Invitation to Tender, for the supply, installation and maintenance of a people counting system in Rossendale

The aim of the project is to measure against benchmarks the improvement in performance of visitor flows to Rosendale's town centres and attractions supported by a statistical analysis software package. Example below:

COMPANY DAILY REPORT
Monday 09/08/2017

VISITOR COUNTS

BEST PERFORMING SITES

Branches	Visitor Count	Outside Traffic	Turn In Rate (%)	Visit Duration (minutes)	Returning Rate (%)
Beijing Shin Kong Men	1105	2560	43.16	6	19.1
Beijing China World	1126	3122	36.07	11	20.9
Beijing Peninsula	1102	2755	40	14	4.4
Bordeaux	1210	4903	24.68	12	1.7
Cannes	1073	5200	20.63	13	1.9

WORST PERFORMING SITES

Branches	Visitor Count	Outside Traffic	Turn In Rate (%)	Visit Duration (minutes)	Returning Rate (%)
Forte Dei Marmi	1107	3014	36.73	19	5.4
Hefei	914	1900	48.11	8	1.4
Jinan Guihe	606	1300	46.62	11	1.9
Kobe Kyoryuchi	500	1030	48.54	11	20.2
Landmark	145	520	27.88	13	18.4

NB: This tender is to be read in conjunction with the RBC public space CCTV ITT, details of this can be found on the RBC website under tenders.

The people counting tender is separate to the CCTV and will be awarded separately and may or may not be the same tenderer. Tenderers should familiarise themselves with the public space ITT to ensure compatibility between the proposed Technical Solution including camera's, location, hardware, transmission methods i.e. Broadband, Monitoring and deployment of the People Counting appliance. Each appointed contractor has a duty to co-operate with each other to ensure the success of all applications, networks, storage and transmission.

It is assumed that all people counting devices / cameras will be mounted on the same poles as the CCTV, using / sharing the power supplies and broadband (internet) connections as provided in the CCTV tender / installation. All reference locations refer to the listed location maps and camera location numbers in the CCTV tender. Part of the tender involves the Contractor assessing the proposed camera's, location, hardware, transmission methods i.e. Broadband, set up / infrastructure and making recommendations to ensure the network capacity is sufficient and all necessary security protocols are in place to comply with the DPA 2018 and GDPR.

Introduction to people counting tender

Basis of the Contract:

The purpose of this document is to invite you to tender to meet the requirements of Rossendale Borough Council.

The requirement:

Rossendale Borough Council is seeking to install a people counting system in the town centres of Haslingden, Bacup and Rawtenstall and on the Lee Quarry adventure trail entrance adjacent to Futures Park.

Using the same poles, internet / broadband and power connections as used by the CCTV system but reporting back the appliance device will be sited at the CCTV / Monitoring Data Centre at Blackburn. The vendor will be responsible for ensuring there is full connectivity between the CCTV network and also the appliance device or any associated piece of equipment. They will also ensure a full audit of network utilisation and bandwidth is conducted to ensure the appliance has sufficient bandwidth to operate. If not recommend a suitable network and design in order to deliver the People counting system.

The Contractor is responsible for all configuration, set up this includes connectivity. The ongoing upgrades, development, patching will be conducted by the Contractor in conjunction with the CCTV Data Centre and Monitoring provider.

From a network security perspective the Contractor is fully responsible for the transmission, storage of all the data that is contained in the appliance device and within the network. The Contractor will ensure all the requirements associated with the General Data Protection Regulation (GDPR) EU 2016/679 are met including any future changes to either the GDPR or the DPA 2018. The Contractor will also have to perform a Data Impact Assessment and comply with the Rossendale. Schedule 13 details the GDPR & Information requirements. The Contractor is liable for all costs associated with any Data Breaches.

In this document 'Contractor' means the person, firm or company whose tender to perform the Contract is accepted and where the context so admits, his personal representatives, successors and permitted assignees. All works, materials and equipment for the works below are to be provided by the Contractor unless expressly stated otherwise.

