



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority
Kingdom of Bahrain - مملكة البحرين



Broadband Quality
Report Published

New GCC
Roaming Rates

Online
Safety Study



Issue: 07 | April 2016



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MESSAGE

We're happy to announce that the new GCC roaming rates have been put into effect starting this April, and we hope we continue to lead the way in the telecommunications industry across the region. It's been a successful 2015 for the Telecommunications Regulatory Authority and we're really proud of our efforts in drastically improving our Quality of Service. I'm confident our initiative on putting a cap on SIM Card registrations will also be positive and well-appreciated move which enhances consumer protection against rising fraud cases.

Also, as the next step of the TRA's survey of 1600 masts in Bahrain, the authority will now begin establishing a legal framework to ensure the rectification of the current mast landscape permitting future masts and towers in line with international best practices.

Our major initiative this year is the 4th National Telecommunications Plan (NTP 4). The interview section with TRA directors, in this issue of the newsletter, will highlight some of the most important strategic goals of 2016 and how all the directorates will work together towards achieving them.

Many thanks to all those who've contributed in the 7th issue of the TRA Newsletter and thank you for your attention.

Mohamed Hamad Bubashait
General Director

NEWSFEED



Eng. Mohammed Alnoaimi
Director of Technical and Operations

BROADBAND QUALITY REPORT PUBLISHED

The Authority has released its latest Broadband analysis report on the quality of Broadband services offered by licensed Internet Service Providers (ISPs) in Bahrain. The report confirms that the average HTTP download speed for the 4th quarter has reached 10.8 Mbps.

The Authority has resumed publishing the quarterly Broadband Quality of Service (QoS) Reports with new introductions such as mobile voice and data testing, Over The Top (OTT) application testing and business broadband testing. The Authority has also developed a consumer web portal for consumers to log into and monitor ISPs performance in real time.

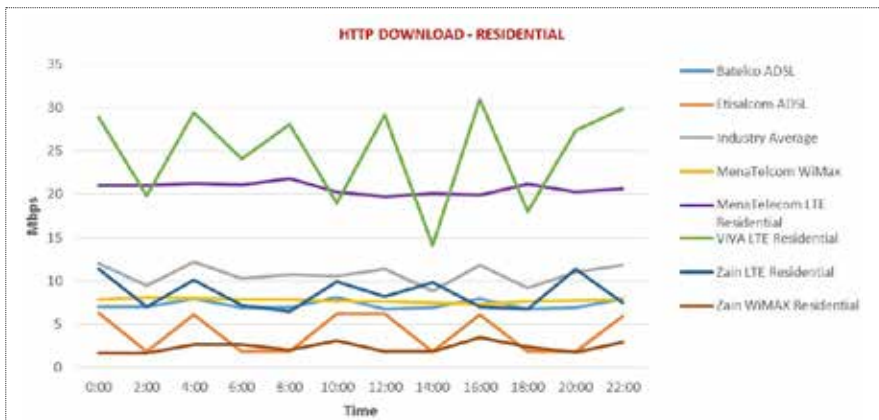
"This report is in line with the Authority's strategy to foster market competition and transparency, which will continually be published on quarterly basis," TRA's Director of Technical & Operations, Mr. Mohammed Alnoaimi, Director of Technical and Operations has stated.



"SAY NO TO CYBERBULLYING"

The TRA has issued a "Say No to Cyberbullying" Booklet in cooperation with the Bahrain Women Association for Human Development's "Be-Free" Program. The Booklet aims to increase awareness among children and young people about cyberbullying's negative impacts on the community. It discusses necessary steps to prevent cyberbullying, how to act in the event of cyberbullying and how to reduce it and contribute to the protection and support of victims.

The Booklet is a part of the TRA's "SafeSurf" Internet Safety campaign, their next project this year, is a 3D Animation video called "Stand Up to Cyberbullying".



The following chart presents the observed average download speed based on measurements taken every hour for the Fixed Broadband Internet packages during the 4th quarter of 2015, from October to December.



NATIONAL NUMBERING PLAN UPDATED

The NNP has been updated after a public consultation held in July 2015. Resolution No. (18) of the Regulation on the National Numbering Plan aims to approve and circulate the updated plan.

