worcestershire
c o u n t y c o u n c i l

12 December 2017

REQUEST TO COMMIT FUNDING FOR NEW TECHNOLOGIES IN CARE – HOWBURY HOUSE

Relevant Cabinet Member
Mr A I Hardman

Relevant Officer
Director of Adult Services

Recommendation

1 **The Director of Adult Services recommends that the Cabinet Member with Responsibility for Adult Social Care:**

(a) **approves the attached business case from Altiom and agrees the £199k funding of New Technologies in Care as identified in this report for Howbury House, to deliver the cashable benefits outlined below; and**

(b) **authorises the Director to take all necessary steps to put (a) into effect.**

Background

1. In November 2015 Cabinet endorsed the development of a New Technologies in Care project with the aim of using innovative technologies to:

- Improve outcomes and experience for people in receipt of Council-funded Care
- Increase productivity for care providers, reducing their costs and their reliance on staff, and thereby improving their sustainability
- Allow savings for the Council – these may come directly from a reduced cost of care, and/or indirectly from intellectual property rights for any products developed, and
- Contribute to the financial viability of Innovation Partners.

2. It was agreed by Cabinet to set aside £2m from directorate reserves for one-off investments which could be made on the receipt of detailed business cases from innovation partners and where clear benefits can be identified, and Council approved the addition of this £2m to the Capital Programme.

3. The authority to approve individual business cases and appoint 1 or more Innovation Partners and as a consequence invest any of the £2m capital reserve in the development of new technologies with the Partners was delegated to the Cabinet Member with Responsibility for Adult Social Care in consultation with the (then) Director of Adult Services and Health – now Director of Adult Services.

Initial progress and challenges

4. The approach so far has been to identify projects through which technology could enable the service to be delivered in new and innovative ways. These projects include Howbury House, Berrington Court (Extra Care), Supported Living (Learning Disabilities) and Greenhill Lodge (Children's Services)

5. To procure the right solutions, the Council has developed a NTIC Dynamic Purchasing System (DPS) on which there are now 28 potential suppliers. The DPS is available to six councils and the three Worcestershire CCGs. Developing the DPS has taken a considerable amount of time as this involved challenging and changing systems, process and thinking.

Next steps and investment opportunities

Howbury House

6. Howbury House is a residential care home which is owned and run by the Council. It was built in the 1980s, and comprises of 32 units to support the delivery of personal care for its residents. It provides a service for people with Dementia, Physical Disabilities and adults over 65 years of age. It currently has limited technological infrastructure and technology.

7. There were three detailed business cases received as a result of the formal procurement process for Howbury House, all of which indicated a return on investment and further partnership opportunities for the Council. The preferred supplier for this particular project was identified as being Altiom. Altiom is the preferred supplier as it supports a significant return on investment for Worcestershire County Council (Appendix 1). Altiom's technology solution comprises of a number of interactive generic components, alongside smaller operating and ongoing support costs offered a solution where the overall costs for Worcestershire County Council were minimised. Ongoing research, design and emerging technology costs are also included in the overall cost ensuring the solution remains at the technology forefront and therefore providing further opportunity for Howbury House to benefit, where appropriate, from new and emerging technologies.

8. Altiom Ltd (a company registered in Worcestershire) have developed technology that will support people with their mobility, personal health and wellbeing, behaviour and social independence. Through the use of a range of 'hard wired' and wireless generic peripherals the technology is configurable to each person ensuring that Altiom, for example, can monitor of emergency alarms, provide reminders or to help with tasks that have become difficult. The technology available will also support staff by reducing or removing administrative tasks, such as updating Support plans, with an integrated technology based approach. The data provided by the technology can be easily analysed and can be used to help in configuring the ongoing delivery of the service to ensure service user's outcomes are being delivered. Altiom can also be used to support the management of the building through remote monitoring of, for example, fridges (used to store medicines), heating and lighting.

