background

Digitalization creates new demands

Sustainable cities

Secure future jobs

Strengthen the innovation region

overall aims

Urban ICT Arena

Urban ICT Arena

We do things together or not at all

URBAN

&

Growing a not boring knowledgebase

NOT BORING

Urban ICT Arena doesn't run any projects

Urban ICT Arena

We do things together or not at all

Quadruple helix - Academia-Industry-Public-Citizens

Growing a not boring knowledgebase

Urban ICT Arena doesn't run any projects

URBAN & NOT BORING

We do things together or not at all

All partners are involved in all parts of Urban ICT Arena

Quadruple helix - Academia-Industry-Public-Citizens

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Urban ICT Arena

We do things together or not at all
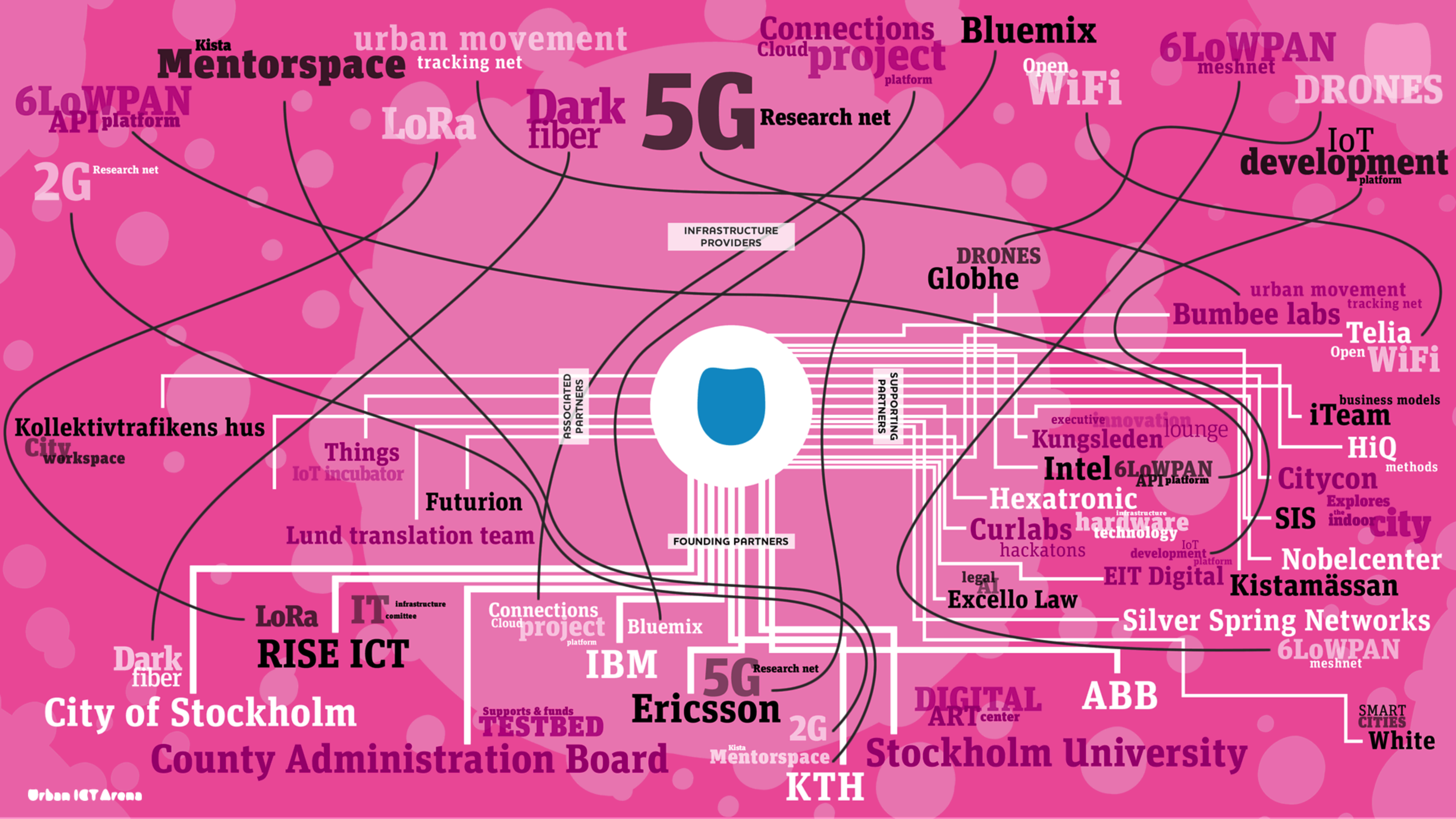
All partners are involved in all parts of Urban ICT Arena

Win-win-win-win-win-win-win.....

