CORPORATE SOFTWARE INFRASTRUCTURE RE-PROCUREMENT

То:	General Purposes Committee			
Meeting Date:	25th July 2017			
From:	Head of Strategy and Architecture, LGSS IT Services			
Electoral division(s):	All			
Forward Plan ref:	2017/	038	Key decision:	Yes
Purpose:	Micro in fur	soft Enterpris	se Support Agree	e charging model for ments, of the change ake advantage of these ble.
	The report ultimately seeks ratification of the recommended option to replace the current agreement.			
Recommendation:	Gene	ral Purposes	Committee is rec	ommended to:
a)		Procure the subscription-based Microsoft Enterprise Support Agreement for the term of three years until 2020.		
	b)		gate alternative o preparation for re	
	c)	Adjust fundi	ng from capital to	o revenue accordingly.

	Officer contact:
Name:	Sam Smith
Post:	Head of Strategy and Architecture,
	LGSS IT Services
Email:	sam.smith@cambridgeshire.gov.uk
Tel:	01223 699024

1.0 SUMMARY

- 1.1 The purpose of this report is to advise General Purposes Committee (GPC) of the changes to the charging model for Microsoft Enterprise Support Agreements, of the change in funding required to continue to take advantage of these and of the alternative options available. The report ultimately seeks ratification of the recommended option to replace the current agreement.
- 1.2 Over recent years the Council has invested heavily in Microsoft infrastructure (e.g. laptop rollout) and many of its major systems and business critical applications integrate with Microsoft desktop and server software.
- 1.3 The Council currently uses a 'Microsoft Enterprise Support Agreement' (ESA) to supply Microsoft software for desktops, software for servers, security patching and support. This agreement lasts for 3 years and is due to expire in September 2017. The agreement allows unlimited Microsoft Office upgrades within the duration of the contract, therefore enabling the Council to benefit from the latest Microsoft technology.
- 1.4 In the past, the Council would have purchased a three year agreement with capital funding and at the end of this would have 'bought out' the licences held so that they could continue to be used for as long as practical beyond the end of the contract. Once these were no long viable, the Council would purchase another contract and the cycle would begin again, thus the Council would gain maximum financial benefit from each ESA purchased.
- 1.5 The original plan at the beginning of the current agreement was to buy-out as previously and then purchase a new agreement approximately two years after it expired. This would have meant that no additional funding would be required until the new agreement had to be purchased.
- 1.6 However, many suppliers, including Microsoft, are now moving towards a subscription charging model and this will be used for any future version of the agreement. This method of charging will, in turn, significantly alter the way that the agreement needs to be funded from periodic capital investment to an ongoing revenue commitment. In this model the Council would never actually own the software, they would simply subscribe to a service for the period of the contract.
- 1.7 The authority is currently covered under its existing ESA until September 2017 with funding identified to cover renewal costs until September 2018 should that be agreed. In order to avoid additional financial penalties being imposed by Microsoft, a decision about renewal must be made by the end of July 2017. GPC must decide whether to continue to use Microsoft regardless of the changes in funding required, or whether to use an alternative supplier for Office software.
- 1.8 Therefore, all options and supporting information are being presented so that GPC has sufficient information on which to base this decision.

2.0 SUMMARY OF OPTIONS

2.1 Option 1 (Recommended) - Sign up to a new Microsoft Enterprise Support Agreement

Advantages

- Microsoft Office is already used within CCC and so is a known quantity both for the user community and from a support perspective. It is the market leader in its field and crucially, already integrates extensively with many of the Council's existing systems including many of the tools which facilitate flexible working. The cost of change would therefore be minimal/zero.
- Universally known and usable document formats (e.g. Word & Excel).
- The Microsoft cost is fixed over the term of the subscription.
- There are no costs associated with implementation other than resource (technical and training) required for future Office upgrades.
- Additionally, it would allow the Council to benefit both from revenue savings and costavoidance of capital spend realised by replacing the current telephony system (anticipated within the next 3 years) with additional Microsoft licencing, instead of renewing with AVAYA.
- It would support the potential move towards Office 365 and cloud based infrastructure. See section 4.3.