9. The technology would be installed during the third and fourth quarters of 2017/18. There would be a 2 year return on a total investment of the £199k initial investment with breakeven point during 2019/20. There is a total efficiency of

£311k over 5 years. (Appendix 2 – Altiom Business Case - p5). The technology will enable the delivery of efficiencies but to fully realise the potential the Council will be required to review the way in which the service is delivered whilst recognising that the Council must ensure the service continues to meet both the Council and Care Quality Commission standards and regulations.

10. Howbury House would become an exemplar residential setting where other residential homes in Worcestershire can visit to better understand how technology can support them to deliver care.

Funding required

11. The total funding required from the £2m of reserves for Howbury is £199k across 5 years. The details of the funding required and return on investment is set out in Appendix 1 – New technology in care, summary of funding and return on investment.

Supporting Information

- Appendix 1 – New technology in care, summary of funding and return on investment.
- Appendix 2 – Altiom Business Case (Note: this has been partly redacted in order to remove commercially confidential information relating to financial or business affairs of Altiom and the public and such partial redaction is in the public interest. Redactions are shown as 'xxxxxxxxx')

Contact Points

Specific Contact Points for this report
Richard Keble, Assistant Director of Adult Services
Tel: 01905 846992
Email: RKeble@worcestershire.gov.uk

Steven Medley, Interim Lead Commissioner
Tel: 01905 843601
Email: Smedley@worcestershire.gov.uk

Appendix 1 – New technology in care, summary of funding and return on investment.

Project / Work Area	Technology Supplier	2017/18	2018/19	2019/20	2020/21	2021/22	Total
Investment							
Howbury House	Altiom	168,680	1,200	9,450	9,636	9,831	**198,797**
Return on investment							
Howbury	Altiom	59,781	60,976	62,217	63,462	64,713	**311,149**
Net							
Howbury	Altiom	**108,899**	**-59,776**	**-52,767**	**-53,826**	**-54,882**	**-112,352**

Appendix 2 – Altiom Business Case

Howbury House Business Case Questionnaire

1. Please provide an executive summary on your solution, which identifies why and how it specifically meets the requirements specified in your initial submission

1 System Description
2 Application Areas
3 Commercial summary

1 System Description.

The Altiom system comprises of a number of interactive components, which, when combined, allow Care Providers to create personalised solutions based on the needs and capacity of the individual. Those components allow the system to:

• Monitor a wide variety and number of non-proprietary sensors, wired or wirelessly.
• Connect all devices as part of the Internet of Things (IoT).
• Be programmed to meet the personalised needs of the individual and their care plan.
• Monitor mobility and activity.
• Interact with wearable devices.
• Know the day and time, use timers and set and reset itself and apply logic to build complex routines based on conditions set by the service provider.
• Automatically operate a wide range of local electromechanical output devices, alarms, alerts and reminders. These can also be operated remotely.
• Store and retrieve cloud based real time and historical data.
• Accept data inputs from a wide range of devices:- Touchscreens, digital pens, scanners for QR and bar codes.
• Communicate via SMS, email, online and through other systems (for example the existing nurse call system).
• Give access via the internet or locally, based on individually assigned access privileges.
• Allow access to vetted accessors, for individual or group data.
• Be managed by the staff at Howbury, via the management interface (Dashboard) which displays real time status indicators and red, amber, green alert status indicators.
• Be programmed locally, by Howbury staff, without the need for outside assistance, via the 'set system' interface.
• Geofence and monitor movement

The system is highly integrated and can simultaneously perform a wide variety of tasks.

2 Application Areas, where the system can assist with or replace various manually performed functions.

Care:
• Night time close monitoring.
• Data acquisition and automatic reporting, for example food and drink intake.
• Bowel habit recording.
• Automated reminders, staff, users and others.
• Automation of devices in the care environment.

• Creation of virtual visits.
• Increasing staff time to have meaningful interaction and reduction in time spent on other things.
• Fall prevention / alerts.
• Increasing independence via assistance checking and reminding.

Clerical and Admin:
• Automatic reporting, reminders and schedules.
• Website and App access to key functions and features.
• Reduction in paperwork.
• H&S / Compliance / O&M manual administration.

