

An effective combination of Telecoms and Drones



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Coordinator

Agenda

- 1. Intro
- 2. Scope
- 3. Exploitation of Drones in Telecoms
- 4. Projects Delivery

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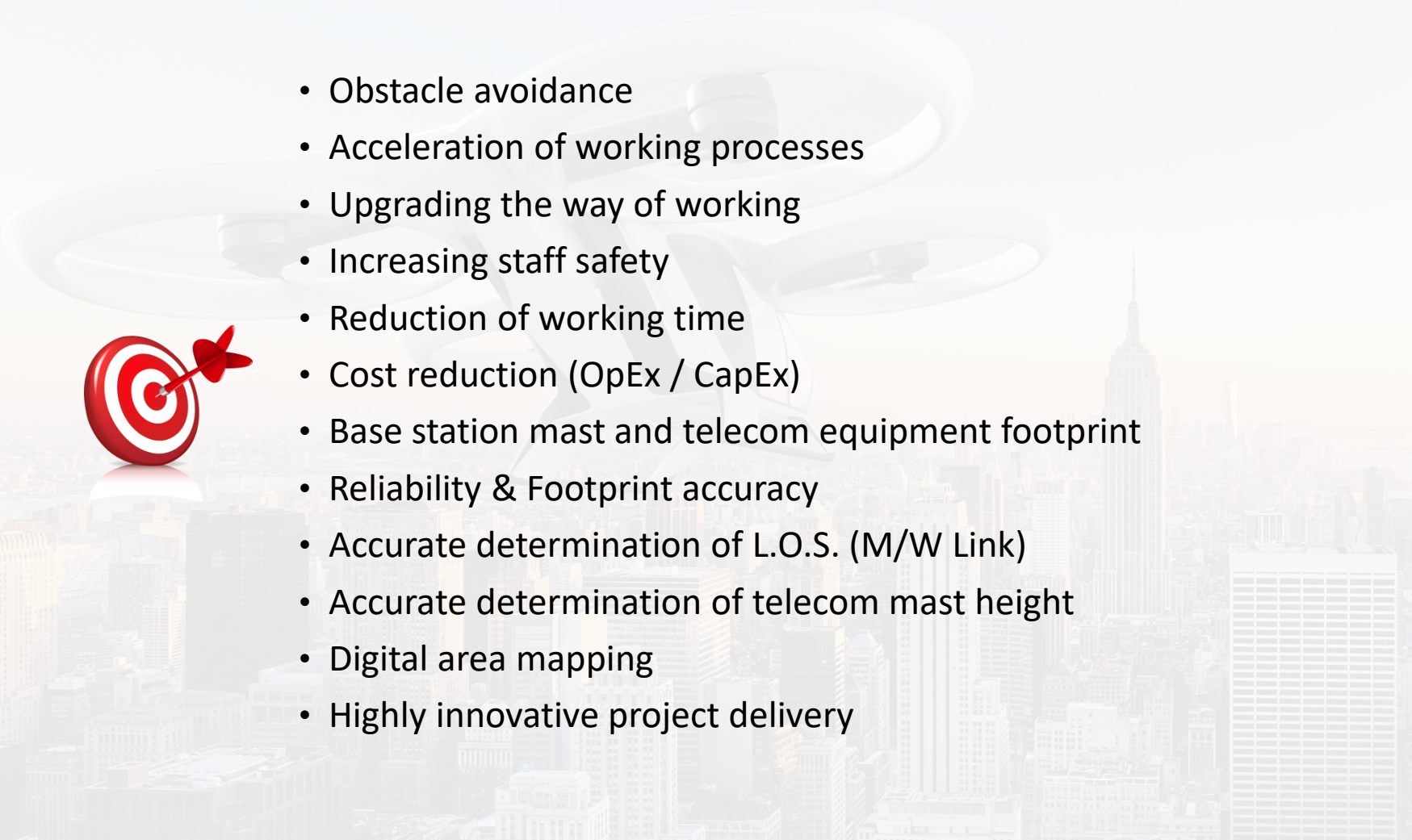
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1. Intro



2. Scope

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- Obstacle avoidance
 - Acceleration of working processes
 - Upgrading the way of working
 - Increasing staff safety
 - Reduction of working time
 - Cost reduction (OpEx / CapEx)
 - Base station mast and telecom equipment footprint
 - Reliability & Footprint accuracy
 - Accurate determination of L.O.S. (M/W Link)
 - Accurate determination of telecom mast height
 - Digital area mapping
 - Highly innovative project delivery

