

Message

From: Steve Wang [Redacted@google.com]
Sent: 12/19/2019 7:18:57 PM
To: Yuki Richardson [Redacted@google.com]
CC: Ollie Proctor [Redacted@google.com]; Paul Gennai [Redacted@google.com]; Christian Veer [Redacted@google.com]; Christian Cramer [Redacted@google.com]; Rosie Lipscomb [Redacted@google.com]; Andrew Nichols [Redacted@google.com]; John Yoo [Redacted@google.com]; Emily Chen [Redacted@google.com]; Natasja Laheij [Redacted@google.com]; Ben Friedenson [Redacted@google.com]
Subject: Re: Privileged and Confidential - Android in Russia - *Dec 2019 Update*

Privileged and Confidential

Thanks for looping me in, Yuki. I requested access to the analysis to get a sense of the size of the revenue challenges. For context, Search Marketing budget is expected to be tight in 2020 in the backdrop of expanding Helpfulness efforts in top brand headwind marketing (US, DE, UK, FR, etc), which would mean that other investment opportunities will need to be evaluated and prioritized in that context. We'll engage Marvin/Rebecca for a discussion in Jan when we have more clarity on the overall Search budget grant and develop a POV from there.

Thanks!
Steve

On Wed, Dec 18, 2019 at 9:58 PM Yuki Richardson [Redacted@google.com] wrote:

Privileged and Confidential

Thanks for this, Ollie. Very interesting and helpful. Wonder if we start to work on more marketing next year...
+Steve Wang - what do you think?

Adding +Paul Gennai and +Christian Veer for their awareness and input on next steps for 2020 also.

Best,
Yuki

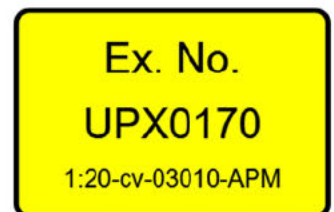
Yuki Richardson
Finance Director - Platforms & Services (Android, Communications, Google Fi)
[Redacted@google.com]
M: [Redacted]

On Tue, Dec 17, 2019, 12:49 PM Ollie Proctor [Redacted@google.com] wrote:
Privileged and Confidential

Hi Christian and Yuki,

Before we break for the holidays, I've done a *quick* refresh of the 'Android in Russia' analysis from the summer, reflecting an additional 6 months of data.

As a reminder, this is the forecast impact on Android mSearch share and revenue to Google, following the FAS Settlement in 2017.



REDACTED FOR PUBLIC FILING & ABRIDGED

High level summary:

Since the update in July...

- The device refresh cycle has been slower than expected so the revenue decline due to new device setups and user-choice has been slower than previously expected (which is good)
- But... the total Android search revenue in 2019 was significantly less than forecast, so the refresh cycle benefit is more than negated by this slower market growth such that the net revenue to Google is less than expected in the next 5 years.

Next:

The team in Russia [Polina, Vitaly] have *just* started looking at the impact of Huawei device launches in Russia, with an intention to bring an ask to Richard Turner. Andrew and I are plugged into this and will lean in after the holidays.

This thinking and analysis is, of course, applicable to other areas and we're happy to collaborate however is best.

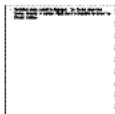
@Rosie Lipscomb - are there any legal aspects to consider as we think specifically about Huawei in Russia?

Everyone - please let me know if you have questions or comment.

Cheers,

Ollie

--



Ollie Proctor

EMEA Business Finance - Platforms & Ecosystems

Financial Analyst

Redacted[@google.com](mailto:Redacted@google.com)

--

--

Steve Wang, CFA

Google Marketing FP&A

I'm hiring: FA/SFA Consumer Apps Marketing

REDACTED FOR PUBLIC FILING & ABRIDGED



Update: Android in Russia

December 2019

6 months since last update

Redacted@

Confidential - Proprietary

REDACTED FOR PUBLIC FILING & ABRIDGED

Impact Summary

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Confidential - Proprietary

REDACTED FOR PUBLIC FILING & ABRIDGED

Redacted

GOOG-DOJ-12478971

Since July 2019...

