

## Woodrock Newsletter – June 2019

Dear Woodrocker

Our long awaited planning for CAMERAS IN OUR AREA is coming to fruition – and for the near future CCJ have only one evening available for us – namely **MONDAY 24<sup>th</sup> JUNE 2019.**

The meeting will thus take place at CCJ Woodmead in the **KINGFISHER Room** (downstairs) at 18.00hrs – and is expected to last until 20.00/20.30hrs latest.

**PLEASE MAKE EVERY EFFORT TO BE THERE !!!**

Attached please find the Proposal from VumaCam for:

- **OVERVIEW CAMERAS** (for the streets)
- **STANDARD LPR CAMERAS** (Licence Plate Recognition for the entry/exit points . . . i.e. “Boom areas”)
- **THERMAL CAMERAS** (for our perimeters)

In addition there is the Proposal from 24/7 Security for:

- **MONITORING** of all cameras on a 24 hour basis.

Both VumaCam and 24/7 Security shall present these Proposals formally via Powerpoint to the Residents and be there to answer all the questions that will arise.

You may wish to bring specific pages of the attached in hardcopy format with you to the meeting for your own convenience.

### **WHY CAMERAS? WHY VUMACAM?**

We have Vuma Fibre throughout the area – having agreed in general meeting in 2016 to supply EVERY HOUSEHOLD IN THE AREA with a fibre-optic point at their boundary.

In addition VumaCam now offers a large network so that every area can contribute in a meaningful manner to the fight against crime in the Northern Suburbs of Johannesburg.

Cameras and ‘high-tech’ options is the way to go in fighting crime in the future.

### **CRIME:**

Although Woodrock is historically a low-crime area, we continually experience invasions along our Highway perimeter – and the greenbelt of CCJ needs to be supported with more than simple household fencing.

Crime (Residential burglaries, attempted burglaries and residential robberies) that we have recently experienced is January 2; February 0; March 2; April 2; May 3; June 7 = 16 incidents.

### **FINANCIAL IMPLICATION**

Should we accept this solution, there is a possible **additional R54,500-00 per month** that we will need in expenditure.

#### Background:

Homes in gated complexes : 351 of which 206 currently contribute towards the WKRRRA. Current fees due are R220 per month.

Stand-alone Homes: 129 of which 61 currently contribute towards the WKRRRA. Current fees due are R330 per month.

**TOTAL Homes in Woodrock: 480 of which 267 currently contribute (varying amounts – not necessarily the above).**

Current average Monthly INCOME: R70,300-00

Current average Monthly EXPENSES: R78,150-00

All Financial details are available monthly on our Website [www.woodrock.co.za](http://www.woodrock.co.za), including names/addresses of those residents and complexes that do contribute.

We apologise for the late notice of this meeting, but were only able to have confirmation of a venue this week. All residents have been aware of the preliminary negotiations taking place between WKRRRA and VumaCam / 24-7 Security, so this meeting comes as no surprise.

We sincerely trust we will see everyone at this VERY IMPORTANT MEETING, so that we can move ahead with plans to better protect our neighbourhood.

Kind regards

Wendy M. Robertson  
Director - WKRRRA  
Woodmead Khyber Rock Residents Association  
P.O. Box 2719, Rivonia, 2128  
email: [info@woodrock.co.za](mailto:info@woodrock.co.za)  
Facsimile: 086.691.6198  
Mobile: 083.700.2401

# WOODMEAD & KHYBER ROCK RESIDENTS ASSOCIATION

## RESIDENTS MEETING

to consider the installation of CAMERAs in our PUBLIC SPACE

VENUE: KINGFISHER ROOM (Downstairs), Country Club Johannesburg, WOODMEAD

TIME/DATE: Monday 24<sup>th</sup> June, 2019 at 18.00hrs (Meeting to close by 20.30hrs latest)

## AGENDA

- 1 Signing & Completion of Attendance Register upon Entry
- 2 Welcome and Introduction of presenters
- 3 Background to the WKRRRA decision to investigate CAMERAS in our Public Space
- 4 Presentation by VumaCam on proposed layout and solutions for varying sites
- 5 Presentation by 24-7 Security on the Monitoring Aspect of the Cameras
- 6 Questions from floor regarding the above.
- 7 Financial Implications relative to WKRRRA / fees required from residents.
- 8 Open discussion around finances / questions from floor.
- 9 Decision on way forward – i.e. the ACCEPTANCE or REJECTION of this Proposal
- 10 GENERAL (time permitting).

# PROPOSAL



## Johannesburg

PO Box 1229, Highlands North, 2037  
8 Philo Road, Wynberg, Sandton, Johannesburg  
Tel: 011 444 2237, Fax: 011 444 2238

## Tshwane

PO Box 1229, Highlands North, 2037  
1024 Pretorius Street, Hatfield, Pretoria  
Tel: 012 451 8600, Fax: 012 342 7750

## KwaZulu-Natal

PO Box 1229, Highlands North, 2037  
Mobeni, Durban  
Tel: 0861 247 SEC (732)

[info@24-7security.co.za](mailto:info@24-7security.co.za)

**011 444 2237**   
[www.24-7security.co.za](http://www.24-7security.co.za) 





PRIVATE & CONFIDENTIAL

0800 00 21 26



011 444 2237

www.24-7security.co.za



Khyber Rock Public space monitoring solution **Option Two**



24/7 SMART SURVEILLANCE SOLUTION AND BILLING		TOTALS	
<b>EVENT BASED &amp; PRO-ACTIVE REMOTE OFF-SITE MONITORING</b>			
-	Event based CCTV monitoring		
-	Pro-active monitoring		
-	Daily system summary report		
-	System management		
-	15 Overview Camera's	R	10 000,00
-	7 LPR Cameras		
<b>Subtotal</b>		R	10 000,00
VAT 15%		R	1 500,00
<b>Total</b>		R	11 500,00



# Khyber Rock Public space monitoring solution **Perimeter**



24/7 SMART SURVEILLANCE SOLUTION AND BILLING		TOTALS	
<b>EVENT BASED &amp; PRO-ACTIVE REMOTE OFF-SITE MONITORING</b>			
- Event based CCTV monitoring			
- Pro-active monitoring			
- Daily system summary report			
- System management		R	4 000,00
- 6 Overview Camera's			
<b>Subtotal</b>		R	4 000,00
<b>VAT 15%</b>		R	600,00
<b>Total</b>		R	4 600,00

## TERMS

All prices are valid for 30 days after date of quotation.