Catering and food
• Automation of HACCP checks and use by dates.
• Menus and planning.
• Automatic replenishment.
• Cost checking.

Cleaning and housekeeping
• Automatic reporting and scheduling of tasks.
• Stock control.
• Automatic replenishment.

Buildings and estate
• Energy / utility use.
• Security.
• Maintenance.
• Tracking.
• Enhancement/use of existing systems.

Medical
• Drug tracking and automation / checking of medication regime

Staff
• Communication within the building
• Tracking
• Providing new models of deployment and care ratios
• Recruitment
• Reduction in agency use
• Inductions

3 Commercial Summary

Benefits fall into two categories: those which offer potential savings and those which do not. All benefits are intended to improve outcomes.

Where a cost saving potential is made, the choice of whether to recover the cost saving or to utilise the benefit in other ways will be the choice of the management at

Howbury and WCC.

The Benefits Realisation spreadsheet works on the assumption that approximately 2/3 of the potential benefits are taken as cost savings which also improve outcomes and the remainder contributed to improving outcomes alone.

The following need to be funded under the normal terms and conditions of previous projects with WCC. Those being: assessment and design, hardware, firmware, software, hosting and data cost, installation, deployment, training and recurrent costs.

Costs which Altiom Ltd will bear and which are shown as investment from supplier include: In depth implementation consultancy, R&D, continued work to integrate emergent technologies during and after the project, for example voice recognition, integration with other agencies, continued development of the Altiom system as part of a future commercial partnership.

The major budget at Howbury is staffing cost and this can be impacted in a number of ways. Calculations are based on saving 45minutes per day of a fulltime equivalent member of staff, changes in the staffing model, reduction in paperwork, less reliance on agency staff etc

Other less contentious savings are made by using Altioms powerful BMS functions, for example changes to the lighting system, energy monitoring and management

Full cost recovery is predicted in 2.83 years.

2. Expected Benefits

Please describe the benefits that are expected to arise from this project and how they will be measured. Benefits can be qualitative or quantitative but need to be expressed in a tangible way so that their achievement can be measured.

Benefits of implementation of the Altiom system are varied and widespread. The beneficiaries are the staff and management at Howbury, residents, WCC, resident's families and friends.

Benefits for management:

Use of the system presents an opportunity to redesign staffing models, care ratio, shift patterns and deployment, as a result in efficiency in care. There is a benefit in cost saving using staff efficiencies and a benefit in the quality of care; for example, staff will be liberated from certain tasks, allowing a higher amount of meaningful interaction with residents.

Using the Altiom database and asset management tools will allow management to reduce the administration burden and reduce paperwork. Having records in digital format provides benefits in many ways. For example: data acquisition will be much more rigorous and accurate and once collected, the data is in a much more useable format. Schedules and reminders can be pre set and automatically generated and the process will self check and report errors or non compliance. Records are more easily retrieved, shared and duplicated. Examples of data groups currently held on paper include: fluid intake, bowel records, refrigerator temperatures, menus and meal selection, medication records, birthday list, GP list, user name and room allocation, infection control log, phone list, accident reports, cleaning schedules, accident reports, fire training records, CQC returns, PAT testing, tree management / safety file, concerns log, comments file, complaints file, residents contact details, DoLs and long term care file, Health and Safety file,, monthly audits, food policy, various staff files and many others.

Improved intervention strategies can be more easily implemented, ensuring that the correct response is provided in a given set of circumstances.

With much greater control of the care environment provided using the Altiom automation functions a saving of around 10% can be expected in electricity costs. The lighting in the building is an obvious area where improvements are a latent source of both cost saving and improve functionality.

Benefits for residents.

Increased independence and less reliance on staff can be provided by: automation of reminders, help with tasks, virtual visits and provision of meaningful interaction with family members. There will need to be a care plan for each individual which identifies who is likely to benefit from such measures and how it is implemented and monitored. Once that plan has been set an indicator can be generated by the system providing a quantitive measure of the system usage.

