

**HERTFORDSHIRE COUNTY COUNCIL
STRATEGIC PROCUREMENT GROUP**

**THE PROVISION OF A MANAGED INTERNET AND WIDE AREA NETWORK
INFRASTRUCTURE FOR HERTFORDSHIRE COUNTY COUNCIL
CONTRACT REF: HCC0902684**

RETURN SCHEDULE 1 – SCHOOLS REQUIREMENTS

**TENDERERS SHOULD BE AWARE THEIR RESPONSES FOR THIS SECTION
WILL BE EVALUATED UNDER THE FOLLOWING CRITERIA WHICH IS SCORED
OUT OF THE TOTAL QUALITY SCORE OF 60%**

	Network Services (12%) Covered by Questions 1 – 1.14 (Excluding 1.4 & 1.6)	Weighting out of 5
	County wide resilient network, resilient core distribution network and virtual network overlays	5
	Traffic prioritisation	2
	Access network to schools & specific care sites (including P2P & resilience options), CPE, and high speed links into HCC & other sites/service	4
	Current IP addressing schema	3
	Maximum possible score 14 x 5 = 70	

	Central Services (20%) Covered by Questions 1.4 & 1.6, 2 – 2.16	Weighting out of 5
	Central provision and Internet access	3
	Firewall Service, local school firewall, anti-virus and proxy/reverse proxy	4
	Web filtering service. including HTTP, FTP etc. & monitoring, school option - local filtering and content cache	5
	network & Internet security	3
	DNS service, Internet Domain mgt. and Internet addressing	3
	service reporting on-line performance & availability, basket tests, self diagnostic tests etc.	4
	Maximum possible score 22 x 5 = 110	

	Additional Services (4%) Covered by Questions 2.17 – 3.3	Weighting out of 5
	VPN service	5
	Video conferencing	4
	Hosting service	2
	DHCP	4
	ID management	3
	Maximum possible score 18 x 5 = 90	

	Service & Relationship Management (8%) Covered by Questions 3.4 – 3.15	Weighting out of 5
	UK located service mgt centre, incident & problem mgt , service hours- network & core service, network & service support centre, service Desk,	2
	on-site engineering support	4
	service changes, process for new services, engineering change request and best value	4
	Management of the IP addressing schema, preventative maintenance, continuous improvement service and adaptive maintenance	3
	service management meetings, contractual review meetings, project reviews, escalation procedure	4
	Finance and invoicing process	5
	Maximum possible score 22 x 5 = 110	

	Service Transition (16%) Covered by Questions 3.16 – 3.18	Weighting out of 5
	Timescales, project plan & risk assessment plan and transition mgt	5
	Difficult to connect schools	3
	Communication with schools, communication with SITTS & BSF service desk and service acceptance	3
	Maximum possible score 11 x 5 = 55	

The various sections that make up each heading will have a weighting of 1 -5 applied to them to reflect their relative importance for evaluation purposes.

All responses to questions will be scored in a range from 1 – 5 (lowest to highest).

- 1 = Unacceptable offering
- 2 = extremely poor
- 3 = Minimal compliance to requirements
- 4 = Complaint
- 5 = Exceeds requirements

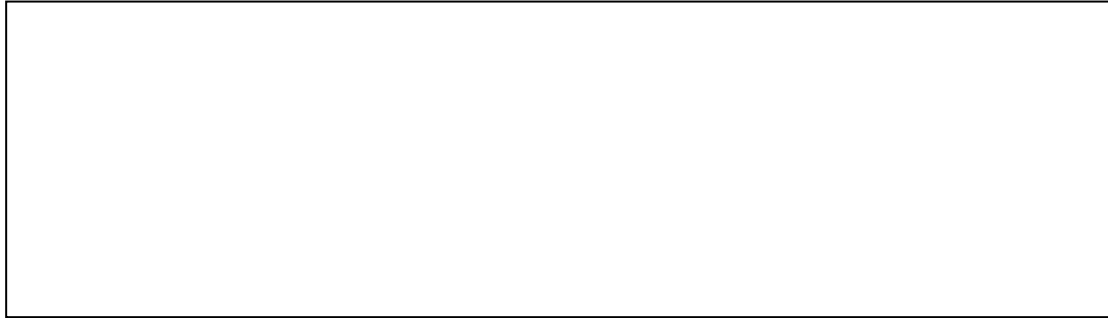
The resulting scores for each section will be multiplied by the allocated weighting factor. Weighted section scores will be totalled up and factored in line with the percentage score identified for each heading.

Note: Questions unanswered or answered with insufficient detail / evidence can receive a ZERO score.

1. NETWORK SERVICES

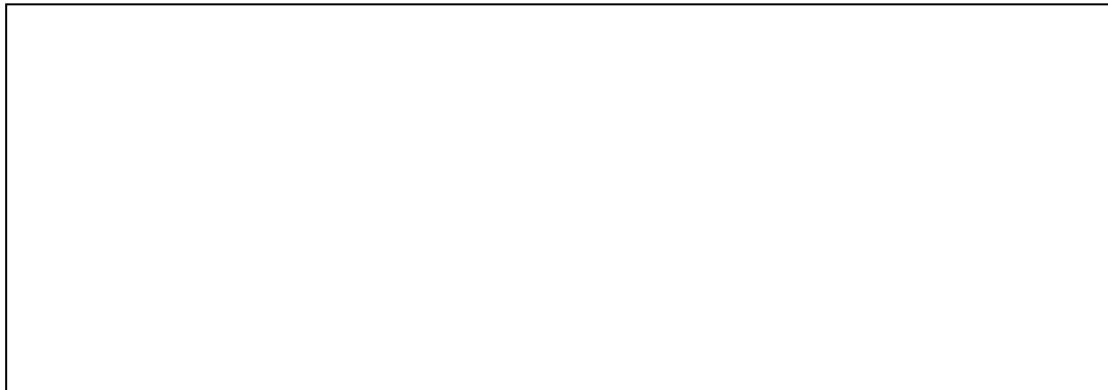
1.1 Schools HGFL network

Describe in detail, with diagrams, site locations, equipment (hardware and software) lists and services how you will meet the Council's requirement for a fully managed resilient County wide area broadband network based on an LLU distributed approach for both copper and fibre services to enable secure high speed communication to schools and other educational related sites.

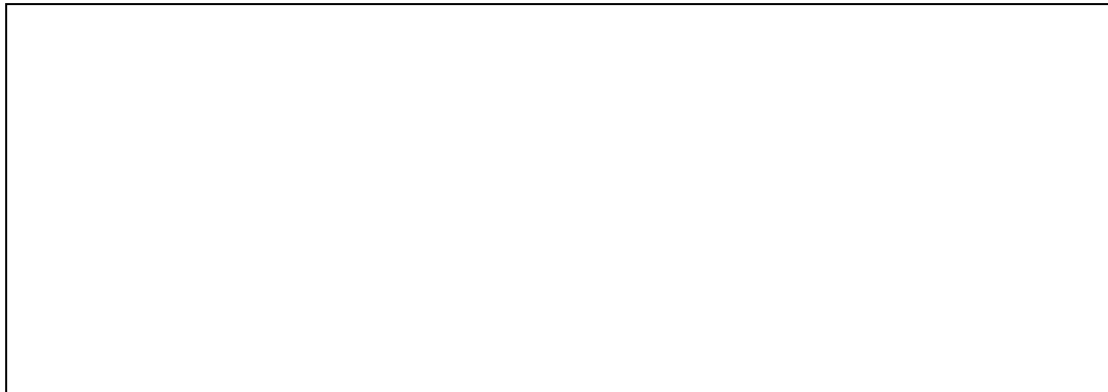


1.2 Resilient Core Distribution Network (Schools HGFL)

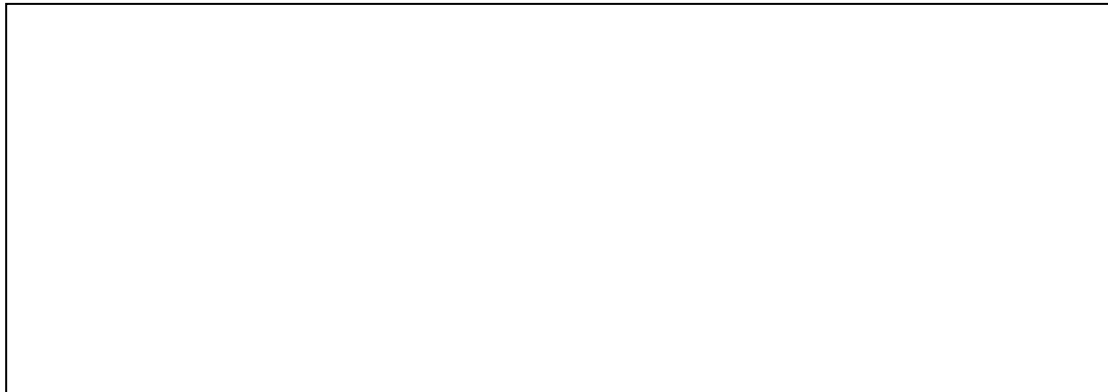
1.2.1 Explain how your design criteria address the areas of network capacity, opportunity for growth, availability and responsiveness for the Schools HGFL core network.



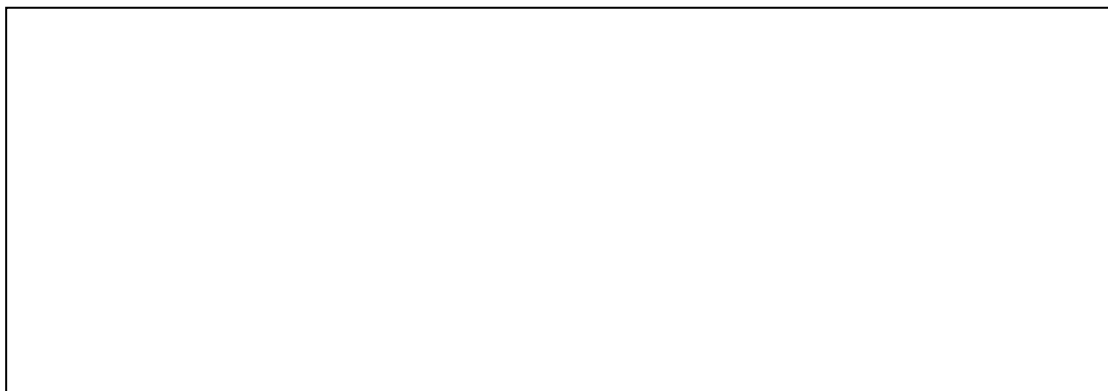
1.2.2 Explain how your proposal will ensure that the core network will have no single points of failure and be engineered to provide a minimum of 99.9% availability 365 days 24x7.