A 50% deposit is required with order and the balance of the price will be due on the completion of the installation.

1. Installation C.O.D. on completion
1. Subject to signing of our standard service agreement
2. Payment monthly in advance
3. Errors & Omissions excluded
4. Client is responsible for electrical reticulation, shelter and ablation
5. Please refer to our company profile for more information on: alarms, armed response, CCTV, electric fencing and security officers
6. Please be advised that should any existing equipment be found faulty, this will be quoted on separately
7. Lightning strike: only once the system is powered up can any further damage be assessed. Damaged/faulty parts will be quoted on separately
8. Please be advised that we reserve the right to inspect/survey the premises before acceptance of the contract, posting of officers or installations
9. 24/7 Security Services reserves the right to perform a credit clearance check on all new, existing and potential clients

On behalf of:



LEE-ROY WYMAN  
CCTV OFF-SITE MONITORING SPECIALIST  
TEL 011 444 2237  
FAX 011 444 2238  
MOBILE 081 046 1356  
EMAIL lee-royw@24-7security.co.za

**ACCEPTANCE:**

NAME AND SURNAME OF PERSON ACCEPTING: \_\_\_\_\_

NAME OF BUSINESS/BODY CORPORATE/OTHER: \_\_\_\_\_

POSSIBLE COMMENCEMENT DATE: \_\_\_\_\_

VUNFA



CAM



VUMACAM

# Khyber Rock- 24/7

June 2019

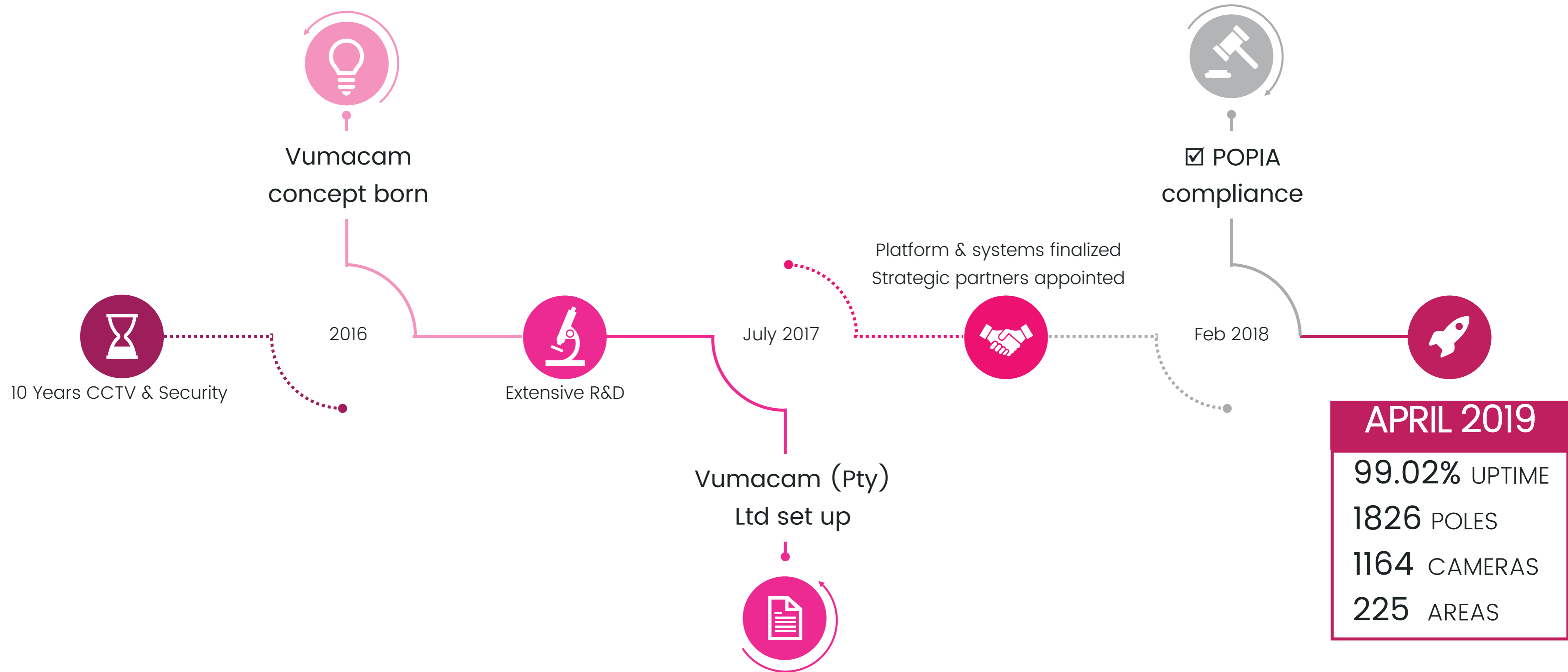
VUMACAM

# What is Vumacam?



**Vumacam provides a secure  
controlled access public space  
surveillance network for  
smarter, safer cities.**

# our history from the beginning

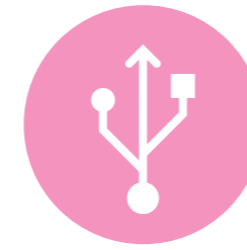


# VUMACAM benefits



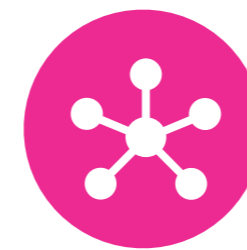
## No Capital Outlay

Infrastructure, maintenance, insurance, replacement kit, monitoring, technical environment, storage, support