Project timescales:

Project delivery within six months of awarding of contract, however as it is linked to the main CCTV contract and cooperation and negotiation will be required between all of the providers particularly the Data Centre and the appointed Transmission provider.

Contract period

The tender requires that warranty and maintenance be included in the supply and installation price; this run for the life of the contract following acceptance and successful implementation of the system by the Contractor.

The Customer will reserve the right to cancel the call off or remove the nominated supplier(s) from the call off contract if there is a material concern which seriously jeopardises the position of the Customer.

Maintenance price period:

Maintenance prices will remain firm for a full five years from the start date of the maintenance provision.

Prices will remain fixed for the duration of the installation of all work packages, and total cost will not exceed the resource envelope.

Procurement Process and Evaluation of Tenders

Procurement timescale

The process is being conducted in accordance with the following indicative timescale:

Competition document issued………………………w/c 6th November

Closing date for receipt of document………………17.00 Hours 7th December

Standstill period (estimated)………………………..w/c 10TH December

Contract award (estimated)…………………………w/c 24th December

Tenderers are requested to register their interest to: guydarragh@rossendalebc.gov.uk to ensure that any amendments or questions can be shared with all interested parties. Clarification questions should be submitted to the same email no later than 7 days prior to close date. Please note that the Council's responses to any queries or clarification requests may, at the Council's discretion, be circulated to all EOI registered parties.

Other than the registered officer, Guy Darragh, and liaison with ICT andrewbuckle@rossendalebc.gov.uk no other Council employee or member of the Council has the authority to give any information or make any representation (express or implied) in relation to this People Counting Tender (PCT), or any other matter relating to the Contract. Any attempt to lobby for or against to Members or Officers of the Council or media during the tender process may be considered grounds for exclusion.

The Council reserves the right to issue supplementary documentation at any time during the tendering process to clarify any issue or amend any aspect of the PCT. All such further documentation that may be issued shall be deemed to form part of the PCT and shall supplement and/or supersede any part of the PCT to the extent indicated.

Tender Submission Requirements

Tenders must be written in the English language.

Tenderers must provide responses as set out in the Checklist for Tenderers. Ensure your submission, including additional pages, reflects the numbering format used in the Schedules so it is clear which part of a Schedule or question your response applies.

Only one Tender is permitted from each Tenderer for PCT. If more than one is submitted by a Tenderer, the one with the latest time of submission will be evaluated and the other(s) disregarded.

The Tender (including price) should remain valid for a minimum of 180 days.

The Tender must not be qualified in any way.

Any signatures must be made by a person who is authorised to commit the tenderer to the Contract. Your full registered business/name and main office address must also be provided on all documents.

Completed tenders must be sent to the following email only: tenders@rossendalebc.gov.uk no later than 17.00 Hours on 7th December. In the event of a large submission tenderers are requested to send several emails which are clearly numbered.

Tenderers must obtain for themselves, at their own expense, all information necessary for the preparation of their tenders.

Under the Contract, the Council will require compliance with its policies. Tenderers are advised to satisfy themselves that they understand all the requirements of the Contract before submitting their Tender.

The Tender must be received in accordance with the relevant instructions no later than the date and time indicated.

EVALUATION OF TENDERS

Tenders will be scored using the following criteria:

Price of supply, installation and maintenance contract up to 5 years.		Pass / fail 60%	
Method Statement 1 – Implementation Plan (detailed description of how the Tenderer will meet the requirements of the project within time constraints including how the security and GDPR will be met) *1000 word limit*	40%		
Method Statement 2 – Methodology (Detailed description of how the Tenderer will manage each work package including network bandwidth assessments) *1000 word limit*			
Method Statement 3 – Implementation Risks and Advantages (How the Tenderer will mitigate and manage risks and bring innovation) *500 word limit*			
Method Statement 4 – Ensuring minimal downtime of			

counter Coverage *750 word limit*			
Method Statement 5 – Training (Detailed description of how the Tenderer will train staff in use of any new equipment and/or technologies) *500 word limit*			
Method Statement 6 – Maintenance (Detailed description of how the Tenderer will maintain the system) *1000 words*			

Price:

Tenders will initially be assessed on a pass/fail basis in relation to the available project resource envelope.