Having a digital record of various parameters will lead to an increased efficacy. For example, fluid intake is currently written down and then checked on an ad hoc basis. Using Altiomdb will show trends over time, raise alerts and make access to records easy.

The Altiom system is very well suited to help prevent falls by a variety of measures, using reminders and alerts, controlling the environment, maintaining ambulance, ensuring adequate fluid intake and so on. Comparisons can be made to any existing falls records over time and comparisons easily made.

Similarly, moving safely about the home is a combination of the above and can be measured in a similar way.

Benefits for WCC

There will be much greater transparency provided by the data being available from source for SLA monitoring and control. There will be a reduced need for visits to site and automatic compliance monitoring for both statutory and non-statutory.

Implementation of the system will allow WCC to:

• Define, collect and monitor key data specific to mobility issues.
• Monitor Key performance indicators.
• Define a new set of standards for the delivery of care and the means by which it is delivered.
• Determine areas where technology can lower care costs, based on sound rather than anecdotal evidence.
• Lower care costs
• Improve outcomes
• Improve compliance

The system will allow WCC and the management at Howbury to introduce Monitoring processes (M), Automated Processes (A).

Reduce staff time spent on the following:
1. Physically checking the security of the building at night. This will be an automated process
2. Checking individuals at night

3. Risks and Potential Issues:

Please describe any known possible risks the project will have or any of the outcomes that could be perceived as negative by one or more stakeholders and what measures will be put in place to mitigate these risks.

Projects using advanced care technology can fail for many reasons that are not related to the reliability of the technology. Many of these are due to obstacles and barriers presented by users, practitioners, administrators and the wider care community.

The users at Howbury are elderly and will not readily accept or adopt new technologies which feel alien to them and do not immediately provide a benefit. Similarly, if

they do not understand the benefit or use of technology it may not be adopted. Furthermore there may be physical or emotional barriers to new tech.

Staff will have a natural reaction to the implementation of the project and might view it as a cost cutting, job threatening scheme which adds to their workload rather than changing the focus of their activities. Furthermore, the increased transparency and accountability surrounding their activity could foster to a 'Big Brother' feeling.

If day to day use of the technology is too complicated then it will not be adopted.
Commissioners and Management can become focussed on KPIs and SLAs, which are easily misused.

The Altiom system is personalised to the needs individual and, by its nature, has a wide range of functions. There is a risk that this becomes a negative issue as it might seem too complex and its aims too difficult to summarise.
A careful program of design and implementation, with staff and management input, will help to allay fears and add a feeling of empowerment in the design and deployment of the system. All stakeholders will need to be involved from the outset in every aspect of its use.

Practical measures will be taken to overcome these difficulties with a face to face programme of implementation consultancy which seeks to identify early adopters and advocates amongst staff and management ant to predicate the use of the system on an incremental basis.

Key initial uses of the system have been outlined elsewhere in this business case and these will form the basis for a soft, incremental launch of the technology. Picking one or two key applications and introducing new uses in a staged manner will overcome 'instant rejection'.

At all stages of the deployment process, Altiom Ltd will provide implementation support consultancy in a hands on way to overcome any obstacles and barriers to adoption through a programme of awareness and education.

4. Timeframe

Please provide details of the initial timescales for the project including the delivery of key milestones e.g. begin to install solution / finish installation / testing complete / sign off of solution / go live with solution / First review of solution.

This can be presented as an appendix if you wish by uploading a file on the 'Application Page'.

Phase
1. Detailed analysis and interpretation of needs with WCC and Howbury management – 4 weeks
2. System final specification, plans and drawings, CPP and H&S considerations – 2 weeks
3. Initial installation, bedrooms – 6 weeks, followed by testing
4. Installation communal areas – 4 weeks, followed by testing
5. Installation complete
6. Implementation phase 4 weeks
7. Sign off
8. Evaluation and review period

Total is 24 weeks. From Analysis to installation in bedrooms, experience suggests this can be done is a little as 6 weeks.