Disadvantages

- Any new agreement would have to be subscription-based. This would require a revenue funding source instead of the current, capital one.
- Office 365 licences are additional to the current agreement

Costs

Licence type	2018-19	2019-20	2020-2021
Office software – Microsoft Office	£221,246	£221,246	£221,246
Additional Microsoft Licencing – see	£481,174	£481,174	£481,174
4.1.4			
Total Annual Cost	£702,421	£702,421	£702,421

Note the shaded areas denote areas of Microsoft licencing that will be needed with all options

2.2 Option 2 – Move to Google G-Suite

Google G-suite is the enterprise or professional version of Google Apps (Gmail, Calendar, Docs) which would be used instead of Microsoft Office for CCC staff. As with the Microsoft ESA this software is purchased as a subscription service.

Advantages:

- Google apps are widely used and known for personal use. They also facilitate interoperability with other organisations.
- Product Client Access Licences (CALS) are currently cheaper than for the Microsoft licences proposed for Option1.

Disadvantages:

- The cost of change is high as the organisation familiarises itself with different software and end users may well require training at additional cost.
- There would be a substantial cost associated with implementation (detailed in Section 4.1, Cost of Change).
- The price of the Google product is not fixed and may increase over the term of the subscription.
- Should the authority decide to revert to Microsoft after having chosen to use Google the cost is significantly higher than if we were to stay with Microsoft; £1,415,000 per annum instead of £702,421. This represents a risk of £712,000 per year.
- Cost related to drop in productivity this is estimated to be approximately £1,125,000 based upon an average loss of 2.5 days per IT user (detailed in Section 4.1, Cost of Change).
- Google software lacks functionality required by services in some areas e.g. in Excel.
- Integration is a major issue Google software does not replicate the functionality of Microsoft Office like-for-like and an extensive and costly piece of work (detailed in Section 4.1, Cost of Change) would be required to analyse which CCC line of business applications have Office functionality embedded in them and whether they could use Google instead. Systems potentially affected are Agresso (which does not integrate with Google Sheets), CapitaOne, Mosaic, EDRM and K2.
- It must be noted that in addition to the licence costs for the Google software itself it cannot be assumed that the authority will cease using all Microsoft Office software. In particular, given the integration issues this is unlikely and any remaining Microsoft products would need to continue to be licenced at full cost.
- LGSS support staff are experts in the Microsoft Office platform and so would require training in order to support the Google product (detailed in Section 4.1, Cost of Change).

Costs

Description	2018-19	2019-20	2020-2021
Office software licences – Google G-Suite	£367,954	£367,954	£367,954
Unlimited			
Costs of change (see 4.1 for detail)	£812,010	£790,010	
Additional Microsoft Licencing – see 4.1.4	£481,174	£481,174	£481,174
Total Annual Cost	1,514,138	1,514,138	£481,174

Note the shaded areas denote areas of Microsoft licencing that will be needed with all options

2.3 Option 3 – Move to open source software

Advantages

• Software would be free.

Disadvantages:

- Using open source software would present all the same issues as using Google G-Suite with the additional problem of support which is far less robust for open source than for either Microsoft or Google.
- Although software would be free, support would need to be purchased.
- Open Office is not easy to use in comparison with MS Office or Google G-Suite and so would require a longer adjustment period (and consequent loss in productivity) by end users.
- Should the authority decide to revert to Microsoft after having chosen to use Open Source the cost is significantly higher than if we were to stay with Microsoft; £1,415,000
 per annum instead of £637,000. This represents a risk of £800,000 per year.

Costs

Description	2018-19	2019-20	2020-2021
Office software licences – Open Office	N/A	N/A	N/A
Costs of change (see 4.1 for detail)	£812,010	£790,010	
Additional Microsoft Licencing – see 4.1.4	£481,174	£481,174	£481,174
Total Annual Cost	£1,146,184	£1,146,184	£481,174

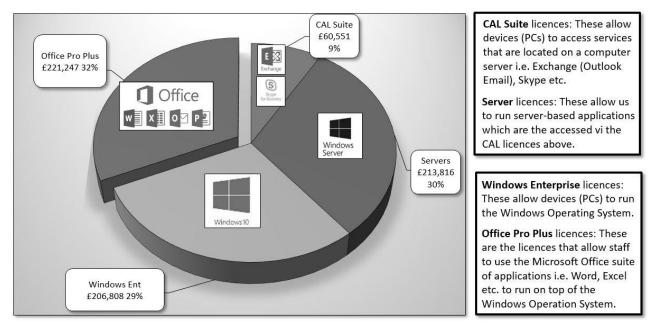
Note the shaded areas denote areas of Microsoft licencing that will be needed with all options

3.0 FINANCIAL CONTEXT

3.1 The subscription model now used by Microsoft for their Enterprise Support Agreements is analogous with domestic subscription services such as Spotify or Netflix where rather than

selling products in their entirety (in this case, an enterprise agreement) a subscription pays for *access* to a product or service.