1.2.3 Clearly identify the impact on performance if key backbone components fail.



1.2.4 Identify how your design will allow the Council to change contention ratios and bandwidth to meet changes in user demand over the lifetime of the contract.



1.3 Central Core 'Head End' Services (HGFL)

1.3.1 Describe in detail, with diagrams, site locations and equipment (hardware and software) lists, how you will meet the Council's requirement for a fully managed resilient core dual 'Head End' service delivery facility, offering a minimum uptime of 99.99%.



1.3.2 How much space will you be contracting for at each of these sites?



1.3.3 Please provide details, with diagrams/plans as appropriate, of the environmental facilities (power, air conditioning, lighting, fire detection and suppression, cabling and security) proposed at the core sites identifying those provide by the site supplier (include contracted commitments) and those supplied and supported under this contract.



1.4 Virtual Network Overlays

- 1.4.1 Explain, in detail, with diagrams and equipment lists (hardware and software), how you will meet the Council's requirements for secure virtual networks separated by "air gap" or equivalent security.

- 1.4.2 Identify any security or networking standards that the networking equipment you would deploy to achieve security separation adhere to.

- 1.4.3 Describe how will you deliver a range of virtual network overlays so as to allow the council the flexibility to provide any network overlay to any site?

- 1.4.4 **Confirm compliance** to the Council's air gap security requirement.

☐ Yes ☐ No (please ✓ as appropriate)

1.5 Routing

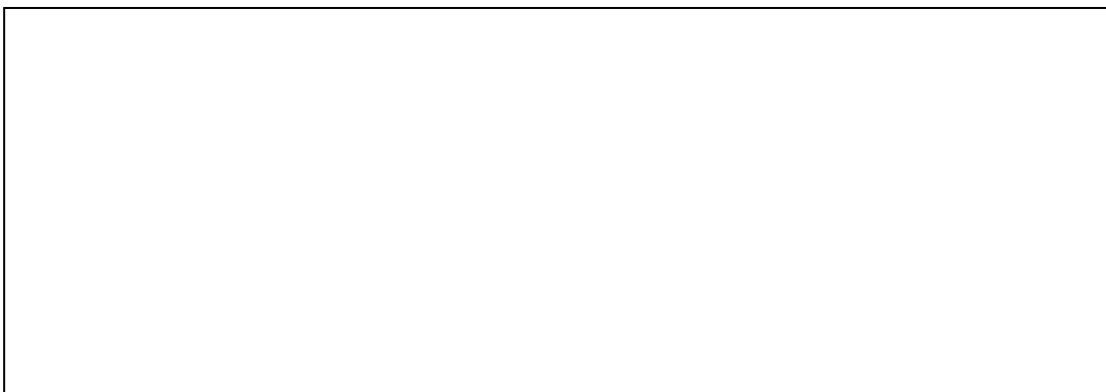
- 1.5.1 Explain how the network will achieve the required routing at IP level to allow all School sites to access the central Head End data centres and any other attached Network interconnection / demarcation point.



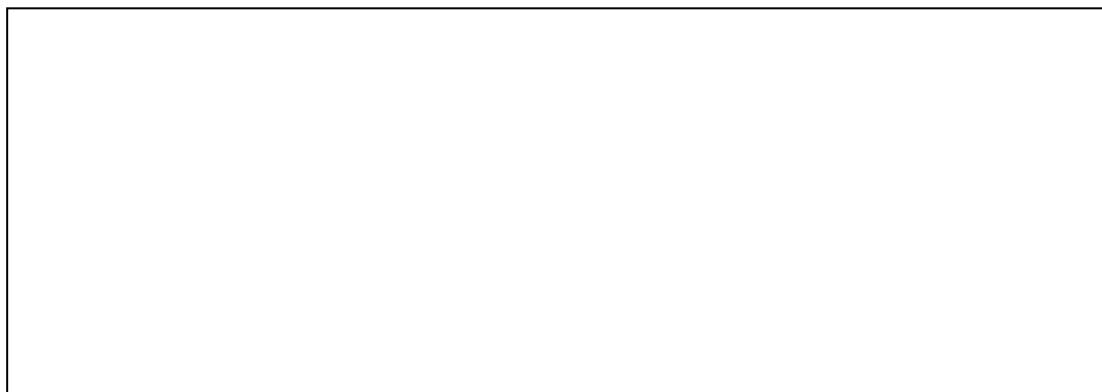
- 1.5.2 Detail the routing protocols used within the network.



- 1.5.3 Confirm the support of Static routing within the network.




1.5.4 Confirm the ability to super net and sub net IP address schemes within the network.



1.5.5 Confirm the ability to summarise routes within the network, detailing any limitations of supplier specific limitations.



1.5.6 Confirm the networks ability for all Schools to access any other school within the Network (if agreed management control processes allow).



1.5.7 Explain how the inter routing will be restricted and controlled.

1.5.8 Confirm the ability to apply Access Control Lists and other filtering to restrict inter routing access by IP address to port level.

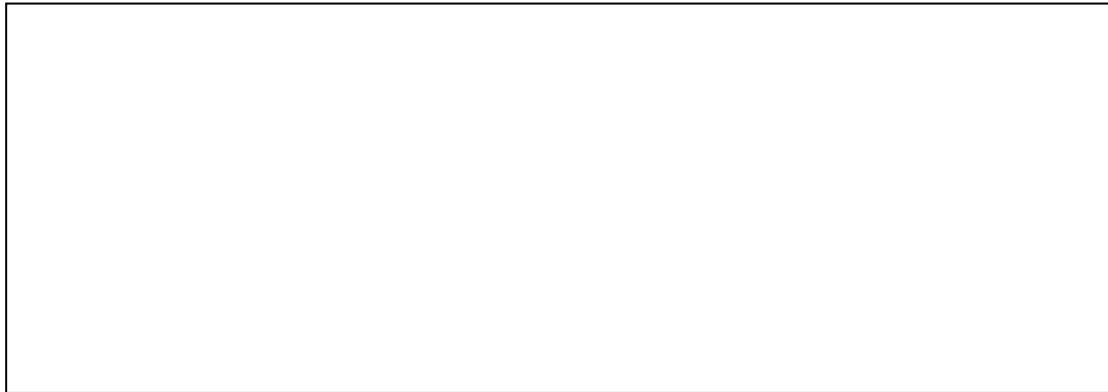
1.6 Access control lists and IP routing restrictions

1.6.1 Confirm that you accept all of the proposed requirements documented in the access control list and IP routing restrictions CPE and security sections of the service specification document?

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.6.2 What School LAN level automatic routing protocols will you support?



1.6.3 Explain how a school with a Layer 3 network will need to reconfigure their existing LAN to accommodate the new network routing plan.



1.7 Network Traffic Prioritisation Quality Of Service (Qos)

1.7.1 Explain with examples using the schools “virtual network requirement” how you will implement, monitor and modify traffic prioritisation on the physical network and within overlays to ensure that the agreed performance of the various data streams is maintained.



1.7.2 How will this design impact on the existing set-up/configuration of the Schools Local Area Networks?

1.7.3 Confirm that the proposed network will allow the Council to prioritise at network layers 2, 3 and 4.

☐ Yes ☐ No (please ✓ as appropriate)

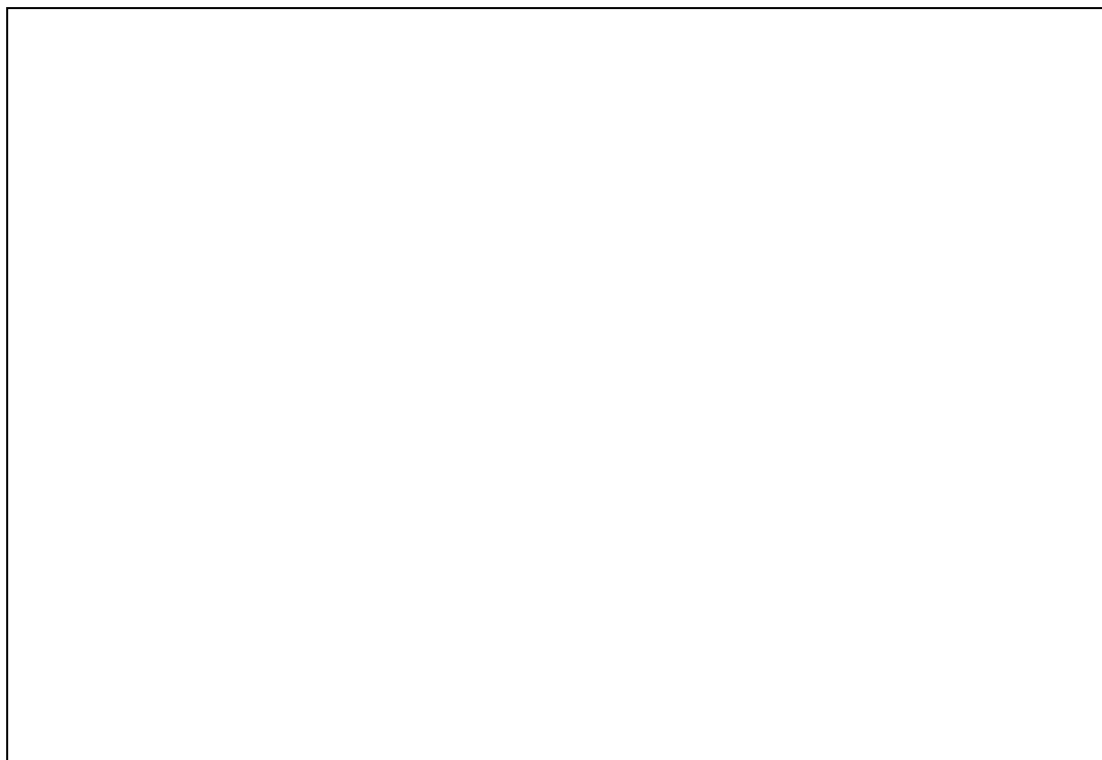
If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.7.4 Confirm that the proposed network will allow the Council to operate differing prioritisation levels across different overlays.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

- 1.7.5 Explain how running different overlay prioritisation schemes is dealt with by the underlying core prioritisation scheme and how these varying levels of priority will impact on the other network overlays .



