#### **KCOM**







	How is it delivered?	Bandwidth	What you need to know	
ADSL* and Bonded	Copper Cable	Up to 20Mbps* Bonded ADSL bonds up to 4 connections	Actual bandwidth achieved is dependent on the distance from the telephone exchange	
ADSL	Service Availability Target	Lead Time	<ul> <li>Asymmetrical service – download speeds higher than</li> </ul>	
	99.40%	30 to 50 days	upload speeds which may be very low  No opportunity for	
(Asymmetric Digital	<del>\</del>		bandwidth upgrades  • Low cost	
Subscriber Line)	Where is the service available?	Target time to fix faults?	<ul> <li>Only suitable for schools with very low internet</li> </ul>	
	Universally available	48 hours	usage or limited alternative options  • Possible to offer	
	<b>©</b>		bonded service to get higher bandwidths	

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	How is it delivered?	Bandwidth	
	Copper Cable	Up to 10Mbps*	What you need to know  • Dedicated bandwidth over a copper circuit
MPF*	Service Availability Target	Lead Time	<ul> <li>Bandwidth achievable is dependent on distance from the exchange</li> </ul>
(Metallic Path Facilities)	99.75%	30 to 50 days	<ul> <li>Symmetrical service -         upload and download         speeds the same</li> <li>Very limited         opportunity to</li> </ul>
	Where is the service available?	Target time to fix faults?	expand bandwidth  • Lower cost than fibre
	Low cost circuits limited to telephone exchanges where Kcom has installed technology to exploit this service	6 hours	<ul> <li>Suitable for schools with limited alternative options</li> </ul>

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	How is it delivered?	Bandwidth	What you			
	Fibre Optic Cable from the exchange to the street cabinet, copper cable from the street cabinet	Up to 80Mbps*	need to know  Reliable mechanism to achieve good bandwidth  Bandwidth figures are best estimates  Asymmetrical service –			
FTTC*	Service Availability Target	Lead Time	download speeds higher than upload speeds			
(Fibre To The Cabinet)	99.75%	30 to 50 days	<ul> <li>Achievable speeds depend on distance from the cabinet and quality of the copper connection to the site</li> <li>No opportunity for bandwidth upgrades</li> </ul>			
Cabillety	Where is the service available?	Target time to fix faults?	<ul> <li>Lower cost than fibre ethernet</li> </ul>			
	Limited to areas where BT has implemented Super-Fast Broadband	6 hours	<ul> <li>Suitable for schools with moderate – high internet usage</li> <li>Suitable as a resilient emergency connection for fibre connected schools with high usage</li> </ul>			

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	How is it delivered?	Bandwidth			
Fibre Ethernet	Fibre Optic Cable	Fibre Optic Cable 10Mbps to 1000Mbps (1Gbps)			
** (EAD	Service Availability Target	Lead Time	<ul> <li>Symmetrical service - upload and download speeds the same</li> </ul>		
10-1gb)	99.75%	Subject to survey	<ul> <li>Easily expandable to increase bandwidth</li> </ul>		
(Ethernet	<b>+</b>		<ul> <li>Highest quality, expandable service at the highest price</li> </ul>		
Access Direct)	Where is the service available?	Target time to fix faults?	<ul> <li>Suitable for schools with high internet usage or schools with</li> </ul>		
	Universally available	6 hours	limited options for reasons of location  • Subject to Fibre or duct available to premises		

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	How is it delivered?	Bandwidth	
	Copper and Fibre	2Mbps	What you need to know
LS	Service Availability Target	Lead Time	<ul> <li>Dedicated connection with dedicated but</li> </ul>
(Learning Stream)	99.75%	Subject to survey	Symmetrical service -     upload and download     speeds are the same      A service specifically     designed for schools
	Where is the service available?	Target time to fix faults?	with limited options due to their location
	BT Learning Stream Circuit	6 hours	