Quadruple helix - Academia-Industry-Public-Citizens

Growing a not boring knowledgebase

Urban ICT Arena doesn't run any projects

Urban ICT Arena

Kista Mentorspace
urban movement tracking net
Connections Cloud project platform
Bluemix
Open WiFi
6LoWPAN meshnet
DRONES
6LoWPAN API platform
LoRa
Dark fiber
5G Research net
IoT development platform
2G Research net
INFRASTRUCTURE PROVIDERS
DRONES
Globhe
urban movement tracking net
Bumbee labs
Telia Open WiFi
ASSOCIATED PARTNERS
SUPPORTING PARTNERS
business models
iTeam
Kollektivtrafikens hus
City workspace
Things IoT incubator
executive innovation lounge
Kungsleden
Intel
6LoWPAN API platform
HiQ methods
Citycon
Futurion
Hexatronic infrastructure hardware technology
SIS
Explores the indoor city
Lund translation team
Curlabs hackatons
IoT development platform
Nobelcenter
FOUNDING PARTNERS
legal AI
Excello Law
EIT Digital
Kistamässan
LoRa
IT infrastructure comittee
Connections Cloud project platform
Bluemix
Silver Spring Networks
Dark fiber
RISE ICT
IBM
5G Research net
6LoWPAN meshnet
City of Stockholm
Supports & funds TESTBED
Ericsson
2G
DIGITAL ART center
ABB
County Administration Board
Kista Mentorspace
Stockholm University
SMART CITIES White
KTH

Urban ICT Arena

Signed & ready for approval Q1 2018:

White Arkitekter – How do we use ICT for supporting the smart city?
Fastighetsägarna i Stockholm – Use drones for roof and facade inspection.
Nobina Tech – AUTOPILOTEN. Hardware and software layer.

On the way in Q1 2018:

SLL – Will explore how future mobility in sustainable and connected cities can be devloped.
DigiNordix – A LoRa WAN company that will provide open real time data. Hard- and software layer.
Capgemini – Interested in contributing & explore the Automagic City with partners & project owners. Business Model layer.
Tele2 – Would like to develop and show case artistic and smart street ligths. Hardware layer
WSI – Would like to bring startups to the testbed for development of smart hardware solutions.
Smart Built Environment – Would like to use the testbed for projects. Service layer
Driwe Sweden – Would like to use the testbed for projects. Service layer
Nobina Tech – Would like to be a strategic part of the testbed. Hardware layer
IVL – Would like to be a part of the development of the sustainable and connected city. Business layer
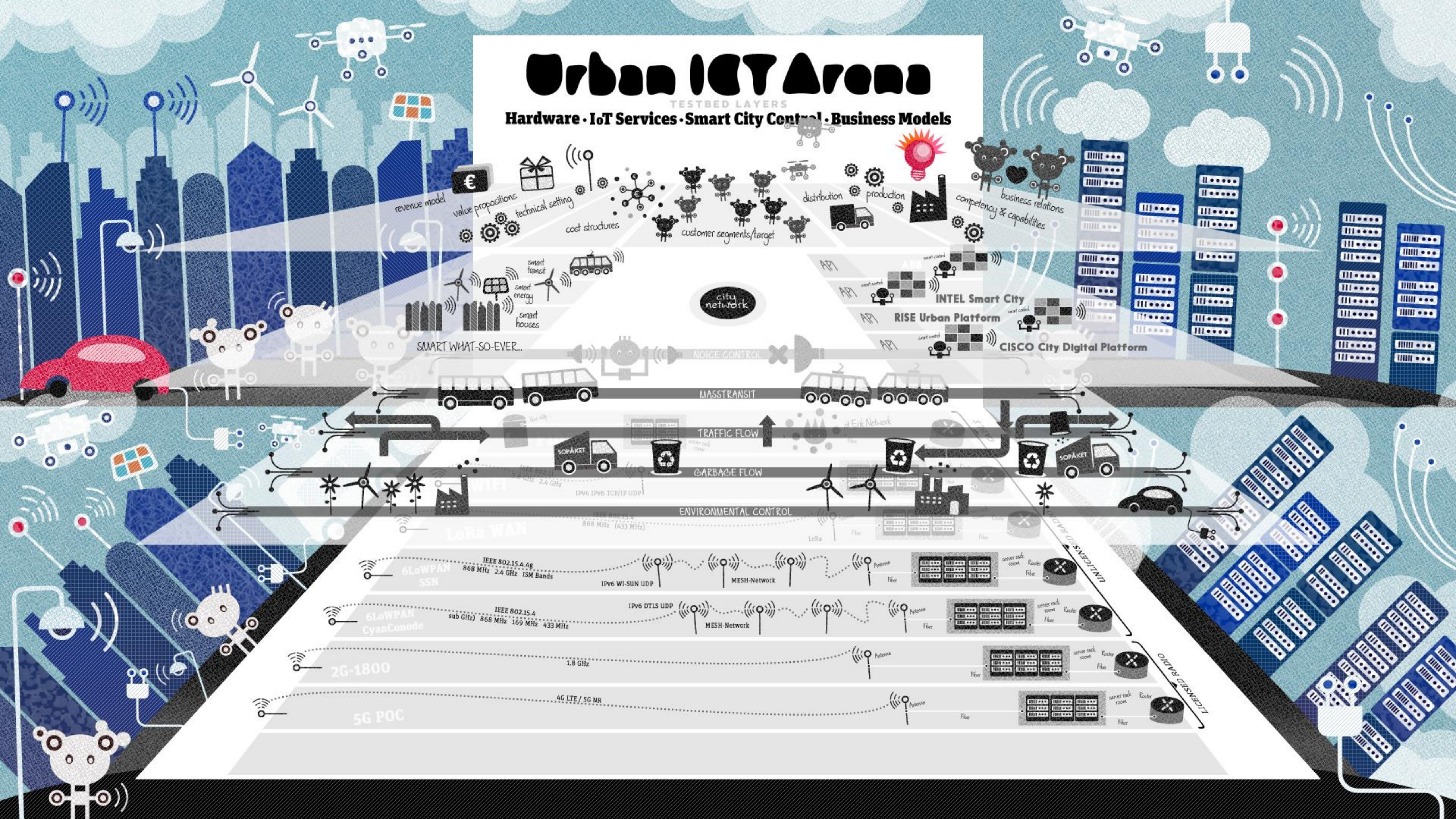**Stockholmsmässan** – Would like to be a part of the co-creation arena. Service layer
IT & Telekomföretagen – Would like to be a strategic partner and explore new business models.