The deployment of the system will follow an initial, but in depth assessment of specific needs with the Users, Management and Staff at Howbury and WCC. This initial consultation will allow stakeholders to influence the measures implemented and at what pace. Once this framework is provided customisations to the system, specifically to the dashboard interface will be made and the hardware installed.

Initial assessments indicate that are clear and immediate benefits in the following care areas, which will be implemented first to maximise efficiency:

• Night time bedroom monitoring, where there are currently 2 hourly manual checks performed on every resident, with little or no alert/alarm function. There is also a security check at the beginning of the shift. These processes can be fully automated and the Management can then choose (if they so wish) to alter the model of supervision.
• Daytime communal area functions. The main determinant for the model of care provided is the geography of the building, with staff deployed on an area by area basis, which is sub-optimal. Using the Altiom system as a global management tool Carers will be able to:
o Implement new models of care and to spend more meaningful time with users
o Increase efficiency and reduce time spent on communication and recording.
o Set reminders and alerts, for themselves, users, management, friends and family etc
o Automate tasks to increase independence
o Create and if necessary supervise greater interaction with family members, through virtual visits
o Involve a wider care community in the care process.
o Monitor changes over time
o Help users to move safely around the home
• Administration and building management:
o Energy efficiency and monitoring
o Record keeping, for example automatic refrigerator temperature monitoring
o Paperless recording

Initially the system can be used as a monitoring and assessment tool without automation etc. in order to establish a baseline. This will allow accurate assessment of efficacy post completion.

Financial Arrangements

Please download the spreadsheet 'Benefit Realisation' and complete all tabs where required.

5. Return on Investment:
Please tick below to confirm you have completed the 'Return on Investment' tab on the 'Benefit Realisation' spreadsheet

◉ Yes

○ No

6. Investment Analysis
Please tick below to confirm you have completed the 'Investment Analysis' tab on the 'Benefit Realisation' spreadsheet

◉ Yes

○ No

7. Savings Analysis

Please describe below how the savings will be achieved from implementing the Solution.

Basis for calculation and assessment of benefit at Howbury

Initial calculations indicate that to maximise the benefits of the system a backbone of infrastructure will be required. This will allow the system to act in as assistive technology tool, but also allow the same technology to perform a building management roll and to be used as an administration tool.

Whilst there is scope for flexibility in the scale of the system installed the business model has been optimised to gain maximum benefit from the outset. It will be possible to add further features to the system in the future. If these were installed as standalone systems then there would be diminished returns, but as the system is designed to be scaleable based on the installed infrastructure, these options will become low cost and hence better value.

Efficiencies provided by the system will, in many cases, free up staff time. There appears to be a choice that can then be made by service commissioners and managers:
1. Reduce staff hours and ratios
2. Redesign staffing models
3. Redeploy staff to other meaningful duties

For this exercise a cost justification has been based on 1 above, but it should be noted that it will be the choice of management whether costs are saved or staff re-tasked, perhaps to give higher quality care delivered or perform another function. On that basis there has been a presumption that only 2/3rds of the projected saving in staff time is used a contribution to cost savings.

Savings on care staff time are based on saving an average of 2/3rds of 45 minutes per day, based on 40hr full time equivalent staff This represents a 6.7% saving on staffing cost. (This is much higher at night, but there might be other influences which do not allow the maximum cash benefit to be realised)
Saving: £847,000 x 6.7% = £56,749

BMS. Savings on energy costs estimated at 7.2%
Saving: £42,400 x 7.2% = £3,052

Total potential annual saving: £59,781

This shows total cost recovery in 2.82 years, if the benefits are taken as cost savings. This, accounting for inflation, gives an ROI of 3 times investment in approximately 8 years.

There are two ongoing costs related to service/warranty and to data/hosting costs. Equipment parts and labour and guaranteed for 12 months and then there is a warranty option based on 7.5% of the equipment and installation cost. Data and hosting costs will be charged at cost + 15%. These figures are shown in the RoI tab

8. You are also required to complete the 'Savings Analysis' tab on the 'Benefit Realisation' spreadsheet. Please tick below to confirm you have completed this.