The new plan conforms to relevant ITU standards that help overcome changes in telecommunication environments, while promoting efficient use of national scarce resources and protecting future developments and needs; it also supports effective competition by fair access to numbering sources. "Extra simplified measures have been implemented in the Plan; in addition to, allowing more numbers to be allocated by operators addressing the growing demand of numbers and short codes in particular," Eng. Mohammed Alnoaimi, Director of Technical and Operations added.

The updated National Numbering Plan can be viewed on TRA's website.

NEWSFEED



*Dr. Khalid Al Khalifa
Director of Cyber Security*

SIM-CARD REGULATION TO PROTECT CONSUMERS

The TRA has issued a regulation on SIM-card registrations to moderate the rising number of identity theft and fraud cases.

The regulation has introduced a ceiling of 10 pre-paid SIM-cards per licensed mobile operators that consumers may acquire; which means a person can obtain up to 30 pre-paid SIM-cards only. TRA will also prevent the sale of SIM-cards in shops and only permit selling them through the operators' outlets and their resellers who've obtained a formal approval from TRA. The Authority is also preparing an awareness campaign for consumers to educate them about the pitfalls of obtaining SIM-Cards on behalf of others and leaving them registered in their names at the disposal of others.

"This regulation is an important step for the protection of the interests of all mobile subscribers. The Authority, in cooperation with the mobile operators, will take a number of measures designed to regulate the registration and verification process for consumers applying for SIM based telecommunication services," Director of Cyber Security, Dr. Khalid Al Khalifa stated.



*Taiba Albinali
Acting Director of
Consumer Affairs
and Media*

92% CONSUMER COMPLAINTS RESOLVED

According to latest figures, a total of 401 Complaints were received last year of which 92% (369) were managed, an improvement from 2014 where 409 complaints were received, of which 75% (301) complaints were successfully closed.

"We prioritize and ensure consumer issues are addressed in a timely and satisfactory manner, and a great way to accomplish that is by optimizing our internal processes," TRA Acting Director of Consumer Affairs & Media, Mrs. Taiba Al Binali stated. TRA consistently encourages consumers to submit unresolved complaints, inquiries and suggestions through all its channels of communications.

The categories of complaints are as follows: Billing and invoicing complaints - 33.4%, Quality of Service - 20.4% and Roaming - 11.4%. Other categories included contractual issues, fraud, Number Portability, service application, among others. It took an average amount of 18 days to close complaints in 2015, another significant improvement from 2014 where complaints took 35 days on average.



*Dr. Mohammed Al Amer
Chairman of TRA*

FIRST BOARD MEETING OF THE YEAR

The TRA's Board of Directors held their first meeting this year, at the headquarters in Seef District.

They discussed various issues related to the Kingdom's telecommunications sector, especially fast-tracking the issuance of the 4th National Telecommunications Plan in cooperation with the Ministry of Transportation and Telecommunications.

Other topics reviewed by the Board pertained to reducing expenses, optimizing organizational structure, the status of telecommunication masts in the kingdom and the importance of developing Bahraini competencies to develop work in the sector.

Praised for promoting performance at the highest level of excellence and innovation and continuing to work in a transparent manner in dealing with all the sector-related issues, positioned as an exemplar regulator at a regional and international level through constructive cooperation with the GCC countries and international organizations.

EVENTS AND EXHIBITIONS



AL AHLIA UNIVERSITY CAREER DAY

TRA had the opportunity to educate students of Al Ahlia University on its roles and responsibilities, and how to apply for a job and the career opportunities available to them at TRA and the telecommunications industry. The Authority participated at the campus's Career Day alongside 65 ministries, organizations and companies from the public and private sectors.

TRA's participation in such events helps strengthen communication between students and the labor market.



INTERNET PROTOCOL WORKSHOP – IPV6

An IPv6 training workshop in cooperation with RIPE Network Coordination Centre (RIPE NCC), a Regional Internet Registry (RIR) was hosted by the Authority. Thirty private and governmental bodies in the sector participated in the workshop.

As explained by Eng. Mohammed Abdulla Alnoaimi, TRA's Director of Technical and Operations, IPv6 helps accelerate the progress of future plans that are aimed at expanding and extending networks and interconnected services for the public and private sector in the kingdom of Bahrain. Therefore, TRA is keen to have private and governmental bodies adopting IPv6 in all their networks and services.



