
Review of SGA + NOG Data

55 messages

Mark Tinka <mark.tinka@seacom.com>

Mon, Dec 5, 2022 at 9:06 AM

To: Etienne-Victor Depasquale <edepa@ieee.org>, Philip Smith <philip@apricot.net>

Hi Etienne.

Philip has graciously accepted to review the SGA and NOG data from the recent survey you conducted.

I have briefed him on the work you have been doing around this, and the relative difference between both data sets you have received.

I am sure his eyes will be most helpful to you, as you work through it.

I'll leave you both to it. Thanks.

Mark.

Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Dec 5, 2022 at 11:05 AM

To: Mark Tinka <mark.tinka@seacom.com>, philip@apricot.net

Thank you very much Philip, and thank you very much Mark for establishing this precious contact.

Philip, I have set up a Jupyterhub notebook server for your use and created a user account named "philip.smith" (without double quotes). The password assigned to your account will be that which you enter (just once) on first use. The server can be found at <https://tljh-ict.research.um.edu.mt/> (I work at the University of Malta).

On gaining access, you will find a series of questions which have been answered both through NOG response and through market research (SG Analytics). There are 71 NOG responses, and 30 responses from SGA. The SGA responses have been guaranteed to be unique and "Tier 1" - equivalent (e.g. Telefonica, Deutsche Telecom, Vodafone).

With regard to the NOG data, I can also show you the analytics directly assembled by Google: they are at <https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics> The latter link has been opened temporarily.

I am eagerly looking forward to your evaluation and am at your disposal for any clarification necessary.

With sincere thanks,

Etienne

[Quoted text hidden]

--

Ing. Etienne-Victor Depasquale
Assistant Lecturer
Department of Communications & Computer Engineering
Faculty of Information & Communication Technology
University of Malta
Web. <https://www.um.edu.mt/profile/etiennedepasquale>

Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Dec 5, 2022 at 11:20 AM

To: philip@apricot.net

I should add that the Jupyter notebook requires that you run the first cell (to import libraries) before running any other cell.

That same first cell holds one tweakable parameter (not fully tested) - the number of histogram bins into which you'd like to break down the subscriber distribution responses.

With sincere thanks,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Dec 5, 2022 at 11:23 AM

To: Mark Tinka <mark.tinka@seacom.com>

Dear Mark,

I wish you'd let me send you a token of my appreciation ! Just an address (whatever address suits you), should you consent ...

Meanwhile: Saku has answered and reviewed the data;
I'm waiting for his permission to cite him at the moment and when he does, I'll share the feedback.

Warm regards,

Etienne

On Mon, Dec 5, 2022 at 9:06 AM Mark Tinka <mark.tinka@seacom.com> wrote:

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[Quoted text hidden]

Mark Tinka <mark.tinka@seacom.com>

Mon, Dec 5, 2022 at 2:03 PM

To: Etienne-Victor Depasquale <edepa@ieee.org>

Thanks, Etienne. Good to hear.

Can you speak to his general view of the SGA data?

Mark.

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Dec 5, 2022 at 2:56 PM

To: Mark Tinka <mark.tinka@seacom.com>

Most of the information in his reply has to be gleaned by reading between the lines, as he's sceptical of the value of questionnaires as a means of sourcing data.

Indeed, the only direct review was that the NOG data matched his view better than SGA's.

With a bit of luck, I'll get to share his reply in full.

Warm regards,

Etienne

[Quoted text hidden]

Mark Tinka <mark.tinka@seacom.com>

Mon, Dec 5, 2022 at 3:09 PM

To: Etienne-Victor Depasquale <edepa@ieee.org>

Thanks, Etienne.

Please keep me posted. Would be keen to hear what Philip comes back with as well.

Mark.

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Mark Tinka <mark.tinka@seacom.com>

Mon, Dec 5, 2022 at 4:50 PM

Absolutely, Mark, rest assured.

Cheers,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Mark Tinka <mark.tinka@seacom.com>

Tue, Dec 6, 2022 at 8:27 PM

Dear Mark,

Saku has given permission to cite him privately, and
if I don't trust you, then I might as well wrap things up :)

Attached, please find the thread we shared;
Saku is unusually sceptical, but
I do think that his input helps me to balance my perspective.
I've asked [Alan Breznick](#) whether he can cite research that
supports surveys as a research method;
it would be good to cite such research in our paper.

Warm regards,

Etienne

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 **discussions with saku.pdf**
3341K

Mark Tinka <mark.tinka@seacom.com>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Dec 12, 2022 at 4:01 PM

Thanks, Etienne.

Saku has always been a skeptic, but you asked if he could chip in so I thought you knew :-).

But as you say, his feedback does help provide some balance, which is never bad. And for the most part, he is not wrong. It's just that the world is tough, and it's better to try something than do nothing, which is what you are doing.

How is it going with Philip?

I'll remind the other two I also asked, Ben and Rebecca.

Mark.

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: philip@apricot.net

Mon, Dec 12, 2022 at 5:36 PM

A gentle, respectful and friendly reminder.

With thanks and kind regards,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Mark Tinka <mark.tinka@seacom.com>

Mon, Dec 12, 2022 at 5:37 PM

No news from Philip as yet -
which reminded me that I wanted to send him a reminder - but forgot to do so.
There was no one to remind the reminder :D before you arrived - so I've just sent him one now.

Warm regards,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Dec 13, 2022 at 12:01 AM

Hi Etienne,

Really sorry, I'm swamped by year-end contract work right now,... Will try my best in the next few days!

philip
--

Etienne-Victor Depasquale wrote on 13/12/2022 02:36:

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Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Dec 13, 2022 at 10:04 AM

No rush, Philip ... rather, thank you very much for sparing your time!

I only wrote as I was unsure whether my messages had reached you or not (you know, spam filters and tons of mail do that :)).

Warm regards,

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Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Dec 13, 2022 at 10:52 AM

Hi Etienne,

Oops yes, sorry, I realise I never even acknowledged your original emails!

I'm busy tomorrow, but Thursday I'll have some time to take a look. Sorry for the delay.

philip

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Etienne-Victor Depasquale wrote on 13/12/2022 19:04:

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Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Jan 3, 2023 at 7:53 PM

Hello Philip,

May you have a prosperous and peace-filled year !

Would you bear with me if I were to return to this and ask you for your evaluation?

Best regards,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Jan 3, 2023 at 8:18 PM

Hello Etienne,

Etienne-Victor Depasquale wrote on 3/1/2023 18:53:

Hello Philip,

May you have a prosperous and peace-filled year !

Thank you and you too, wishing you all the best for 2023.

| Would you bear with me if I were to return to this and ask you for your evaluation?

Yes, I have been trying to take a few days off. Will try tomorrow or Thursday - Friday and weekend I'm travelling back to Australia so will be off line.

Best wishes,

philip

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Best regards,

Etienne

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Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Wed, Jan 4, 2023 at 10:40 AM

Philip, I hope I haven't been rude;
I do understand that December was the time for rest.

I only wanted to draw your attention to this
now that we're more or less returning to normal.

Please take your time;
if at all possible, I would only like to know when to return to you and ask for your feedback.

With thanks and best regards,

Etienne
[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Mon, Jan 16, 2023 at 10:45 AM

Hello Philip, and good day to you,

I wonder whether you would let me know when would be the best time to take this up with you.

With thanks and best regards,

Etienne
[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Jan 17, 2023 at 8:52 AM

Hi Etienne,

I had every intention today, but time has run away from me. I've got a timeslot allocated tomorrow, so I hope...! Let me see if I can take a quick look tonight, once I've got a contract job out of the way.

Best wishes,

philip
--

Etienne-Victor Depasquale wrote on 16/1/2023 19:45:

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I wonder whether you would let me know when would be the best time to take this up with you.

With thanks and best regards,

Etienne

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Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Jan 17, 2023 at 8:57 AM

To: Philip Smith <philip@apricot.net>

Don't worry Philip,
I'm not in a rush; I intend to start writing toward the end of January, but
even that is not a hard deadline.

I'm torn between hoping for your answer and
the pragmatic reality that I'd rather you give me a relaxed (as opposed to a rushed) answer.
The only factor that tempers the relaxed side of the balance is
that January - mid-February are probably a realistic upper bound on the time I can wait before starting to write.

Anyways ... thank you so much for your patience; I am truly grateful.

Warm regards,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Fri, Jan 20, 2023 at 7:53 AM

Hi Etienne,

At last, I have a small free time window after weeks of wall to wall... :-)

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Philip, I have set up a Jupyterhub notebook server for your use and created a user account named "philip.smith" (without double quotes). The password assigned to your account will be that which you enter (just once) on first use. The server can be found at <https://tljh-ict.research.um.edu.mt/> <<https://tljh-ict.research.um.edu.mt/>> (I work at the University of Malta).

On there I found two spreadsheets, dataNOG and dataSGA. Yikes thank goodness have I a 27" screen as there are a lot of columns to parse there. dataNOG has the interesting content in columns X, Y and Z, at least for me anyway. :-)

With regard to the NOG data,
I can also show you the analytics directly assembled by Google:
they are at <https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNAG71Aa6heaK8U/viewanalytics> <<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNAG71Aa6heaK8U/viewanalytics>>
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Ah yes, got this too. I hope you can follow what I'm asking below, as each chart isn't numbered - maybe if you can number them, then I can say "in Chart 5, such and such"... etc. :-)

Just curious, 55% of response were from Europe. Is this because you asked more European operators, or you got more response from Europe as a percentage of who you asked? Or is it simply that the North American market is so condensed into a few bigger operators now...? Just wondering.

I'm also surprised that Middle East and Asia have similar response levels. Is that again because of lack of responses compared with outreach, or? Especially because Asia is huge, more than a third of the world's population, and a huge amount of network operators.

South America raises the question again, small response.

So what's the percentage of responses versus how many were asked - that would be interesting to see.

I'm amused by the one journalist who responded... Really? I'd have expected it'd to be CTO or Network Architect, or Chief Network Engineer to be the main responders to the questions you were asking.

And then the next pie-chart down, re who makes the decisions. It would be interesting to break this down per role. Because right now 44.4% make the decision - but are they the CTO, or the Network Architect, or the Network Engineer, or the journalist...

I'm trying to get my head around the "Metro-area Residential Access Subscriptions" chart. Three entries for active ethernet, and I'm trying to tie them back to the spreadsheet - oh yes, the <1Gbps, 1Gbps, and >1Gbps. Maybe sort in order of popularity, rather than alphabetical, and expand the titles out (or maybe that's just me), to make it easier to parse.

And the pie charts after that, I'm struggling with the colours and trying to work out which is which. Maybe a more structured summary. The listing is good, I just struggle a bit (and I'm a little red/green colour blind, so match colours between the chart and the key on the right is a bit more challenging for me - easier if they are in order on the key, and in the chart).

