

25 February 2014

Dear Vice President Kroes,  
Dear Commissioner Almunia,

### **Apple restrictive practices on 4G networks**

Mobile communications technologies and services are evolving very rapidly, and INTUG members welcome the business opportunities which these developments are creating, especially through the availability of 4G networks and 4G smartphones in Europe.

The Apple iPhone has commanded a significant 4G market share in Europe as well as in other parts of the world. Unfortunately, an increasing number of organisations in the public and private sectors face business limitations and growing dissatisfaction from their staff, due to Apple's current policy of exclusive mobile network operator arrangements. In Belgium, for example, the Apple iPhone can only be connected to Mobistar's 4G network, whilst use of Proximus and Base 4G networks is blocked for Apple commercial, rather than technical, reasons. iPhone owners expect to be able to use their smartphone on their 4G network of choice, but this is being denied them on several mobile networks. A change in the law in Belgium is planned, which could be a model for action at European level.

Apple's policy leaves iPhone users wanting 4G connectivity with no choice except to buy access from the mobile networks chosen by Apple, thus eliminating competition. In many cases, buyers of Apple iPhones were not even properly informed by Apple, or the reseller, of this unacceptable limitation in the choice of their preferred 4G network provider.

INTUG believes that both Apple and Apple iPhone resellers should be informed that, firstly, they have a legal obligation to properly inform potential buyers of the network limitations of the product which they offer. Secondly, INTUG believes that regulatory steps should be taken to stop this limitation of 4G network provider choice for iPhone users. This policy is incompatible with the Digital Agenda for Europe, the (harmonisation) rules with regard to spectrum, the rules with regard to international roaming and with consumer protection principles.

Kind regards,

Nick White  
Executive Vice President

Danielle Jacobs  
Chairman of the Board

#### *Annexes*

*INTUG report concerning the Apple iPhone 4G connectivity issue is attached.  
A list of countries indicating the extent of this restrictive practice.*

## **Apple iPhone 4G Connectivity**

### **1. Introduction**

Seamless connectivity of Apple smartphones and tablets to new 4G/LTE networks is vital for innovation and investment in new online business processes and applications. As this is not always possible, INTUG is therefore highlighting in this short paper the issues and government responses, and the actions INTUG intends to take on behalf of customers.

Buyers of Apple devices will erroneously assume that a new Apple smartphone or tablet will seamlessly connect to the high-speed 4G/LTE networks provided by their preferred mobile network operator. Existing iPad owners should face no problem connecting to most currently available 4G networks, but in some countries iPhones are only allowed to connect in 4G mode on specific networks, for example only Mobistar in Belgium.

Many businesses issuing iPhones to employees for online applications are already being faced with this problem, if their business is not contracted with the specified operator.

The office of the European Commission's competition commissioner, Joaquin Almunia, has confirmed that it is monitoring the situation surrounding Apple's limitations on network connectivity, whilst Apple continues to sell high volumes of iPhones and iPads.

### **2. The Apple iPad, iPhone and 4G networks**

Apple does list the networks on which their iPad tablet will work, but even some unlisted networks seem to accept connectivity provided it is a Wi-Fi + cellular model. The current situation is not so good for iPhone users, as access is often restricted to one 4G network initially, based on Apple's certification process. One of the explanations often cited is that Apple wants to ensure the quality of the user experience, and this quality is determined by a combination of the handset and the 4G network quality.

During the initial roll-out of the iPhone in the USA, the American mobile networks did not always provide the minimum quality required by the iPhone. Some customers wrongly blamed the Apple handsets. Apple responded with a network certification process to assure a high quality customer experience. Olaf Swantee, CEO of UK number one operator EE, said 4G handsets and networks need to be fine-tuned to one another to guarantee a high quality user experience.

However, this seems inconsistent with the iPad situation, since these can connect to non-certified 4G networks, while iPhones with similar or identical components, are blocked from using the same networks. Some claim that Apple use network certification to protect the commercial interests of Apple certified 4G network operators, by pushing iPhone users to subscribe to them. Business users are concerned that Apple's lock-in contract tactics may tempt other major handset manufacturers to make exclusive network operator deals.