## Reliable Feed

Consistent reliable feed, monitored for multiple points of failure



## Extensive Network Coverage

Reduced 'blind spots' of adjacent areas



## Secure and Compliant

POPIA and regulatory compliance, secure



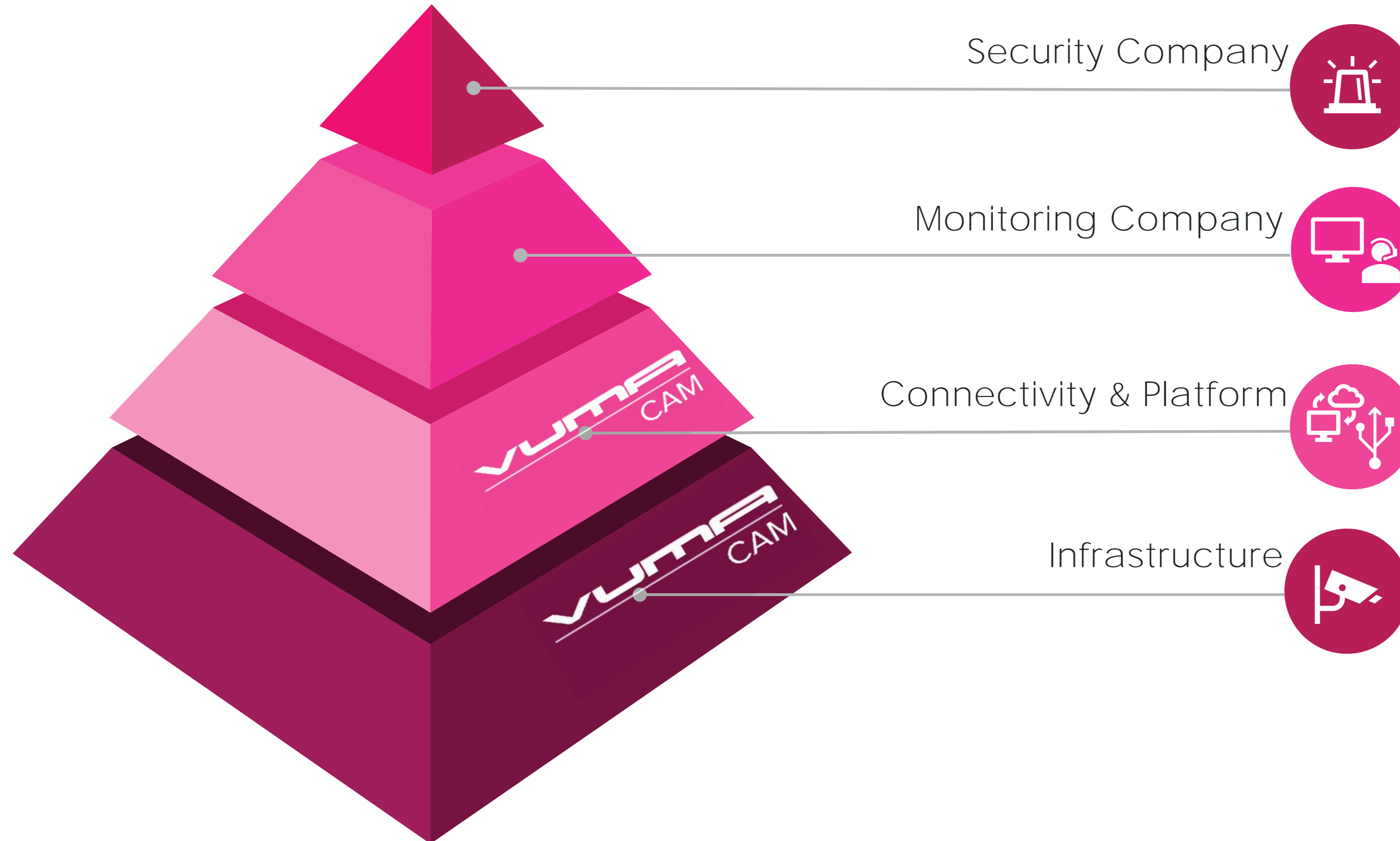
## SLA

Service Level Agreement with penalty/credit system





# VUMACAM relationships



VUMACAM

# why vumacam



## RESEARCH & DEVELOPMENT

~24 months of determining optimal specifications AND fine tuning model



## EXISTING ECONOMIES OF SCALE

Connectivity, Storage, Hardware, Preferential Partners



## CONNECTIVITY

Significant savings owing to strategic partners  
Fibre connectivity ensuring reliable, consistent feed



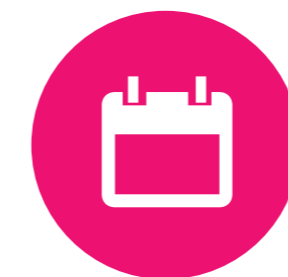
## STORAGE

Built & owned storage system, built to reduce cost per GB



## GRANULAR DETAIL

Considerations of all requirements based on existing client feedback = superior client value, service efficiencies & minimised costs



## INTRICATE UNDERSTANDING

Of optimal solution and maintenance cycles allows ability to provide assistance & support with establishing and maintaining 3<sup>rd</sup> party relationships