CHILDREN LEARN ABOUT ONLINE SAFETY DURING SPRING CAMP

TRA, in collaboration with Ministry of Youth & Sports Affairs, conducted a workshop this February to raise awareness on online safety. The workshop was held at Salman Cultural Center as part of "I am the Future" Spring Camp which was attended by 95 children, ages 9 to 15.

The workshop covered a range of crucial subjects such as; Identifying what personal information is, how to safeguard it, who to consider strangers online, internet sharing and internet etiquette, how to browse and download safely, safe use of social media and raising awareness about cyber bullying.



EVENTS AND EXHIBITIONS (CON.)

STRATEGY WORKSHOP

The Authority held a Strategy Workshop for its staff members in February, which was also attended by the General Director.



MAST PLACEMENTS AND LEGAL STATUS DISCUSSED

By the end of 2015, the number of masts in the Kingdom reached 1500, of which 12% are shared between operators. TRA held a workshop in February with government stakeholders and public wireless network operators to begin establishing the Mast Deployment Regulatory Framework and rectifying the legal status of unpermitted masts.

General Director Mr. Mohammed Bubashait explained that the development of telecommunications services since liberalization has seen rapid growth in the Kingdom and is now a major component of the national economy. As such, the government has decided that TRA ensures telecommunications masts follow a suitable regulatory framework and systems that facilitate the evolution of environment friendly wireless networks.

The project focuses on deploying future masts with better designs to blend with the surrounding environment and address public concerns towards mast emissions. It also limits the amount of masts and towers by encouraging site sharing among operators. Project Manager, Mr. Adel Alshowaikh addressed that the TRA has conducted a study of masts' current status to identify the main causes led to the increase of unpermitted masts and a technical evaluation on a sample of existing masts to ensure its compliance with engineering standards and specifications for establishing telecom masts.



INTERVIEW

Leading with Ambition

One-on-one with members of the TRA Directorate on their strategies for 2016 towards the implementation of 4th National Telecommunications Plan (NTP 4) which lays the government's framework in the telecom sector for the next three years.



MOHAMED ALBINALI,
DIRECTOR OF
MARKET AND
COMPETITION

1) What is the main purpose of your directorate, what are the major duties your position entails as director?

The Market and Competition Directorate ('MCD') is one of the most important directorates in the Telecommunications Authority Regulatory ('TRA'). The main objective of MCD is to ensure that there is effective competition in all telecoms markets.

In markets that lack competition, MCD will take adequate steps to foster it. For instance, this includes imposing obligations on the dominant operator to provide access to its network on regulated terms. Consequently, it is important for MCD to review telecommunications market on a regular basis, and in each of those markets, to assess the level of competition and the need to regulate.

2) What are the top three strategic goals for 2016 that your directorate will work towards?

To adapt the regulatory framework to support the policy directions set in the forthcoming 4th National Telecoms Plan (NTP 4); finalize the review of price and non-price terms of the regulated wholesale products in Batelco's Reference Offer; and continue monitoring the markets and deregulate those in which effective competition has emerged.

3) What do you enjoy most about your job? What are some of the challenges?

The Telecommunication sector is continuously evolving; it is a dynamic sector with rapid technological changes and innovations. Therefore, while my job is certainly challenging, it is also very gratifying and stimulating. My job is also interesting in so far as it requires being able to handle a variety of concepts such as regulatory economics, accounting, network technologies and competition law.



MOHAMMED AL NOAIMI,
DIRECTOR OF
TECHNICAL AND
OPERATIONS

1) What is the main purpose of your directorate, what are the major duties your position entails as director?

Technical and Operations is responsible for managing the telecom sector's scarce resources such as frequencies and numbers, both fixed and mobile, while ensuring the efficient delivery of quality service. In addition, we also have to review relevant technologies and update regulations as needed. We do this by applying the best practices that suit Bahrain's ICT sector.

2) What are the top three strategic goals for 2016 that your directorate will work towards?

Our main initiative this year is to implement the government's strategic plan, the National Broadband Network, for fixed communication infrastructure (from copper to fiber optics). It is a high level strategy that contributes towards ubiquitous broadband all over Bahrain.

We are also on the verge of releasing a mast permission regulation which will set rules for developing wireless towers in Bahrain. We currently have 1600 masts of which many are not permitted. However, we won't be moving these since they pose no hazard to the public. The mast regulation will contribute towards the strategic objective of the TRA and will consist of surveying masts and gauging radio emissions on a quarterly basis.