◉ Yes

○ No

9. Funding Arrangements

Please evidence below how you will fund the implementation of this solution.

As stated in the Executive Summary, Altiom's costs fall into a number of categories.

xxxxxxxxxxxxxx

Costs which Altiom Ltd will voluntarily bear and which are shown as investment from supplier include: In depth implementation consultancy, R&D, continued work to integrate emergent technologies during and after the project, for example voice recognition, integration with other agencies, continued development of the Altiom system and the Altiom database (Altiom DB), as part of a future commercial partnership. The company do not seek a return on this investment from this project, but seek to further the deployment of the system in other areas with WCC as a commercial partner.

The long term aim is to make Howbury an exemplar scheme and to improve efficiencies and outcomes. This will help both WCC and Altiom to influence service provision elsewhere, providing financial benefits and better outcomes.

10. If the successful bidder, do you commit to having the following:
1. Employer's (Compulsory) Liability Insurance = £5 Million
2. Public Liability Insurance = £2.5 million
3. Product Liability Insurance = £5 million
4. Professional Indemnity Insurance = £2 million

☉ Yes

○ No

11. If the successful bidder, do you commit to being part of a Gain-Share agreement with the Council in relation to the Solution

☉ Yes

○ No

Statement of IT Requirements

These requirements are divided into subject-based sections. Some questions have explanatory footnotes that elaborate on what is required and / or ask for specific explanations. Each Requirement is Mandatory apart from the Requirements in questions 20 and 24 which are Optional (Mandatory = No). Any response by the supplier to a Mandatory Requirement which is not deemed compliant will result in the whole response being non-compliant, and therefore rejected.

12. SECURITY

The solution must be certifiable as PSN (Public Service Network) Compliant where it connects to Public Networks, and it must support the Council in meeting the 1998 Data Protection Act. Please explain how this statutory requirement can be met

A Public Services Network Compliance Certificate could be issued by the company, if required by WCC, to evidence that the infrastructure is sufficiently secure that its connection to the PSN would not present an unacceptable risk to the security of the network.
To comply with the principles of the DPA 1998

However, it is unlikely that PSN certification will be required as it is not likely that the system will be required to connect directly with WCC or NHS networks, preferring to allow 'web access' to data and services provided by Altiom.
It should be noted that our cloud hosting provider Amazon Web services (AWS) UK is PSN certified https://www.gov.uk/government/publications/public-services-network-psn-service-compliance/psn-compliant-services.
Should PSN compliance be required then consultation would need to be entered into to ensure that Altiom's security arrangements are compatible with PSN standards and that certification can be issued.
At all times Altiom will adhere to its own security policy including but not limited to:
• Acceptable use policies, to specify what types of network activities are allowed and which ones are prohibited
• E-mail and communications activities, to help minimize problems from e-mails and attachments
• Antivirus policy, to help protect the network against threats like viruses, worms, and Trojan horses
• Identity policy, to help safeguard the network from unauthorized users
• Password policy, to help employees select strong passwords and protect them
• Encryption policy, to provide guidance on using encryption technology to protect network data
• Remote access policy, to help employees safely access the network when working outside the office

1. Personal data will be processed fairly and lawfully and shall not be processed unless certain conditions are satisfied.
2. Personal data will only be obtained and processed for specific and lawful purposes. It will also only be processed for purposes which are compatible with those for which it was obtained.
3. Personal data will be adequate, relevant and not excessive for the purposes it is being processed for.
4. Personal data will be accurate and up to date.
5. Personal data will not be kept for longer than is necessary.
6. Personal data will only be processed in accordance with the rights of data subjects.
7. Personal data will be protected by appropriate technical and organisational measures against unauthorised or unlawful processing and against accidental loss, destruction or damage.
8. Personal data will not be transferred outside the European Economic Area.

