The Vale of Glamorgan Council

Cabinet Meeting: 23 October, 2017

Report of the Leader

LiDW2 Grant / Wide Area Network Upgrade 2017

Purpose of the Report

1. To seek approval to upgrade the Wide Area Network and improve ICT performance across the Council's network.

Recommendations

- 1. That delegated authority is granted to the Director of Learning and Skills in consultation with the Cabinet member for Learning and Culture to accept the LiDW2 Grant from the Welsh Government to upgrade ICT connectivity for all schools.
- 2. That delegated authority is granted to the Head of Finance in consultation with the Leader of the Council, to join the Public Sector Broadband Aggregation (PSBA) network on behalf of the Council.
- 3. That delegated authority is granted to the Head of Finance in consultation with the Leader of the Council to enter into an agreement with Welsh Government and BT for the supply of the Wide Area Network.
- 4. That delegated authority is given to the Head of Legal Services to execute the necessary arrangements for the Council to join the PSBA.
- 5. That Cabinet approve the increase in the Capital Programme funded by £348,000 from Welsh Government, £86,500 from the Computer Renewal Fund and the pulling forward of £20,000 from the 2018/19 Capital Programme.
- 6. That the use of Article 14.14 of the Council's Constitution (urgent decision procedure) be authorised in respect of recommendation 1 above.

Reasons for the Recommendations

- 1. To secure Welsh Government grant to support the upgrade of the schools internet capacity.
- 2-5. To enable the Council to upgrade its ICT infrastructure.
- 6. To enable the Council to access the funding within the timescale available.

Background

- 2. The Council's corporate Wide Area Network (WAN) connects all council offices and all schools together to allow them to securely access ICT services such as email, internet and Oracle. It also extends into other organisations where Council staff operate from such as the NHS, Central Government organisations and other Local Authorities.
- 3. The existing WAN was commissioned in 2010 and provided as a managed service by a company called Networks by Wireless. This network consists of primarily radio based technology.
- 4. In 2014, Networks by Wireless went into administration. This resulted in the Council making a substantial capital investment to purchase the entire network hardware infrastructure from the administrator, the site share agreements from Arqiva (as equipment is located on Wenvoe, St Hilary and Pencoed masts) and the radio broadcast licences from Ofcom. The annual revenue cost to maintain the network hardware infrastructure following its purchase in 2014 reduced as the Vale of Glamorgan ICT Service was now essentially managing its own WAN services.
- 5. The hardware infrastructure that was purchased from the Administrator in 2014 is near end of life and it has started to cause network issues resulting in service performance degradation, intermittent network problems and some longer-term outages.
- 6. Due to the age of the hardware, the ICT service were planning to apply for Capital funding to allow progression of tenders to replace the WAN in 2018/2019 with a managed service similar to the service that was previously provided by Networks by Wireless before they went into administration.
- 7. The Welsh Government has set new guidelines with regard to ICT connectivity across all schools. Under the guidance all Secondary schools in Wales must have at least 1 Gigabit per second (Gbps) internet connectivity and all Primary schools in Wales must have at least 100 Megabit per second (Mbps) internet connectivity by 2020. These guidelines will primarily support the 'Reform of National Reading and Numeracy Tests' as announced by Kirsty Williams, Cabinet Secretary for Education in May 2017.
- 8. To assist Local Authorities to achieve these demands, grant funding has been made available by the Welsh Government as part of a scheme called LiDW2. The Welsh Government intends to release this grant funding in November 2017.
- 9. If the Vale of Glamorgan Council accept the grant funding, schools will be moved off the corporate WAN and onto the Welsh Governments existing secure Public Sector Broadband Aggregation (PSBA) network. The PSBA network is a closed secure fibre network, which connects all Local Authorities in Wales, blue light services and Welsh Government. The PSBA network sits on physical infrastructure owned, operated and maintained by BT.
- 10. The Vale of Glamorgan Council is the only Local Authority in Wales which does not currently utilise the PSBA for its corporate WAN services. This is due to historic issues with service tariff inconsistencies which have since been resolved.

