appropriate signage (barriers if required) are to be sited at access and egress points.
- Where surveys are being carried out where equipment is located below broadcast aperture space (High RF Fields) the following shall apply.
  - **Collision Avoidance Settings**:
    Set the drone's collision avoidance system to a minimum of 5m horizontal distance from the body of the structure.
  - **Survey Commencement**:
    Pilot to fly no higher than the approved survey height,
    and does not fly into the broadcast aperture space.

National Grid:

- All Drone requests are deemed High Risk.
- Agora access permit raised as standard, RAMS documents will be reviewed by Cellnex UK's SHE Team.
- Number of technicians attending to be confirmed in RAMS approval process.
- Drone company MUST select "Need for Special Equipment – Yes" and "Special Equipment – Drone" when submitting a Site Access Request (SAR) in Agora.
  - When future changes are made in Agora, within "Special Equipment" there will be the option to select "Drone – High Risk Activity" & "Drone – Low Risk Activity.
  - Current process, Include in the SAR Description box the correct risk level, either Low Risk or High Risk.
- Cellnex UK Site Access Team must submit RAMS/Drone documents to Cellnex UK SHE Team via JIRA.
- Cellnex internal Matrix team to review application.

- Once RAMS have been approved, SHE to email drone company rep advising they must complete the online "Drone Flight Notification Form" Drone Flight Notification Form to the NG Security Control Centre (SCC).
- SCC will email the operator with approval and a reference number.
- Operator to add reference number to their Site Access Request (SAR) in Agora and reply to email from SHE with the reference number.
- If works are 50m from NG Pylon and the drone will not fly any closer, 1 technician can attend and approval from the SCC is enough to be approved.
- If works require drone to fly closer than 50m, Cellnex SHE to email NG Drone contacts with operators RAMS/Specific drone documents and SCC reference number for approval, these works may require 2 technicians.
- Once NG Drone contacts approved visit, SHE to approve SHE-RAMS JIRA to Site Access.
- Cellnex Site Access to approve visit.

MOD:

- Cellnex UK Site Access Team to process request as per standard access procedure.

EDF (Gas):

- Cellnex UK Site Access Team to process request as per standard access procedure.

BT High Tower:

- Cellnex UK Site Access Team to process request as per standard access procedure.

BT Reach:

- Drone company raises a SHE-RAMS JIRA ticket to Cellnex UK SHE Team and submits RAMS/Drone specific documents for review.
- Cellnex SHE to confirm works can proceed via the Jira ticket.
- Following SHE confirmation, drone company follows the BT Reach process to obtain an approved NoW number by including the SHE confirmation.
- Once approved NoW number obtained, drone Company to raise the Site Access Request (SAR) in Agora and include in the "SAR Description" field, the initial SHE-RAMS TOW reference and the approved NoW number.
- Cellnex UK Site Access Team will check the SAR against the TOW to confirm it matches before processing the request for approval.

4.4. Site Access Team

It is the responsibility of the Cellnex UK Site Access Team to process drone survey site access requests (SAR) via Agora.

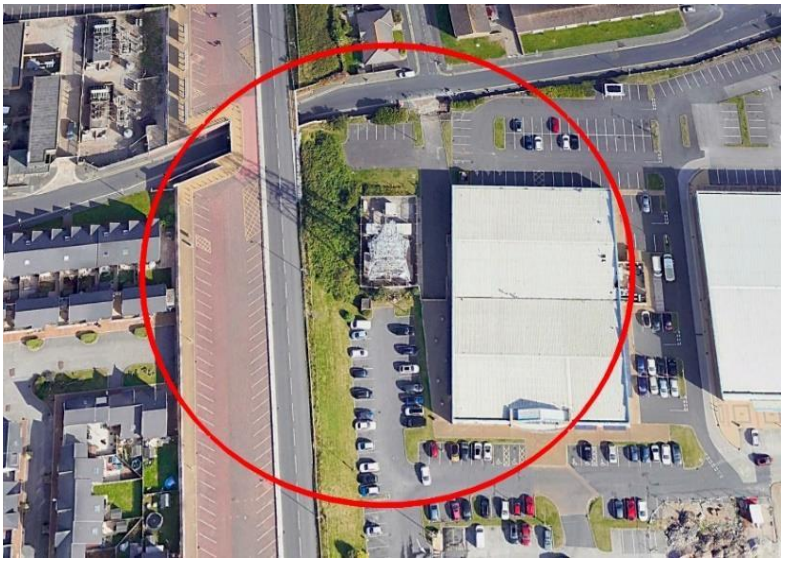
4.5 Low and High Risk Examples

***Example 1**: **Low Risk** - The image below shows a Rural Cellnex site with a 50m radius shown. The nearby property is outside this marked area so the visit can be completed under a standard OA (PDRA01) by 1 technician under their GVC license and your Lone Worker Policy.*

***Example 2**: **Low Risk** - The image below shows a Rural Cellnex site with a 50m radius shown. There are no neighbouring properties so can be visited as per above, however there is a Network Railway line within the 50m zone. The drone company must alert Network Rail via their* Flight Management System: DroneCloud *of the intention to possibly fly over the rail track and attach evidence with their RAMS submission.*