I've got about half way down the Google form anyway...

Let me have a look at the dataSGA spreadsheet... Will write separately for more clarifications. :-)

philip

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I am eagerly looking forward to your evaluation and am at your disposal for any clarification necessary.

With sincere thanks,

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Oh ummm, you are going to have to explain this one to me... I found the two spreadsheets,... What else can I do on there?

philip

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Etienne-Victor Depasquale <edepa@ieee.org>

Sat, Jan 21, 2023 at 10:26 AM

To: Philip Smith <philip@apricot.net>

Philip, I'm terribly sorry; you should have found the Jupyter notebook but my bad configuration placed a symbolic link to a directory containing the data instead ! I'll address the Jupyter notebook issue alone in this reply, to avoid lengthening this message too much.

I've replaced the symbolic link with the Jupyter notebook.
You should now see "operator_analysis.ipynb" when you log in.
Single-clicking the hyperlink opens up a page containing a series of so-called cells.
The cells contain Python script.
The topmost cell on the page imports a library of functions that supports the execution of the rest of the cells.
A cell's script is executed by clicking on the "play-to-end" icon to its left.

From there on,

the cell scripts can be executed in any order, as they are independent.
The result of execution of the cell script is a comparative analysis of data collected from the NOGs (left) and data collected by SG Analytics from Tier 1 operators.
SGA have described Tier 1s as incumbents like Orange, Vodafone and Telefonica, without explicitly identifying them.

Thank you very much.

Warm regards,

Etienne

[Quoted text hidden]

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Mon, Jan 23, 2023 at 9:54 AM

Part 1

Just curious, 55% of response were from Europe. Is this because you asked more European operators, or you got more response from Europe as a percentage of who you asked? Or is it simply that the North American market is so condensed into a few bigger operators now...? Just wondering.

More responses came from people whose company HQs are in Europe.

However, the location of the HQ is less significant than the geographical distribution of subscribers in access networks.

That's a better indicator of the geographic scope.

Answers were sourced through NOGs all over the world.

I'm also surprised that Middle East and Asia have similar response levels. Is that again because of lack of responses compared with outreach, or? Especially because Asia is huge, more than a third of the world's population, and a huge amount of network operators.

The same observation made about geographic distribution of access networks as opposed to geographic distribution of HQs holds here too.

I'm amused by the one journalist who responded... Really? I'd have expected it'd to be CTO or Network Architect, or Chief Network Engineer to be the main responders to the questions you were asking

:D

There's a story behind that.

I tried to rope in support from Lightwave's followers, but got so little that Stephen Hardy posted his input to verify whether the form was working properly. I'll eliminate his contribution from the published statistics but his opinion is significant.

And then the next pie-chart down, re who makes the decisions. It would be interesting to break this down per role. Because right now 44.4% make the decision - but are they the CTO, or the Network Architect, or the Network Engineer, or the journalist...

I've added you to the list of people who can see the individual replies.

Please, keep this to yourself. Only you and three other trusted people can see the individual replies.

I'm trying to get my head around the "Metro-area Residential Access Subscriptions" chart. Three entries for active ethernet, and I'm trying to tie them back to the spreadsheet - oh yes, the <1Gbps, 1Gbps, and >1Gbps. Maybe sort in order of popularity, rather than alphabetical, and expand the titles out (or maybe that's just me), to make it easier to parse.

And the pie charts after that, I'm struggling with the colours and trying to work out which is which. Maybe a more structured summary. The listing is good, I just struggle a bit (and I'm a little red/green colour blind, so match colours between the chart and the key on the

right is a bit more challenging for me - easier if they are in order on the key, and in the chart).

Probably, my Jupyter notebook will improve readability.

The Google analytics are available as a free service for subscribers to Google Forms, and they have some value but they are admittedly general-purpose and not best tailored to this particular survey.

I'll wait for your response to inspection of the data as digested in the notebook.

Warm regards,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Sun, Feb 5, 2023 at 7:14 PM

To: Philip Smith <philip@apricot.net>

Hello again Philip :)

I truly am sorry to be such a nag;
I'm knocking again because I'm writing up and badly need your contribution.

I would dearly like to have your detailed feedback by February.
If I can facilitate your feedback in some way, please do let me know.

Cheers,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>

Mon, Feb 6, 2023 at 12:36 AM

To: Etienne-Victor Depasquale <edepa@ieee.org>

Hi Etienne,

Honestly I'm trying my best to make time, but I'm totally swamped with organisation and prep work for APRICOT 2023 coming up in two weeks. Been like this for last 4 weeks unfortunately. I will make time for you in the coming days as best as I can.

philip

--

Etienne-Victor Depasquale wrote on 6/2/2023 04:14:

Hello again Philip :)

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> <<mailto:mark.tinka@seacom.com>>

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Feb 6, 2023 at 8:01 PM

To: Philip Smith <philip@apricot.net>

I'm sorry I nag, Philip ... really, it's only to avoid falling out of the queue that I send these reminders.

I know and understand that I have to take a lower priority.

Thank you for bearing with my reminders so patiently.

Warm regards,

Etienne

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Philip Smith <philip@apricot.net>

Thu, Feb 9, 2023 at 11:33 AM

To: Etienne-Victor Depasquale <edepa@ieee.org>

Hi Etienne,

Please don't fret, you are first in the queue once I get some respite from the 16 hour days it's been for the last 4 weeks...

philip

--

Etienne-Victor Depasquale wrote on 7/2/2023 05:01:

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[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Fri, Feb 10, 2023 at 10:10 AM

To: Philip Smith <philip@apricot.net>

Thank you for the forbearing attitude :)

Incidentally, in case you know of operators who might like to complete the survey, I'd be delighted to have their input.

The link is this one: <https://forms.gle/vN2DuhnLUWUwQ4176>

Cheers,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>

Fri, Feb 10, 2023 at 12:45 PM

To: Etienne-Victor Depasquale <edepa@ieee.org>

Hi Etienne,

Etienne-Victor Depasquale wrote on 10/2/2023 19:10:

Thank you for the forbearing attitude :)

Incidentally, in case you know of operators who might like to complete the survey, I'd be delighted to have their input.

The link is this one: <https://forms.gle/vN2DuhnLUWUwQ4176> <<https://forms.gle/vN2DuhnLUWUwQ4176>>

It's not so much knowing the operators, there are thousands in region. :-)

What I suggest you can do is compose a short email explaining your project goal, and the feedback you'd like, including the survey link. Send it to me, and I can send to AOPS mailing list and the SANOG mailing list. Former covers the whole Asia Pacific region, has about 400 subscribers. Latter is for South Asia, and has similar numbers. I'm sure you'll get some feedback from that.

Would that work? (Easier than me writing 1:1, or you subscribing to both lists just for the survey).

A short email, I can forward on your behalf...

philip

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Cheers,

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Etienne-Victor Depasquale <edepa@ieee.org>

Fri, Feb 10, 2023 at 5:54 PM

To: Philip Smith <philip@apricot.net>

Hello Philip,

What I suggest you can do is compose a short email explaining your project goal, and the feedback you'd like, including the survey link.

Yes, that's very helpful. thank you !

The text below my salutation might be fit for purpose.

Warm regards,

Etienne

###START EMAIL TEXT

"An academic from the University of Malta is asking for help through response to a questionnaire that forms part of an academic study.

The study is directed solely towards facilitating understanding of metro area networks, for analysts who approach from the perspective of energy consumption.

The study is anonymous (no individual or company names are solicited), and individual responses will only be used in aggregate.

A digest of the survey will be sent to respondents who write to the email address shown in the profile page."

###END EMAIL TEXT

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Feb 14, 2023 at 5:43 PM

To: Philip Smith <philip@apricot.net>

Hello Philip,

Hope your preparations for APRICOT '23 are shaping up nicely :)

Would you let me know when you send out the request to the APOPS and SANOG mailing lists?

Thank you !

Cheers,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Wed, Feb 15, 2023 at 4:44 AM

Hi Etienne,

Etienne-Victor Depasquale wrote on 15/2/2023 02:43:

Hello Philip,

Hope your preparations for APRICOT '23 are shaping up nicely :)

If I thought the previous weeks were crazy, this one is even more so. But we are getting there...

Would you let me know when you send out the request to the APOPS and SANOG mailing lists?

I've got it half done, but just not sent yet...

philip

--

Thank you !

Cheers,

Etienne

On Fri, Feb 10, 2023 at 5:54 PM Etienne-Victor Depasquale <edepa@ieee.org <mailto:edepa@ieee.org>> wrote:

Hello Philip,

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"An academic from the University of Malta
<<https://www.um.edu.mt/profile/etiennedepasquale>> is asking for help through response to a questionnaire that forms part of an academic study <<https://forms.gle/AAJokyg98JLW7Ti6A>>.

The study is directed solely towards facilitating understanding of metro area networks, for analysts who approach from the perspective of energy consumption.

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Etienne-Victor Depasquale wrote on 10/2/2023 19:10:

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 > > > :D
 > > > There's a story behind that.
 > > > I tried to rope in support from Lightwave's
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 > > got so little
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 verify whether the
 > > form was
 > > > working properly.
 > > > I'll eliminate his contribution from the
 published
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 > > > his opinion is significant.

> > >
 > > > And then the next pie-chart down, re
 who makes the
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 > Because right now
 > > > 44.4% make
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 the Network
 > > Architect,
 > > > or the
 > > > Network Engineer, or the journalist...
 > > >
 > > > I've added you to the list of people who
 can see the
 > > individual replies.
 > > > Please, keep this to yourself. Only you and
 three
 > other trusted
 > > > people can see the individual replies.
 > > >
 > > > I'm trying to get my head around the
 "Metro-area
 > > Residential Access
 > > > Subscriptions" chart. Three entries for
 active
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 > > > And the pie charts after that, I'm
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 Maybe a more
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 > > are in
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 > > > Probably, my Jupyter notebook will improve
 readability.