Most importantly, we are working towards the provision of a telecoms environment that delivers world class communication and ICT services at a high speed.

3) What do you enjoy most about your job? What are some of the challenges?

I like that we have a friendly work culture and drive towards our goals as a family. Since I don't like routine and mundane work, I find the challenges of keeping up with rapid changes in technology and its effect on the regulatory frameworks very exciting.

INTERVIEW (CON.)



**DR. KHALID
BIN DUAIJ
AL KHALIFA**
DIRECTOR OF
CYBER SECURITY

1) What is the main purpose of your directorate, what are the major duties your position entails as director?

Our directorate is composed of the Cyber Safety and Cyber Security departments. Our goal is to promote a safe, secure and reliable cyber environment through safeguarding users and securing critical electronic communication infrastructure and services. Every year, we are involved in mitigating risks and continuing promotion of cyber safety through knowledge, culture and innovation to consumers, children and academic institutions.

We're responsible for protecting the backbone of data exchange and internet connectivity. In 2014, Bahrain's cyber security was ranked the 19th best globally and 8th regionally.

2) What are the top three strategic goals for 2016 that your directorate will work towards?

A major goal for the year is to publish the 2nd National Internet Safety Review which

is a comprehensive study of online safety across Bahrain, wherein through schools and organizations we identified and measured risks of the internet by surveying 2000 students.

The second is to issue the Critical Telecommunications Infrastructure Risk Management Regulation, currently in its draft stage, which will provide a framework for the identification and management of risks to the critical telecommunications infrastructure of Kingdom of Bahrain. And finally, we want to ensure the successful implementation of the SIM card registration regulation which mitigates the risks of fraud.

3) What do you enjoy most about your job? What are some of the challenges?

I respect the support and empowerment that our General Director Mr. Mohammed Hamad Bubshait gives us in order to adopt new ideas, encouraging innovative and thoughtful leadership in a well-structured and professional environment.

One of our biggest challenges is recruitment for the department, since Bahrain has a shortage of cyber security experts in the private and public sector.



**DR. JEAN
PIERRE
SCERRI**
ACTING
DIRECTOR OF
LEGAL AFFAIRS

1) What is the main purpose of your directorate, what are the major duties your position entails as director?

Our directorate includes the Legal Affairs and Licensing departments, we're a team of eight experts. Our duties majorly consist of drafting agreements, subsidiary regulations, providing legal advice to other directorates, dealing with disputes consumers have with operators and playing an intermediary role in waiving or confirming disputed payments.

2) What are the top three strategic goals for 2016 that your directorate will work towards?

We're currently working on a Roaming Transparency Regulation that will establish a pre-determined cut off limit for data roaming charges. We're also providing consultation for the government's initiative towards the Fourth National Telecommunications Plan (NTP4) which highlights the country's vision

and policy for the next three years in the telecommunications sector. As well, we're tackling the issue of licensees withholding or barring overtop and free applications from consumers.

3) What do you enjoy most about your job? What are some of the challenges?