13. Please provide evidence that the solution uses / processes Personal Data in a robust and secure manner

The current Altiom System cryptographic protocol xxxxxxxxxxxxx provides very high levels of privacy and data integrity.
The processor which is used in the Altiom Generation 3 controller, latest firmware and the supporting architecture are 'TLS 1.3' ready and this new protocol will be available to use at Howbury and for other WCC applications going forward.

xxxxxxxxxxxxxxxx

Where data is held it will be held in accordance with the Data Protection Act http://www.legislation.gov.uk/ukpga/1998/29/contents including but not limited to ensuring data is:
• used fairly and lawfully
• used for limited, specifically stated purposes
• used in a way that is adequate, relevant and not excessive
• accurate
• kept for no longer than is absolutely necessary

• handled according to people's data protection rights
• kept safe and secure
• not transferred outside the European Economic Area

xxxxxxxxxxxxxxxxxxxx

14. Does the solution provide an option for an Administrator to permanently delete and remove all data for a specified user?

◉ Yes

○ No

15. Please demonstrate that, where all or part of the solution is hosted in a data centre, the data centre complies with the ANSI/TIA-942 Tier 2 as a minimum.

Altiom use a Ties 3+ datacenterxxxxxxxxxxxxxxxxxxx

This is fully compliant with the guidelines: https://www.gov.uk/government/publications/public-services-network-psn-service-compliance/psn-compliant-services
xxxxxxxxxxxxxxxxxxxxxxxxxxxx

16. Please demonstrate that for data of a confidential or sensitive nature, or subject to any local law that prevents it being stored in another country, that this data is only hosted in an EEA-based data centre.

Altiom use a Ties 3+ datacenter: xxxxxxxxxxxxxxxxxx
This is fully compliant with the guidelines: https://www.gov.uk/government/publications/public-services-network-psn-service-compliance/psn-compliant-services
xxxxxxxxxxxxxxxxxxxxxxxx

17. USER INTERACTION

All web based output should be browser agnostic.
Pages should operate equally well with all supported versions of the major web browsers, including Microsoft Internet Explorer 11, Microsoft Edge, Google Chrome, Mozilla Firefox, Apple Safari, on desktop operating systems as well as mobile / tablet operating systems.

Explain how your solution will meet this standard.

From outset, the system has not produces native Apps., preferring to develop content in HTML5, creating Web Apps. These are accessible over the Internet across multiple devices; they have a wider reach and deeper penetration than Flash-based authoring or native app-based mobile learning. In addition, it takes a shorter amount of time to develop content in HTML5 than it does with native apps.
The sites Altiom currently develop are progressive web apps. These are designed to give the greatest experience on any devices. The pages will work across all web browsers but more advanced browsers can take advantage of better capabilities to achieve a greater user experience.

All are interfaces have been designed for web as it allows any users to use the app/configuration utilities without the need to install any plugin/app regardless of what device they choose to use.

18. All web based output must comply with the World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines (WCAG) 2.0 up to conformance level AA.

All Altiom third party products conform fully to standard required. HTML/CSS are used correctly, there are no mark-up error's on any page and there are no non-standard items.

This not uncommon for the modern web; however, to make a page work on any device this does impose some limitations on any public web pages as retaining all W3 standards will require more basic webpages.

Altiom's development team are well versed in these areas and can ensure that all web site pages pass validation.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Explain what Accessibility testing has been performed to provide evidence for this

19. Explain what Accessibility testing has been performed to provide evidence for this.

To maximise accessibility, a program of accessibility testing will be completed as part of the design phase of the project. This is conducted on a 'test early, test often' basis and is designed to:

1. Address the needs of people with all disabilities.
2. Balance the needs of people with differing disabilities.
3. Match those needs to optimal techniques.
4. use clear language to express needs or techniques

Development is aimed at meeting at least WCAG 2.0 as it:

• Is designed around core human needs that are applicable to technologies other than HTML and CSS (such as Flash).
• Carefully documents the reasoning for each conformance criterion.
• Suggests practical techniques for meeting conformance criteria using current technologies.
• Ensures each provision is testable.
• Incorporates more recent research than current alternatives.
• Is designed to be broadly compatible with existing accessibility standards.
• Will be an international standard.

xxxxxxxxxxxxxxxxxxxxxxxxxx

By 'responsive' the solution will auto size to fit end device screen size, such that scrolling is minimised and is limited, where possible, to vertical scrolling only, and content is appropriately shown for the size of the end device screen size, i.e. that text font remains readable, optional content is hidden on smaller screens, images sized / placed appropriately and full user functionality is maintained irrespective of the end user screen size.

20. The solution must be able to support customisable branding, logos, etc.
Please explain the mechanisms available for this is it via templates, via customisation by the supplier on demand via a costed project, or via some interactive self-service available to Administrators?

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

21. REPORTING

The solution must provide a set of 'out of the box' standard reports, covering common reporting requirements.

Please explain what these reports are, and whether they are included in the base price or are an optional costed extra.

Notwithstanding the features stated in section 22, the system delivered will be equipped with the following standard reports;

SLA target achieved / breached
Red alert summary
Environmental summary
Texts sent summary
Email sent summary
System usage
Weekly management update
Comments log
Scheduled task reporter
User reports

22. The solution must provide a facility to create customised reports based on selecting (ideally any of the) fields from the solution's database, and applying filtering, grouping and sorting criteria. Please explain which fields can be added to a report, what sort of filtering criteria are allowed, what grouping/sorting is possible.

The Altiom system has the widest possible range of reporting elements, all of which are customisable xxxxxxxxxxxxxxxxxx This is a key feature of the system, making reporting a free tool.

xxxxxxxxxxxxxxxxxxxxxxx

Automatic reports mode. The User specifies the parameters to define the report, for example; event, time and date, count, method of delivery (text, email, CSV file etc) and so on, then sets the report date/ frequency etc.

Manual reports mode. The user navigates to the via the reports dialogue to locate the report subject, selects key criteria, selects specific time or period and generates the report, which can then exported in a wide variety of formats.

At this time there has been no indication given by WCC or Howbury of what reports will be required 'out of the box'. Typically these are based around exceptions and alert levels, related to time of day and date xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

23. The solution must provide the facility to export data to Microsoft Excel (i.e. as a CSV file or another Excel-compatible format) from a course or a report. Please confirm if this facility will be available.

⦿ Yes
○ No

24. The solution must provide the facility to export data to Microsoft Excel (i.e. as a CSV file or another Excel-compatible format) from a course or a report. Please confirm if this facility will be available.

◉ Yes

○ No

25. The solution should offer the ability to create a schedule for delivering standard or customised reports that the solution can send via email to selected recipients. Please explain how the scheduling system works, and what options are available to send the email. The Council currently uses an on premise Microsoft Exchange installation to handle all email.

From the dashboard interface there is a section to define a schedule for delivering any automated or manual report. This follows on from the reports date/frequency dialogue (which defines the 'schedule'), where there is an option to select what to do with the report. On selection of 'Report by email' it is possible to set and change email addresses, add multiple emails ad BCC emails etc.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Reports can be scheduled to be delivered daily weekly or monthly, xxxxxxxxxxxxxxxxxxxx

Report contents can be customised to give the information that WCC decide is required. That can be scheduled based on time intervals of WCC's specification

26. AUDITING

Please detail what access to logs the Council will have in the event of a system/service failure or security breach.

xxxxxxxxxxxxxxxxxxxxxxxxxx

Security breaches may fall into two categories that would be reported in accordance with ICO guidelines https://ico.org.uk/media/for-organisations/documents/1536/breach_reporting.pdf
They may be
• a breach of the Data Protection Act (DPA); or
• the unlawful obtaining of personal data (known as a section 55 DPA breach).

Other security breaches (DDoS attacks etc) will also be reported to WCC in a timely fashion and all available information will be forwarded to WCC

Clean vf