Example 3: Low Risk *- The image below shows a rural Cellnex site with a 50m radius shown which shows various properties falling within the 50m safety zone, but as these are minimal, this visit can be attended as a low risk activity with 1 technician under a PDRA01 & GVC and lone worker policy. Instructions must be included in your RAMS advising the pilot to make reasonable endeavors to make direct contact with the residents of the activities taking place.*

Example 4: High Risk *- The image below shows an urban Cellnex site with a 50m radius shown. There is a strong possibility of un-involved people entering the 50m safety area so a UK SORA (OSC) license must be used and 2 technicians to attend. If a 249g drone is to be used to mitigate against using a UK SORA (OSC), this must be detailed in the RAMS and 2 technicians must attend.*



5. Change Control

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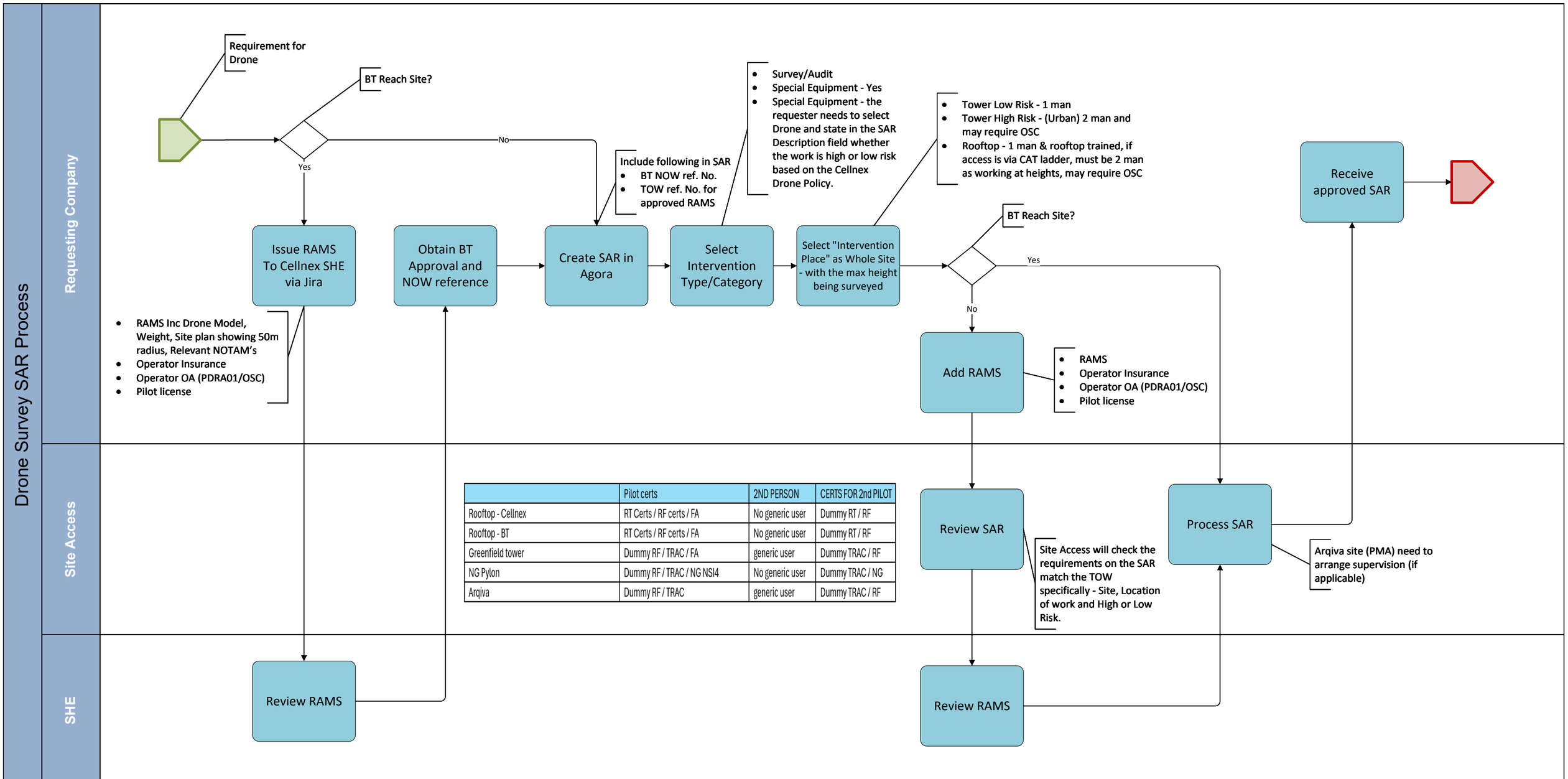
6. Appendix 1 - Drone Survey Site Access Request (SAR) Process Flow



	Pilot certs	2ND PERSON	CERTS FOR 2nd PILOT
Rooftop - Cellnex	RT Certs / RF certs / FA	No generic user	Dummy RT / RF
Rooftop - BT	RT Certs / RF certs / FA	No generic user	Dummy RT / RF
Greenfield tower	Dummy RF / TRAC / FA	generic user	Dummy TRAC / RF
NG Pylon	Dummy RF / TRAC / NG NSI4	No generic user	Dummy TRAC / NG
Arqiva	Dummy RF / TRAC	generic user	Dummy TRAC / RF