Urban ICT Arena

TESTBED LAYERS

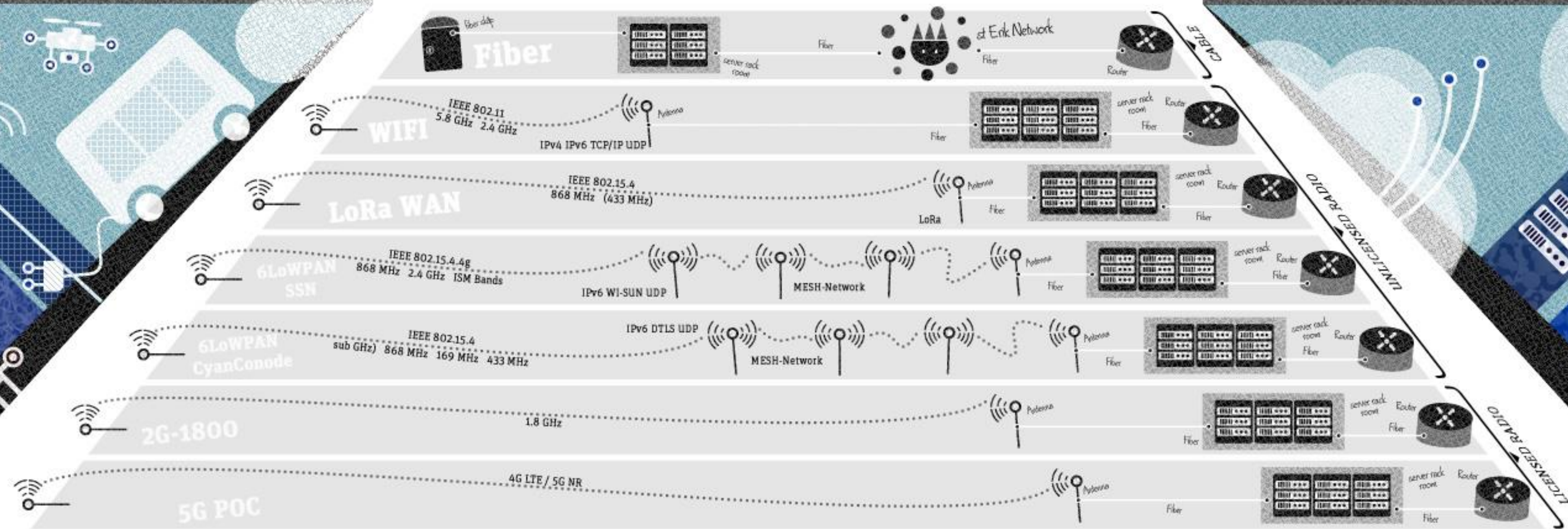### Hardware · IoT Services · Smart City Control · Business Models

revenue model · value propositions · technical setting · cost structures · customer segments/target · distribution · production · competency & capabilities · business relations

API · ABB · INTEL Smart City · RISE Urban Platform · CISCO City Digital Platform

smart control

smart transit · smart energy · smart houses

SMART WHAT-SO-EVER... · city network · NOICE CONTROL

MASSTRANSIT

TRAFFIC FLOW

GARBAGE FLOW · SOPÅKET

ENVIRONMENTAL CONTROL

WIFI · 5 GHz 2.4 GHz · IPv4 IPv6 TCP/IP UDP

LoRa WAN · IEEE 802.15.4 · 868 MHz (433 MHz) · LoRa

6LoWPAN SSN · IEEE 802.15.4.4g · 868 MHz 2.4 GHz ISM Bands · IPv6 WI-SUN UDP · MESH-Network · Antenna · server rack room · Router · Fiber

6LoWPAN CyanConode · IEEE 802.15.4 · sub GHz) 868 MHz 169 MHz 433 MHz · IPv6 DTLS UDP · MESH-Network · Antenna · server rack room · Router · Fiber