1.8 Site Level services

- 1.8.1 Identify those circuit types that are universal throughout the county and those that are unique to suppliers underlying networks. Detail all technology and speed options available as part of the service.



1.9 Access Network to user sites

- 1.9.1 Using the site details provided identify the technologies that you are proposing to use to deliver network connectivity to the council's Schools sites. Please provide a schedule showing the number of sites, access node and proposed service analysed by speed, technology and Circuit / link supplier as appropriate. Indicated on this schedule where you already have access to proposed access nodes. Clearly indicate any sites where you believe that you will be unable to meet the council's minimum and stated requirements of 16Mbps copper Junior, Infant and associated sites. 100Mbps fibre for Secondary and Middle schools. Identify any sites where the proposed solution is provided over a technology that will offer an increase in speed by means of a configuration change and indicate the maximum speed possible for each site.

- 1.9.2 Explain how you will ensure the delivery of the maximum possible available bandwidth to those sites where the minimum and specified service is unavailable, identifying any additional costs associated with your proposals.

- 1.9.3 Confirm that you comply with the service requirements for the links to be offered as detailed:

For links up to **30 Mbps** a minimum availability of 99.5%, 365 days 24 x 7. With latency maximum of 50 ms RTD, jitter maximum 5 ms one way and packet loss 0.1%

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

- 1.9.4 For links between **30 Mbps and 300 Mbps** a minimum availability of 99.5%, 365 days 24 x 7. With latency maximum of 25 ms RTD, jitter maximum 5 ms one way and packet loss 0.1%

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

- 1.9.5 For links between **300 Mbps and 1Gbps** a minimum availability of 99.5%, 365 days 24 x 7. With latency maximum of 10 ms RTD, jitter maximum 5 ms one way and packet loss 0.1%

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.9.6 Confirm that faults resulting in loss of service or significant degradation in the quality of the service to the site will be fixed within 4 hours.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

1.10 Resilience options

1.10.1 Confirm that all detailed resilience options are available within the offered service.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

1.10.2 Provide list of resilience options available for each site detailed in the Councils School site list. Detail what technologies and alternate routing options are available.

1.11 Customer Premises Equipment (CPE)

1.11.1 Provide details (hardware and software versions) and technical specifications for the CPE that you are proposing to deliver the detailed service.

1.11.2 How will you implement the virtual overlays at each school site so as to allow access to the HGfL schools network, public network and BSF specific network?

1.11.3 How will you implement the virtual overlays at each corporate site so as to allow access to the Private, HGfL schools network, public network and other specific networks?

1.11.4 Confirm that the CPE to be deployed meets all the requirements specified in the Customer premises Equipment and associated sections of the Tender.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot meet this requirement and what is proposed as an alternative, detail any differences by model and site type deployed.

1.12 TCP/IP addressing schema

1.12.1 Confirm that you accept the requirements identified in this section

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.12.2 Explain how you will approach the requirement for a total upgrade of a schools IP subnet allocation.

1.12.3 Confirm that you will be able to adhere to the current school IP scheme and will be able to transport all traffic across network without adding latency due to any necessary translations.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.12.4 Please explain how the current local router interface will be maintained to allow zero impact cut over for school LANs.

1.12.5 Please confirm that DHCP relay services will be available. If not how will you deliver DHCP services to local site Local Area Networks?

1.13 Service Demarcation Points

1.13.1 Confirm that you accept the proposed service demarcation recommendations with regards the schools HGFL network being presented on a separate physical cable/port at the main inter network connection points.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

1.13.2 Links to the HCC corporate Network will be achieved at the two HCC Network interconnection points. Confirm that you accept the proposed service demarcation recommendations with regards the presenting the Schools HGFL to the HCC core corporate Network.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

1.14 JANET

1.14.1 Confirm that Janet Interconnection is possible and that the JVCS video service inter-working services will be fully available.

1.14.2 Detail how you will provide access to the National Education Network.

1.14.3 From your experience with other solutions please detail any known issues with Janet services or inter working.

2. SECURITY AND INTERNET RELATED REQUIREMENTS

2.1.1 Confirm that you accept all of your obligations identified in the various sections of the specification.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed. Providing a detailed list of the areas of non compliance.

2.1.2 Confirm compliance to the wider security principles laid out in this specification and those detailed in the Schools security policy and framework documentation .

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed. Providing a detailed list of the areas of non compliance.

2.1.3 Confirm acceptance that the Council MUST agree and sign off any design before implementation and reserve the right to carry out Penetration and Security tests on the network prior to final signoff.

☐ Yes ☐ No (please ✓ as appropriate)

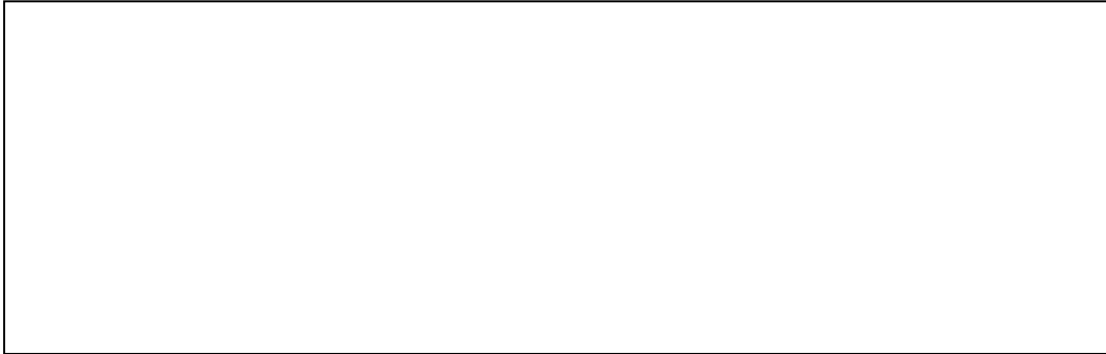
If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

2.2 Internet Connectivity

- 2.2.1 Describe in detail, with diagrams, and equipment (hardware and software) lists, how you will meet the Council's requirement for a fully managed resilient Internet service with no single point of failure to schools and other educational related sites.

- 2.2.2 Describe in detail how you will meet the Council's requirement for a resilient on-line Internet availability, capacity and response monitoring service for School environment.

- 2.2.3 Explain how you will manage the progressive provision of Internet bandwidth to meet changes in demand for both School and corporate environments.



- 2.2.4 Provide details of overall capacity available, ISP peering point information and class / tier of bandwidth provider used to deliver the HGFL/Schools service.

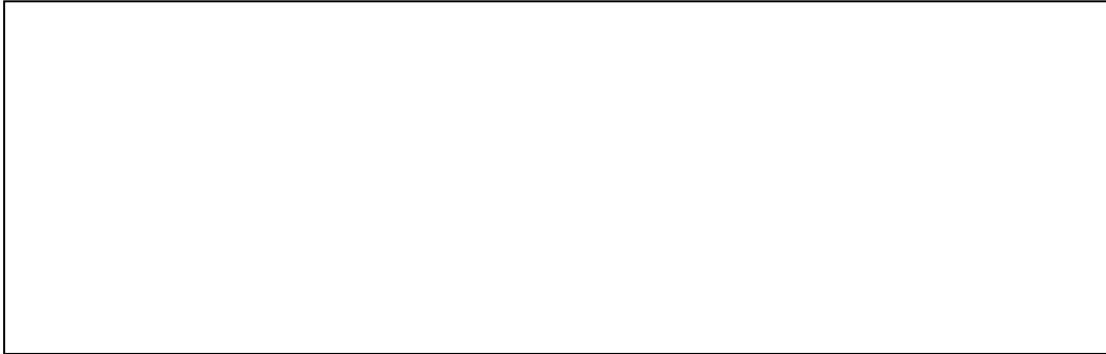


2.3 Firewall service


- 2.3.1 Describe in detail, with diagrams and equipment (hardware and software) lists, the proposed “Resilient Service Level Firewall Solution” that you will implement to meet the Council’s requirement to protect the service from Internet “abuses” and to protect the network and service boundaries.



2.3.2 How will you ensure that your solution can support a “per service” firewall function?

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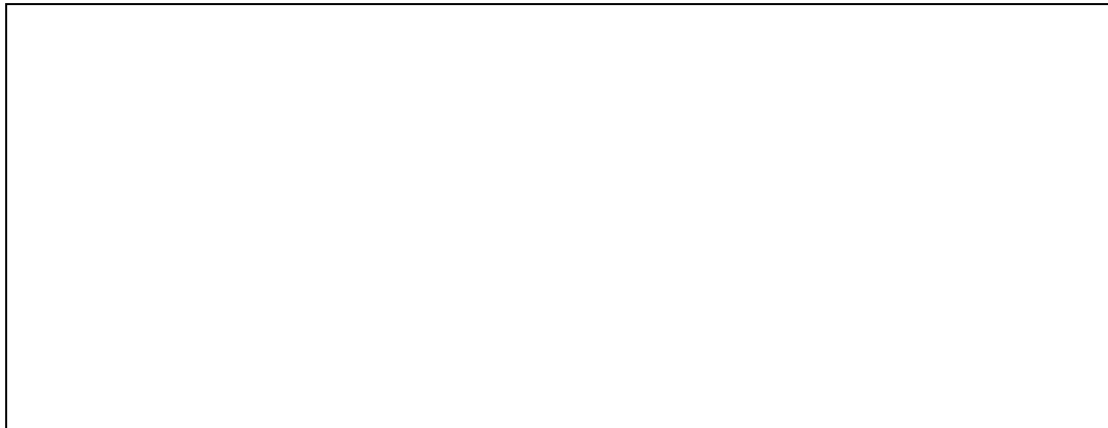
2.3.3 Explain how your proposal will meet the Council’s security policies.

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2.3.4 Confirm that Full NAT options are available, detailing NAT types and any limitations.

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- 2.3.5 Confirm that multiple IP addresses will be provided and that they will be presented to the internet for service suppliers to be able to differentiate customers on a school level basis, detailing and any limitations.