- 3.2 When the current agreement was purchased it was with the expectation that CCC would be able to buy out the contract and sweat the asset as described in Section 1, before purchasing a subsequent agreement. However, this is no longer possible and should we choose to purchase a new agreement, it would have to be on a subscription basis; although the option to buy out is still available we have been advised that the price would be significantly higher as it would not include the current discounts. This cost would be prohibitively high at £1.4m per annum, when compared to the subscription option.
- 3.3 The cost of the Council's existing Enterprise Agreement is £1.92m over three years, an average of £640k per annum. This is funded through the existing capital programme but the shift in licencing requires a corresponding shift from capital funding to an ongoing annual revenue commitment which is in addition to existing IT revenue budgets. This revenue cost would be approximately £702k per annum, so an increase of £62k, though the demand and therefore the cost could vary each year according to organisational change. For instance a move to Office 365 would mean an **additional** per annum cost of between £120k & £160k depending on the specific options chosen.
- 3.4 It should be noted that:
 - Funding will need to change from capital to revenue regardless of whether the Council chooses to go with Microsoft or with Google G-Suite as both now use the subscription charging model.
 - Whichever of the three options is selected, there will still be a requirement for Microsoft licensing for non-Office elements (servers, Client Access and Enterprise) as illustrated in the diagram below.



In addition to the licencing costs and method of funding, other financial considerations need to be taken into account such as the cost of change, cost of implementation and the future

cost or savings through licencing linked to this investment.

4.0 SUPPORTING PARAGRAPHS

4.1 Cost of change

Although the cost of Google Client Access Licences (CALS) or open source would be significantly lower than Microsoft, it should be noted that the cost of change would be so great that any return on investment would not be realised for some considerable time. There are several elements of change that contribute to this cost:

4.1.1 Software implementation

The Council has invested in excess of £700k in supplying, implementing and supporting laptops with Microsoft products to the workforce. There would be a substantial cost associated with the removal of Microsoft software and distribution of its replacement. Given the time required for rebuilding devices, a change to Google/open source software would require additional resource and it is estimated that this would cost £205,020. This excludes the cost of any inconvenience and time lost to the user during the rebuild. IT Staff will also require training in and familiarisation with new products in order to be able to support them effectively. The cost for that is estimated at £22k

4.1.2 Staff productivity

As previously stated, a conservative estimate of the cost of lost staff productivity is approximately £1,125,000. This figure is based on an anticipated average productivity loss for each person of 2.5 days (at least one day and a maximum of a week) calculated at £15 per hour plus on-costs. This equates to 10,000 days at 7.5 hours at £15 per hour = 1,125,000. This figure excludes the cost of IT staff teams familiarising themselves with the support requirements of Google G-Suite/open source software mentioned above.

4.1.3 Integration

The Council uses a broad range and large number of systems in order to deliver services to the public. These systems vary in size and criticality but many rely on integration with Microsoft Office products. They include major systems already in use, such as CapitaOne but also systems currently being implemented, namely Agresso and Mosaic.

Many more, smaller systems used at service level also integrate with Microsoft and although it is entirely possible that they will work with Google or open source software, this cannot be guaranteed. Therefore, a move away from Microsoft would require a substantial project to audit, analyse and in some cases implement a solution for, all systems which currently rely on MS Office software for any functionality.

The potential cost and resource required for such a project should be taken into account. Without the analysis mentioned above an exact cost is difficult to calculate but a conservative estimate is £250k.

4.1.4 Additional Microsoft Licencing

A number of server and SQL licences will still be required from Microsoft and this is an unavoidable cost whichever option is chosen.

Any continued use of Microsoft Office licencing such as Excel for finance colleagues and budget holders or Word for use with specific business systems will also require purchase of Microsoft licences at the full cost for every member of staff using them.