2G-1800 · 1.8 GHz · Antenna · server rack room · Router · Fiber

5G POC · 4G LTE / 5G NR · Antenna · server rack room · Router · Fiber

UNLICENSED RADIO · LICENSED RADIO

Urban ICT Arena
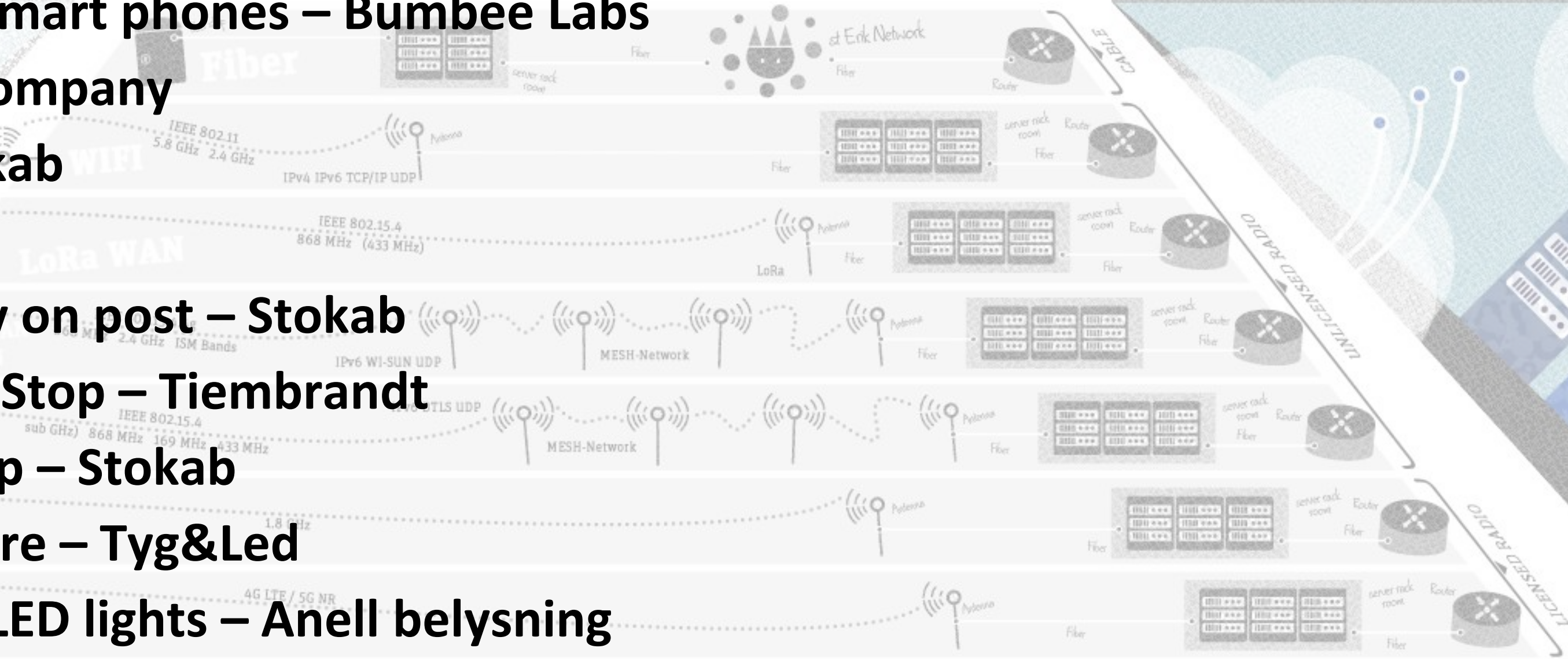## TESTBED LAYERS

Hardware

1. Fiber line with 15 stations – Stokab
2. LoRa WAN– RISE ICT/Acreo
3. 2G Open IP wireless network- KTH
4. 5G POC-Kista Ericsson
5. 5G POC Hägerstalund - Ericsson
6. 6LoWPAN - Intel/CyanConnode
7. WiFi Urban ICT Arena - Telia Company
8. 6LoWPAN - Silverspring
9. Grow Smarter comes to Urban ICT Arena – Enviroment Department
10. Kista Mobility Week –Ericsson, Nobina Tech, KTH, KSCAB
11. Hardware for positioning smart phones – Bumbee Labs
