TRAFFIC MANAGEMENT KEY FACTS INDICATOR FOR CONSUMERS*

Section 1: Traffic man						0)		
(not including during busy times and places to manage network congestion see Section 2)								
Mobile broadband (Dongles, Laptops, Netbooks, iPads and Tablets) consumer packages								
Use and availability of						,		
Are any services, content, applications or protocols always blocked on this product?**					oduct?**	Yes		
If so what?		Adult services (for example gambling or erotica) will be blocked unless content lock is deactivated						
Are any services, conte	ent, applic	ations or protocol	s always prioritised?			No		
If so what?	N/a							
Are any services, content, applications or protocols always slowed down? No								
If so what?	N/a							
Are any managed servi		ered on this produ	ıct?			No		
If so what? What impact?	N/a							
Data caps and download limits								
What are the download Data usage caps vary -	This varies - see the							
If you do not have a '4G Ready' or '4G' Plan your upload data speed will be limited to						specific		
8Mbps and your download data speed will be limited to 10Mbps. Is traffic management used to manage compliance with data caps and download limits? No, howeve								
if you go over								
						your data		
						cap you may		
						have to pay		
						for the extra data used		
Under what circumstan	ces?	N/a				data abba		
Level of speed reduction? N/a								
Duration of speed reduction? N/a								
Is traffic management used in relation to heavy users?						No, we would		
						only block / throttle in the		
						event of		
						activity		
our network								
Under what circumstances? N/a								
Level of speed reduction? N/a								
Duration of speed reduction? N/a Section 2: Traffic management to optimise network utilisation								
(what happens during busy times and places in addition to traffic management as described in								
section 1)								
Is traffic management used during peak hours?					No			
When are typical peak hours? Weekdays: Weekends:								
What type of traffic is managed during these periods?***								
Traffic Type		Blocked	Slowed down		Prio	ritised		
Peer to Peer (P2P) Newsgroups								
Browsing/email								
VOIP (Voice over IP)								

Gaming		
Audio streaming		
Video streaming		
Music downloads		
Video downloads		
Instant messaging		
Software updates		
Is traffic management	No	
If so how?		

^{*}This KFI gives an overview of typical traffic management practices undertaken on this product; it does not cover circumstances where exceptional external events may impact on network congestion levels

^{**}This excludes any service, content, application or protocol that an ISP is required to block by UK law and child abuse images as informed by the list provided by the Internet Watch Foundation.

^{***}If no entry is shown against a particular traffic type, no traffic management is typically applied to it.

Glossary

Traffic management:

Traffic management is the term used to describe a range of technical practices undertaken to manage traffic across networks.

The different outcomes achieved by the use of technical practices can include:

- The prioritisation of certain types of traffic in busy times or busy areas to ensure that it is of an adequate quality
- The slowing down of certain traffic types that are not time-critical at busy times or busy places
- Ensuring compliance with a consumer's contract, for example slowing down of traffic for the heaviest users
- Supporting the delivery of managed services, for example to ensure a guaranteed quality of service for a specific piece of content

Managed services:

The majority of internet traffic is delivered on a "best efforts" basis. A managed service, on the other hand is one whereby an ISP offers "quality of service" that can guarantee a certain level of performance, so that the content, service or application can be delivered without risk of degradation from network congestion. Such a quality of service arrangement can be made between an ISP and a content or service provider or directly between an ISP and the consumer.

Best Efforts:

This phrase relates to the delivery of internet traffic where traffic management is applied without distinctions based on the source of that traffic.

Slowed down:

This outcome is achieved by the deployment of technologies that can decrease the priority of traffic types deemed to be non-time critical on the network e.g. slowing down traffic such as downloads during busy times and busy periods.

Prioritised:

This outcome is achieved by the deployment of technologies that increase the priority given to certain traffic types, e.g. time-critical traffic such as video. This outcome can also be achieved as a consequence of slowing down other selected traffic which reduces the overall data flow on the network.

Heavy users:

Heavy users can cause peak traffic volumes to exceed the engineered maximum load. In practice this refers to a very small proportion of users of a network whose use is excessive to the extent that it impacts on other users.