2.4 Optional requirement – School level Firewall

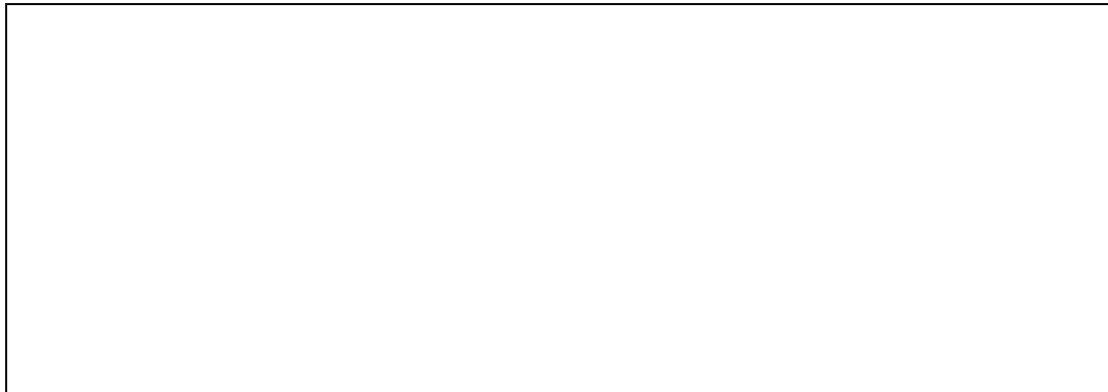
- 2.4.1 Provide details of your local school firewall solution and explain how you would expect this to integrate into a school based network identifying the benefits that this will bring to the school.



- 2.4.2 Detail the number of interfaces available on proposed equipment
Clearly identifying how public WIFI services would be 'tunnelled' or 'Directed' across the core NW.



- 2.4.3 Explain how you will monitor and manage this device, identifying how you will involve the school in its operation. Clearly detail roles and responsibilities and detail a point in time configuration roll back service.



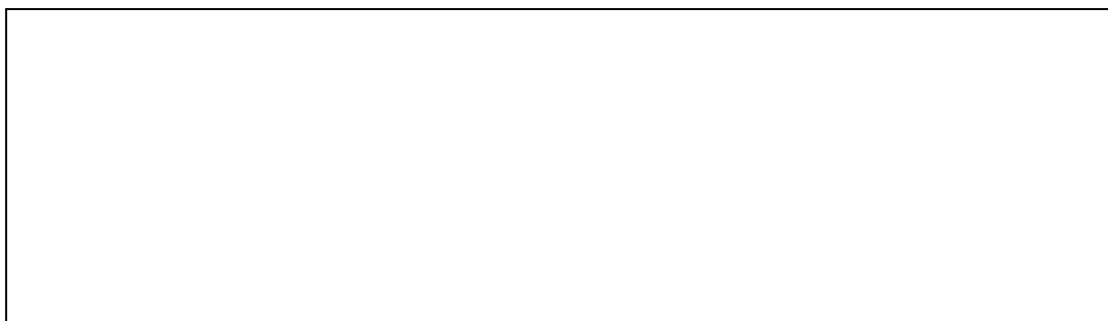
2.5 Network Anti- virus protection

Describe in detail, with diagrams and equipment (hardware and software) lists, the proposed network “Anti-virus Solution” that you will implement to meet the Council's requirement to manage and restrain virus outbreaks.



2.6 Proxy & Reverse Service

Describe in detail, with diagrams and equipment (hardware and software) lists, the proposed “Proxy and Reverse Proxy Solution” that you will implement to meet the Council's requirement.



2.7 Web/Content Filtering

2.7.1 Are you proposing to 'take on' the existing Fortigate central solution, transferred from the incumbent supplier?

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is Yes, provide details explaining how you will incorporate this equipment in your response to the next question?

2.7.2 Are you proposing to deploy the existing Fortigate Technology used within the HGFL

☐ Yes ☐ No (please ✓ as appropriate)

2.7.3 Describe in detail, with diagrams, product and equipment (hardware and software) lists, how you will meet the Council's requirement for a fully managed resilient web filtering service appropriate to meet the requirements of the Council's users.


- 2.7.4 How will your proposed web filtering service assist the Council in its objective of keeping young people safe on-line whilst also allowing school, and other staff, to teach them an awareness of the dangers and to behave responsibly themselves?

- 2.7.5 Provide details of your experience in implementing and supporting your proposed solution in a mixed Educational and corporate environment. If the solution you are proposing for Hertfordshire differs from your existing service solutions please provide details.

- 2.7.6 Confirm your ability to deliver all the features and facilities detailed within the Internet Web Filtering sections of the tender.

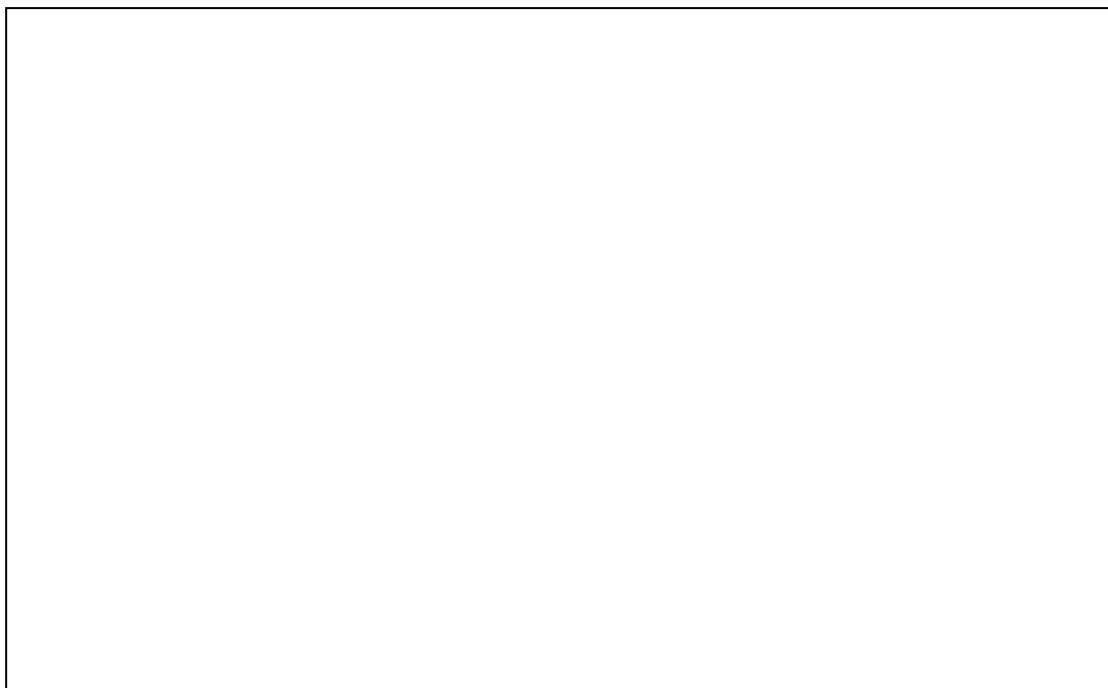
☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot provide what is proposed. Detailing point by point those features and facilities that will not be available.



2.7.7 Please provide the following detail with regards to the solution proposed :

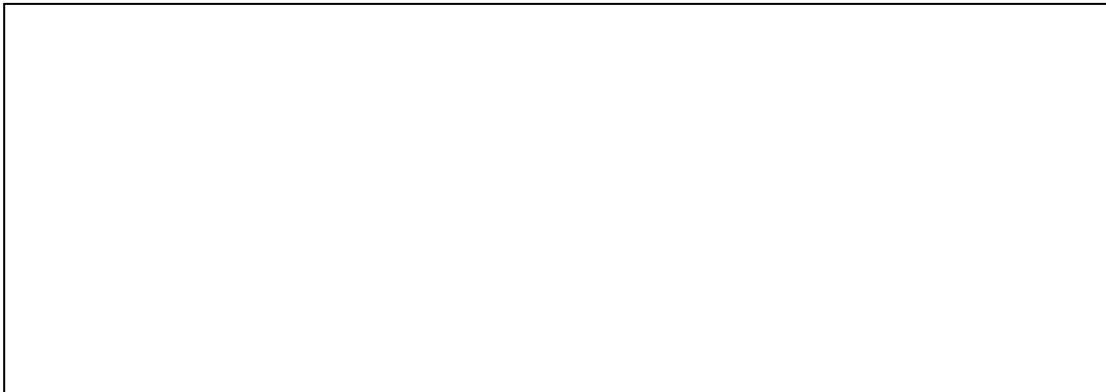
How many filtering policies can your solution support?
Are only categorised sites allowed through to the service user?
How quickly will the service categorise new sites?
Are local "Allow / deny" lists supported?
How quickly will make local changes to website categorisation?
Can your solution force "safe mode" on for image searches & what browser products does it support?
Is the supplier/developer committed to maintaining the option to force "safe mode" on for image searches in its product?
How effective will your solution be at detecting and banning both client and clientless proxy avoidance sites?



2.7.8 How will you ensure that users will never be able to access Web pages that fall below the Counties “base-line” configuration?



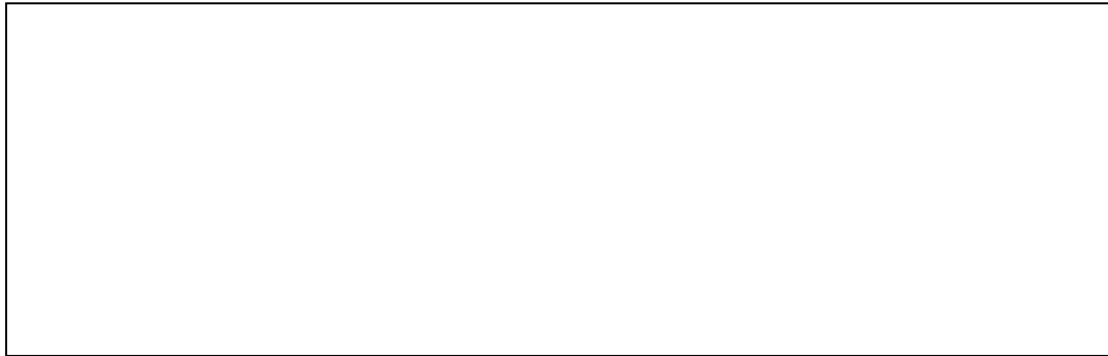
2.7.9 How will your solution detect and ban access to both client and clientless proxy avoidance sites?