## UPTIME SLA

96% Commitment – Current 99.02%



## REGULATORY COMPLIANCE

Security, Privacy, Legal Acts carefully considered

# VUMACAM services



WHAT YOU GET	VUMACAM	TRADITIONAL	WHY THIS IS IMPORTANT
Guaranteed camera uptime	Yes, 96% minimum	Normally not monitored	Know when your cameras are down, and trust that they are working when you need them to be
SLA	Yes	No	Know what you are paying for at all times
Reporting on uptime	Yes	No	Know monthly what performance is, and how you are tracking to SLA. Be notified of any downtime so you don't only find out when an incident occurs that the camera is not working
Maintenance and fixes	Included – Strict turnaround times to adhere to 96% SLA uptime. Replacement stock always on hand. Dedicated maintenance teams.	Days or weeks – including extra cost for replacement of faulty equipment	Extra cost involved in repairing/replacing equipment. Time delay in repairing = camera down – ordering extra stock, reconfiguring, resuming service
Insurance	Yes – Included	At your cost	For injuries and replacement kit in a disaster
LPR network	Vast	Access to only your cameras	LPR functionality, integrated with multiple databases, across an extensive network, allowing access to vehicles of interest across the entire network
Storage of Feed	Secure storage in a tier3 datacentre, built specifically for CCTV feed, best price point	Local	Datacentre storage is accessible from any connection is not subject to interference and is secure and not at risk of local disturbance (NVR being stolen, broken)
Consideration for regulatory compliance (privacy, POPIA, impact on ongoing investigations)	Yes	Seldom	Ensures strict compliance and adherence to regulations and privacy concerns
Connectivity to the camera pole	Fibre	Various	Consistent, reliable feed, no interruptions, good bandwidth – ensures efficient throughput and dependable service
Connection redundancy/Firewalls/Security	Yes	?	Compliance and access security, redundant connectivity to data centre
Server and software solutions	Managed and monitored server environment Milestone = world class video management system	Disparate systems	integrates with chosen analytics software all in one view (no need to move from system to system)
Sensor in pole	Yes	?	Know when power is down, when the temperature will impact outcome, when a pole moves = impact view
Battery backup	Yes	?	If power to a pole goes down, buffer to address the issue before feed is lost
Research & Development	Continuous	No	Continually determining optimal specifications AND fine tuning model and solution
Technology upgrades	Included at no extra cost	Extra cost	As technology advances you want your solution to keep up to date, and not have to incur extra cost to keep abreast
Footage Requests	Portal for requests	Manual	Ease and regulatory compliance of retrieval increase efficiency and usability in court
Capital Outlay	No – monthly cost for access to feed	Yes	Do you want to have the headache of raising capital, owning equipment, maintaining kit, ensuring you have extra cash on hand to pay for replacement cost?