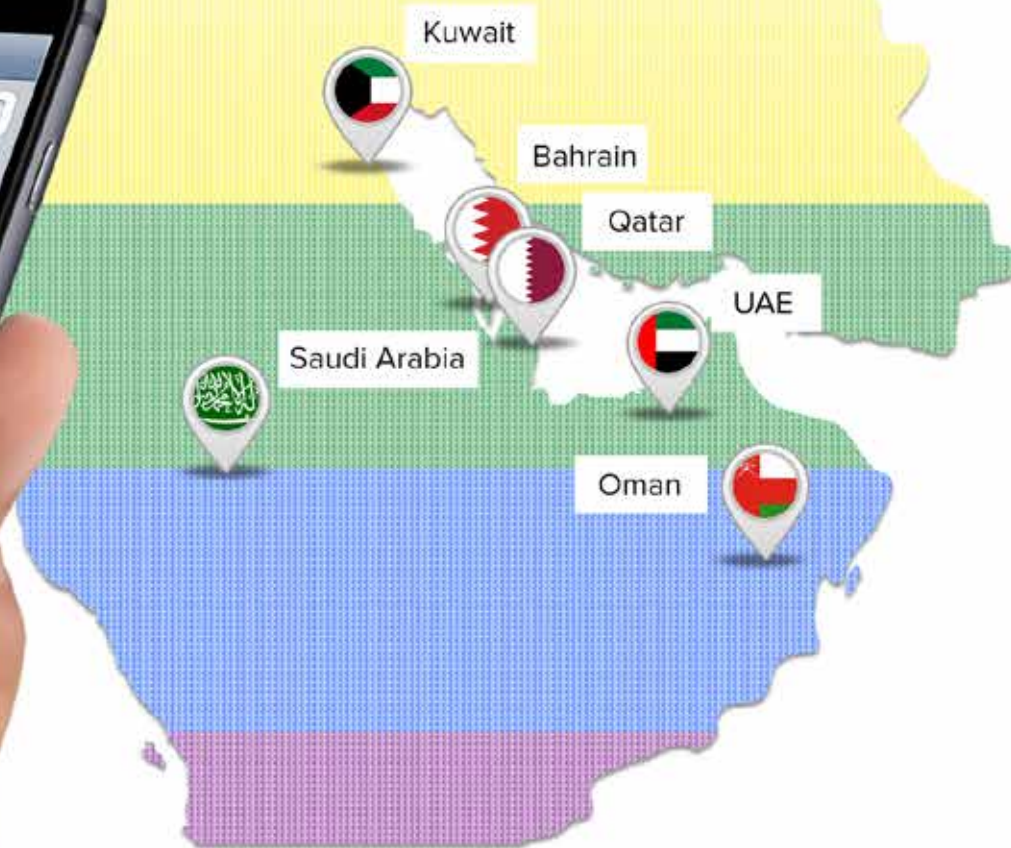
I enjoy knowing that what we do is to contribute towards the welfare of society wherein they experience improved data and consumer protection. It's an honour to be a part of TRA Bahrain, being one the region's leading regulators. Although at times I feel we tend to be extremely ambitious and have to overcome the challenge of doing all that we have to do with the resources and timeframe we've given ourselves.

COVER STORY

New GCC Roaming Rates

Consumers across the region will benefit from lower GCC roaming prices for voice, SMS and mobile data, effective as of the 1st of April, 2016, Bahrain's Telecommunications Regulatory Authority has announced.

In the framework of joint cooperation between the GCC countries, the Ministerial Committee for Post, Telecommunications and Information Technology adopted GCC roaming price caps at its 24th meeting which was held in Doha in early June 2015. "The GCC Roaming Working Group in collaboration with the GCC telecommunications ministries and regulators, conducted a lengthy study and consultation with the operators in all the GCC countries



COVER STORY (CON.)

during the past two years, based on which it was agreed to reduce GCC roaming prices,” General Director of TRA Mr. Mohamed Bin Hamad Bubashait has stated.

The new roaming prices applied in two phases, saw new wholesale prices applied to the operators effective 1st January and retail prices (the actual application on consumers’ bills) to begin on 1st April 2016.

«The application of lower wholesale and retail prices will be gradual over a period of three years for voice and SMS, and five years for mobile data,» he added.

The new regulation will reduce rates for roaming, telephone calls, text messaging and data services throughout the GCC countries, offering the opportunity to increase traffic between GCC operators with customers being encouraged to boost their usage of roaming services when traveling. This positive impact will be extended to the overall contribution

of the telecommunications industry to the economy of each country.

In addition, the TRA will establish a framework to ensure accuracy of the billing and invoicing systems of operators in Bahrain. The move comes after billing and invoicing complaints

"The application of lower wholesale and retail prices will be gradual over a period of three years for voice and SMS, and five years for mobile data."

topped the list of grievances handled by the TRA in 2014 and 2015 and pertain to all major telecom companies in the Kingdom.

The TRA aims to create a roaming transparency regulation this year Consumer Affairs Manager Amjad Elnayal shared, wherein in addition to real time notifications, customers will also be offered a cap on data roaming

services which are suspended when the bill or usage reaches a pre-determined cost.

New GCC roaming rates effective April 1st will also ensure that customers are being charged fairly for roaming services across all operators in the GCC. “To a certain extent, placing a

cap for telecom companies will limit financial damage incurred by users,” Mr. Elnayal explained. The new regulation on maximum caps for roaming services is similar to those applied by operators in the European Union, he continues.