2.7.10 How will HTTP software be filtered to ensure connections do not circumvent the Web Filtering policies?



2.7.11 How will HTTPs proxy avoidance software be filtered to ensure Encrypted connections do not circumvent the Web Filtering policies?



2.7.12 How will your solution enforce safe searching . Detail any configuration options for AD or user account flexibility. Clearly identify all Search engines that safe search will be applied to.

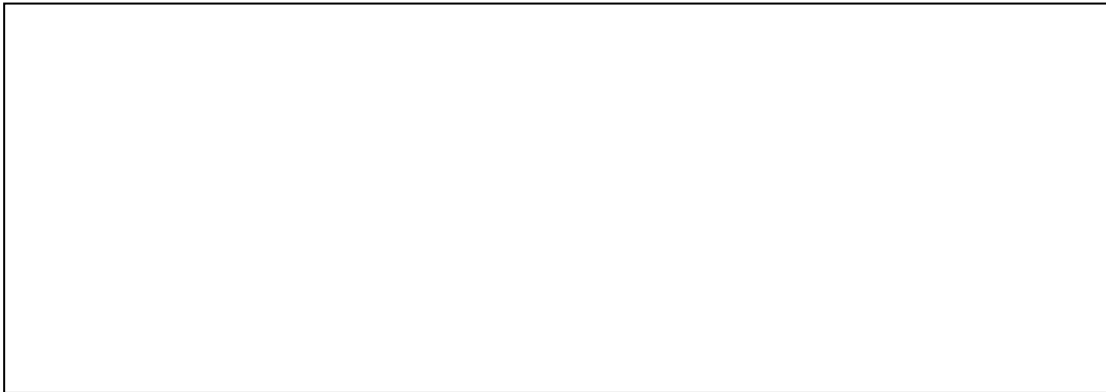


2.8 HTTPs interception , decoding and filtering

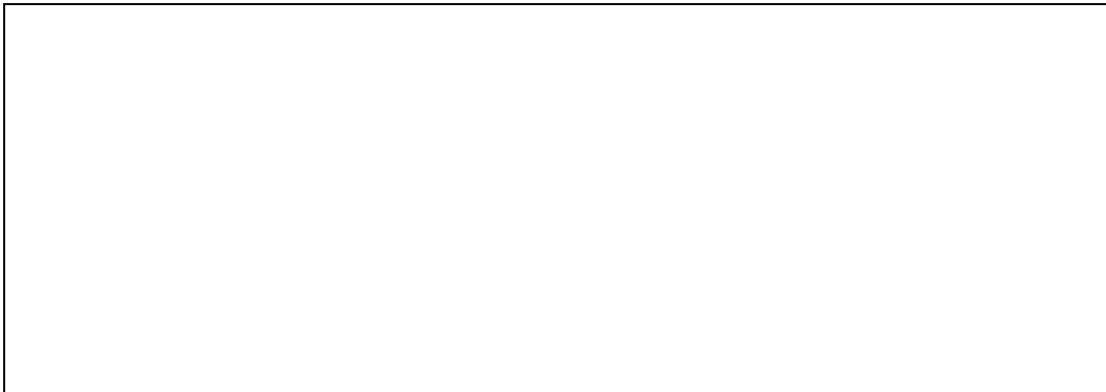
2.8.1 Explain in detail, with equipment/software lists and diagrams if appropriate, how you will provide an HTTPs interception, decoding and Filtering services.



2.8.2 What policies can be applied and to what level are they enforceable.



2.8.3 How will HTTPs proxy avoidance software be filtered to ensure encrypted connections do not circumvent the Web Filtering policies.



2.9 Video content filter/portal, Protocol; filtering & Packet shaping

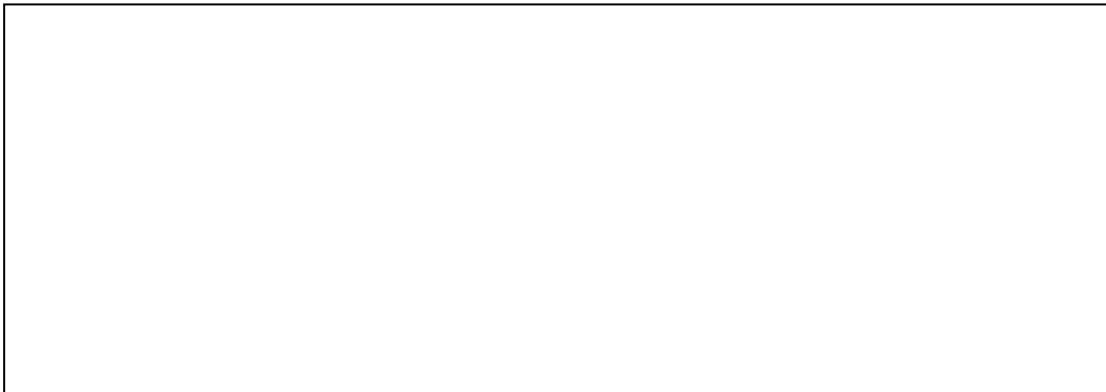
2.9.1 Explain in detail, with equipment/software lists and diagrams if appropriate, how you will provide the schools with a “You Tube” video authorisation and policing service.



- 2.9.2 Explain in detail, with equipment/software lists and diagrams if appropriate, how you will provide the schools HGFL network with an FTP filtering service as detailed.



- 2.9.3 Explain in detail, with equipment/software lists and diagrams if appropriate, how you will provide the schools HGFL with a Protocol filtering and packet shaping service as detailed.

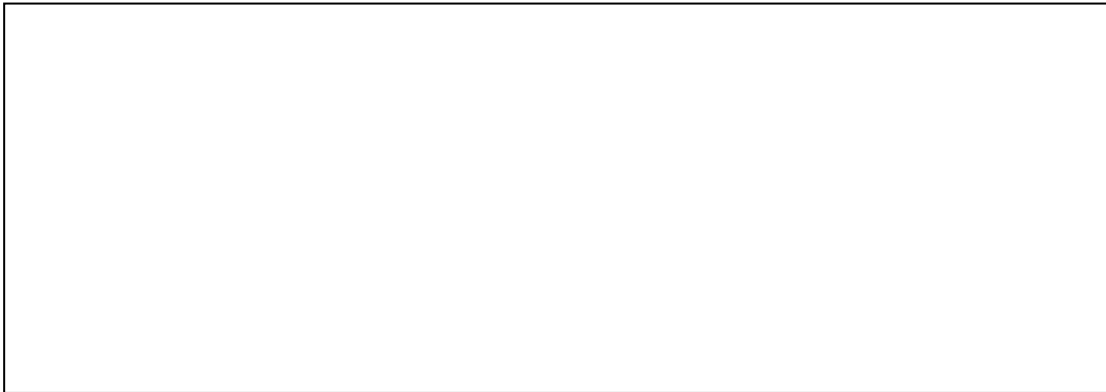


2.10 Web filtering monitoring & recording

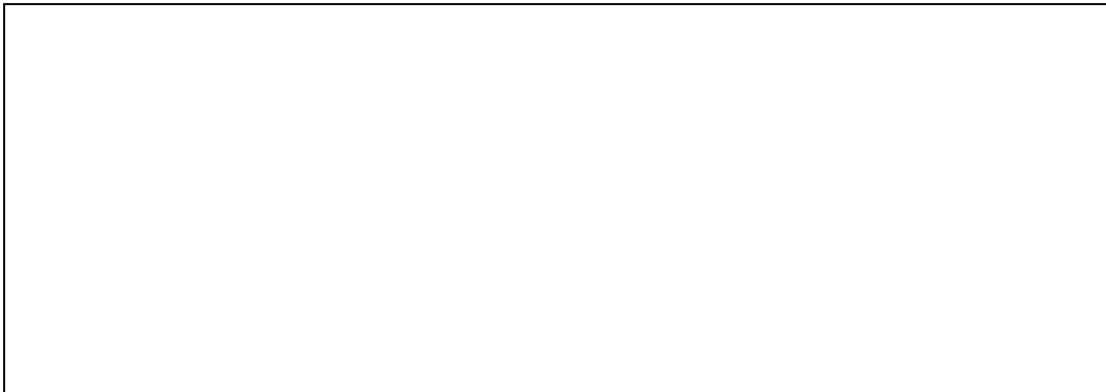
- 2.10.1 Describe in detail, with diagrams, product and equipment (hardware and software) lists, how you will meet the Council's requirement to monitor Internet web access in "real-time" with the ability to select particular schools, particular categories of website and/or particular infringements of web filtering policy.



2.10.2 Explain how you will guarantee the responsiveness of this solution.



2.10.3 Provide details of the processes that you will use to safely secure past logs in such a way as to make them available for analysis if required.

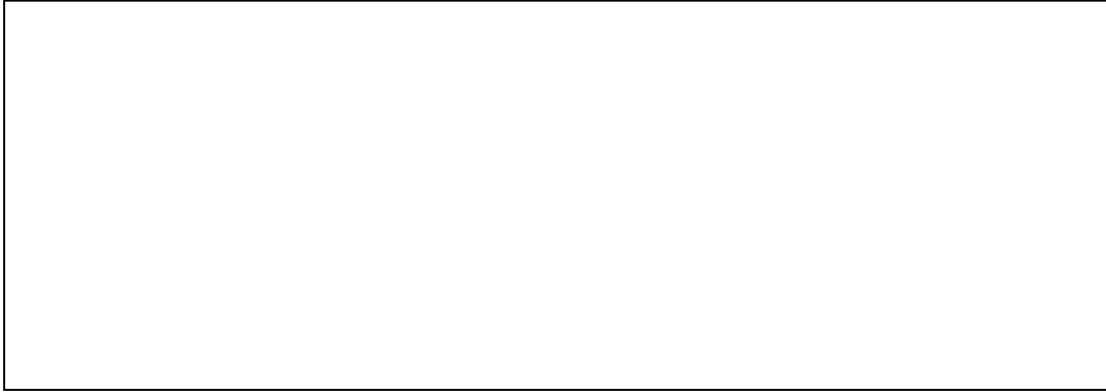


2.10.4 Have you got this reporting service in use elsewhere and would it be possible to get “hands-on” experience of the service?