12. Narrow band IOT – Telia Company
13. Fiber between posts – Stokab
14. Hybrid cable – Hexatronic
15. Magnet ODF, Plug and play on post – Stokab
16. Digital design for New Bus Stop – Tiembrandt
17. How to retrofit old bus stop – Stokab
18. ODF contact surface for fibre – Tyg&Led
19. Develop neural control of LED lights – Anell belysning
20. Smart street lights with remote control system – S:t Erik Communication and Traffic Administration
21. Test of electronic boxes & wells with sensors that detects opening – St:Erik Communications & Stokab
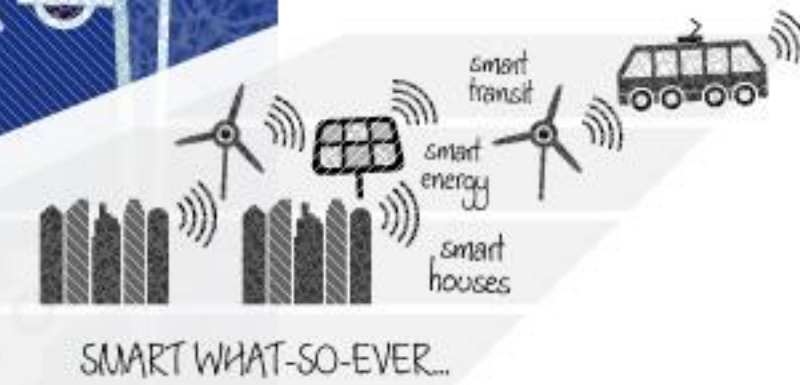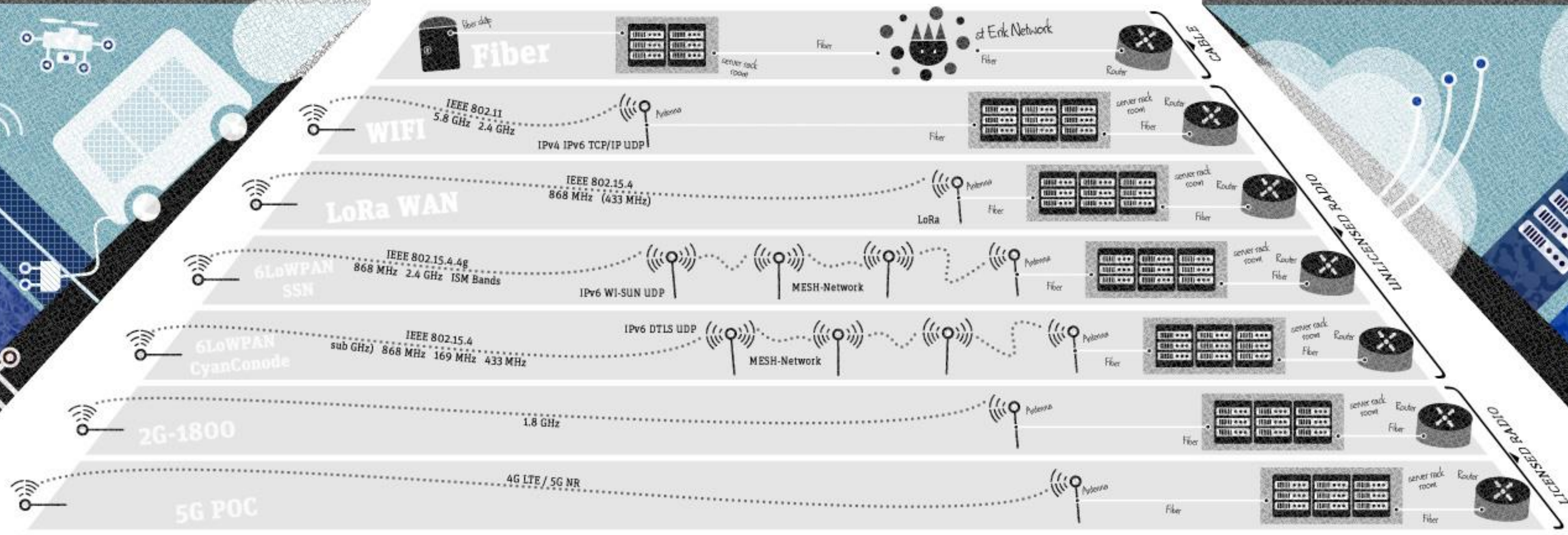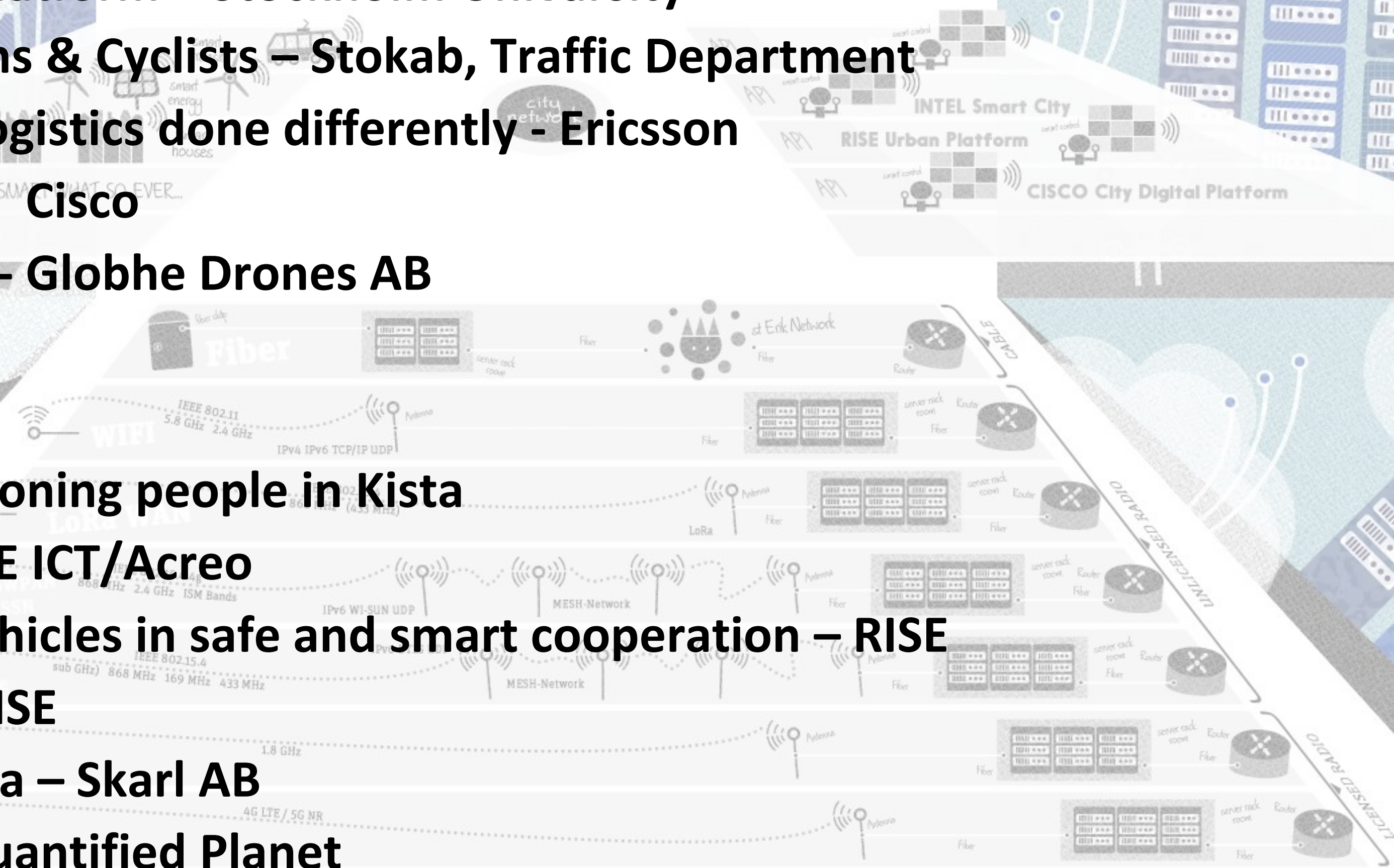
Urban ICT Arena
TESTBED LAYERS