“Of the 401 complaints received by TRA, 136 were related to billing and invoice,” Mr. Elnayal

highlighted, “This figure doesn’t reflect a clear picture of how many complaints were actually made to operators. TRA only receives cases of escalated complaints forwarded to by aggrieved customers when their service providers were not able to solve their issues. The operators therefore receive a much larger amount of complaints which are solved internally.” The Authority hopes to restore confidence in the operators’ billing systems by checking their accuracy to help seek well-informed and clear solutions to this issue.

The lower roaming rates come in continuation of cooperation between the GCC regulators under the supervision of the GCC Secretariat-General. The first regulatory roaming framework only covered outgoing calls while roaming was issued in June 2010 and implemented over a period of two years until it was fully implemented in February 2012.

Adopted caps for the following roaming services	Adopted caps effective 1st of April 2016
Local outgoing calls while roaming in GCC (minute)	BHD 0.098
International outgoing calls to any GCC country while roaming in GCC (minute)	BHD 0.241
Received calls while roaming in GCC (minute)	BHD 0.132
SMSs (per SMS)	BHD 0.030
Data services (per Mbit)	BHD 0.489

The table displays the upcoming retail price caps for voice and SMS mobile data.

ONLINE SAFETY STUDY

TRA's National Internet Safety Review reveals %37.9 of respondents have been cyber-bullied.



Dr. Khalid bin Duaij Al Khalifa,
TRA's Director of Cyber Security

Commissioned by UK based independent researchers, Professor Julia Davidson and Professor Elena Martellozzo, Telecommunications Regulatory Authority (TRA) of Bahrain finalized the highly anticipated "National Internet Safety Review" study in March this year. The purpose of the study was to identify key issues surrounding children's and adult's perceptions of risk and their online behavior. The study was also compared with the first study conducted in 2010.

This study sheds light on some crucial insights into various areas of online behavior in the Kingdom," Dr. Khalid bin Duaij Al Khalifa TRA's Director of Cyber Security said. "Compared to our findings in 2010, it's a relief to see that the levels of awareness to online risks

have increased. It is, however, concerning to see that Cyberbullying has accumulated a high percentage. This is something that will require greater collaboration between both government and private sectors to address as we all have a stake in this matter."

Compared to the last results, 2015's findings point to various new developments in online behavior. Overall time online spent by young people has increased, with 47% reporting to spend up to three hours a day compared to one third of the sample in the previous report. Young people are moving away from fixed internet and online activity with a nearly 50% reduction in desktop use since 2010. They are also accessing the internet using more fluid, dynamic and mobile technologies in 2015, with nearly four times more reporting using a smartphone when compared to six years ago. There is an increased use of the internet for activities such as performing homework and research, as well as instant messaging, but there was decreased use of email.

The young people's survey revealed that there have been reductions in a majority of risk areas, including youngsters sharing personal information with strangers online (16.6% in 2010 vs. 9.9% in 2015). There was a large reduction in the number of young people who

Compared to our findings in 2010, it's a relief to see that the levels of awareness to online risks have increased.

reportedly met an online contact in person in 2010 (43%) and 2015 (16.4%), which comes as a positive change. Variations in cyberbullying were difficult to interpret in 2010, however the 2015 study reveals that a high percentage of respondents (37.9%) have been cyber-bullied.

"The facts on Cyberbullying which we've uncovered are still alarming. In order for us to make a substantial change, we keenly



Ms. Mariam Almannai,
TRA's Manager of Cyber Safety



believe that this change will come from a joint effort across ministries and organizations. TRA is adamant on being on the vanguard of this change, and I have no doubt that the leaders in both government and private institutions as well as the public at large will share our belief in the immediacy and cooperation required," TRA's Manager of Cyber Safety, Ms. Mariam Almannai, stated.

The study consisted of focus group interviews with children aged 7-11, a national survey of children aged 12-18 and a national survey of adults- 1637 young people aged 12 - 18 from schools in the Kingdom participated in the child survey and 98 children aged 7-11 participated in the focus groups. The sample was nationally representative of Bahrain, including a 50/50 gender split. Furthermore, the split was also equal amongst different age groups.

The official National Internet Safety Review study is due to be published for public viewing in a month's time.