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	How is it delivered?	Bandwidth	
	Wireless	20Mbps	What you
Wireless	Service Availability Target	Lead Time	need to know  • Delivered without a
(Zycomm W3Z)	99.75%	Subject to survey	<ul> <li>physical connection</li> <li>Symmetrical service -         upload and download         speeds are the same</li> <li>A potential solution</li> </ul>
	Where is the service available?	Target time to fix faults?	for remote schools with limited options
	Subject to survey	6 hours	

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	How is it delivered?	Bandwidth	
Campus	Site specific	Site specific	What you need to know
	Service Availability Target	Lead Time	<ul> <li>A shared connection suitable only for</li> </ul>
(Connection shared with a school on the	N/A	Subject to survey	schools that share the same site  • School Interconnections supplied locally  • Circuit type for the site
same site)	Where is the service available?	Target time to fix faults?	will be one of those shown previously in this guide
	Sites with an existing campus network	N/A	

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Circuit Type	Full Name	How is it delivered?	Bandwidth	Where is the service available?	What is the target time to fix faults?	Service Availability Target	Lead Time	What you need to know
ADSL* and Bonded ADSL	Asymmetric Digital Subscriber Line	Copper cable	Up to 20Mbps*  Bonded ADSL bonds up to 4 connections	Universally Available	48 hours	99.40%	30-50 days	Actual bandwidth achieved is dependent on the distance from the telephone exchange Asymmetrical service – download speeds higher than upload speeds which may be very low No opportunity for bandwidth upgrades Low cost Only suitable for schools with very low internet usage or limited alternative options Possible to offer bonded service to get higher bandwidths
MPF *	Metallic Path Facilities	Copper cable	Up to 10Mbps	Low cost circuits limited to telephone exchanges where Kcom has installed technology to exploit this service	6 hours	99.75%	30-50 days	Dedicated bandwidth over a copper circuit Bandwidth achievable is dependent on distance from the exchange Symmetrical service - upload and download speeds the same Very limited opportunity to expand bandwidth Lower cost than fibre Suitable for schools with limited alternative options
FTTC*	Fibre To The Cabinet	Fibre Optic Cable from the exchange to the street cabinet, copper cable from the street cabinet	Up to 80Mbps*	Limited to areas where BT has implemented Super-Fast Broadband	6 hours	99.75%	30-50 days	Reliable mechanism to achieve good bandwidth Bandwidth figures are best estimates Asymmetrical service – download speeds higher than upload speeds Achievable speeds depend on distance from the cabinet and quality of the copper connection to the site No opportunity for bandwidth upgrades Lower cost than fibre Suitable for schools with moderate – high internet usage Suitable as a resilient emergency connection for fibre connected schools with high usage
Fibre Ethernet ** (EAD 10-1gb)	Ethernet Access Direct	Fibre Optic Cable	10Mbps- 1000Mbps (1Gbps)	Universally available	6 hours	99.75%	Subject to Survey	Dedicated connection with dedicated bandwidth Symmetrical service - upload and download speeds the same Easily expandable to increase bandwidth Highest quality, expandable service at the highest price Suitable for schools with high internet usage or schools with limited options for reasons of location Subject to Fibre or duct available to premises



Circuit Type	Full Name	How is it delivered?	Bandwidth	Where is the service available?	What is the target time to fix faults?	Service Availability Target	Lead Time	What you need to know
LS	Learning Stream	Copper and Fibre	2Mbps	BT Learning Stream Circuit	6 hours	99.75%	Subject to Survey	Dedicated connection with dedicated but low bandwidth Symmetrical service - upload and download speeds are the same A service specifically designed for schools with limited options due to their location
Wireless	Zycomm W3Z	Wireless	20Mbps	Subject to Survey	6 hours	99.75%	Subject to Survey	Delivered without a physical connection     Symmetrical service - upload and download speeds are the same     A potential solution for remote schools with limited options
Campus	Connection shared with a school on the same site	Site specific	Site specific	Sites with an existing campus network	N/A	N/A	Subject to Survey	A shared connection suitable only for schools that share the same site     School interconnections supplied locally     Circuit type for the site will be one of the above

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If you need more detailed information please contact empsn@kcom.com

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