### 3. Mobile Network Operators

4G network operators might persuade Apple to change their current practices, but the very strong bargaining position of Apple, and the fragmented position of network operators, makes this very unlikely in the short term. The 4G network operators are split into those who have already obtained Apple's 4G network certification, and those that have not.

The Apple certified 4G network providers support the certification scheme, whilst the others prefer to accept iPhones only, thus avoiding having to obtain Apple certification.

In the longer term, this is not good news for operators or customers. Life for Tier 2 and 3 operators, and those lacking the scale of large groups, will become increasingly difficult as Apple's exclusivity tactic is likely to hit them hardest. Apple are unlikely to do this to Tier 1 operators, whilst smaller entrants may not even qualify for the certification stage.

### 4. INTUG Actions

The Apple iPhone 4G situation is in deadlock, and poses a major threat to investment by business customers in new online business processes using smartphones. INTUG will include this issue in its actions aimed at addressing the more general deficiencies of the dysfunctional European mobile market, which remains a fragmented patchwork of national markets, designed principally for individual end consumers. A better solution must be developed by all suppliers, which serves the needs of business customers. INTUG plans joint action on this issue with BEUC, the European consumer organisation.



## INTUG - overview Apple iPhone and 4G

Certified for Apple iPhone 5S and 5C  
 Insufficient info available  
 Not certified, no incompatibility on the frequency band level  
 Based on data as found on Wikipedia (see Reference links) and Itemaps.org  
 - 26/01/2014

Country	Operator	Owner	Freq. Comp.?	Apple Certified?	Remark
<b>Europa</b>	<a href="#">Reference</a>				
Austria	A1	Telekom Austria	Y	Y	
	T-Mobile Austria	Deutsche Telekom	Y	Y	
	3	Hutchison Whampoa	Y	N	
Belgium	Proximus	Belgacom	Y	N	
	BASE	KPN	Y	N	
	Mobistar	Orange S.A.	Y	Y	
Czech Republic	T-Mobile	Deutsche Telekom	Y	Y	
	O2	Telefonica	Y	N	
	Vodafone	Vodafone	Y	N	
Denmark	TDC	TDC	Y	Y	
	Telenor	Telenor	Y	Y	
	Telia	TeliaSonera	Y	Y	
	3	Hutchison Whampoa, Investor AB	Y	Y	
Estonia	EMT	Teliasonera	Y	Y	
	Elisa	Elisa	Y	N	
	Tele2	Tele2	Y	N	
Finland	Sonera	TeliaSonera	Y	Y	
	Elisa	Elisa	Y	Y	
	DNA	Local telco's	Y	Y	
France	Orange	Orange S.A.	Y	Y	
	SFR	Vivendi	Y	Y	
	Bouygues Telecom	Bouygues Group	Y	Y	
	Free Mobile	Iliad	Y	Y	



Germany	Telekom	Deutsche Telekom	Y	Y	
	Vodafone	Vodafone	Y	Y	
	E-Plus	KPN	Y	N	
	O2	Telefonica	Y	Y	
	Debitel	Freenet Group	Y	Y	
Hungary	Magyar Telekom	Deutsche Telekom	Y	Y	
	Telenor	Telenor	Y	N	
	Vodafone	Vodafone	?	N	LTE planned
Ireland	Vodafone Ireland	Vodafone	Y	Y	
	O2	Telefonica Europe	?	N	LTE expected 2014
	Meteor and eMobile	Eircom	Y	Y	
	3	Hutchison Whampoa	?	N	LTE expected 2013
Italy	TIM	Telecom Italia	Y	Y	
	Vodafone	Vodafone, Verizon	Y	Y	
	Wind	Vimpelcom	Y	N	
	3	Hutchison Whampoa	Y	Y	
Latvia	LMT	Div.	Y	Y	
	Tele2	Tele2	Y	N	
	BITE Latvia	Mid Europa Partners	?	N	Freq. band unknown
Lithuania	Omnitel	TeliaSonera	Y	N	
	Tele2	Tele2	Y	N	
	BITE	Mid Europa Partners	Y	N	
	Teledema	Teledema	Y	N	
Luxembourg	POST Luxembourg	POST Luxembourg	Y	Y	
	Tango	Belgacom	Y	Y	
	Orange	Orange S.A.	Y	Y	
Netherlands	KPN	KPN	Y	Y	
	Vodafone Netherlands	Vodafone	Y	Y	
	T-Mobile	Deutsche Telekom	Y	Y	
Norway	Telenor Mobile	Telenor	Y	Y	
	NetCom	TeliaSonera	Y	Y	
	Tele2	Tele2	Y	Y	
Poland	T-Mobile	Deutsche Telekom	?	N	Planned
	Orange	Orange S.A.	?	N	In test
	Plus	Polkomtel	Y	N	