Estimated revenue loss is improved... but revenue to Google still sees a net reduction due to slow growth

Timeframe	Jun '19 View		Dec '19 View		Dec vs Jun Views	
	Total	Total	Total	Total	\$	%
Total Russia Search Revenue Search Revenue on Android	Confidential					
Current Forecast: As-is Google Marketing	June '19	Dec '19	Delta			
Total Revenue Loss	Confidential					
Loss as % of Android Total	Confidential					
Net Revenue to Google	Confidential					
Current Forecast: 2x Google Marketing	June '19	Dec '19	Delta			
Total Revenue Loss	Confidential					
Loss as % of Android	Confidential					
Net Revenue to Google	Confidential					
Current Forecast: No Google Marketing	June '19	Dec '19	Delta			
Total Revenue Loss	Confidential					
Loss as % of Android Total	Confidential					
Net Revenue to Google	Confidential					

The total Search Revenue on Android is **Confidential** lower than previously expected due to a slower market growth rate...

...so although the Total Revenue Loss due to user choice/Yandex action is improved by **Confidential** due to slower phasing...

...the overall Net Revenue to Google is actually still **Confidential** lower, over 2019-2023.

Slower than expected phasing of devices to the 'New' setup realises an improvement in Total Revenue Loss.

Available 2019 actuals are **Confidential** below previous estimate. This is used to adjust growth rates for future years, resulting in a total search revenue **Confidential** lower over 5 years.

Assumptions:
Traffic loss **Confidential** based on scenario end year
Lost TAC **Confidential**

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Confidential - Proprietary

Model here

Topics

- Timeline of events
- Recap of the commercial agreement
- Market trends
- Search market share analysis
- Forecast and financial impact
- Appendix

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Confidential - Proprietary

REDACTED FOR PUBLIC FILING & ABRIDGED

Redacted

GOOG-DOJ-12478973

Timeline

	Competition Details	Partnership Deals
April 2017	Settlement with FAS; Partnership Agreement with Yandex	Yandex / Mail.ru pays Google TAC for search traffic on new devices (see next slide for detail)
May 2017 – July 2017	Product design, rollout planning, including amendments to MADA / RSA	
August 2017	New Russia build requirements available to interested OEMs	
December 2017	Last month to obtain GTS approval for old Russia builds	
January 2018	New Russia build now <u>required</u> by all OEMs	
Ongoing	Monthly reporting to Yandex on status; periodic check-ins with FAS	
January 2019		New bounty+RSA deal taken to ACPX; approved with conditions but deployment paused pending wider RSA discussions

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Confidential - Proprietary

REDACTED FOR PUBLIC FILING & ABRIDGED

Russian Commercial Agreements for Android

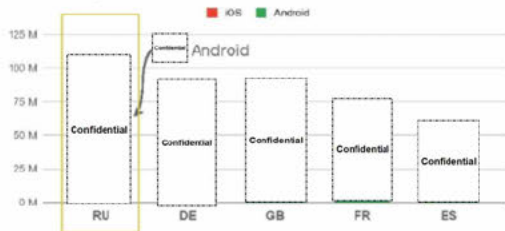
[Illustration](#)

The FAS Settlement meant that both existing and new devices were affected

	Existing Devices	New Devices
Product Change	<p>Choice prompt pushed to all existing devices Chrome (not widget) triggers in-app search provider promotion screen between Yandex / mail.ru and Google</p>	<p>All new devices ship with prompt for Chrome and Search widget (aka Chrome widget) to choose Google, Yandex, or mail.ru as default Chrome widget UI has some degree of Yandex / mail.ru branding</p>
TAC	No TAC	Yandex / Mail.ru pays Google Confidential for search traffic on new devices if a user chooses Yandex / mail.ru as default OOB (ie. searches via Chrome or Chrome widget) and clicks on ads served by them
Territory / Term	Russia only (does not include CIS) Confidential for Yandex and Mail.ru	

Russia is huge for Google... but is a complex market

Total Smartphone Users



1 in Google users in EMEA

- #1 in Smartphone users
- #1 in Active Google Accounts
- #1 in Chrome DAU
- #1 in Voice adoption
- #1 in Play Downloads
- #1 in Pay users

Yandex



Both 28-day actives and revenue maintain high growth rates with some stability in the last 6 months

Android Actives and Growth in Russia



Android 28-day actives continue to grow at [redacted] YoY, which is consistently [redacted] higher than the average for UK, ES, DE and FR

Since last update: [redacted] YoY growth increase and relative stability around [redacted]