> > > The Google analytics are available as a
free service for
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> > >
> > > Hi Etienne,
> > >
> > > At last, I have a small free time
window after
> weeks of
> > wall to
> > > wall... :-(
> > >
> > > Etienne-Victor Depasquale wrote on
5/12/2022 20:05:
> > > >
> > > > Philip, I have set up a Jupyterhub
notebook
> server for
> > your
> > > use and
> > > > created a user account named
"philip.smith"
> (without
> > double
> > > quotes).
> > > > The password assigned to your
account will be that
> > which you
> > > enter (just
> > > > once) on first use.
> > > > The server can be found at
> > > <https://tljh-ict.research.um.edu.mt/>
<<https://tljh-ict.research.um.edu.mt/>>
> <<https://tljh-ict.research.um.edu.mt/>>
<<https://tljh-ict.research.um.edu.mt/>>>
> > <<https://tljh-ict.research.um.edu.mt/>>
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> <<https://tljh-ict.research.um.edu.mt/>>
<<https://tljh-ict.research.um.edu.mt/>>>
> > <<https://tljh-ict.research.um.edu.mt/>>

<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>>>
<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
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<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>>>>>

> > > > The latter link has been opened temporarily.
> > >
> > > Ah yes, got this too. I hope you can follow what
> I'm asking
> > > below, as
> > > each chart isn't numbered - maybe if you can
> number them,
> > then I
> > > can say
> > > "in Chart 5, such and such"... etc. :-)
> > >
> > > Just curious, 55% of response were from Europe. Is
> this
> > because you
> > > asked more European operators, or you got more
> response from
> > > Europe as a
> > > percentage of who you asked? Or is it simply that
> the North
> > > American
> > > market is so condensed into a few bigger operators
> > now...? Just
> > > wondering.
> > >
> > > I'm also surprised that Middle East and Asia have
> similar
> > response
> > > levels. Is that again because of lack of responses
> > compared with
> > > outreach, or? Especially because Asia is huge,
> more than
> > a third
> > > of the
> > > world's population, and a huge amount of network
> operators.
> > >
> > > South America raises the question again, small
> response.
> > >
> > > So what's the percentage of responses versus how many
> > were asked
> > > - that
> > > would be interesting to see.
> > >
> > > I'm amused by the one journalist who responded...
> Really?

> > I'd have
 > > > expected it'd to be CTO or Network
 Architect, or Chief
 > > Network
 > > > Engineer
 > > > to be the main responders to the
 questions you
 > were asking.
 > > >
 > > > And then the next pie-chart down, re
 who makes the
 > > decisions. It
 > > > would
 > > > be interesting to break this down per role.
 > Because right now
 > > > 44.4% make
 > > > the decision - but are they the CTO, or
 the Network
 > > Architect,
 > > > or the
 > > > Network Engineer, or the journalist...
 > > >
 > > > I'm trying to get my head around the
 "Metro-area
 > > Residential Access
 > > > Subscriptions" chart. Three entries for
 active
 > ethernet,
 > > and I'm
 > > > trying
 > > > to tie them back to the spreadsheet -
 oh yes, the
 > <1Gbps,
 > > 1Gbps,
 > > > and
 > > > >1Gbps. Maybe sort in order of
 popularity,
 > rather than
 > > > alphabetical,
 > > > and expand the titles out (or maybe
 that's just
 > me), to
 > > make it
 > > > easier
 > > > to parse.
 > > >
 > > > And the pie charts after that, I'm
 struggling with the
 > > colours and
 > > > trying to work out which is which.
 Maybe a more
 > structured
 > > > summary. The
 > > > listing is good, I just struggle a bit
 (and I'm a
 > little
 > > red/green
 > > > colour blind, so match colours between
 the chart
 > and the
 > > key on the
 > > > right is a bit more challenging for me
 - easier if
 > they
 > > are in
 > > > order on
 > > > the key, and in the chart).
 > > >
 > > > I've got about half way down the Google

form anyway...

> > > Let me have a look at the dataSGA

spreadsheet...

> Will write

> > > separately
> > > for more clarifications. :-)

> > > philip
> > > --

> > >
> > > >
> > > > I am eagerly looking forward to your

evaluation

> and am at
> > > your disposal
> > > > for any clarification necessary.
> > > >
> > > > With sincere thanks,
> > > >
> > > > Etienne
> > > >
> > > > On Mon, Dec 5, 2022 at 9:06 AM Mark

Tinka

> > > <mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>
> <mailto:mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>> <mailto:mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>
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> <mailto:mark.tinka@seacom.com <mailto:mark.tinka@seacom.com>>
> > <mailto:mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>
<mailto:mark.tinka@seacom.com>>>>>> wrote:

> > > >
> > > > Hi Etienne.
> > > >
> > > > Philip has graciously accepted

to review

> the SGA
> > and NOG
> > > data from
> > > > the recent survey you conducted.
> > > >
> > > > I have briefed him on the work