Tenders within the resource envelope will subsequently be assessed for maintenance pricing.

Tenderers' price scores will be based on the lowest price submitted by tenderers.

The tenderer with the lowest price will be awarded the full score of 40%, with the remaining tenderers gaining pro-rata scores in relation to how much higher their prices are when compared to the lowest price.

Non-Price:

Tenderers are asked to respond to a number of method statements (Schedule 2) which are intended to explain how they meet specific requirements. There are 6 method statements in total.

Each method statement will be scored on a scale of 0 to 3 points, in accordance with the following scheme

Score	Performance
0	The response raises major concerns about understanding or approach which is potentially highly detrimental to

	satisfactory service delivery or contract performance.
1	The response suggests significant shortcomings of understanding or approach which may impact on service delivery or contract performance.
2	The response suggests minor shortcomings of understanding or approach which may impact to a short extent on service delivery or contract performance.
3	The response raises no concerns about understanding or approach to service delivery or contract performance.

If a tender scores '0' against any one or more method statements, this will give grounds for excluding that tender from any further consideration. For any tenders so excluded, the relevant price will also be excluded from the evaluation.

Clarification meetings:

The Council reserves the right to hold clarification meetings, site visits and/or interviews as it considers appropriate both before and after tender submission.

Site visits:

All of the site locations for this tender are in unrestricted public areas and no guided site visits will be offered. However, if you require clarification of the counter locations please email guydarragh@rossendalebc.gov.uk.

Award of Contract:

It is envisaged that one contractor will be appointed on the PCT contract.

The Customer does not bind itself to accept the lowest or any bid.

Upon conclusion of the evaluation of responses, the bid with whom it is agreed should be awarded, will be advised accordingly in writing with the issue of an 'Acceptance' letter.

Bidders who are unsuccessful will be advised of this in writing via a 'Non-acceptance of Submission' letter.

In the event of separate contractors for the "people counting" are installing the CCTV; The Contractor will be responsible for all liaison, communication with all stakeholders to ensure a smooth installation and ongoing management of both systems.

<u>Specification</u>

All cameras to be the following standard or equivalent:

VCA3502SV / VCA3502SVIR Outdoor, Motorized Focus & Zoom lens Image Sensor Sony STARVIS Exmor 1/2.8" 1080p CMOS Effective Pixels 1920 x 1080 Scanning System Progressive scanning AGC Control Auto IRIS (DC) Supported

NB: More information is included in the specification addendum

<u>Rawtenstall</u>

Two dedicated "people counting" cameras (as above)

1 Fixed on Camera Pole 8 viewing towards Bank Street / Grange Cres., T/Junction

2 Fixed on Camera point 3 viewing towards Ormerod St

Both cameras will require fixing brackets and will take power from existing supply and utilise the CCTV broadband connection.

<u>Haslingden</u>

Two dedicated "People counting" cameras (As Above)

3 Fixed at Camera point 2 on Dearden gate viewing towards Bank St

4. Fixed at Camera point 2 on Dearden gate viewing towards New St

Both cameras will require fixing brackets and will take power from existing supply and utilise the CCTV broadband connection.

<u>Bacup</u>

Two dedicated "people counting" cameras (as above)

5 Fixed at Camera point 3 viewing down James St

6 Fixed at Camera Point 1 on Union St viewing towards James St

Both cameras will require fixing brackets and will take power from existing supply and utilise the CCTV broadband connection.

<u>Futures Park</u>

One dedicated "people counting" camera (as above)

7 Mounted on the Futures Park council offices building rear corner above the existing PTZ camera unit viewing towards the access road to the Lee Quarry adventure trail entrance.

This unit will require wall fixing mount and be connected into the buildings existing broadband system and utilising power from the building with all power supplies and connectors to be provided by the contractor.

The Counter System

The appliance device will be installed in the Blackburn CCTV Data Centre, Rossendale will access via an IPsec VPN created by the Contractor and Rossendale. Rossendale will create a separate network to ensure that the data is only available to the people who require access namely with Mr Guy Darragh and his Team. This will not be available on the Rossendale LAN.