Smart City Control

1. Real-Time Analytics & Feedback for Out-Of-Home Digital Signage – SarvAI, Ericsson
2. From prototype to MVP – Map projekt
3. Smart and Connected Archives – Stockholm City Archives
4. Connected Busstop – Ericsson/Stokab
5. MediaSence Digital Platform – Stockholm Univarsity
6. Measuring Pedestrians & Cyclists – Stokab, Traffic Department
7. Urban mobility and logistics done differently - Ericsson
8. City Digital Platform - Cisco
9. No Boring Drone Lab - Globhe Drones AB
10. Bluemix – IBM
11. Watson - IBM
12. Bumbee Labs – Positioning people in Kista
13. Urban Platform – RISE ICT/Acreo
14. Bicycles and other vehicles in safe and smart cooperation – RISE
15. Platform analysis – RISE
16. Streaming sensor data – Skarl AB
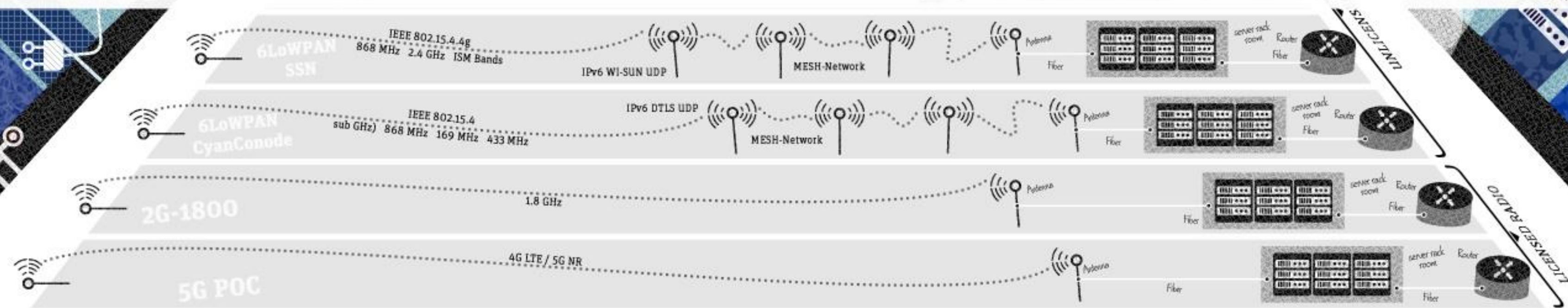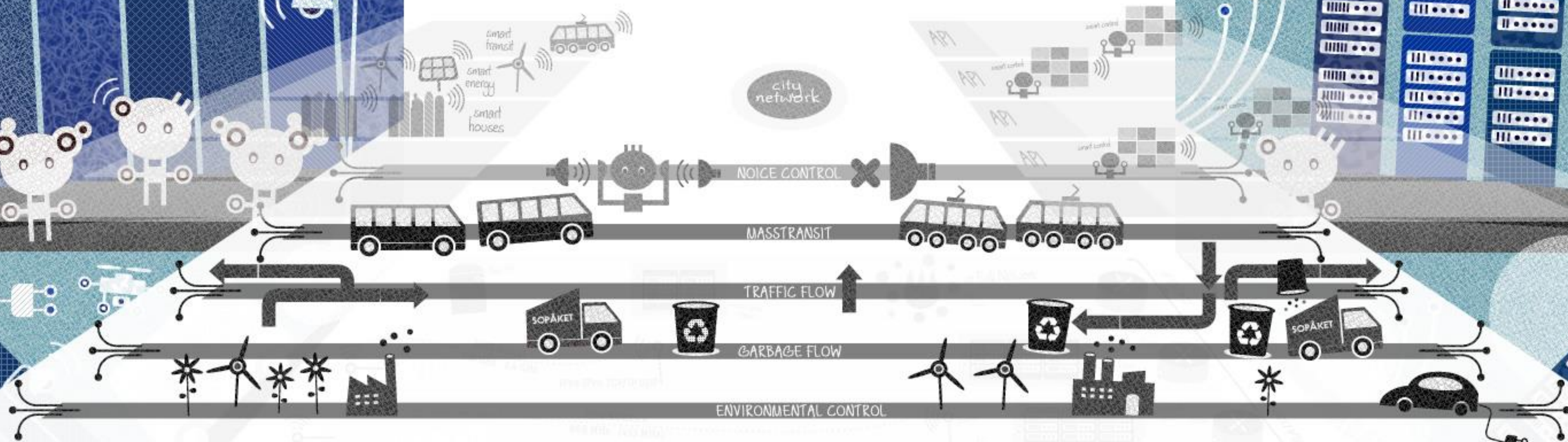17. Global Goals Lab – Quantified Planet