you have

> been doing
> > around
> > > this, and
> > > > the relative difference between

both data

> sets you
> > have

```

> > > received.
> > > > I am sure his eyes will be most
helpful to
> you, as you
> > > work through it.
> > > >
> > > > I'll leave you both to it. Thanks.
> > > >
> > > > Mark.
> > > >
> > > >
> > > >
> > > > --
> > > > Ing. Etienne-Victor Depasquale
> > > > Assistant Lecturer
> > > > Department of Communications &
Computer Engineering
> > > > Faculty of Information &
Communication Technology
> > > > University of Malta
> > > > Web.
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Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Wed, Feb 15, 2023 at 10:42 AM

If you happen to cross paths with [Dion Leung](#), please give him my regards.
Years ago, I came across his APRICOT'15 presentation (online) and set up a link with him over LinkedIn.

I'll confess that he might not remember me; we only crossed paths online.
Even in this limited context, he was very affable.

Good luck with this year's show; you're in my prayers.

Cheers,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Fri, Mar 3, 2023 at 10:21 AM

Hello Philip,

I hope that this year's edition met your expectations (and perhaps exceeded them).

I'm risking my neck again :)

May I post a reminder about the review and the circulation among APOPS and SANOG?

Warm regards,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Wed, Mar 15, 2023 at 9:07 AM

Hi Etienne,

Sorry for delay... After APRICOT 2023 sinking all my time, my laptop died... Now working on a spare one after getting backups restored on to it...

I've sent the emails to the SANOG and APOPS lists - with you in bcc. If you need a deadline attached to getting responses, let me know and I can follow up - or you follow up, and I'll approve your non-member posting (I run the lists).

Going to get to the rest of your requests tomorrow and Friday, knowing how pressing time is for you...

Did you get any responses from your UKNOF posting I saw the other day?

philip

--

Etienne-Victor Depasquale wrote on 3/3/23 19:21:

Hello Philip,

I hope that this year's edition met your expectations (and perhaps exceeded them).

I'm risking my neck again :)

May I post a reminder about the review and the circulation among APOPS and SANOG?

Warm regards,

Etienne

On Wed, Feb 15, 2023 at 10:42 AM Etienne-Victor Depasquale <edepa@ieee.org> <<mailto:edepa@ieee.org>>> wrote:

If you happen to cross paths with Dion Leung
<<https://www.linkedin.com/in/dionleung/>>, please give him my regards.
Years ago, I came across his APRICOT'15 presentation (online) and
set up a link with him over LinkedIn.

I'll confess that he might not remember me; we only crossed paths
online.
Even in this limited context, he was very affable.

Good luck with this year's show; you're in my prayers.

Cheers,

Etienne

On Wed, Feb 15, 2023 at 4:45 AM Philip Smith <philip@apricot.net> <<mailto:philip@apricot.net>>> wrote:

Hi Etienne,

Etienne-Victor Depasquale wrote on 15/2/2023 02:43:

> Hello Philip,

>

> Hope your preparations for APRICOT '23 are shaping up nicely :)

If I thought the previous weeks were crazy, this one is even
more so.
But we are getting there...

> Would you let me know when you send out the request to the
APOPS and
> SANOG mailing lists?

I've got it half done, but just not sent yet...

philip

--

>

> Thank you !

>

> Cheers,

>

> Etienne

>
> On Fri, Feb 10, 2023 at 5:54 PM Etienne-Victor Depasquale
> <edepa@ieee.org <<mailto:edepa@ieee.org>>
<<mailto:edepa@ieee.org> <<mailto:edepa@ieee.org>>>> wrote:
>
> Hello Philip,
>
> What I suggest you can do is compose a short email
explaining your
> project goal, and the feedback you'd like, including
the survey
> link.
>
> Yes, that's very helpful. thank you !
> The text below my salutation might be fit for purpose.
>
> Warm regards,
>
> Etienne
>
> ###START EMAIL TEXT
> "An academic from the University of Malta
> <<https://www.um.edu.mt/profile/etiennedepasquale>
<<https://www.um.edu.mt/profile/etiennedepasquale>>> is asking for
help
> through response to a questionnaire that forms part of an
academic
> study <<https://forms.gle/AAJokyg98JLW7Ti6A>
<<https://forms.gle/AAJokyg98JLW7Ti6A>>>.
>
> The study is directed solely towards facilitating
understanding of
> metro area networks,
> for analysts who approach from the perspective of energy
consumption.
>
> The study is anonymous (no individual or company names are
> solicited), and
> individual responses will only be used in aggregate.
>
> A digest of the survey will be sent to respondents who
write to the
> email address shown in the profile page."
> ###END EMAIL TEXT
>
> On Fri, Feb 10, 2023 at 12:45 PM Philip Smith
<philip@apricot.net <<mailto:philip@apricot.net>>
> <<mailto:philip@apricot.net> <<mailto:philip@apricot.net>>>>
wrote:
>
> Hi Etienne,
>
> Etienne-Victor Depasquale wrote on 10/2/2023 19:10:
> > Thank you for the forbearing attitude :)
> >
> > Incidentally, in case you know of operators who
might like to
> complete
> > the survey, I'd be delighted to have their input.
> >
> > The link is this one:
<https://forms.gle/vN2DuhnLUWUwQ4176>
<<https://forms.gle/vN2DuhnLUWUwQ4176>>
> <<https://forms.gle/vN2DuhnLUWUwQ4176>
<<https://forms.gle/vN2DuhnLUWUwQ4176>>>
> > <<https://forms.gle/vN2DuhnLUWUwQ4176>
<<https://forms.gle/vN2DuhnLUWUwQ4176>>
> <<https://forms.gle/vN2DuhnLUWUwQ4176>
<<https://forms.gle/vN2DuhnLUWUwQ4176>>>>

>

> It's not so much knowing the operators, there are
thousands in

> region. :-)

>

> What I suggest you can do is compose a short email
explaining your

> project goal, and the feedback you'd like, including
the survey

> link.

> Send it to me, and I can send to APOPS mailing list
and the SANOG

> mailing list. Former covers the whole Asia Pacific
region, has

> about 400

> subscribers. Latter is for South Asia, and has
similar numbers.

> I'm sure

> you'll get some feedback from that.

>

> Would that work? (Easier than me writing 1:1, or you
subscribing

> to both

> lists just for the survey).

>

> A short email, I can forward on your behalf...

>

> philip

> --

>

> >

> > Cheers,

> >

> > Etienne

> >

> > On Thu, Feb 9, 2023 at 11:33 AM Philip Smith

> <philip@apricot.net <<mailto:philip@apricot.net>>

<<mailto:philip@apricot.net> <<mailto:philip@apricot.net>>>

> > <<mailto:philip@apricot.net>

<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>

<<mailto:philip@apricot.net>>>>> wrote:

> >

> > Hi Etienne,

> >

> > Please don't fret, you are first in the queue
once I get

> some respite

> > from the 16 hour days it's been for the last 4
weeks...

> >

> > philip

> > --

> >

> > Etienne-Victor Depasquale wrote on 7/2/2023 05:01:

> > > I'm sorry I nag, Philip ... really, it's
only to avoid

> falling

> > out of

> > > the queue that I send these reminders.

> > >

> > > I know and understand that I have to take a
lower

> priority.

> >

> > > Thank you for bearing with my reminders so
patiently.

> > >

> > > Warm regards,

> > >

> > > Etienne
> > >
> > > On Mon, Feb 6, 2023 at 12:36 AM Philip Smith
> <philip@apricot.net <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net> <<mailto:philip@apricot.net>>>
> > <<mailto:philip@apricot.net>
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> > > <<mailto:philip@apricot.net>
<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>
<<mailto:philip@apricot.net>>>>> wrote:
> > >
> > > Hi Etienne,
> > >
> > > Honestly I'm trying my best to make
time, but I'm
> totally
> > swamped with
> > > organisation and prep work for APRICOT
2023 coming
> up in two
> > weeks.
> > > Been
> > > like this for last 4 weeks
unfortunately. I will
> make time
> > for you in
> > > the coming days as best as I can.
> > >
> > > philip
> > > --
> > >
> > > Etienne-Victor Depasquale wrote on
6/2/2023 04:14:
> > > > Hello again Philip :)
> > > >
> > > > I truly am sorry to be such a nag;
> > > > I'm knocking again because I'm
writing up and
> > > > badly need your contribution.
> > > >
> > > > I would dearly like to have your
detailed
> feedback by
> > February.
> > > > If I can facilitate your feedback in
some way,
> please do
> > let me know.
> > > >
> > > > Cheers,
> > > >
> > > > Etienne
> > > >
> > > > On Mon, Jan 23, 2023 at 9:54 AM
Etienne-Victor
> Depasquale
> > > > <edepa@ieee.org
<<mailto:edepa@ieee.org>> <<mailto:edepa@ieee.org>
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 <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>>
 > > > <mailto:edepa@ieee.org
 <mailto:edepa@ieee.org> <mailto:edepa@ieee.org
 <mailto:edepa@ieee.org>>
 > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>
 <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>>>> wrote:
 > > > >
 > > > >
 > > > > Part 1
 > > > >
 > > > > Just curious, 55% of
 response were from
 > Europe. Is
 > > this
 > > > because you
 > > > > asked more European
 operators, or you
 > got more
 > > response from
 > > > > Europe as a
 > > > > percentage of who you asked?
 Or is it
 > simply that the
 > > > North American
 > > > > market is so condensed into
 a few
 > bigger operators
 > > > now...? Just
 > > > > wondering.
 > > > >
 > > > > More responses came from people
 whose
 > company HQs are
 > > in Europe.
 > > > > However, the location of the HQ
 is less
 > significant than
 > > > > the geographical distribution of
 > subscribers in access
 > > networks.
 > > > > That's a better indicator of the
 geographic
 > scope.
 > > > > Answers were sourced through
 NOGs all over
 > the world.
 > > > >
 > > > > I'm also surprised that
 Middle East and
 > Asia have
 > > similar
 > > > response
 > > > > levels. Is that again
 because of lack
 > of responses
 > > > compared with
 > > > > outreach, or? Especially
 because Asia
 > is huge,
 > > more than
 > > > a third
 > > > > of the
 > > > > world's population, and a
 huge amount
 > of network
 > > operators.

> > > >
 > > > > The same observation made about
 > > > > geographic distribution of
 access networks
 > as opposed to
 > > > > geographic distribution of HQs
 holds here too.
 > > > >
 > > > > I'm amused by the one
 journalist who
 > responded...
 > > Really?
 > > > I'd have
 > > > > expected it'd to be CTO or
 Network
 > Architect, or Chief
 > > > Network
 > > > > Engineer
 > > > > to be the main responders to the
 > questions you
 > > were asking
 > > > >
 > > > > :D
 > > > > There's a story behind that.
 > > > > I tried to rope in support from
 Lightwave's
 > followers, but
 > > > got so little
 > > > > that Stephen Hardy posted his
 input to
 > verify whether the
 > > > form was
 > > > > working properly.
 > > > > I'll eliminate his contribution
 from the
 > published
 > > statistics but
 > > > > his opinion is significant.
 > > > >
 > > > > And then the next pie-chart
 down, re
 > who makes the
 > > > decisions. It
 > > > > would
 > > > > be interesting to break this
 down per role.
 > > Because right now
 > > > > 44.4% make
 > > > > the decision - but are they
 the CTO, or
 > the Network
 > > > Architect,
 > > > > or the
 > > > > Network Engineer, or the
 journalist...
 > > > >
 > > > > I've added you to the list of
 people who
 > can see the
 > > > individual replies.
 > > > > Please, keep this to yourself.
 Only you and
 > three
 > > other trusted
 > > > > people can see the individual
 replies.
 > > > >
 > > > > I'm trying to get my head
 around the

> "Metro-area
 > > > Residential Access
 > > > Subscriptions" chart. Three
 entries for
 > active
 > > ethernet,
 > > > and I'm
 > > > > trying
 > > > > to tie them back to the
 spreadsheet -
 > oh yes, the
 > > <1Gbps,
 > > > 1Gbps, and
 > > > > >1Gbps. Maybe sort in order of
 > popularity,
 > > rather than
 > > > > alphabetical,
 > > > > and expand the titles out
 (or maybe
 > that's just
 > > me), to
 > > > make it
 > > > > easier
 > > > > to parse.
 > > > >
 > > > > And the pie charts after
 that, I'm
 > struggling with the
 > > > colours and
 > > > > trying to work out which is
 which.
 > Maybe a more
 > > structured
 > > > > summary. The
 > > > > listing is good, I just
 struggle a bit
 > (and I'm a
 > > little
 > > > red/green
 > > > > colour blind, so match
 colours between
 > the chart
 > > and the
 > > > key on the
 > > > > right is a bit more
 challenging for me
 > - easier if
 > > they
 > > > are in
 > > > > order on
 > > > > the key, and in the chart).
 > > > >
 > > > > Probably, my Jupyter notebook
 will improve
 > readability.
 > > > > The Google analytics are
 available as a
 > free service for
 > > > subscribers
 > > > > to Google Forms, and
 > > > > they have some value but they
 are admittedly
 > > general-purpose and
 > > > > not best tailored to this
 particular survey.
 > > > >
 > > > > I'll wait for your response to
 inspection
 > of the data as

> > > digested in
> > > the notebook.
> > > >
> > > > Warm regards,
> > > >
> > > > Etienne
> > > >
> > > >
> > > > On Fri, Jan 20, 2023 at 7:53 AM

Philip Smith

> > > <philip@apricot.net>
<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net>>>
> <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>
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<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net>>>
> <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>
<<mailto:philip@apricot.net>>>>>>> wrote:

> > >
> > > > Hi Etienne,
> > > >
> > > > At last, I have a small free

time

> window after
> > weeks of
> > > wall to
> > > > wall... :-(
> > > >
> > > > Etienne-Victor Depasquale

wrote on

> 5/12/2022 20:05:
> > > >
> > > > > Philip, I have set up a

Jupyterhub

> notebook
> > server for
> > > your
> > > > use and
> > > > > created a user account named
> "philip.smith"
> > (without
> > > double
> > > > quotes).
> > > > > The password assigned to your
> account will be that
> > > which you
> > > > enter (just
> > > > > once) on first use.
> > > > > The server can be found at
> > > > > <https://tljh-ict.research.um.edu.mt/>
<<https://tljh-ict.research.um.edu.mt/>>
> <<https://tljh-ict.research.um.edu.mt/>>
<<https://tljh-ict.research.um.edu.mt/>>>