The Contractor will agree the methods to connect the People counting system with the Blackburn CCTV Centre, and contractors will be required to liaise with **BT "open view"** who supply the connection to Blackburn, and supply any / all hardware and software required to ensure the connection to Rossendale Borough Council. All network, infrastructure, on-going maintenance will be met by the Contractor.

It is envisaged that we will use a Titan Vision abacus system or equivalent that will provide, via the cameras, the following as a minimum standard.

Measure the number of visitors to and from the chosen sites and the following essential requirements:

- Near-Live and historical reporting
- Selectable reports, global views and the ability to drill down to specific groups, selected areas or individual entrances
- Instant reports
- Multi layered graphical representation
- Simple fully configurable user interface
- Fully customisable
- Automatic PDF or Email reports
- Automatic data sent to Shared Folders.

Analyse and share relevant footfall statistics

Accessed via web page via any device on the network.

The abacus appliance or equivalent would be supplied and commissioned within the Blackburn CCTV Data Centre.

The Contractor will provide a full life warranty covering all parts labour and call outs as part of the installation.

The callout attendance period, in the event of a fault, would be 4 hours with online, maintenance, as appropriate, included.

Addendum

FOR REFERENCE ONLY I INCLUDE THE FULL SAMPLE SPECIFICATION FOR THE CAMERA

CAMERA **or equivalent to** as below.

Model

VCA3502SV / VCA3502SVIR Outdoor, Motorized Focus & Zoom lens Image Sensor Sony STARVIS Exmor 1/2.8" 1080p CMOS Effective Pixels 1920 x 1080 Scanning System Progressive scanning AGC Control Auto IRIS (DC) Supported

Minimum Illumination

VCA3502SV Colour: 0.03 Lux (DSS on) / B/W : 0.006 Lux (DSS On) VCA3502SVIR Colour: 0.03 Lux (DSS On) / B/W : 0 Lux (IR LED On) Lens 2.8 mm(w) – 12.0 mm(t), F1.4(w) – F2.6(t) Angle of View Horizontal: Approx. 99°(Wide) to 35°(Tele) Vertical: Approx.54°(Wide) to 20°(Tele)

Shutter Time

Automatic: 1/30 ~ 1/10,000 Manual: 1/2 ~ 1/5,000 Day & Night True Day & Night (Removable IR-cut filter) Wide Dynamic Range True WDR (100 dB)

IR ILLUMINATOR IR LED VCA3502SVIR: IR LED X 28 (850 nm) IR Working Distance VCA3502SVIR: Max. 40 m (131 ft)

SMART IR

VCA3502SVIR: Supported (Automatically adjust the infrared light to the best, according to the brightness of the scene)

VIDEO Video Compression H.264 Baseline, Main, High profile(MPEG-4 Part 10/ AVC), MJPEG(Motion JPEG)

Video Streaming

Dual Stream, Configurable streams in H.264, MJPEG H.264: Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality

Resolutions

16:9 mode

1920 x 1080, 1280 x 720, 1120 x 630, 960 x 540, 800 x 450, 640 x 360, 480 x 270, 320 x 180

4:3 mode

SXGA(1280x960), XGA(1024x768), SVGA(800x600), PAL(720x576), NTSC(720x480), VGA(640x480), QVGA(320x240)

Frame Rate

H.264: Max 30fps in all resolutions MJPEG: Max 30fps in all resolutions Image Settings Configurable brightness, contrast, saturation, sharpness Image Orientation Flip / Mirror / Corridor Mode(-90°, +90°) Noise Filter Supported (0 ~ 3) Defogging Supported Smart Bitrate Control Supported (It works in VBR mode) Exposure Adjustment +1.0, +0.6, +0.3, 0, -0.3, -0.6, -1.0 EV White Balance ATW1 / ATW2 / Push / Manual Back Light Compensation On(possible to designate zone) / Off Flicker Control Normal, 50Hz, 60Hz DSS (Sens-up) 2X ~ 16X Video Stabilization Supported Burnt-in Text Time stamp and text caption overlay Privacy Mask 4 configurable regions