4.2 Information Security & Information Management considerations

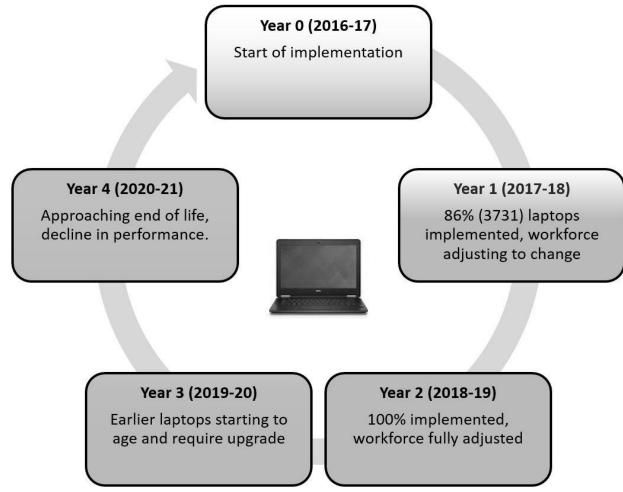
Whichever technical solution is used for Office software must be able to meet the necessary standards for both Information Security and Information Management. The Council must comply with existing Data Protection and new General Data Protection Regulation (GDPR) legislation. The location for data storage and configuration of Office software will have information governance implications. This does not preclude a move to alternative Office software but adds an additional element for consideration.

4.3 Looking ahead/technical roadmap

Whichever option is selected will impact upon the future technical direction for CCC and needs to be viewed in the context of where the Council is now and where it is heading both strategically and geographically.

The Council has invested heavily in Microsoft and is currently in the relatively early stages of this investment. Staying with Microsoft allows additional, cost effective options for telephony which would not otherwise be available and which would negate the requirement to refresh voice hardware. It would also make other features and functionality available and potentially smooth the transition to cloud based technology.

The diagram below illustrates where the Council is currently in the lifecycle of the current laptop investment.



Office 365

Office 365 is a product from Microsoft which, as well as providing downloadable software, also allows for the option of a cloud-based service which makes it comparable with Google G-Suite. For business users, Office 365 has a range of service plans available. As the Council's strategic direction makes a move towards cloud based infrastructure increasingly likely, it would be pragmatic to invest in licencing for these service plans now in order to future-proof a likely move to Office 365.

This would introduce an additional financial commitment of between £75k & £180k per annum if all CCC staff were migrated to Office 365.

Although there would inevitably be a change cost associated with a move to Office 365, this would be relatively low as there is already far more familiarity with Microsoft products.

5.0 TIMESCALES

The current agreement ceases in September and a commitment is required by end of July in order for the authority to benefit from available discounts. It must be noted that without these discounts the cost will increase significantly.

6.0 ALIGNMENT WITH CORPORATE PRIORITIES

6.1 Developing the local economy for the benefit of all

There are no significant implications for this priority.

6.2 Helping people live healthy and independent lives

There are no significant implications for this priority.

6.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

7.0 SIGNIFICANT IMPLICATIONS

7.1 **Resource Implications**

The report above sets out details of significant implications in Section 2.0 (costs for each option), Section 3.0, Financial Context and Section 4.1, Cost of change.

7.2 Procurement/Contractual/Council Contract Procedure Rules Implications

Although there are significant financial implications the procurement will utilise existing frameworks and procedures and therefore there are no specific implications within this category.

7.3 Statutory, Legal and Risk Implications

There are no significant implications within this category.

7.4 Equality and Diversity Implications

There are no significant implications within this category.

7.5 Engagement and Communications Implications

There are no significant implications within this category.

7.6 Localism and Local Member Involvement

There are no significant implications within this category.

7.7 Public Health Implications

There are no significant implications within this category.

Implications	Officer Clearance
· · · · · · · · · · · · · · · · · · ·	
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Chris Malyon
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Name of Officer: Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	No Name of Legal Officer: N/A
Have the equality and diversity implications been cleared by your Service Contact?	No Name of Officer: N/A
Have any engagement and communication implications been cleared by Communications?	No Name of Officer: N/A
Have any localism and Local Member involvement issues been cleared by your Service Contact?	No Name of Officer: N/A
Have any Public Health implications been cleared by Public Health	No Name of Officer: N/A

Source Documents	Location
None	Not applicable