```

> > <https://tljh-ict.research.um.edu.mt/
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> <https://tljh-ict.research.um.edu.mt/
<https://tljh-ict.research.um.edu.mt/>>>>>
> > > > > (I work at the University
of Malta).
> > > >
> > > > On there I found two
spreadsheets,
> dataNOG and
> > dataSGA.
> > > Yikes thank

```


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<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>>>>
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<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>
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<<https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics>>>>>>>

> > > > > The latter link has been
opened

> temporarily.

> > > >

> > > > Ah yes, got this too. I hope

you can

> follow what

> > I'm asking

> > > > below, as

> > > > each chart isn't numbered -

maybe if

> you can

> > number them,

> > > then I

> > > > can say

> > > > "in Chart 5, such and

such"... etc. :-)

> > > >

> > > > Just curious, 55% of

response were from

> Europe. Is

> > this

> > > because you

> > > > asked more European

operators, or you

> got more

> > response from

> > > > Europe as a

> > > > percentage of who you asked?

Or is it

> simply that

> > the North

> > > > American

> > > > market is so condensed into

a few

> bigger operators

> > > now...? Just

> > > > wondering.

> > > >

> > > > I'm also surprised that

Middle East and

> Asia have

> > similar

> > > response

> > > > levels. Is that again

because of lack

> of responses

> > > compared with

> > > > outreach, or? Especially

because Asia

> is huge,
 > > more than
 > > > a third
 > > > > of the
 > > > > world's population, and a
 huge amount
 > of network
 > > operators.
 > > > >
 > > > > South America raises the
 question
 > again, small
 > > response.
 > > > >
 > > > > So what's the percentage of
 responses
 > versus how many
 > > > were asked
 > > > > - that
 > > > > would be interesting to see.
 > > > >
 > > > > I'm amused by the one
 journalist who
 > responded...
 > > Really?
 > > > I'd have
 > > > > expected it'd to be CTO or
 Network
 > Architect, or Chief
 > > > Network
 > > > > Engineer
 > > > > to be the main responders to the
 > questions you
 > > were asking.
 > > > >
 > > > > And then the next pie-chart
 down, re
 > who makes the
 > > > decisions. It
 > > > > would
 > > > > be interesting to break this
 down per role.
 > > Because right now
 > > > > 44.4% make
 > > > > the decision - but are they
 the CTO, or
 > the Network
 > > > Architect,
 > > > > or the
 > > > > Network Engineer, or the
 journalist...
 > > > >
 > > > > I'm trying to get my head
 around the
 > "Metro-area
 > > > Residential Access
 > > > > Subscriptions" chart. Three
 entries for
 > active
 > > ethernet,
 > > > and I'm
 > > > > trying
 > > > > to tie them back to the
 spreadsheet -
 > oh yes, the
 > > <1Gbps,
 > > > 1Gbps,
 > > > > and
 > > > > >1Gbps. Maybe sort in order of

> popularity,
 > > rather than
 > > > alphabetical,
 > > > and expand the titles out
 (or maybe
 > that's just
 > > me), to
 > > > make it
 > > > > easier
 > > > > to parse.
 > > > >
 > > > > And the pie charts after
 that, I'm
 > struggling with the
 > > > colours and
 > > > > trying to work out which is
 which.
 > Maybe a more
 > > structured
 > > > > summary. The
 > > > > listing is good, I just
 struggle a bit
 > (and I'm a
 > > little
 > > > red/green
 > > > > colour blind, so match
 colours between
 > the chart
 > > and the
 > > > key on the
 > > > > right is a bit more
 challenging for me
 > - easier if
 > > they
 > > > are in
 > > > > order on
 > > > > the key, and in the chart).
 > > > >
 > > > > I've got about half way down
 the Google
 > form anyway...
 > > > >
 > > > > Let me have a look at the
 dataSGA
 > spreadsheet...
 > > Will write
 > > > > separately
 > > > > for more clarifications. :-)
 > > > >
 > > > > philip
 > > > > --
 > > > >
 > > > > >
 > > > > > I am eagerly looking
 forward to your
 > evaluation
 > > and am at
 > > > > your disposal
 > > > > > for any clarification
 necessary.
 > > > > >
 > > > > > With sincere thanks,
 > > > > >
 > > > > > Etienne
 > > > > >
 > > > > > On Mon, Dec 5, 2022 at
 9:06 AM Mark
 > Tinka
 > > > > <mark.tinka@seacom.com

<mailto:mark.tinka@seacom.com>
> <mailto:mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>>
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<mailto:mark.tinka@seacom.com>
> <mailto:mark.tinka@seacom.com
<mailto:mark.tinka@seacom.com>>>>>>> wrote:
> > > > >
> > > > > Hi Etienne.
> > > > >
> > > > > Philip has graciously
accepted
> to review
> the SGA
> > and NOG
> > > data from
> > > > the recent survey you
conducted.
> > > > >
> > > > > I have briefed him on

the work

> you have
> > been doing
> > > around
> > > > this, and
> > > > > the relative

difference between

> both data
> > sets you
> > > have
> > > > received.
> > > > >
> > > > > I am sure his eyes

will be most

> helpful to
> > you, as you
> > > > work through it.
> > > > >
> > > > > I'll leave you both

to it. Thanks.

> > > > >
> > > > > Mark.
> > > > >
> > > > >
> > > > >
> > > > > --
> > > > > Ing. Etienne-Victor

Depasquale

> > > > > Assistant Lecturer
> > > > > Department of

Communications &

> Computer Engineering
> > > > > Faculty of Information &
> Communication Technology
> > > > > University of Malta
> > > > > Web.
> > <https://www.um.edu.mt/profile/etiennedepasquale>

<<https://www.um.edu.mt/profile/etiennedepasquale>>

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> > > >
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> > > > --
> > > > Ing. Etienne-Victor Depasquale
> > > > Assistant Lecturer
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Computer Engineering
> > > > Faculty of Information &
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> > > > University of Malta
> > > > Web.
> <https://www.um.edu.mt/profile/etiennedepasquale>
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> > >
> > > --
> > > Ing. Etienne-Victor Depasquale
> > > Assistant Lecturer
> > > Department of Communications & Computer
Engineering
> > > Faculty of Information & Communication
Technology
> > > University of Malta
> > > Web.

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-- Ing. Etienne-Victor Depasquale
Assistant Lecturer
Department of Communications & Computer Engineering
Faculty of Information & Communication Technology
University of Malta

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Web. <https://www.um.edu.mt/profile/etiennedepasquale>
<<https://www.um.edu.mt/profile/etiennedepasquale>>

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Ing. Etienne-Victor Depasquale

Assistant Lecturer

Department of Communications & Computer Engineering

Faculty of Information & Communication Technology

University of Malta

Web. <https://www.um.edu.mt/profile/etiennedepasquale> <<https://www.um.edu.mt/profile/etiennedepasquale>>

Etienne-Victor Depasquale <edepa@ieee.org>

Wed, Mar 15, 2023 at 1:27 PM

To: Philip Smith <philip@apricot.net>

Hello Philip, and thank you, your contribution is deeply appreciated.

Firstly, I hope that this year's series of meetings and conferences met your expectations. I admit that although I was happy to save travel time for some of my duties, I started missing personal contact.

Secondly, I've received the bccs.

Your presence gives me credibility, as I am unknown to most, if not all, operators, whereas

I'm sure that your name readily comes to mind with the AP region's operators (to say the least).

Given the time zone difference, there's plenty of time for more (currently one) responses to come in.

Thirdly, regarding UKNOF, I had some response during my first call in July, but none during the second call.

I'll add that I've got some feedback from BT, as Andrew Lord let me know about his reply, and that's already quite a haul.

Finally, thank you for your patience and your gentle support. I'm honoured and hope to repay you.

I shall, of course, refer to your support in my paper

(God willing it gets published, but I'm optimistic, and provided that you give permission to referencing you), but that's the "goes without saying" part :)

Cheers,

Etienne

On Wed, Mar 15, 2023 at 9:07 AM Philip Smith <philip@apricot.net> wrote:

Hi Etienne,

Sorry for delay... After APRICOT 2023 sinking all my time, my laptop died... Now working on a spare one after getting backups restored on to it...

I've sent the emails to the SANOG and APOPS lists - with you in bcc. If you need a deadline attached to getting responses, let me know and I can follow up - or you follow up, and I'll approve your non-member posting (I run the lists).

Going to get to the rest of your requests tomorrow and Friday, knowing how pressing time is for you...

Did you get any responses from your UKNOF posting I saw the other day?

philip

--

Etienne-Victor Depasquale wrote on 3/3/23 19:21:

> Hello Philip,

>

> I hope that this year's edition met your expectations (and perhaps
> exceeded them).

>

> I'm risking my neck again :)

>

> May I post a reminder about the review and the circulation among APOPS

> and SANOG?
>
> Warm regards,
>
> Etienne
>
> On Wed, Feb 15, 2023 at 10:42 AM Etienne-Victor Depasquale
> <edepa@ieee.org> wrote:
>
> If you happen to cross paths with Dion Leung
> <<https://www.linkedin.com/in/dionleung/>>, please give him my regards.
> Years ago, I came across his APRICOT'15 presentation (online) and
> set up a link with him over LinkedIn.
>
> I'll confess that he might not remember me; we only crossed paths
> online.
> Even in this limited context, he was very affable.
>
> Good luck with this year's show; you're in my prayers.
>
> Cheers,
>
> Etienne
>
>
> On Wed, Feb 15, 2023 at 4:45 AM Philip Smith <philip@apricot.net>
> <<mailto:philip@apricot.net>>> wrote:
>
> Hi Etienne,
>
> Etienne-Victor Depasquale wrote on 15/2/2023 02:43:
> > Hello Philip,
> >
> > Hope your preparations for APRICOT '23 are shaping up nicely :)
>
> If I thought the previous weeks were crazy, this one is even
> more so.
> But we are getting there...
>
> > Would you let me know when you send out the request to the
> APOPS and
> > SANOG mailing lists?
>
> I've got it half done, but just not sent yet...
>
> philip
> --
>
> >
> > Thank you !
> >
> > Cheers,
> >
> > Etienne
> >
> > On Fri, Feb 10, 2023 at 5:54 PM Etienne-Victor Depasquale
> > <edepa@ieee.org> <<mailto:edepa@ieee.org>>
> <<mailto:edepa@ieee.org>> <<mailto:edepa@ieee.org>>>> wrote:
> >
> > Hello Philip,
> >
> > What I suggest you can do is compose a short email
> explaining your
> > project goal, and the feedback you'd like, including
> the survey
> > link.
> >
> > Yes, that's very helpful. thank you !
> > The text below my salutation might be fit for purpose.

Warm regards,

Etienne

###START EMAIL TEXT

"An academic from the University of Malta
<https://www.um.edu.mt/profile/etiennedepasquale>
[<https://www.um.edu.mt/profile/etiennedepasquale>](https://www.um.edu.mt/profile/etiennedepasquale) is asking for help
 > through response to a questionnaire that forms part of an academic study
[<https://forms.gle/AAJokyg98JLW7Ti6A>](https://forms.gle/AAJokyg98JLW7Ti6A).
 >
 > The study is directed solely towards facilitating understanding of
 > metro area networks,
 > for analysts who approach from the perspective of energy consumption.
 >
 > The study is anonymous (no individual or company names are solicited), and
 > individual responses will only be used in aggregate.
 >
 > A digest of the survey will be sent to respondents who write to the
 > email address shown in the profile page."
 > ###END EMAIL TEXT

On Fri, Feb 10, 2023 at 12:45 PM Philip Smith
[<philip@apricot.net>](mailto:philip@apricot.net)
[<mailto:philip@apricot.net>](mailto:philip@apricot.net) wrote:

Hi Etienne,

Etienne-Victor Depasquale wrote on 10/2/2023 19:10:
 > Thank you for the forbearing attitude :)
 >
 > Incidentally, in case you know of operators who might like to
 > complete
 > the survey, I'd be delighted to have their input.
 >
 > The link is this one:
<https://forms.gle/vN2DuhnLUWUwQ4176>
[<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
 > [<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
[<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
 > [<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
[<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
[<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
[<https://forms.gle/vN2DuhnLUWUwQ4176>](https://forms.gle/vN2DuhnLUWUwQ4176)
 >
 > It's not so much knowing the operators, there are thousands in
 > region. :-)
 >
 > What I suggest you can do is compose a short email explaining your
 > project goal, and the feedback you'd like, including the survey
 > link.
 > Send it to me, and I can send to APOPS mailing list and the SANOG
 > mailing list. Former covers the whole Asia Pacific region, has
 > about 400

> subscribers. Latter is for South Asia, and has
> similar numbers.
> I'm sure
> you'll get some feedback from that.
>
> Would that work? (Easier than me writing 1:1, or you
> subscribing
> to both
> lists just for the survey).
>
> A short email, I can forward on your behalf...
>
> philip
> --
>
>
> > Cheers,
> >
> > Etienne
> >
> > On Thu, Feb 9, 2023 at 11:33 AM Philip Smith
> > <philip@apricot.net <<mailto:philip@apricot.net>>
> <<mailto:philip@apricot.net> <<mailto:philip@apricot.net>>>
> > <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>>>>> wrote:
> >
> > Hi Etienne,
> >
> > Please don't fret, you are first in the queue
> once I get
> some respite
> > from the 16 hour days it's been for the last 4
> weeks...
> >
> > philip
> > --
> >
> > Etienne-Victor Depasquale wrote on 7/2/2023 05:01:
> > > I'm sorry I nag, Philip ... really, it's
> only to avoid
> > falling
> > > out of
> > > the queue that I send these reminders.
> > >
> > > I know and understand that I have to take a
> lower
> > priority.
> > >
> > > Thank you for bearing with my reminders so
> patiently.
> > >
> > > Warm regards,
> > >
> > > Etienne
> > >
> > > On Mon, Feb 6, 2023 at 12:36 AM Philip Smith
> > <philip@apricot.net <<mailto:philip@apricot.net>>
> <<mailto:philip@apricot.net> <<mailto:philip@apricot.net>>>
> > <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>>>>>
> > > <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>>>
> > <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>
> <<mailto:philip@apricot.net>>>>>> wrote:
> > >

> > > > Hi Etienne,

> > > >

> > > > Honestly I'm trying my best to make

> time, but I'm

> > totally

> > > swamped with

> > > > organisation and prep work for APRICOT

> 2023 coming

> > up in two

> > > weeks.

> > > > Been

> > > > like this for last 4 weeks

> unfortunately. I will

> > make time

> > > for you in

> > > > the coming days as best as I can.

> > > >

> > > > philip

> > > > --

> > > > Etienne-Victor Depasquale wrote on

> 6/2/2023 04:14:

> > > > Hello again Philip :)

> > > >

> > > > I truly am sorry to be such a nag;

> > > > I'm knocking again because I'm

> writing up and

> > > > badly need your contribution.

> > > >

> > > > I would dearly like to have your

> detailed

> > feedback by

> > > February.

> > > > If I can facilitate your feedback in

> some way,

> > please do

> > > let me know.

> > > >

> > > > Cheers,

> > > >

> > > > Etienne

> > > >

> > > > On Mon, Jan 23, 2023 at 9:54 AM

> Etienne-Victor

> > Depasquale

> > > > <edepa@ieee.org

> <mailto:edepa@ieee.org> <mailto:edepa@ieee.org

> <mailto:edepa@ieee.org>>

> > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>

> <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>>

> > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>

> <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>

> > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>

> <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>>>

> > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>

> <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>

> > <mailto:edepa@ieee.org <mailto:edepa@ieee.org>

> <mailto:edepa@ieee.org <mailto:edepa@ieee.org>>>>>>> wrote:

> > > >

> > > >

> > > > Part 1

> > > >

> > > > Just curious, 55% of

> response were from

> Europe. Is
 > > this
 > > > because you
 > > > > asked more European
 > operators, or you
 > > got more
 > > > response from
 > > > > Europe as a
 > > > > percentage of who you asked?
 > Or is it
 > > simply that the
 > > > North American
 > > > > market is so condensed into
 > a few
 > > bigger operators
 > > > now...? Just
 > > > > wondering.
 > > > > More responses came from people
 > whose
 > > company HQs are
 > > > in Europe.
 > > > > However, the location of the HQ
 > is less
 > > significant than
 > > > > the geographical distribution of
 > > subscribers in access
 > > > networks.
 > > > > That's a better indicator of the
 > geographic
 > > scope.
 > > > > Answers were sourced through
 > NOGs all over
 > > the world.
 > > > >
 > > > > I'm also surprised that
 > Middle East and
 > > Asia have
 > > > similar
 > > > > response
 > > > > levels. Is that again
 > because of lack
 > > of responses
 > > > compared with
 > > > > outreach, or? Especially
 > because Asia
 > > is huge,
 > > > more than
 > > > > a third
 > > > > of the
 > > > > world's population, and a
 > huge amount
 > > of network
 > > > operators.
 > > > >
 > > > > The same observation made about
 > > > > geographic distribution of
 > access networks
 > > as opposed to
 > > > > geographic distribution of HQs
 > holds here too.
 > > > >
 > > > > I'm amused by the one
 > journalist who
 > > responded...
 > > > Really?
 > > > > I'd have
 > > > > expected it'd to be CTO or
 > Network

> > Architect, or Chief
 > > > Network
 > > > > Engineer
 > > > > to be the main responders to the
 > > questions you
 > > > were asking
 > > > >
 > > > > :D
 > > > > There's a story behind that.
 > > > > I tried to rope in support from
 > Lightwave's
 > > followers, but
 > > > got so little
 > > > > that Stephen Hardy posted his
 > input to
 > > verify whether the
 > > > form was
 > > > > working properly.
 > > > > I'll eliminate his contribution
 > from the
 > > published
 > > > statistics but
 > > > > his opinion is significant.
 > > > >
 > > > > And then the next pie-chart
 > down, re
 > > who makes the
 > > > decisions. It
 > > > > would
 > > > > be interesting to break this
 > down per role.
 > > > Because right now
 > > > > 44.4% make
 > > > > the decision - but are they
 > the CTO, or
 > > the Network
 > > > Architect,
 > > > > or the
 > > > > Network Engineer, or the
 > journalist...
 > > > >
 > > > > I've added you to the list of
 > people who
 > > can see the
 > > > individual replies.
 > > > > Please, keep this to yourself.
 > Only you and
 > > three
 > > > other trusted
 > > > > people can see the individual
 > replies.
 > > > >
 > > > > I'm trying to get my head
 > around the
 > > "Metro-area
 > > > Residential Access
 > > > > Subscriptions" chart. Three
 > entries for
 > > active
 > > > ethernet,
 > > > > and I'm
 > > > > trying
 > > > > to tie them back to the
 > spreadsheet -
 > > oh yes, the
 > > > <1Gbps,
 > > > > 1Gbps, and
 > > > > >1Gbps. Maybe sort in order of
 > > popularity,

> > > rather than
> > > > alphabetical,
> > > > and expand the titles out
> (or maybe
> > that's just
> > > me), to
> > > > make it
> > > > > easier
> > > > > to parse.
> > > > >
> > > > > And the pie charts after
> that, I'm
> > struggling with the
> > > > colours and
> > > > > trying to work out which is
> which.
> > Maybe a more
> > > structured
> > > > > summary. The
> > > > > listing is good, I just
> struggle a bit
> > (and I'm a
> > > little
> > > > red/green
> > > > > colour blind, so match
> colours between
> > the chart
> > > and the
> > > > key on the
> > > > > right is a bit more
> challenging for me
> > - easier if
> > > they
> > > > are in
> > > > > order on
> > > > > the key, and in the chart).
> > > > >
> > > > > Probably, my Jupyter notebook
> will improve
> > readability.
> > > > > The Google analytics are
> available as a
> > free service for
> > > > subscribers
> > > > > to Google Forms, and
> > > > > they have some value but they
> are admittedly
> > > general-purpose and
> > > > > not best tailored to this
> particular survey.
> > > >
> > > > > I'll wait for your response to
> inspection
> > of the data as
> > > > digested in
> > > > > the notebook.
> > > > >
> > > > > Warm regards,
> > > > >
> > > > > Etienne
> > > > >
> > > > >
> > > > > On Fri, Jan 20, 2023 at 7:53 AM
> Philip Smith
> > > > <philip@apricot.net>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>
> <<mailto:philip@apricot.net>>>
> > <<mailto:philip@apricot.net>>
> <<mailto:philip@apricot.net>> <<mailto:philip@apricot.net>>

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> <mailto:philip@apricot.net>>>
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> > > <mailto:philip@apricot.net
> <mailto:philip@apricot.net> <mailto:philip@apricot.net
> <mailto:philip@apricot.net>>
> > <mailto:philip@apricot.net
> <mailto:philip@apricot.net> <mailto:philip@apricot.net
> <mailto:philip@apricot.net>>>>> wrote:
> > > >
> > > > Hi Etienne,
> > > >
> > > > At last, I have a small free
> time
> > window after
> > > weeks of
> > > > wall to
> > > > wall... :-(
> > > > Etienne-Victor Depasquale
> wrote on
> > 5/12/2022 20:05:
> > > > >
> > > > > Philip, I have set up a
> Jupyterhub
> > notebook
> > > server for
> > > > your
> > > > > use and
> > > > > > created a user account named
> > "philip.smith"
> > > (without
> > > > double
> > > > > quotes).
> > > > > > The password assigned to your
> > account will be that
> > > which you
> > > > enter (just
> > > > > once) on first use.
> > > > > > The server can be found at
> > > > > https://tljh-ict.research.um.edu.mt/
> <https://tljh-ict.research.um.edu.mt/>
> > <https://tljh-ict.research.um.edu.mt/
> <https://tljh-ict.research.um.edu.mt/>>
> > > <https://tljh-ict.research.um.edu.mt/
> <https://tljh-ict.research.um.edu.mt/>
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> > > > > (I work at the University
> of Malta).
> > > >
> > > > On there I found two
> spreadsheets,
> > dataNOG and
> > > dataSGA.
> > > > Yikes thank
> > > > goodness have I a 27" screen
> as there
> > are a lot of
> > > columns to parse
> > > > there. dataNOG has the
> interesting
> > content in
> > > columns X,
> > > > Y and
> > > > > Z, at
> > > > > least for me anyway. :-))
> > > > >
> > > > > > With regard to the NOG data