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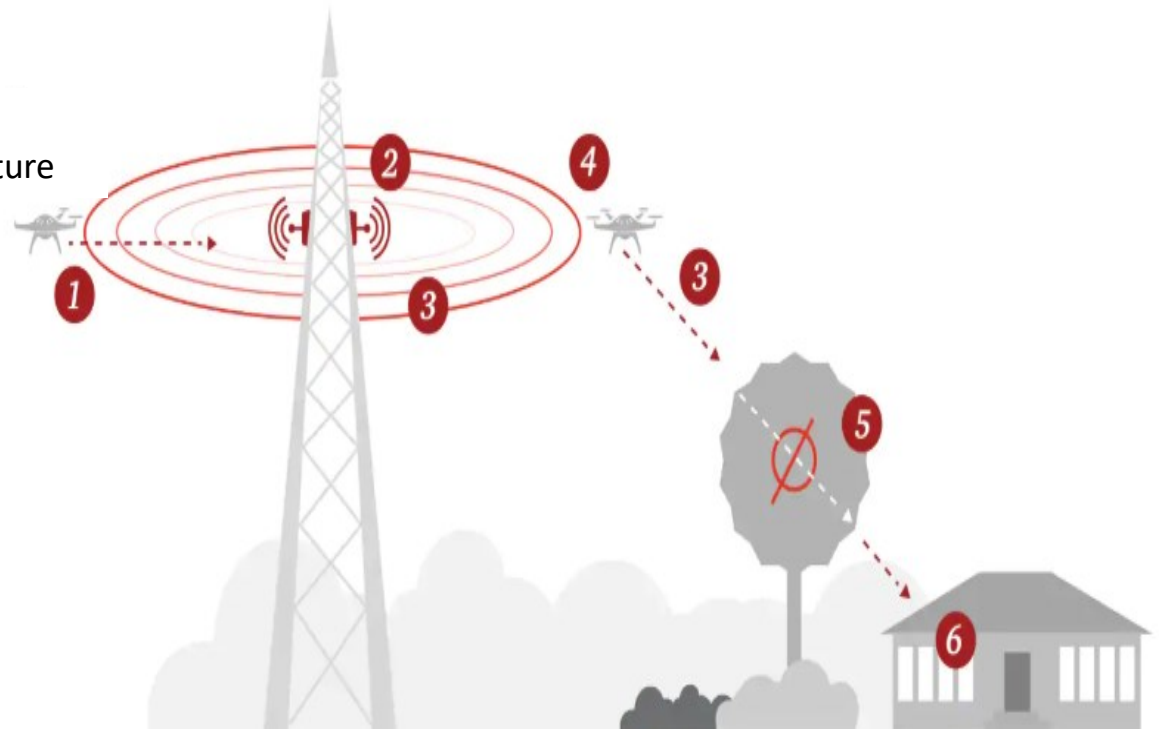
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3. Exploitation of Drones in Telecoms

- 1 Identification of devices installed on masts by drone operation
- 2 Devices installed on telecommunications infrastructure
- 3 Radio signal
- 4 Recipient of signal
- 5 Creation of map showing topography around mast
- 6 Obstacle interrupt connectivity between mast and recipient



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4. Projects Delivery

Site Survey Reports



- **Obstacle avoidance, Panoramic photos from any altitude**
- **Radio-planning, L.O.S testing**
- **Great accuracy in mast height prediction**

Remote Site Survey Reports



- **In cases of no road access**
- **Staff safety**
- **Reduction of working time**

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4. Projects Delivery

Radio Cover. Measurements



- Perform radio coverage measurements at any height (Cell Edges , Cell size, Handovers)
- Stadiums, Big facilities, High Buildings
- 3D antenna radiation pattern

3D Mapping / Tower Inspections



- Create accurate & high-resolution maps, reports and 3D models of buildings, masts, telecom infrastructure
- Tower inspections / Damage Prediction
- Staff safety / Cost Reduction

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4. Projects Delivery

Digital Mapping



- F.T.T.x Site Surveys (2D Orthomosaics, 3D models of Cities / Villages)
- Digital maps from aerial images

E.M.F. Measurements



- Precise measurements
- Radiation maps at any height
- Reduction of working time

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4. Projects Delivery

Cell On Sky Mobile Operation



- First flying 3G Base Station on a Drone (Autonomous)
- Disaster Response / Recovery
- Search & Rescue

C.O.S.M.O. (v2)



- Flying Base Station on a Drone – 2G, 4G & 5G Done, Wi-Fi to be planned
- Tethered Station / Micro antennas
- Disaster Response / Recovery

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...“sky is not the limit”...

Thank You