Urban ICT Arena
TESTBED LAYERS

IoT Services

city network

smart transit
smart energy
smart houses

API

NOICE CONTROL

MASSTRANSIT

TRAFFIC FLOW

GARBAGE FLOW

ENVIRONMENTAL CONTROL

SOPÅKET

6LoWPAN SSN — IEEE 802.15.4.4g 868 MHz 2.4 GHz ISM Bands — IPv6 WI-SUN UDP — MESH-Network — Antenna — server rack room — Router — Fiber

6LoWPAN CyanConode — IEEE 802.15.4 sub GHz) 868 MHz 169 MHz 433 MHz — IPv6 DTLS UDP — MESH-Network — Antenna — server rack room — Router — Fiber

2G-1800 — 1.8 GHz — Antenna — server rack room — Router — Fiber

5G POC — 4G LTE / 5G NR — Antenna — server rack room — Router — Fiber

UNLICENS

LICENSED RADIO

1. Sjyst data! – RISE ICT, SCB, Bumbee Labs, KSCAB
2. Integration of CargoBeacon to existing logistic processors– CargoBeacon, Gränges, Edsbyn
3. Video QoE in mobile networks – Agama, Ericsson
4. Expert cleaning of water surfaces – Surfcleaner, Tekniska Verken
5. Legal AI – InnovationSpark AB, IBM
6. Scorecard for monitoring QoE for digital services – Procera, Ericsson
7. Streaming sensor data – Skarl AB
8. Not Boring 5G Bike – Urban ICT Arena/Ericsson/Kista Mentorspace
9. Get hacked on demand by Bounty Kaiser – Stockholm University
10. Data collection for Global Goals – Quantified Planet
11. Sensor data from rooms – RISE Acreo
12. All you need is love –Ericsson Katzeff
13. AUTOPILOTEN – Nobina Tech, Ericsson, KTH, Klövern, SJ, KSCAB
14. GCity – Stockholm University
15. Kista Mobility Week – Ericsson, KTH, Nobina Tech