Relevant Issues and Options

11. Welsh Government has advised that it will meet all of the capital costs required to purchase and install new network circuits at each school as part of the grant. They

will also pay for any construction costs required to physically lay and install fibre cables into areas which don't currently have fibre coverage.

- 12. Currently internet traffic from all schools is routed over the WAN back to the Civic Office as their route out to the internet is via a single internet connection located at the Civic Office. One of the design proposals submitted by PSBA as part of the LiDW2 project suggests that all schools would have their own dedicated internet connection. This would provide performance improvements and resilience to the schools whilst eliminating the need to route their internet traffic across the corporate WAN back to the Civic Office. This change would also improve performance of the corporate WAN for Council staff.
- 13. Web filtering for schools is currently administered on firewalls located at schools, which are coming to end of life. Savings would be made with the LiDW2 design, by eliminating these firewalls and providing a cloud based web filtering solution on the PSBA network. The cost of the proposed web filtering solution would be covered by the grant.
- 14. If the LiDW2 grant is accepted, schools would be removed from the existing corporate WAN design effectively 'orphaning' any council buildings that currently receive their network connections via school buildings. Any council buildings orphaned by the LiDW2 project would require a capital investment by the Council to reconnect them to the WAN.
- 15. PSBA have proposed that, if the schools are going to be moved off the current corporate WAN infrastructure and onto the PSBA network as part of the LiDW2 project, it would be an opportunity to move the council's WAN onto the PSBA network infrastructure too as all other Welsh LA's have done previously.
- 16. This would avoid the costs and time for the Council of going out to tender for a new separate corporate WAN, avoid the costs of re-joining orphaned Council buildings back onto a separate corporate network, avoid the revenue costs of maintaining end of life network hardware and avoid the costs of signing up to a separate managed corporate WAN services.
- 17. Negotiations have been ongoing between Welsh Government, PSBA and Vale of Glamorgan Council since June 2017, but clarification required by the Council on both technical and financial issues has only very recently been forthcoming.
- 18. Welsh Government require a decision from the Vale of Glamorgan Council as soon as possible to allow them to place orders now for the hardware and also the contractors to survey the schools, dig trenches and lay the fibre optic cables where required.

Resource Implications (Financial and Employment)

19. As outlined above, funding is available from the Welsh Government to upgrade the ICT networks in the schools. A summary of the capital costs required is contained in the table below.

Item	LiDW Grant for	Additional Capital	Capital Spend on
	Schools	Spend in Schools	the Council network
PSBA network	348,418		200,802
Cabinets /Cabling		55,000	
Care Hardware		31,500	31,500
Decommissioning			35,000

Total	348.418	86.500	267.802
Total	010,110	00,000	201,002

- 20. It is proposed that the capital costs for the schools, £86,500, is funded from the Computer Renewal Fund, this will be repaid by Education over 5 a year period. £247,802 of the required spend on the Council network can be funded from within this year's capital programme and it is proposed that £20,000 is brought forward from the 2018/2019 capital programme for ICT to meet the balance of the investment required.
- 21. The revenue costs of supporting the network can be met from within the existing revenue budgets.

Sustainability and Climate Change Implications

22. There are no such implications that arise as a result of this report.

Legal Implications (to Include Human Rights Implications)

23. The Council will need to enter into a contract for the provision of the PSBA to the Council.

Crime and Disorder Implications

24. There are no such implications that arise as a result of this report.

Equal Opportunities Implications (to include Welsh Language issues)

25. The upgrade of the ICT network will ensure equal access to the network by all schools across the Vale of Glamorgan.

Corporate/Service Objectives

26. This project comes under the priority outcome of Community Leadership.

Policy Framework and Budget

27. This is a matter for Executive decision by Cabinet.

Consultation (including Ward Member Consultation)

28. No ward member consultation has taken place, as this is corporate and not ward specific.

Relevant Scrutiny Committee

29. Corporate Performance and Resources Scrutiny Committee.

Background Papers

None

Contact Officer

Nick Wheeler - Operational Manager (ICT)

Officers Consulted

Head of Finance Team Manager (Networks and Communications) Senior Procurement Officer (ICT)

Responsible Officer:

Rob Thomas - Managing Director