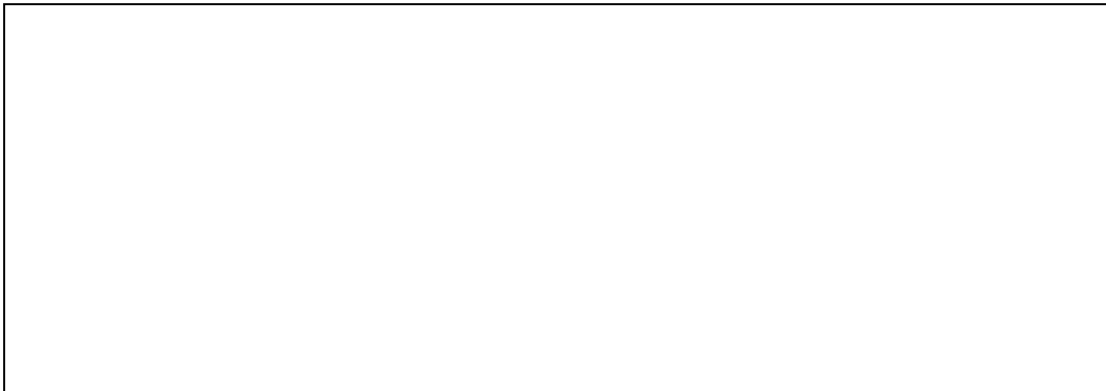


2.11 Optional Requirement – School Level Filtering

2.11.1 Describe in detail, with diagrams, product and equipment (hardware and software) lists, how you will meet the Council's requirement for a fully managed school level web filtering service.

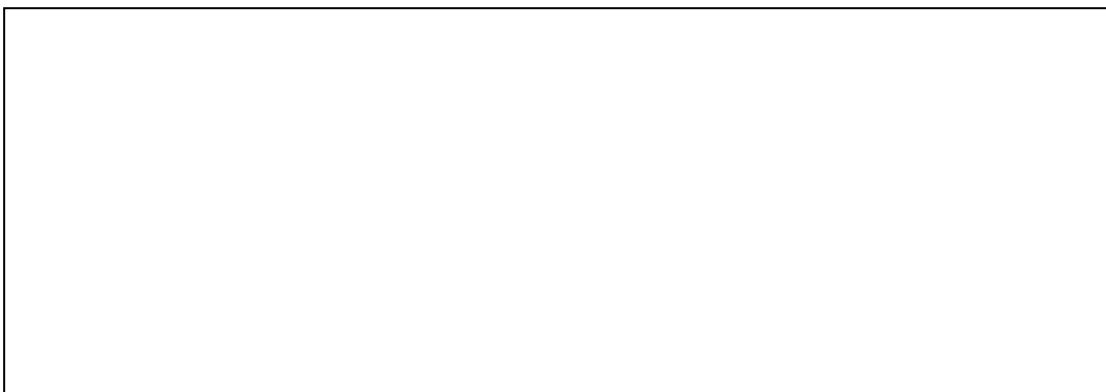


2.11.2 Explain how this will be implemented so as to ensure that the school is never able to operate a web filtering service below the minimum “base-line”.



2.12 Content Cache Service

2.12.1 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a resilient, fault-tolerant and fast caching proxy solution identifying the protocols that the solution will cache and the likely order of content that will be delivered from the cache.



2.12.2 Are you proposing to deploy the existing Zeus load balancers and Blue Coat ProxySG 810-20 appliances in your solution?

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is Yes, provide details explaining how you will incorporate this equipment in your response to the next question?

2.12.3 Explain how you will ensure that the caching service is maintained so as not to limit user demand.


2.12.4 Confirm that you accept the proposed reporting requirements?

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

2.13 DNS

2.13.1 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a resilient DNS service (internal and external) on a dedicated DNS platform based on the latest industry standard platform.



2.13.2 Provide a detailed resolution data flow map. Showing at every level from school to Internet level how each server resolves the requested Host Name / URL. Identify what servers perform what activity, what servers are authoritative and for what domain.



2.13.3 Explain how Internal Microsoft Workstation Registrations will be blocked on central DNS equipment.



2.14 Internet Domain Management

- 2.14.1 Confirm that you will provide the Council with a domain registration with a domain registration service for “org” and “org.uk domains and offer a “help desk” and a registration service for “.herts.sch.uk” domains if required by the Council’s schools.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

- 2.14.2 Confirm that you will be responsible for the provision of authoritative DNS for those Hertfordshire’s “.herts.sch.uk” domains covered by this contract and any other domain that may be required by the Council.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

2.15 Internet Addressing

- 2.15.1 Confirm that you will supply and maintain sufficient “real” Internet TCP/IP addresses to enable Hertfordshire schools to provide, participate in and make use of services offered over the Internet.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

2.15.2 Confirm that you will undertake to provide external IP address translation for those services that Hertfordshire schools require to be available from the Internet and provide as many additional public TCP/IP addresses as required to implement new services throughout the life of this contract.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

**2.16 Service Performance and reporting-
Service Reporting and Availability Reporting Service**

2.16.1 Provide a detail description with diagrams, as appropriate, equipment lists and software products of the solution that you will implement to meet the Council's requirement for a "real-time" on-line IP network Performance reporting service.

2.16.2 What data will the service capture (identify source/s), frequency of collection and what presentation facilities, pre-defined/ ad-hoc/ detailed/summary, will be available to the user for analytical purposes.

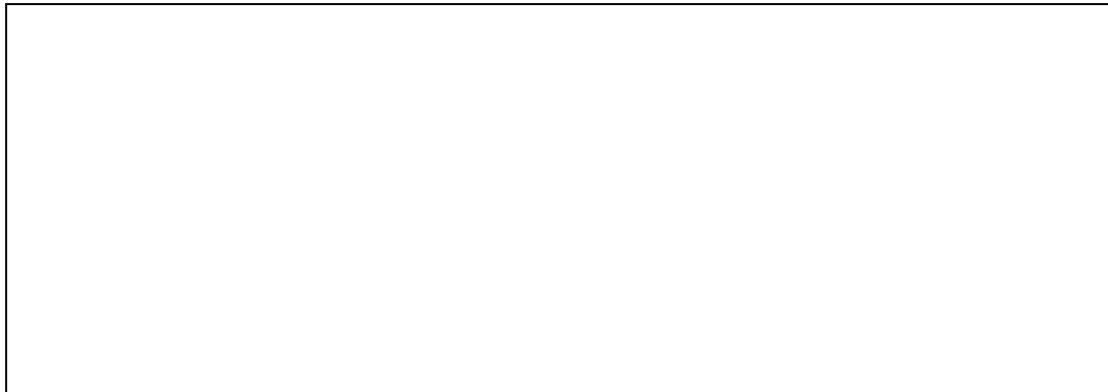
2.16.3 Confirm that the service will make available 13 months of historical data, including data on latency, utilisation and RTD for analysis.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

2.16.4 Describe the “client” and security requirements that users will need to access this service.

2.16.5 Describe how you will meet the Council's requirements for a real-time online "traffic light" graphical/tabular presentation showing the service status of all sites and key network and service components.



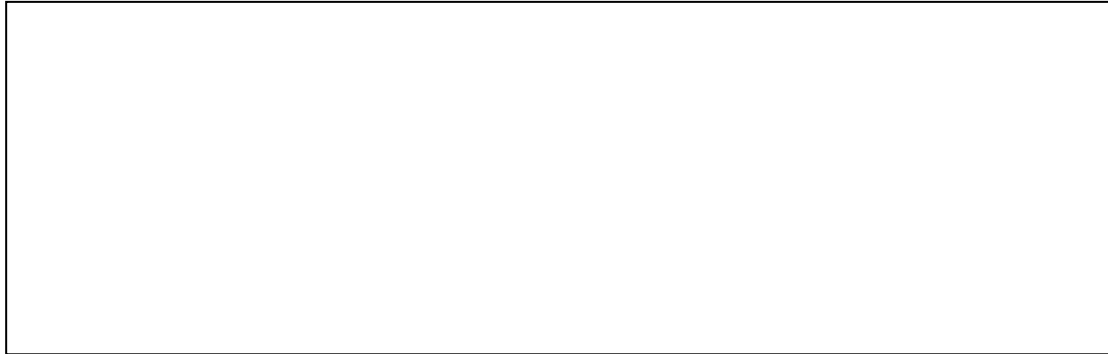
2.16.6 Describe how you will meet the Council's requirements for a self-diagnostic and performance testing facility for schools. Explain how this service would operate and what performance guidelines you will provide to the Council and schools staff.



2.16.7 Describe how you will meet the Council's requirement for a centrally located user perception and performance monitoring point to allow users located within a Council site to measure the time taken for "user path travelled journeys".



2.16.8 Confirm that all monitoring and testing systems will be available to both HCC technical staff and School level staff within the HGFL network. Detail the different levels of access control available and what services can be restricted to user account level access or on a 'need to know' basis.



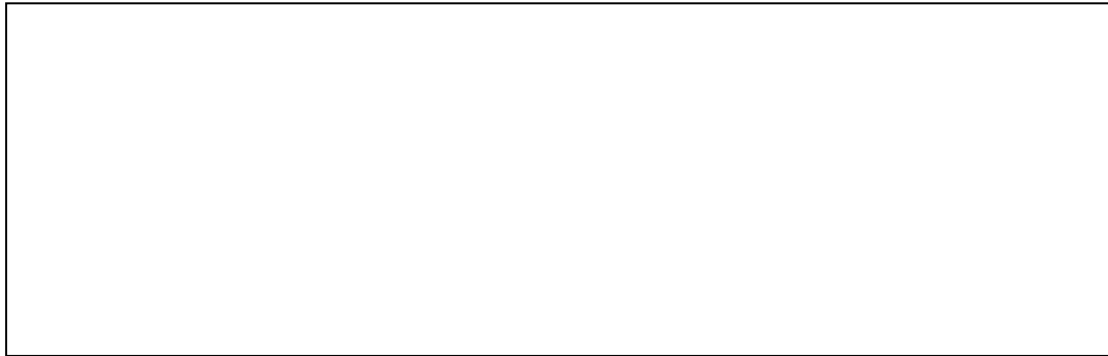
2.16.9 Confirm your acceptance of the Base web restriction checking, reporting and management requirements detailed.