```

[illegible]

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[>>>>>](https://docs.google.com/forms/d/1kJnEjukNDGC4JARuhgBI0HUUrQ8UNA-G71Aa6heaK8U/viewanalytics)

> > > > > > The latter link has been
 > opened
 > > temporarily.
 > > > > >
 > > > > > Ah yes, got this too. I hope
 > you can
 > > follow what
 > > > I'm asking
 > > > > > below, as
 > > > > > each chart isn't numbered -
 > maybe if
 > > you can
 > > > number them,
 > > > > then I
 > > > > > can say
 > > > > > "in Chart 5, such and
 > such"... etc. :-)
 > > > > >
 > > > > > Just curious, 55% of
 > response were from
 > > Europe. Is
 > > > this
 > > > > because you
 > > > > > asked more European
 > operators, or you
 > > got more
 > > > response from
 > > > > > Europe as a
 > > > > > percentage of who you asked?
 > Or is it
 > > simply that
 > > > the North
 > > > > > American
 > > > > > market is so condensed into
 > a few
 > > bigger operators
 > > > > now...? Just
 > > > > > wondering.
 > > > > >
 > > > > > I'm also surprised that
 > Middle East and
 > > Asia have
 > > > similar
 > > > > response
 > > > > > levels. Is that again
 > because of lack
 > > of responses
 > > > compared with
 > > > > outreach, or? Especially
 > because Asia
 > > is huge,
 > > > more than
 > > > > a third
 > > > > > of the
 > > > > > world's population, and a
 > huge amount
 > > of network
 > > > operators.
 > > > >
 > > > > > South America raises the
 > question
 > > again, small
 > > > response.