	Play	Novator	Y	Y	
Portugal	TMN	Portugal Telecom	Y	Y	
	Vodafone Portugal	Vodafone	Y	Y	
	Optimus	Orange S.A.	Y	Y	
Slovakia	Orange	Orange S.A.	Y	N	
	Telekom	Deutsche Telekom	Y	Y	
	O2	Telefonica Czech	Y	N	
	SWAN	Swan	Y	N	Planned
Spain	Movistar	Telefonica	Y	Y	
	Vodafone	Vodafone	Y	Y	
	Orange	Orange S.A.	Y	Y	
	Yoigo	TeliaSonera	Y	Y	
Sweden	Telia	TeliaSonera	Y	Y	
	Tele2	Tele2	Y	Y	
	Telenor	Telenor	Y	Y	
	3	Hutchison Whampoa	Y	Y	
UK	EE	Deutsche Telekom, Orange S.A.	Y	Y	
	O2-UK	Telefonica	Y	Y	
	Vodafone UK	Vodafone	Y	Y	
	3	Hutchison Whampoa	Y	N	
Russia	MTS	Sistema	Y	N	
	MegaFon	Garsdale, TeliaSonera	Y	N	
	Beeline	VimpelCom	Y	Y	
	Rostelecom	Div.	Y	N	
Ukraine	Kyivstar				
<b>Americas</b>	<a href="#">Reference</a>				
US	Verizon Wireless	Verizon & Vodafone	Y	Y	
	AT&T Mobility	AT&T	Y	Y	
	Sprint Corp.	SoftBank Corp.	Y	Y	
	T-Mobile US	Deutsche Telekom	Y	Y	
	U.S. Cellular	Telephone & Data Systems	Y	Y	
	Cricket Communications	Leap Wireless Int.	Y	N	
	C Spire Wireless	Telapex	Y	N	
	nTelos	nTelos Holdings Corp.	Y	Y	
	Cincinnati Bell Wireless	Cincinnati Bell Inc.	?	N	Freq. band unknown



	Cellcom	Nsight Inc.	Y	Y
	Alaska Wireless Network	General Comm., Alaska Comm.	Y	Y
	Bluegrass Cellular	Bluegrass Cellular Inc.	Y	Y
	Appalachian Wireless	Appalachian Wireless	Y	Y
Canada	Rogers Wireless	Rogers Comm.	Y	Y
	Bell Mobility	Bell Canada	Y	Y
	Telus Mobility	Telus	Y	Y
	SaskTel Mobility	SaskTel	Y	Y
	MTS Mobility	MTS	Y	Y
Mexico	Telcel	America Movil	Y	Y
<b>Asia Pacific</b>	<a href="#">Reference</a>			
Australia	Telstra Mobile	Telstra	Y	Y
	Optus Mobile	Singapore Telecommunications	Y	Y
	Vodafone	Vodafone, Hutchison	Y	Y
China	China Mobile	State-owned	Y	Y
	China Unicom	State-owned, Telefonica	Y	N
	China Telecom	State-owned	Y	N
Hong Kong	China Mobile Hong Kong	China Mobile	Y	N
	3	Hutchison	Y	Y
	CSL	Telstra, NWD	Y	Y
	PCCW Mobile	PCCW	Y	N
	SmarTone	Sun Hung Kai Properties	Y	Y
Singapore	SingTel Mobile	Singapore Telecommunications	Y	Y
	StarHub	StarHub	Y	Y
	M1	Axiata Group, M1	Y	Y