2.16.10 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a robust centralised backup service for data held on school servers



2.16.11 Detail any software required as well as software and server / client configuration required to make use of the facility.



2.16.12 Explain in detail how your proposed service will allow schools to backup and restore SIMs and Curriculum data.



ADDITIONAL SERVICES

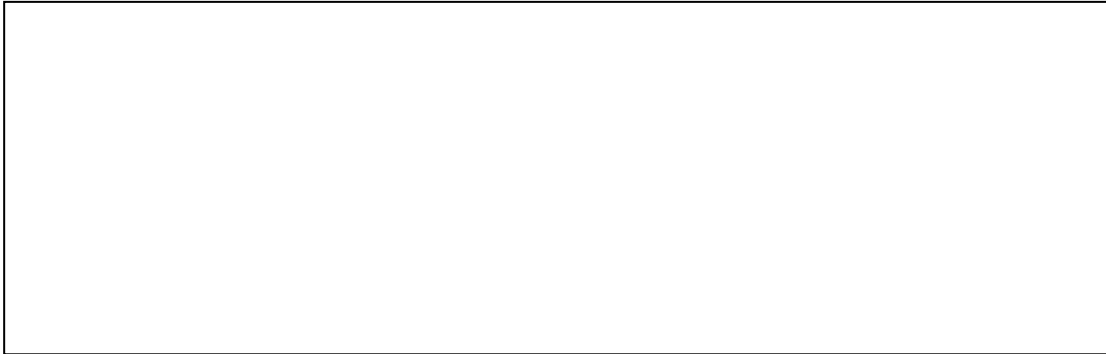
2.17 VPN Service

2.17.1 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a fully managed SSL and IPSEC client and clientless VPN service that will:

- Allow users to access network services from outside the network using an Internet connection.
- Allow for secure school to school access.



2.17.2 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for an Optional Additional Factor access security system for VPN account authentication.



2.17.3 Explain how you will provide and support, user account registration and management service.



2.17.4 Explain how you plan to meet the user support and training requirements for this service.



2.18 Video Conferencing Service

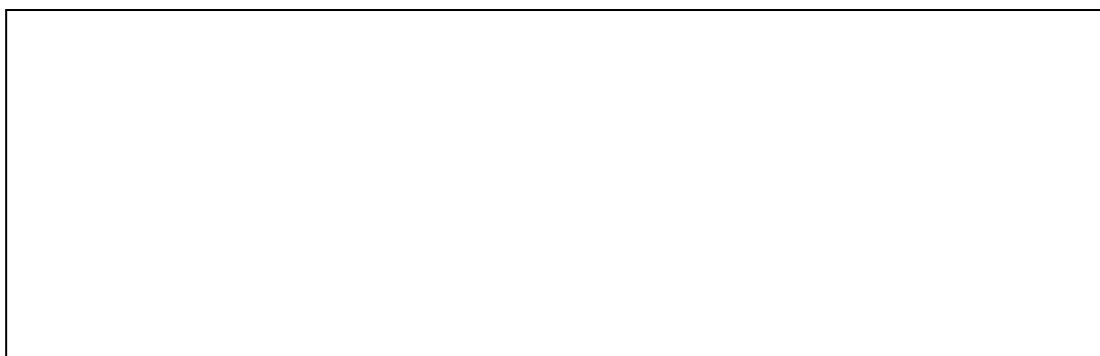
2.18.1 Are you proposing to deploy the existing Video Conferencing equipment in your solution?

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is Yes, provide details explaining how you will incorporate this equipment in your response to the next question.



2.18.2 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a resilient and robust IP video conferencing solution that will allow schools to engage in point-to-point and point-to-multipoint video conferencing sessions.



2.18.3 Confirm that your proposed solution will support all of the standards mentioned in the requirement specification section ---

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.



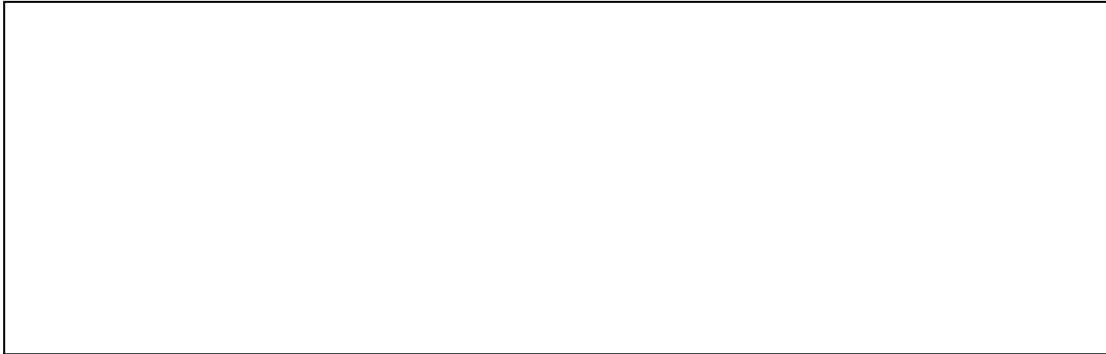
2.18.4 Explain how you would propose to set up a video conferencing service as detailed that will provide a reliable and flexible VC facility.

2.18.5 Give details of relevant qualifications held by your technical support staff and their experience setting up and supporting a school or similar video conferencing service. Confirm that these staff will be available to work with Council advisers to encourage and evangelise the rollout of VC services within the HGFL.

2.18.6 Do you maintain/support any operational video conferencing services? If so please provide details of the technical solution and a contact for reference purposes.

2.19 Network Support for Voice over IP

2.19.1 Confirm that the service can support IP telephony Trunk side as well as VOIP user side services across the schools HGFL overlay.



2.19.2 Provide detailed design guidance for schools to enable them to modify their LANs to be able to make use of such services.

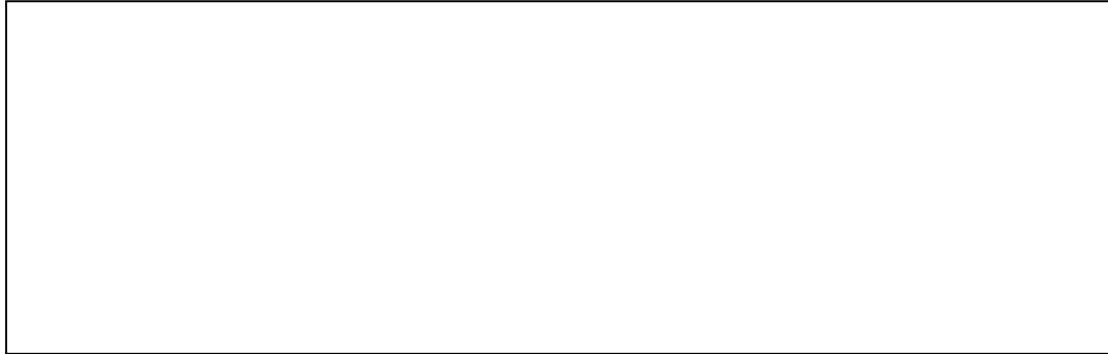


2.19.3 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a secure SKype gateway. Identify all bandwidth and security mediation technologies that would be deployed to meet the authorities specification in this area.



2.20 Hosting Facility

2.20.1 Provide details of the hosting facility that you can make available to the Council at each of the core Internet 'Head End' sites clearly indicating any limitations that there might be on the power consumption and heat output of the units being hosted.



2.20.2 Explain how you will enable the County to remotely manage its hosted equipment?



2.21 Network Support for CCTV

Describe in detail, with diagrams, product description and equipment (hardware and software) lists how you will create and support a secure network overlay to allow the Hertfordshire CCTV Partnership operations centre to provide a CCTV surveillance service to the Council's schools.

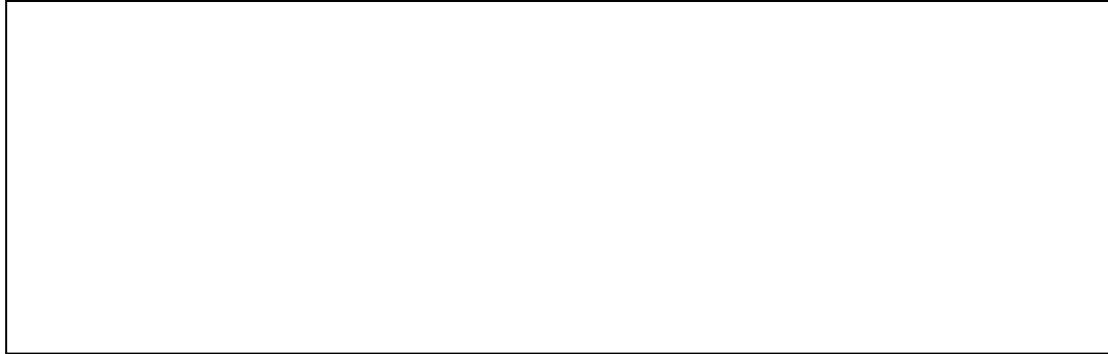
Note: The surveillance centre **MUST** only be allowed to access those schools that are under contract with them and will not be given access to any other network or core services.



OPTIONAL SCHOOL SITE BASED SERVICES

2.22 Local Cabling Support & maintenance

2.22.1 Explain how you would implement and manage an on-site managed service for the design, installation, move, patching and repair of school site structured copper and Fibre cabling.



2.22.2 Detail any requirements for adoption of site services not already identified within this Tender specification.

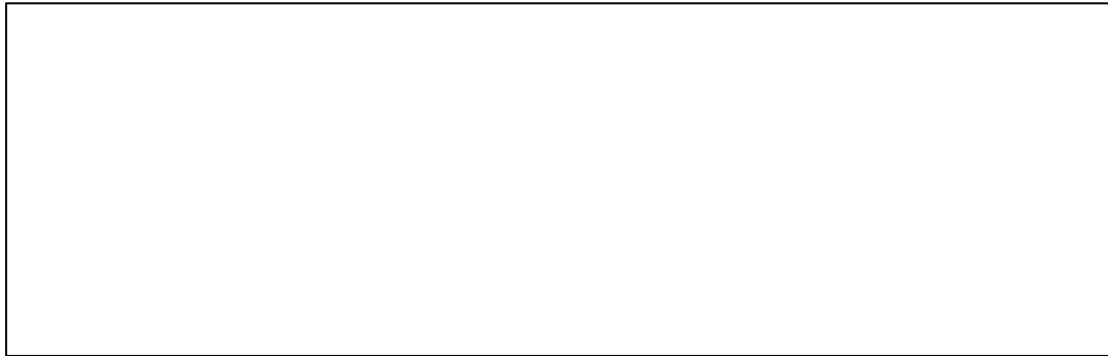


2.23 LAN equipment

2.23.1 Explain the process that you would use to implement and support a fully managed LAN solution encompassing a range of schools at of difference sizes and estates.