Urban ICT Arena
TESTBED LAYERS
Business Models

1. NotBoring ILS Workshop – IQ Samhällsbyggnad
2. Disrupt large organizations for digital transformation – RISE ICT
3. Open Innovation for Industry Process development – TEYI, KSCAB
4. New business models for commercial screens on bus stop – Clearchannel
5. Test and analyze commercial surfaces on bus stop – Public Transportaion of Stockholm
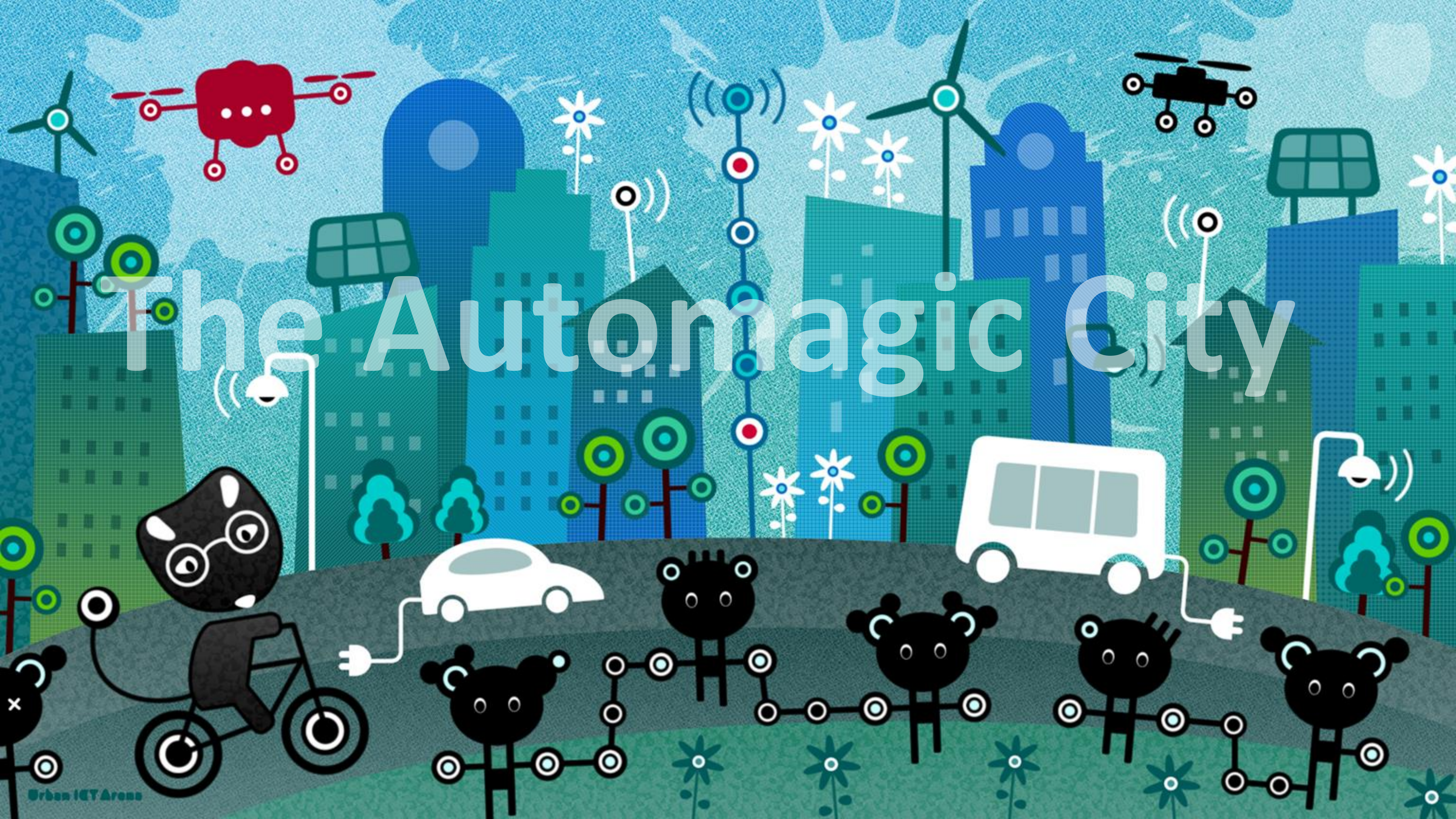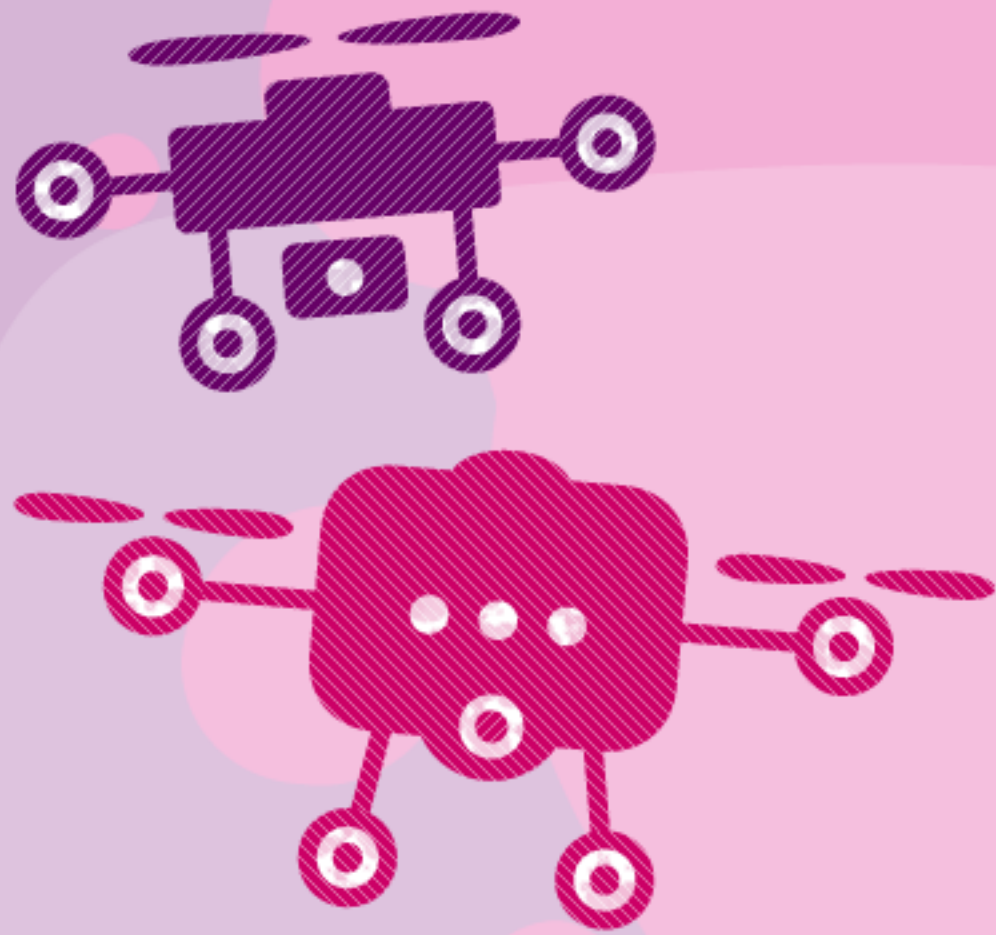
The Automagic City

SMART**SPECIALIZATION**

Sustainable & Connected City

Drones

Sensors

images

sounds

Cyber Security

Drone usecases

- Smoke plyme analysis
- Find lost people
- Parking servailance
- Find a parking lot
- Evacuation support – find lost people and guide to exit
- Inspection tool – high altitude technology & vegetation
- Air particle metering on high altitude
- Transport of blood & organs
- Mapping
- Pollination
- Micro mobility vehicle
- Mobile periscope – surrounding support

Welcome
to Urban ICT Arena

and to be not boring with us