> > > > >
 > > > > > So what's the percentage of
 > responses
 > > versus how many
 > > > > were asked
 > > > > - that
 > > > > would be interesting to see.
 > > > > >
 > > > > > I'm amused by the one
 > journalist who
 > > responded...
 > > > Really?
 > > > > I'd have
 > > > > > expected it'd to be CTO or
 > Network
 > > Architect, or Chief
 > > > > Network
 > > > > > Engineer
 > > > > > to be the main responders to the
 > > questions you
 > > > were asking.
 > > > > >
 > > > > > And then the next pie-chart
 > down, re
 > > who makes the
 > > > > decisions. It
 > > > > > would
 > > > > > be interesting to break this
 > down per role.
 > > > Because right now
 > > > > > 44.4% make
 > > > > > the decision - but are they
 > the CTO, or
 > > the Network
 > > > > Architect,
 > > > > > or the
 > > > > > Network Engineer, or the
 > journalist...
 > > > > >
 > > > > > I'm trying to get my head
 > around the
 > > "Metro-area
 > > > > Residential Access
 > > > > > Subscriptions" chart. Three
 > entries for
 > > active
 > > > ethernet,
 > > > > and I'm
 > > > > > trying
 > > > > > to tie them back to the
 > spreadsheet -
 > > oh yes, the
 > > > <1Gbps,
 > > > > 1Gbps,
 > > > > > and
 > > > > > >1Gbps. Maybe sort in order of
 > > popularity,
 > > > rather than
 > > > > alphabetical,
 > > > > > and expand the titles out
 > (or maybe
 > > that's just
 > > > me), to
 > > > > make it
 > > > > > easier
 > > > > > to parse.
 > > > > >
 > > > > > And the pie charts after
 > that, I'm

> struggling with the
> > colours and
> > > trying to work out which is
> which.
> > Maybe a more
> > > structured
> > > > summary. The
> > > > listing is good, I just
> struggle a bit
> > (and I'm a
> > > little
> > > > red/green
> > > > colour blind, so match
> colours between
> > the chart
> > > and the
> > > > key on the
> > > > right is a bit more
> challenging for me
> > - easier if
> > > they
> > > > are in
> > > > > order on
> > > > > the key, and in the chart).
> > > > >
> > > > > I've got about half way down
> the Google
> > form anyway...
> > > >
> > > > > Let me have a look at the
> dataSGA
> > spreadsheet...
> > > Will write
> > > > > separately
> > > > > for more clarifications. :-)
> > > > >
> > > > > philip
> > > > > --
> > > > >
> > > > > >
> > > > > > I am eagerly looking
> forward to your
> > evaluation
> > > and am at
> > > > > your disposal
> > > > > > for any clarification
> necessary.
> > > > >
> > > > > > With sincere thanks,
> > > > > >
> > > > > > Etienne
> > > > > >
> > > > > > On Mon, Dec 5, 2022 at
> 9:06 AM Mark
> > Tinka
> > > > > <mark.tinka@seacom.com>
> <mailto:mark.tinka@seacom.com>
> > <mailto:mark.tinka@seacom.com>
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> <mailto:mark.tinka@seacom.com>
> > <mailto:mark.tinka@seacom.com
> <mailto:mark.tinka@seacom.com>>>>>>> wrote:
> > > > >
> > > > > > Hi Etienne.
> > > > > >
> > > > > > Philip has graciously
> accepted
> > to review
> > > the SGA
> > > > and NOG
> > > > data from
> > > > > the recent survey you
> conducted.
> > > > >
> > > > > > I have briefed him on
> the work
> > you have
> > > been doing
> > > > around
> > > > > this, and
> > > > > > the relative
> difference between
> > both data
> > > sets you
> > > > have
> > > > > received.
> > > > > >

> > > > > I am sure his eyes
 > will be most
 > > helpful to
 > > > you, as you
 > > > > work through it.
 > > > > >
 > > > > > I'll leave you both
 > to it. Thanks.
 > > > > >
 > > > > > Mark.
 > > > > >
 > > > > >
 > > > > >
 > > > > >
 > > > > > --
 > > > > > Ing. Etienne-Victor
 > Depasquale
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 > > Computer Engineering
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Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Thu, Mar 16, 2023 at 9:33 AM

Hi Etienne,

Etienne-Victor Depasquale wrote on 15/3/2023 22:27:
| Hello Philip, and thank you, your contribution is deeply appreciated.

Sorry for letting you down... It's been a horror 3 months, you've no idea. :-(

| Firstly, I hope that this year's series of meetings and conferences met your expectations. I admit that although I was happy to save travel time for some of my duties, I started missing personal contact.

Oh, the conference was beyond expectations, almost 800 on-site, which is very impressive for our event. But so much politics and other unpleasantness going on that it was v draining and all consuming.

| Secondly, I've received the bccs.

Great! I've not seen any reaction on either list though. Hmmm.

| Your presence gives me credibility, as I am unknown to most, if not all, operators, whereas I'm sure that your name readily comes to mind with the AP region's operators (to say the least).
| Given the time zone difference, there's plenty of time for more (currently one) responses to come in.

Well, I hope so... Or they just say "oh that's Philip posting even more noise"... ;-)

| Thirdly, regarding UKNOF, I had some response during my first call in July, but none during the second call.
| I'll add that I've got some feedback from BT, as Andrew Lord let me know about his reply, and that's already quite a haul.

Ah good, I hope that helped. There is a bit of fatigue around the industry with all the various surveys ongoing - I think people won't really take part unless they can see an outcome that is going to benefit them. I was chatting with Mark about your work too - it's very interesting, but honestly, I think what you get from the NOG community is going to be more realistic than anyone else tells you... I'm making time tomorrow to go back through your data, now that I'm emerging from the debris of 3 months...

Finally, thank you for your patience and your gentle support. I'm honoured and hope to repay you.
I shall, of course, refer to your support in my paper
(God willing it gets published, but I'm optimistic, and provided that you give permission to referencing you),
but that's the "goes without saying" part :)

Not sure I've done too much apart from hinder your progress and your deadlines... :-(I feel very guilty about that, as I was saying to Mark the other week when we were in Manila, but it's truly been a rough 3 months...

philip

--

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Thu, Mar 16, 2023 at 7:48 PM

But so much politics and other unpleasantness going on that it was very draining and all consuming.

I happened to note that there was a lot of lobbying in the regions' NOGs to prevent a certain organization from being elected to APNIC.

Not sure I've done too much apart from hinder your progress and your deadlines... :-(I feel very guilty about that, as I was saying to Mark the other week when we were in Manila, but it's truly been a rough 3 months...

Don't worry about that, really.

There was a lot of work that I was able to do in the meantime.

Many concurrent threads have gone into this paper, and our discussion is just one of them.

I've updated the NOGs data set to include all 76 responses (the journalist's response has been removed).
I'm looking forward to your opinion.

Cheers,

Etienne

[Quoted text hidden]

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Mar 20, 2023 at 12:56 AM

Hi Etienne,

Etienne-Victor Depasquale wrote on 23/1/2023 18:54:

Part 1

Just curious, 55% of response were from Europe. Is this because you asked more European operators, or you got more response from Europe as a percentage of who you asked? Or is it simply that the North American market is so condensed into a few bigger operators now...? Just wondering.

More responses came from people whose company HQs are in Europe.
However, the location of the HQ is less significant than the geographical distribution of subscribers in access networks.
That's a better indicator of the geographic scope.
Answers were sourced through NOGs all over the world.

I've been looking at the Google sheet again, and then looking at the data on the notebook too... Kinda interesting.

Yes, SGA has given you a guarantee of the biggest providers, probably what we'd call the national telecoms (in the

old days). My feeling from the industry is that those folks will have much less scope to do what "they want to do", in that technical decisions about network deployments will be made by their vendors. I remember similar in my Cisco days - the biggest deployments by big operators (at least for access) were by and large handed over to the vendors to make a proposal and then implement. So the vendors would deploy what they could do best (technology or profit margin), I suppose, rather than the ideal technology or newest technology choices available. So even if the CTO of a "Tier-1" responded, they'd have not a lot of say in what is made available or what the future strategy might be, apart from choosing the options their vendors present to them.

Doing the survey by open request to the NOG community will mean you'll get the smaller operators and the operators who are not driven by their vendors - the big private operators for example. Is it representative? Well, who knows, but we are stuck with those who are willing to volunteer their time. Again, I've helped these providers over the years, and they are much more determined to do what is right for the customer, the best and most reliable implementation, most cost effective for them to implement and operate. (I've been advising one just now on this very thing - they want particular tech for a new mobile access network, but unfortunately their management signed up for a vendor first - the tech team now has no say in what is being deployed because the vendor has a "solution" they are going to deliver. I'm looking at the technology choices and shaking my head - it's going to harm this operator's potential for success as their competitors are already looking at the newer technologies.)

So I'd summarise that you have two valid data sources in your survey here, but from parts of the community that have different/opposite outlooks on how they deploy infrastructure. Both are valid. TBH I'm more comfortable with access infrastructure that has been designed by the provider than one that is delivered by the vendor - my bias after years and years of working helping build Internet service provider networks.

I tried to rope in support from Lightwave's followers, but got so little that Stephen Hardy posted his input to verify whether the form was working properly.

Oh right...

I'll eliminate his contribution from the published statistics but his opinion is significant.

Well, again, he'd have a view on proceedings, based on what he sees from the operators he interacts with. My view would be from the infrastructure operators I've helped build, which are generally not the "historical national telecoms operators"... The modern providers are very keen on "keep it simple", so the minimum hindrance for an end-users IP packets to get to and from the content the end-user wants. (Maybe a simplistic comment, but so many of the folks I work with start from this point... ;-))

I've added you to the list of people who can see the individual replies.
Please, keep this to yourself. Only you and three other trusted people > can see the individual replies.

Thanks for that... I'd a bit more of a poke around to look at the answers; more for interest.

Probably, my Jupyter notebook will improve readability.

The update does now, yes... Interesting. A lot of similarities, but the differences between SGA and NOG response data.

Have you got any more feedback or input after I posted to the SANOG and APOPS lists?

Would you like me to send a reminder, with a deadline, if that helps at all?

I'll wait for your response to inspection of the data as digested in the notebook.

Thanks for sharing all this - it was an interesting read. I can't think of anything that would invalidate (or cause question) on either the NOG or SGA survey. They are going to be as representative as you can get with a voluntary response.