AUDIO Audio Streaming Two way Audio Compression G.711 Audio input / output 1/1

NETWORK Ethernet Standard 10 / 100 Base-T IP IPv4, IPv6

Protocol

QoS Layer 3 DiffServ, TCP/IP, UDP/IP, HTTP, HTTPS, FTP, RTSP, RTCP, RTP/UDP, RTP/TCP, mDNS, UPnP™, SMTP, DHCP, DNS, DynDNS, NTP, SNMPv1/v2c/v3(MIB-II), IGMP, ICMP, SSLv2/v3, TLSv1/1.2, SRTP, RTMP, IEEE802.1X

Security

HTTPS(SSL), IP Filtering, Multi-level access with password protection Users Live viewing for up to 10 clients

INTEGRATION Application Programming Interface Software Development Kit(SDK) available ONVIF Compliance Profile S, Profile G

Event Sources

Sensor (DI); Alarm(DO); Video Motion Detection; Face Detection; Tamper Detection; Video Content Analytics(VCA); Network Loss/Detect; Network Setting Change; Time(Recurrence/Schedule); Storage Error

Event Actions

File upload: E-mail, FTP Notification: E-mail, FTP, HTTP, TCP Trigger-Alarm (DO) Recording Event Log Saving

Event Metadata Streaming (RTSP/RTP)

Video Motion Detection (MD); Video Content Analytics (VCA)

GENERAL Material Aluminium, Anti-vandal bubble (PC); Ivory External I/O Terminals 1x Alarm In, 1x Alarm Out Language on webpage Korean, English, Chinese

Power Source / Consumption

DC 12V, PoE / VCA3502SV: 8W @ DC 12V, 9.5W @ PoE / (Heater on) VCA3502SVIR: 9W @ DC 12V, 10.5W @ PoE / (Heater on, IR-LED on)

Operating Temperature

Humidity up to 85% RH (non-condensing) [DC12V / PoE] -40 °C ~ 50 °C (-40 °F ~ 122 °F); Built-in heater* Approvals FCC, CE, IP66 (All in progress) IK Rating IK10 Weight 1.2 kg (2.7 lb) Dimensions (W x H) Ø 155 mm x 129 mm (Ø 6.2" x 5.1") Bubble: Ø 100 mm (Ø 3.9")

EDGE STORAGE Storage 1x microSD / microSDHC memory card slot (SD/SDHC up to 32GB, card not included)** Continuous Recording Instant recording; Search & Download Event Recording Search of Event Logs; Playback; Download

VIDEO ANALYTICS Analytics Engine VCA Technology's advanced tracking algorithm with rich library of detection behaviours

Detection Zones and Rules

40 zones (Multi-segment Polygons and Lines) in total 60 rules in total Tamper Detection Supported Auto Tracking - VCA Pre-set

Detection Behaviour

Enter, Exit, Appear, Disappear, Stop, Direction, Dwell filter; Tailgating; Colour Filter Logical Rules Extends standard rules to allow various combinations of the inputs 3D Behaviour Perspective Corrected Size and Speed Filters

Object Classification

Configured Max./Min. object sizes and Max./Min. speeds People Tracking Tracks individuals separately among overlapped multiple people Counting Line High accuracy people and vehicle counting - counting 20 counters in total

Counter Report

Generates counter reports based on the counter database Heatmap Report Shows relative crowd density of the 24 hour period (criterion: midnight) Meta Data Plain XML Format

Price schedule

	New Counters	Price £
Rawtenstall	2	
Haslingden	2	
Futures Park	1	
Bacup	2	
TOTAL	7	

Tender Prices

| Items	Qty	Unit Rate	Total (Qty x unit rate)
New Counters (cams)	7	………	………
Fitting to poles	6	………	………
Mounted on building	1		
Connection to Data Centre / Network connectivity, transmission and security of Data	7	………	………
System Demonstration	2 days	………	………
Grand TOTAL of Contract			£………