VUMACAM

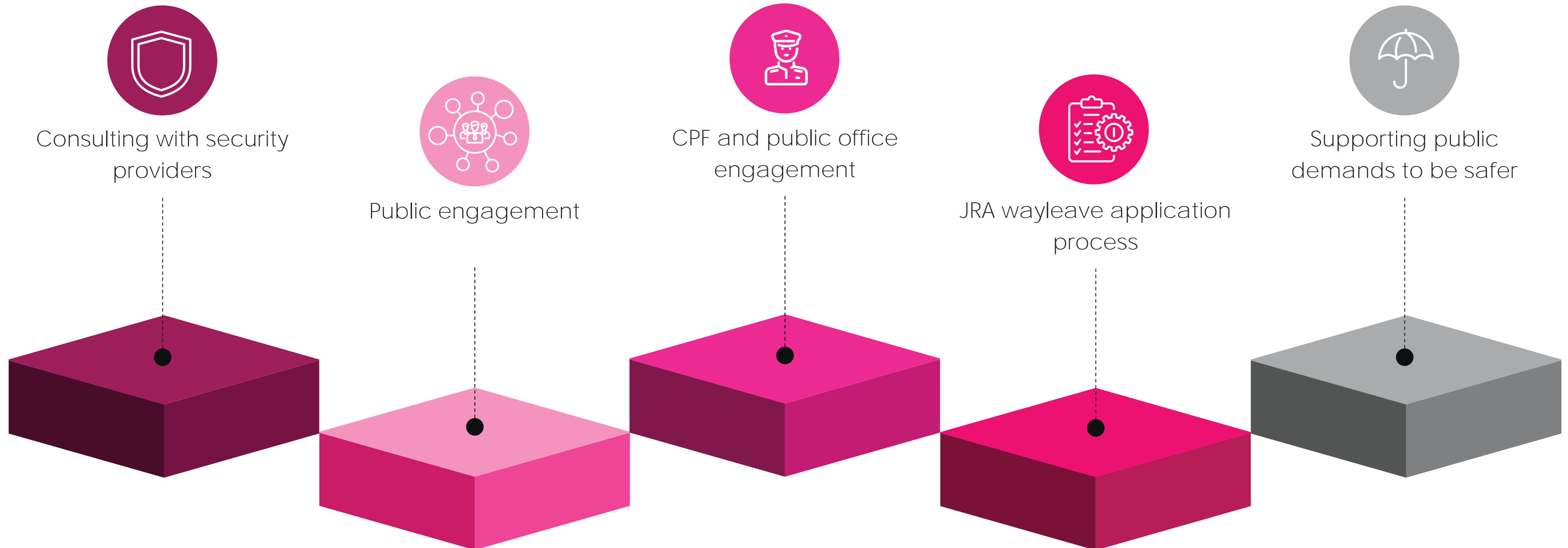
**deployment**



# VUMACAM rollout

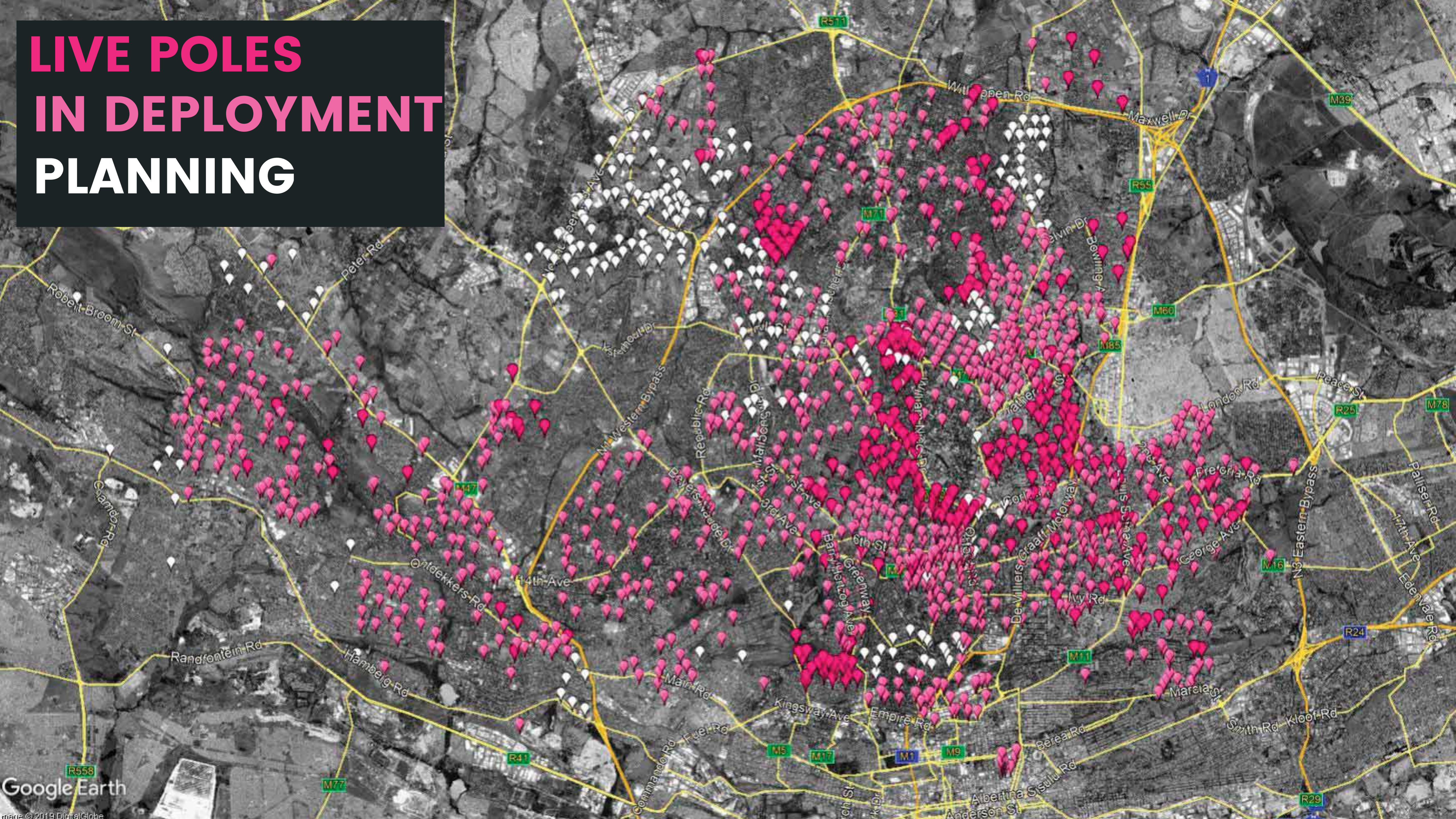


**Vumacam is currently deploying infrastructure across Johannesburg to enable to create safer smarter cities by driving collaboration between all stakeholders.**





# LIVE POLES IN DEPLOYMENT PLANNING





VUMACAM

# Khyber Rock-proposed solution

# Khyber Rock Internal proposed layout





VUMACAM

# Commercials



Mapped Solution – 36 Month Contract

- 15 OVERVIEW CAMERAS
- 7 STANDARD LPR CAMERAS
- 0 MULTI CHECK POINT LPR CAMERAS
- 0 THERMAL CAMERAS
- 8 POLES
- 30 DAYS STORAGE
- 96 % UPTIME SLA COMMITMENT

**R18 920**

Per month

*Excludes:*

- VAT
- Connectivity to Teraco
- Analytics

*Costing subject to full Site Survey being conducted and wayleave approval.*



# Khyber Rock Perimeter proposed layout





# Commercials



Mapped Solution – 36 Month Contract

- 6** OVERVIEW CAMERAS
- 2** STANDARD LPR CAMERAS
- 0** MULTI CHECK POINT LPR CAMERAS
- 6** THERMAL CAMERAS
- 5** POLES
- 30** DAYS STORAGE
- 96** % UPTIME SLA COMMITMENT

**R24 000**  
Per month

*Excludes:*

- VAT
- Connectivity to Teraco
- Analytics

*Costing subject to full Site Survey being conducted and wayleave approval.*

VUMACAM

# standard rate card





VUMACAM

**infrastructure & software**

VUMACAM

# the technology

...

Vumacam supplies high quality, high availability video management as a service. This is done by:





VUMACAM

# camera options



**HIKVISION**

## OVERVIEW

### 2 MP IR Vari-focal Bullet Network Camera

- 1/2.8" Progressive Scan CMOS
- 1920 × 1080 resolution
- 2.8 to 12 mm focal length
- Powered by Darkfighter
- H.265, H.265+, H.264+, H.264
- 120dB Wide Dynamic Range
- BLC/3D DNR/ROI
- IP67, IK10



**HIKVISION**

## ANPR

### 2MP ANPR Ultra-Low Light Bullet Camera

- 1/1.8" Progressive Scan CMOS
- 1920 × 1080 @ 60fps
- Ultra-low light
- IR and white light, optional
- Auto-iris, support P-iris (-P)
- Capture rate >99% (certain countries and regions)
- Recognition rate >98% (certain countries and regions)
- 120dB WDR



**HIKVISION**

## MULTI-CHECKPOINT

### 2MP Low Light Smart ANPR Unit

- DarkFighter ultra-low light License Plate Recognition\* technology • 1 / 1.8" progressive scan CMOS sensor
- Full HD 1080p, up to 25fps
- 120 dB WDR
- Full set of smart features
- Up to 50 m IR range
- Up to 32GB on-board storage
- 3 hanging IR LED lamps



**HIKVISION**

## LONG RANGE THERMAL

### Thermal Network Bullet Camera

- Recognition Range: ~250m
- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD < 40mk (@25°C, F#=1.0)
- Powerful behaviour analysis algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm



**HIKVISION**

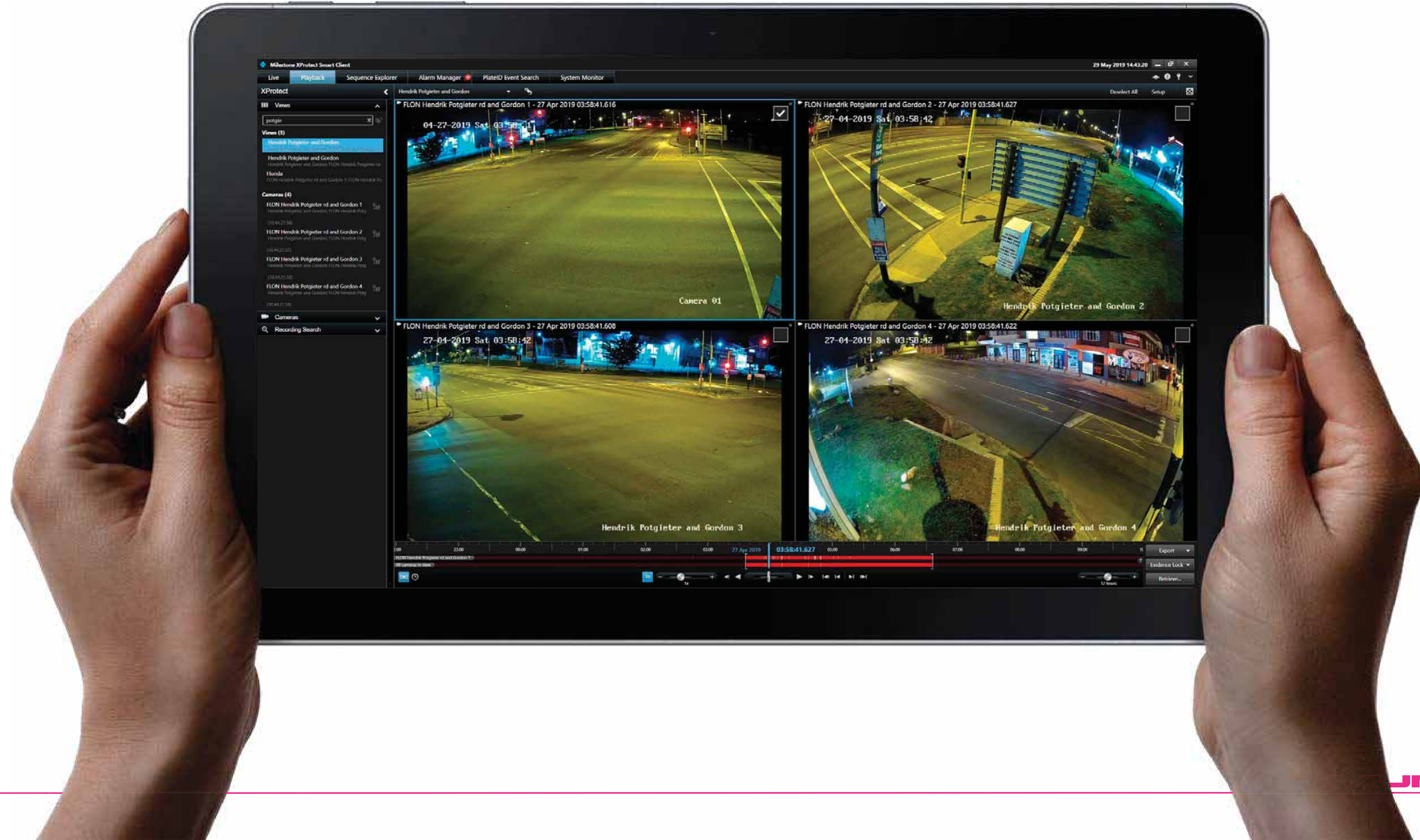
## SHORT RANGE THERMAL

### Thermal Network Bullet Camera

- Recognition Range: ~70m
- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD < 40mk (@25°C, F#=1.0)
- Powerful behaviour analysis algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm



# VUMACAM overview camera views





# VUMACAM licence plate recognition



**VUMA CAM ALERTS** Online

Alerts 338 Acknowledged Suppressed 6

- DV67MPGP** Apr 15 10:41:31  
WAV\_CAMP\_ATH\_7.2\_A\_5782\_V  
Level 1 Your Vehicle of Interest
- HG78FWGP** Apr 15 10:37:43  
CRA\_Nort\_and\_Som\_16.1\_A\_5750\_V  
Level 7 Your Vehicle of Interest
- HG78FWGP** Apr 15 10:36:06  
CRA\_Buck\_and\_Cla\_29.1\_A\_5805\_V  
Level 7 Your Vehicle of Interest
- CM94YFGP** Apr 15 10:34:56  
WAV\_DOUG\_ATH\_6.2\_A\_5876\_V  
Level 2 Your Vehicle of Interest
- DS38WGGP** Apr 15 10:33:11  
GLENH\_NOR\_QUE\_3.2\_A\_5712\_V  
Level 3 Your Vehicle of Interest
- CL09GHGP** Apr 15 10:32:40  
WAV\_LBOTH\_WAV\_5.2\_A\_5701\_V  
Level 1 Your Vehicle of Interest

**Compare** Copy Ashleigh Parry

South Africa > Sandton > Morningside > MORNS\_CENT\_EAST\_16

Hit on MORNS\_CENT\_EAST\_16.3\_A\_5918\_V

**VBB289-GP**  
Apr 15 10:00:34

**On Record** Suppress Case No. Suppress Plate Suppress Camera

**VBB289-GP**  
Apr 15 10:00:34

Case Number	Case Station	Crime Type
00154/04/2018	N/A	HIT AND RUN (LEAVING SCENE OF
Date of Offence	Data Sources	TO & Contact
2018-04-07T00:00:00	Metagrated	N/A
Reported By	Captured By	Level
Kjell Hoppenbrouwers	N/A	1
Comments	Actions	
N/A	N/A	
Make	Vehicle Type	
TOYOTA RUN X Unknown - pleas SEDAN/ HATC	N/A	
Model	Vehicle Features	
TOYOTA RUN X Unknown - pleas SEDAN/ HATC	N/A	

Wrong Car Remove  
Wrong Read Acknowledge



# VUMACAM network monitoring dashboard



### Nodes with Pending Problems

- telecomsdata.co.za has 1 alarm (20 minutes)
- AIWV\_LeGreg\_GR\_45.2\_T\_2437\_V has 1 alarm (3 days)
- AIWV\_LeGreg\_GR\_45.3W has 1 alarm (3 days)
- AIWV\_LeGreg\_GR\_45.1\_T\_0977\_V has 1 alarm (3 days)

### Nodes with Outages

- AIWV\_LeGreg\_GR\_45.2\_T\_2437\_V (3 days)
- AIWV\_LeGreg\_GR\_45.3W (3 days)
- AIWV\_LeGreg\_GR\_45.1\_T\_0977\_V (3 days)
- AIWV\_Phoenix\_39\_355 (2 months)
- AIWV\_ik\_ami\_East\_31\_6W (2 months)

### Business Services with Pending Problems

There are no pending problems.