2.23.2 Detail any requirements for adoption of site services not already identified within this Tender specification.



3. OPTIONAL CENTRAL SERVICES

3.1 ID management

3.1.1 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a resilient and robust Identity Management system that is Shibboleth® / SAML compliant as detailed.



3.1.2 Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a resilient and robust Active Directory synchronisation service on a school by school basis.



3.2 Public WIFI overlay

Describe in detail, with diagrams, product description and equipment (hardware and software) lists, how you will meet the Council's requirement for a robust Public WIFI overlay as detailed.



3.3 Design Consultancy

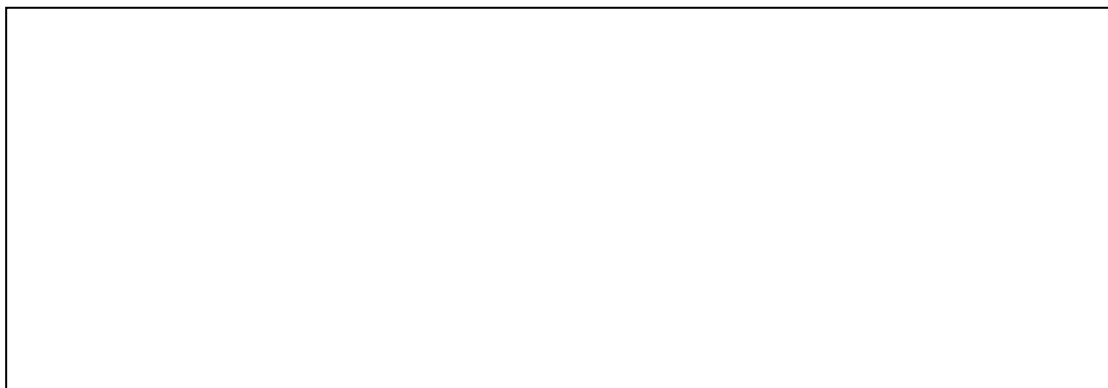
Provide details of how you will be able to provide the Council with a technical project based design, consultancy and technical assistance service covering LAN design ,Video Conferencing , Firewall and Security and School LAN Active Directory design that can be bought into by schools.



SERVICE MANAGEMENT

3.4 Support Centre:

3.4.1 Provide details of the Service Centre Manager and Technical Manager responsible for the delivery of this service.



3.4.2 Please provide a detailed description of the service desk and support operation that you will maintain to support this contract.

3.4.3 Provide details of any industry standard methodology used in the delivery of this service, staff numbers, skill sets and qualifications/accreditations.

3.4.4 Will your service centre be located in Hertfordshire?

3.4.5 Provide full address details for the proposed service centre.

3.5 Incident and Problem management

3.5.1 Provide a detailed description of the incident and problem management service/methodology that you will implement for this service identifying the software tools/service that you will use.

3.5.2 Explain how you will ensure that service documentation is accurate and maintained in a timely fashion.

3.6 Service “Trouble-shooter”

Confirm that your proposed solution will provide the Council with the services of appropriately skilled resources to help resolve school service issues.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed. Detail what alternative arrangements you can put in place to provide schools with onsite assistance.

3.7 Service Changes/ Process for new services

3.7.1 Confirm that you comply with the “change control” and “service change” processes identified in section:

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

3.7.2 Are you able to provide an on-line system to allow users to monitor the progress of service changes and faults ? Please provide details.

3.8 Engineering change request service

Confirm that you will operate an internal engineering change control system and employ suitable ITIL style processes to ensure all engineering changes are appropriately authorised and signed-off by the Council before implementation.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

3.9 Council Business Continuity Planning and Disaster Recovery Processes

Confirm that you will provide support to the Council with the ongoing support for its Business Continuity planning processes.

☐ Yes ☐ No (please ✓ as appropriate)

3.10 Best value

Confirm that you accept the best value proposals made in section .

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

3.11 Preventative maintenance

Explain how you will meet the Council's requirements/objectives identified in the "Preventative Maintenance" section of the specification.

3.12 Continuous service improvement

Explain how you will meet the Council's requirements/objectives identified in the "Continuous Improvement Service" section of the specification.

3.13 Adaptive Maintenance

Explain how you will meet the Council's requirements/objectives identified in the "Adaptive Maintenance Service" section of the specification.

3.14 Service hours

Confirm that you accept the service hours for 'Network and Core services', 'Network and service support centre' and 'Service Desk' as detailed.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot accept what is proposed.

3.15 Contract Governance between the Contractor and Council

3.15.1 Explain how you propose to manage the operational and contractual requirements of a service of this size and scale? What processes and guarantees would you propose to ensure the professional and timely resolution of operational and contractual issues.

3.15.2 Confirm that you will be able meet the governace framework detailed

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot meet this requirement

3.15.3 Provide an escalation process as outlined in the Tender, clearly identifying The Councils key requirements.

3.15.4 Confirm that you will be able to work as described throughout the document with the Councils SITSS schools software and support provider.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot meet this requirement.

3.15.5 Confirm that you will be able to work as described throughout the document with the Councils existing and newly appointed SMS provider.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the above question is No, please give the reasons why you cannot meet this requirement.

3.16 Service Transition

3.16.1 Explain, in detail, how you will plan and build the network, core and support services and migrate all Education sites, without service disruption, by 28th February 2010.

3.16.2 Provide details of the management, project and technical teams, with staff numbers, that you will establish to deliver this contract.

3.16.3 Provide the names, experience and qualifications of “key” staff to include the leads in the areas of project management, technical design, account management, HR, Finance and technical implementation.

3.16.4 Provide a detailed project plan, with your submission, to support your explanation of how you will establish the network and core services and migrate user sites by 28th February 2011.

3.16.5 Provide a detailed risk assessment plan, with your submission, to support your explanation of how you will establish the network and core services and migrate user sites by 28th February 2010.

3.16.6 Explain, in detail, the processes and procedures that you will implement to identify and subsequently manage the timely service provision to “difficult to connect sites”

3.16.7 Describe in detail how you will approach the development and implementation of a “Change Awareness programme” to ensure that the schools services are migrated with a minimum of disruption. Please include details of any relevant experience that you have in this area.

3.16.8 Describe in detail how you will develop a working relationship with the various “first line” support teams who will be interfacing with Schools and corporate users. Identify any software solutions/systems that you are able to make available to the first line support teams to streamline the operation of service functions (faults/changes etc.).

3.16.9 Confirm that you comply with the requirements for service acceptance as identified in section:.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed.

3.16.10 Explain how you will meet our requirements to provide the “online monitoring and reporting services” sufficiently early to enable us to use them for service acceptance.

3.16.11 Provide a draft “service acceptance plan” with your submission.

3.17 Wayleave

Confirm that you comply with the requirements for wayleave as identified in section:.

☐ Yes ☐ No (please ✓ as appropriate)

If the answer to the previous question is No, please give the reasons why you cannot accept what is proposed

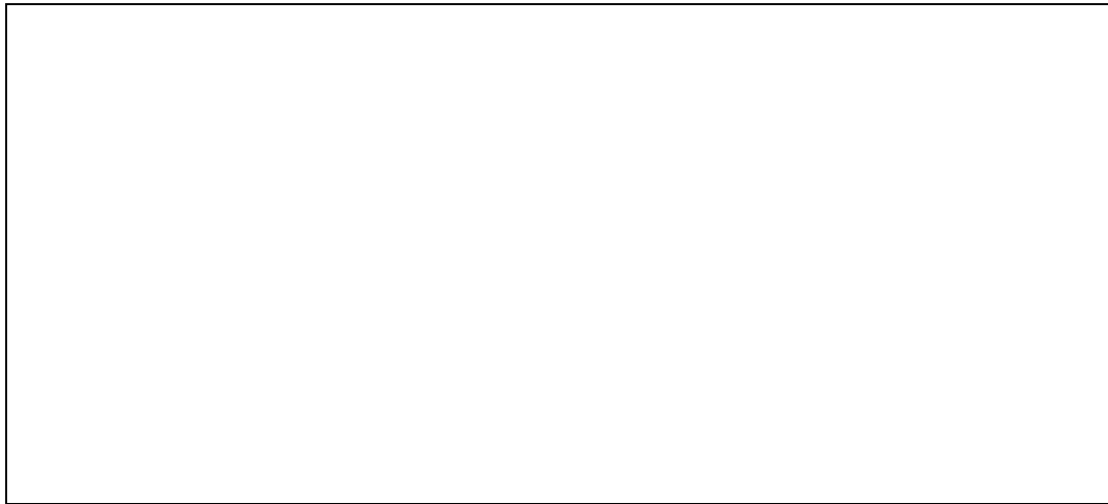
3.18 Expiration of Contract with NTL

The Council's contract with NTL, our existing supplier, specifies that on the expiry of the contract that existing site equipment will become the property of HCC. If your design requires the use of Cisco Router equipment identify any opportunity to reuse equipment to save the Council money.

The Council can arrange for any existing links in the current contract to be novated to the new supplier at an agreed reasonable cost (to be paid to NTL by the Council). If your design could benefit from Novating existing circuits and this would in turn save the Council money please clearly identify those services that you would wish to Novate.

3.18.1 NTL will provide the Council with all information, programs and scripts used by NTL to deliver the current service to the Council. Please identify if you wish to make use of any of these existing assets.

3.18.2 Will your solution depend on NTL providing equipment or circuits used under the current contract? Please provide details.

A large, empty rectangular box with a black border, intended for the user to provide details regarding their solution's dependence on NTL equipment or circuits.

3.18.3 Please explain how you will establish a working relationship with NTL to facilitate the transparent transition of schools to your service

A large, empty rectangular box with a black border, intended for the user to explain how they will establish a working relationship with NTL for a transparent transition.