Maintenance of all counters and software support

| Maintenance of all cameras on a repair or replace basis to ensure full operation of the system inclusive of bi-annual service visit.	1st year	Year 2,3,4 and 5 per annum price £
TOTAL	Warranty period	

Method Statements

1	**Method Statement 1** – Implementation Plan (detailed description of how the Tenderer will meet the requirements of the project within time constraints including how the security and GDPR will be met) *1000 word limit*
	Response
2	**Method Statement 2** – Methodology (Detailed description of how the Tenderer will manage each work package including network bandwidth assessments) *1000 word limit*
	Response
3	Method Statement 3 – Implementation Risks and Advantages (How the Tenderer will mitigate and manage risks and bring innovation) *500 word limit*
	Response
4	Method Statement 4 – Ensuring minimal downtime of counter Coverage *750 word limit*
	Response
5	Method Statement 5 – Training (Detailed description of how the Tenderer will train staff in use of any new equipment and/or technologies) *500 word limit*
	Response
6	**Method Statement 6** – Maintenance (Detailed description of how the Contractor will maintain the system, conenctivity) *1000 words*
	Response

Location maps annex

Rawtenstall CCTV proposed upgrades
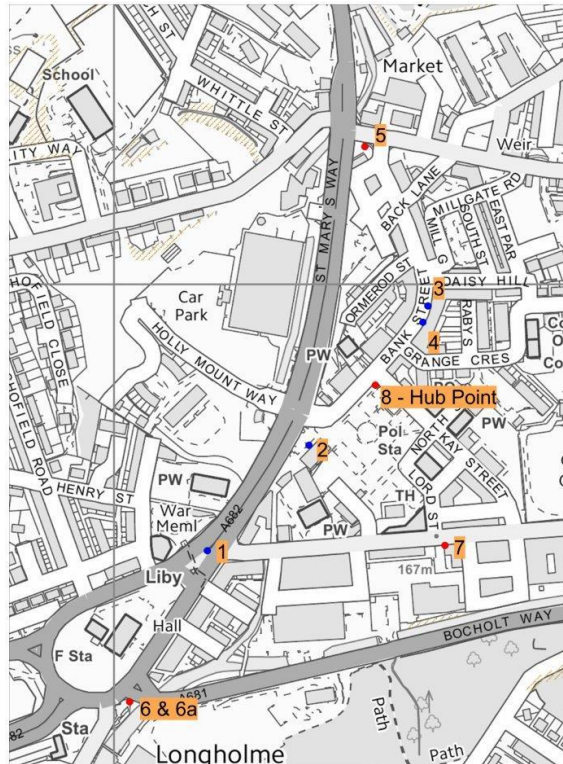
Bacup CCTV proposed upgrades
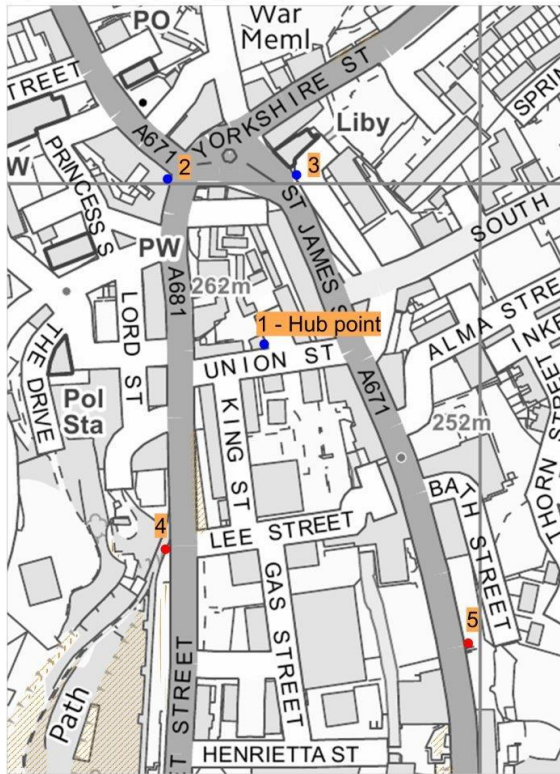
Haslingden CCTV proposed upgrades