### Applications with Pending Problems

There are no pending problems.

### Status Overview

Alarms  
790

Outages  
779

Legend: Normal (Green), Warning (Yellow), Major (Red)

### Availability Over the Past 24 Hours

Categories	Outages	Availability	Availability %
Categories	2 of 187	185	98.93%
Overview	2 of 427	425	99.53%
ANPR	0 of 217	217	100.00%
Thermal	2 of 18	16	88.89%
Switches	1 of 77	76	98.71%
Routers	0 of 9	9	100.00%
Servers	0 of 10	10	100.00%
<b>Total</b>	<b>5 of 823</b>	<b>818</b>	<b>99.28%</b>

Overall Service Availability: 99.28%

### Regional Status

Legend: Normal (Green), Warning (Yellow), Major (Red), Critical (Dark Red)

### Notifications

- You have 424 outstanding notices
- There are 3,009 outstanding notices
- On-Call Schedule

### Resource Graphs

Type the code label:

### KBC Reports

Type the KBC report name:

### Grafana Dashboards

- Aproria (LALPA)
- AREP (LPR BGL)
- Allesia (Recording 3)
- Allesia (Recording 1)
- Allesia (Recording 2)
- Server Dashboard
- Zeno (Management)

### Quick Search

Node ID:  Search

Node label like:  Search

TCP/IP Address like:  Search

Providing service:  Search

### Vumocom UPTIME REPORT ALL AREAS

AREA	Number of centers	MTTR (hours)	OUTAGE (hours)	OUTAGE %	AVAILABILITY %	SLA AVAILABILITY
ADOTS	3	4	33.3	154	96.45	99.46
AIWV	809	229.6	1004.3	139	98.01	99.43
BERG	3	0	0	0.00	100.00	100.00
BROD	2	0.29	0.36	0.03	99.97	99.97
BRAM	12	6412	59.77	0.01	99.99	99.97
BRAMV	2	1.41	0.84	0.08	99.92	99.92
BRUMA	3	0.07	45.92	212	97.97	97.97
BSRA	1	0.28	2.25	0.31	99.69	99.69
CHBLT	2	13	4.85	0.34	99.66	99.66
CSA	152	203.4	1055.03	151	99.89	99.84
CYRL	3	0.8	0.26	0.01	99.99	99.99
DPE	20	28.46	240.06	1.73	98.27	98.01
DUN	80	4280	7384.54	12.84	87.16	88.84
EVM	10	8.27	30.89	0.37	99.63	99.63

**SLA UPTIME\***  
**99.02%**

**APRIL 2019**



# VUMACAM client monitoring dashboard





Weather Fairland  
26.13°S 27.94°E 159km aot

Wed 4-24	Thu 4-25	Fri 4-26	Sat 4-27	Sun 4-28	Mon 4-29	Tue 4-30
19 °C	19 °C	21 °C	23 °C	22 °C	21 °C	22 °C
12 °C	12 °C	9 °C	9 °C	10 °C	11 °C	10 °C

2019-04-24  
**10:53:41**

### Camera Availabilites

All Camera Outages: **9**

Percentage Available: **98.5%**

Total Cameras: **618**

Overview Outages	Overview Camera Total
<b>6</b>	<b>383</b>
ANPR Outages	ANPR Camera Total
<b>3</b>	<b>223</b>
Thermal Outages	Thermal Camera Total
<b>0</b>	<b>0</b>

### Camera Outage List

Camera Name

- CRA\_Port\_and\_Cam\_37.1\_0\_9915\_V
- CRA\_Port\_and\_Cam\_37.2\_0\_0040\_V
- DUN\_East\_and\_Jan\_4.1\_A\_5761\_V
- DUN\_East\_and\_Jan\_4.2\_0\_9905\_V
- DUN\_Kent\_and\_Crad\_11.1\_A\_5680\_V
- DUN\_Kent\_and\_Crad\_11.2\_A\_5785\_V
- DUN\_Kent\_and\_Crad\_11.3\_0\_9961\_V
- DUN\_Kent\_and\_Crad\_11.4\_0\_9980\_V
- DUN\_Kent\_and\_Crad\_11.5\_0\_0045\_V

### Camera Outage List (cont)

No data to show



Weather Houghton Estate  
26.10°S 28.00°E 1081m aot

Tue 4-23	Wed 4-24	Thu 4-25	Fri 4-26	Sat 4-27	Sun 4-28	Mon 4-29
20 °C	20 °C	21 °C	23 °C	25 °C	24 °C	23 °C
12 °C	12 °C	12 °C	9 °C	8 °C	9 °C	11 °C

2019-04-23  
**15:34:52**

### Camera Availability

All Camera Outages: **6**

Percentage Available: **97.4%**

Total Cameras: **233**

Overview Outages	Overview Camera Total
<b>3</b>	<b>120</b>
ANPR Outages	ANPR Camera Total
<b>2</b>	<b>105</b>
Thermal Outages	Thermal Camera Total
<b>0</b>	<b>0</b>