Hope this helps!

philip

--

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Mar 21, 2023 at 9:17 PM

Philip, pardon me, my daughter's in hospital and I'm out of my routine.

I'll answer by Thursday.

Warm regards,

Etienne

[Quoted text hidden]

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Wed, Mar 22, 2023 at 10:26 AM

my bias after years
and years of working helping build Internet service provider networks.

That (your bias) is precisely what I need (was hoping for, and indeed received) from you.
Your input is a significant part of a qualitative survey of the quantitative survey (the aggregated responses).

Well, again, he'd have a view on proceedings, based on what he sees from
the operators he interacts with.

I agree perfectly; I've tried to include him in the qualitative survey but he's a hard goose to chase :D

My view would be from the
infrastructure operators I've helped build, which are generally not the
"historical national telecoms operators"... The modern providers are
very keen on "keep it simple", so the minimum hindrance for an end-users
IP packets to get to and from the content the end-user wants. (Maybe a
simplistic comment, but so many of the folks I work with start from this
point... ;-))

Excellent qualification of your perspective, thank you !

A quick follow-up:

how do they tackle QoS? By packet classification at ingress devices? Presumably, classification takes place only for
business, not residential customers? What's your view on the use of OTN for hard slicing (and thereby bandwidth and
latency guarantees)?

Have you got any more feedback or input after I posted to the SANOG and
APOPS lists?

Would you like me to send a reminder, with a deadline, if that helps at all?

Only one, I'm afraid; yes, a reminder would be very helpful. I don't think that deadlines help, though.

Replies have come in a clear pattern: an initial wave comes in and dies down within two days.

Hope this helps!

Yes, it does. May I keep in touch for short discussions over the following two-three months?

Warm regards,

Etienne

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Sun, Mar 26, 2023 at 10:41 PM

Not sure whether this got lost in my long e-mail :)

Would you be able to send a reminder to the mailing lists? A deadline isn't necessary.

Cheers,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Mar 27, 2023 at 5:52 AM

Hi Etienne,

Etienne-Victor Depasquale wrote on 22/3/2023 19:26:

Excellent qualification of your perspective, thank you !

A quick follow-up:

how do they tackle QoS? By packet classification at ingress devices? Presumably, classification takes place only for business, not residential customers? What's your view on the use of OTN for hard slicing (and thereby bandwidth and latency guarantees)?

QoS... Hmmmm... If anything is done it'll be on the service provider's aggregation device. But the QoS is likely confined to "limiting the bandwidth to what was purchased", "ensuring data cap is not exceeded", "reducing throughput when data cap is exceeded". And in some cases dealing with "DDoS", but that's done more within the infrastructure itself rather than on the access device - or outsourced to DDoS mitigation providers.

That's about all that I'm aware of, at least in the operators I see. Most operate just what we call "all you can eat", with "QoS" only being applied to what they'd call persistent offenders. Business access plans have a different contention ratio from the residential plans, and often I see business users terminated on different devices (and at different densities) from residential users. Some lump everything together, and the differentiator is in customer support and IP addressing availability (residential gets single dynamic IPv4, whereas business gets static IPv4 with option for a routed subnet - for example).

Interesting to see in a couple of providers I had to insist they turn off their "QoS" as it was seriously damaging what my customers were trying to do. The QoS basically ended up dropping or rate-limiting UDP so badly that DNS was failing - one of these customers operated a ccTLD so you can imagine the chaos. :(So over my career, the only QoS I've done is to help end-sites with limited bandwidth try and prioritise core network services, then business customers, then residential customers, so that the provider could provide functionality with the limited resources they had. And this was coarse QoS, not trying to classify services.

OTN as in Optical Transport Networking...? Don't really have any thoughts tbh... I'm not assisting any network infrastructure that I know are using it. I have clients using GPON for access but that's for efficiency and power (or lack there of) reasons. Hmmmm, no, nothing really from experience I can share, sorry.

Only one, I'm afraid; yas, a reminder would be very helpful. I don't think that deadlines help, though.

Replies have come in a clear pattern: an initial wave comes in and dies down within two days.

Only one? Sigh... Ok, I've sent a reminder to both lists now. Here's hoping that jogs some memory and we get a few more.

Yes, it does. May I keep in touch for short discussions over the following two-three months?

Of course, and I promise to be more responsive than I was Nov-Feb..

philip

--

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Apr 4, 2023 at 8:13 PM

Only one? Sigh... Ok, I've sent a reminder to both lists now. Here's hoping that jogs some memory and we get a few more.

Down to zero, sadly, and still at 78.

This is probably my last call, as I really am burning time's wick to its base, and I wonder whether a couple of directed requests to people you know would work... ? If I were to get 5 more responses, it would be a boost worth striving for.

Warm regards,

Etienne

[Quoted text hidden]

[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Apr 11, 2023 at 10:49 AM

Sorry for reminding you about this, Philip.

If this request can't be met, that's ok; just let me know and I'll stop nudging :)

Warm regards,

Etienne

[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Tue, Apr 11, 2023 at 11:03 AM

Hi Etienne,

Yeah I was giving this some thought - let me send a few exploratory emails and see... (Travelling at the moment.)

philip

--

Etienne-Victor Depasquale wrote on 11/4/2023 09:49:

Sorry for reminding you about this, Philip.

If this request can't be met, that's ok; just let me know and I'll stop nudging :)

Warm regards,

Etienne

On Tue, Apr 4, 2023 at 8:13 PM Etienne-Victor Depasquale <edepa@ieee.org <mailto:edepa@ieee.org>> wrote:

Only one? Sigh... Ok, I've sent a reminder to both lists now. Here's hoping that jogs some memory and we get a few more.

Down to zero, sadly, and still at 78.

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If I were to get 5 more responses, it would be a boost worth striving for.

Warm regards,

Etienne

On Mon, Mar 27, 2023 at 5:52 AM Philip Smith <philip@apricot.net

[Quoted text hidden]

Web. <https://www.um.edu.mt/profile/etiennedepasquale> <<https://www.um.edu.mt/profile/etiennedepasquale>>

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Tue, Apr 18, 2023 at 11:22 PM

Hello :)

Your friendly neighbourhood pest is hovering overhead again :D

I tried nudging [Douglas Fischer](#) and he responded, so I'm up to 79.

Cheers,

Etienne

[Quoted text hidden]

Hi Etienne,

I've had no joy in my outreach so far... :-(

philip

--

Etienne-Victor Depasquale wrote on 19/4/2023 07:22:

Hello :)

Your friendly neighbourhood pest is hovering overhead again :D

I tried nudging Douglas Fischer <<https://www.linkedin.com/in/dougdiskin/>> and he responded, so I'm up to 79.

Cheers,

Etienne

On Tue, Apr 11, 2023 at 11:03 AM Philip Smith <philip@apricot.net <<mailto:philip@apricot.net>>> wrote:

Hi Etienne,

Yeah I was giving this some thought - let me send a few exploratory emails and see... (Travelling at the moment.)

philip

--

Etienne-Victor Depasquale wrote on 11/4/2023 09:49:

> Sorry for reminding you about this, Philip.

>

> If this request can't be met, that's ok; just let me know and I'll stop

> nudging :)

>

> Warm regards,

>

> Etienne

>

> On Tue, Apr 4, 2023 at 8:13 PM Etienne-Victor Depasquale

> <edepa@ieee.org <<mailto:edepa@ieee.org>>

> <<mailto:edepa@ieee.org> <<mailto:edepa@ieee.org>>>> wrote:

>

> Only one? Sigh... Ok, I've sent a reminder to both lists now. Here's

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> know would work... ?

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> Warm regards,

>

> Etienne

>

> On Mon, Mar 27, 2023 at 5:52 AM Philip Smith

> <philip@apricot.net <<mailto:philip@apricot.net>>

[Quoted text hidden]

To: Philip Smith <philip@apricot.net>

I'm immensely grateful for the trouble you're taking on my behalf.
If you do manage to make headway, please let me know.

Regardless, please don't worry;
I'll stop nagging you on this, as
I'm beginning to feel harshly uncomfortable with my pestering you like this on more data.
This was an accretion on my original contact with you, and
I feel that I'm grossly overstepping my bounds.
(Obviously,) I'd love to have about five more from the APAC region, but
I'll move ahead with what I have.

With sincere thanks and warm regards,

Etienne
[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Mon, Apr 24, 2023 at 2:51 AM

Hi Etienne,

Etienne-Victor Depasquale wrote on 19/4/2023 16:57:
| I'm immensely grateful for the trouble you're taking on my behalf.
| If you do manage to make headway, please let me know.

There is only so much pushing that can be done when we ask people to volunteer to help with something... :-(

| Regardless, please don't worry;
| I'll stop nagging you on this, as
| I'm beginning to feel harshly uncomfortable with my pestering you like this on more data.

Don't worry about it!

| This was an accretion on my original contact with you, and
| I feel that I'm grossly overstepping my bounds.
| (Obviously,) I'd love to have about five more from the APAC region, but
| I'll move ahead with what I have.

Yeah, let me try some other avenues and see how I get on!

philip
--

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Fri, Apr 28, 2023 at 12:47 AM

I'm struggling to get meaningful feedback on the aggregation section questions.

Can you help here? Basically, whether the results you see summarized in the graphs match your expectations or not.

Cheers,

Etienne
[Quoted text hidden]
[Quoted text hidden]

Etienne-Victor Depasquale <edepa@ieee.org>
To: Philip Smith <philip@apricot.net>

Wed, May 17, 2023 at 12:11 PM

I hope this reminder doesn't irk you ... fingers crossed.

Cheers,

Etienne
[Quoted text hidden]

Philip Smith <philip@apricot.net>
To: Etienne-Victor Depasquale <edepa@ieee.org>

Thu, May 18, 2023 at 2:10 PM

Hi Etienne,

Apologies, as I'm teaching at the moment, a very full on agenda right. Will try get you a reply over the weekend!

philip

--

Etienne-Victor Depasquale wrote on 17/5/2023 17:11:

I hope this reminder doesn't irk you ... fingers crossed.

Cheers,

Etienne

On Fri, Apr 28, 2023 at 12:47 AM Etienne-Victor Depasquale <edepa@ieee.org <mailto:edepa@ieee.org>> wrote:

I'm struggling to get meaningful feedback on the aggregation section questions.

Can you help here? Basically, whether the results you see summarized in the graphs match your expectations or not.

Cheers,

Etienne

On Mon, Apr 24, 2023 at 2:51 AM Philip Smith <philip@apricot.net

[Quoted text hidden]

Web. <https://www.um.edu.mt/profile/etiennedepasquale> <<https://www.um.edu.mt/profile/etiennedepasquale>>