### Camera Outage List

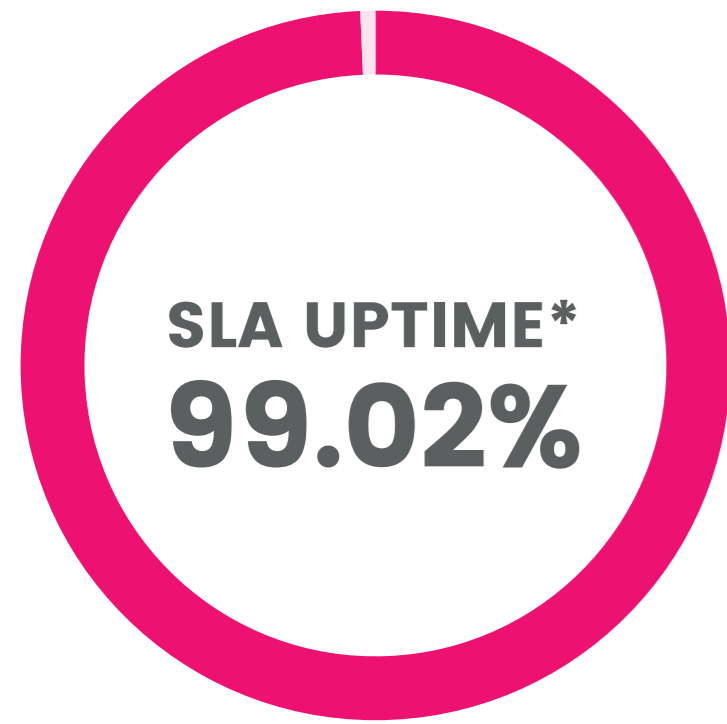
Camera Name

- NORW\_IVY\_LUCY\_3.1\_0\_0778\_V
- NORW\_IVY\_LUCY\_3.2\_A\_5851\_V
- WAV\_KNOX\_ATH\_4.1\_0\_9916\_V
- WAV\_KNOX\_ATH\_4.2\_A\_5640\_V
- WAV\_SCOT\_STIR\_1.1\_0\_1293\_V
- WAV\_SCOT\_STIR\_1.2\_M\_5407\_V

### Camera Outage List (cont)

No data to show

# UPTIME REPORT ALL AREAS

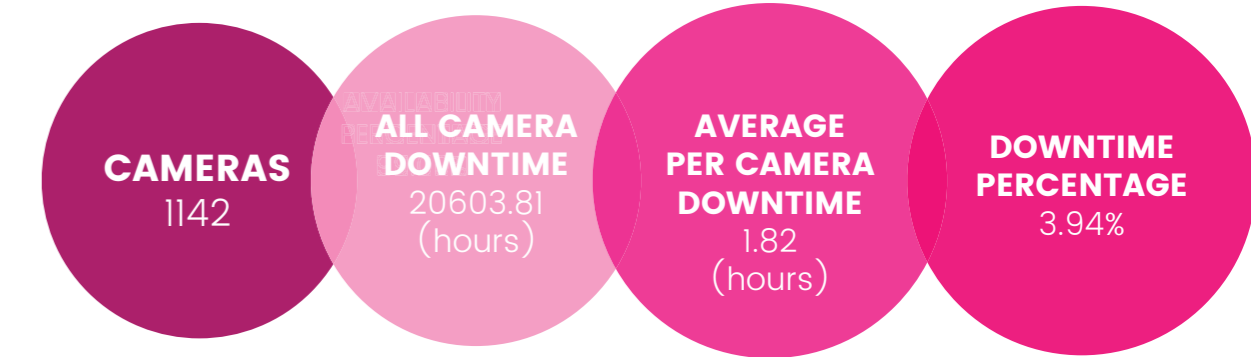


**APRIL 2019**

ALL CAMERAS VUMACAM  
OVERVIEW: 635  
LPR: 473  
THERMAL: 22  
MULTICHECK: 11  
VUMACAM: 1

AREA	Number of cameras	MTTR (hours)	OUTAGE (hours)	OUTAGE %	AVAILABILITY %	SLA AVAILABILITY
ABOTS	3	4	33.3	1.54	98.46	98.46
AIIWE	169	339.6	1694.3	1.39	98.61	99.43
BERG	3	0	0	0.00	100.00	100.00
BIRDH	2	0.29	0.38	0.03	99.97	99.97
BRAM	12	64.12	519.17	6.01	93.99	99.17
BRAMV	2	1.41	9.84	0.68	99.32	99.32
BRUMA	3	6.07	45.93	2.13	97.87	97.87
BSRA	1	0.28	2.25	0.31	99.69	99.69
CHELT	2	1.3	4.85	0.34	99.66	99.66
CRA	152	363.4	1655.62	1.51	98.49	98.64
CYRIL	3	0.11	0.26	0.01	99.99	99.99
DPE	20	28.46	249.06	1.73	98.27	99.01
DUN	80	4280	7394.54	12.84	93.41	98.84
EMM	10	9.27	30.99	0.43	99.57	99.57

\*SLA UPTIME does not include downtime caused by maintenance of the system; service unavailability caused by events outside our, or our personnel's reasonable control such as loss of electricity, adverse weather conditions, any fibre network outage or vandalism, and excludes the failure or unavailability of your facilities or systems such as internet connectivity, any other service or third-party used by you to use, connect to, or access the service



**Cameras**  
All cameras covered by the applicable contract

**All camera downtime**  
The total summation of all downtime for all cameras. i.e. a pole had four cameras (overview or LPR) down simultaneously for an hour the total downtime would be calculated as 4 cameras x 1 hour = 4 hours downtime.

**Average per camera downtime**  
The average downtime or time for a camera to come online over the entire base of cameras over the reporting period.

**Downtime percentage**  
The downtime as a percentage over the entire base of cameras over the reporting period. SLA allowable downtime is 4%.

**Availability percentage**  
The availability or normal expected working condition of the entire fleet of cameras over the reporting period. Target availability percentage is 96%

**MTTR**  
Mean time to repair



VUMACAM

# Contact



## **VUMACAM (PTY) LTD**

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2194, Gauteng, South Africa

**Eitan Ash**

**082 824 9560**

**[Eitan@vumacam.co.za](mailto:Eitan@vumacam.co.za)**

# acceptance



I hereby confirm acceptance and agreement of the Proposal:  
Khyber Rock- 04.06.2019  
and the content contained therein

By signing this document, I certify that I am duly authorised to make representation on behalf of the Company/Client  
I certify that the information provided below is, to the best to my knowledge and belief, true, accurate and complete

Acceptance	
Signature	
Name	
Job Title	
Date	