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Total Monthly Search Revenue for Android Mobile Devices



Total search revenue shows an upward trend though YoY growth rate is volatile, which is comparable to the UK, ES, DE and FR

Since last update: [redacted] YoY growth peak before settling around [redacted]

Confidential - Proprietary

28DA Y-o-Y Growth rates
RU GB DE ES FR

[redacted] Confidential

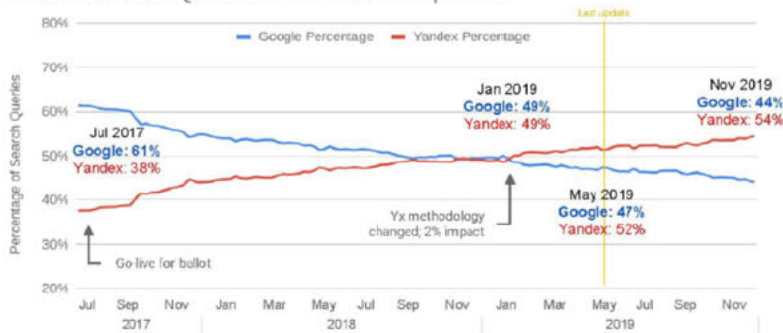
Revenue YoY Growth rates
RU GB DE ES FR

[redacted] Confidential

The YoY growth decline since Jan 2018 correlates with the start of the FAS Agreement / User-Choice ballot coming into effect in Jan 2017

Google Android Smartphone search share continues to decline; further -3% in last 6 months

Share of Search Queries on Android Smartphones



Data shows ~19% search share lost in past 2.5 years since the ballot go-live at ~3% decline every 6 months

A straight-line, 'assuming no change' scenario, would indicate a further loss of ~15% over the next 2 years

Since last update: downward trend continues with G share declining from 47% in May to 44% in Nov

The two key causes are explained in the following slides.

Starting point: Jan 2017, G 63%, Y 35%. Percentages do not sum to 100% as other, small search providers are not shown. Caveat: this data is from Yandex and exact methodology is unknown. Trends, however, have been verified with internal data.

There are two key causes...

Cause 1: required user-choice ballot for search provider on Chrome and widget, combined with device refresh

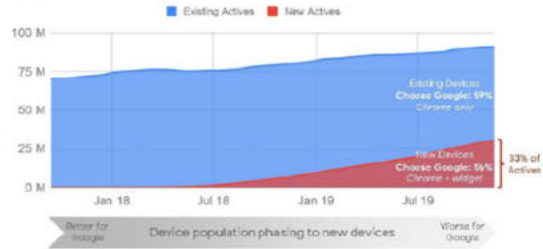
DHS with "Chrome Widget" - No branding out of the box (illustrative)
**All users at first launch*



Widget and Chrome New Tab branding subsequently set to chosen provider
**Subsequent launches after ballot*
**User can change again via settings*



Proportion of Existing and New Active Devices



Since July 2017, the user-choice ballot is required on **all** existing devices (Chrome only) and new devices (Chrome and search widget).

Google cannot be set as the default search engine on Chrome and the search widget; it must be chosen.

Choosing Google is lower on New devices than Existing devices, and as devices are refreshed the device population will phase to 'New'.

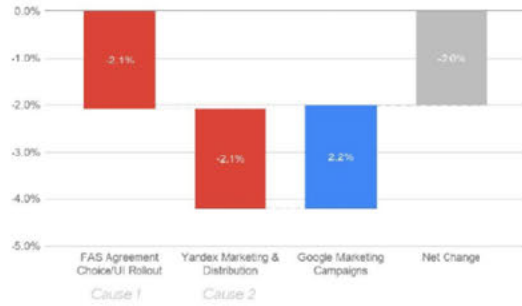
Since last update: the rate of phasing to New devices is slower than expected (currently 33% vs 52% expected).

Note that the ballot is only on Chrome and the widget, not Yandex browser (that is Yandex by default) nor any 1P/3P browsers (e.g. sBrowser or Firefox).

There are two key causes...

Cause 2: Yandex marketing and distribution deals... but Google marketing can offset the loss

Cause / Drivers of mSearch Share Change
Illustrative example: H2 2018



Google marketing is effective in Russia and as-is marketing spend reduces the impact of 35-50% of the total search share loss.

Google



Yandex spends 4-11x more than Google on marketing ([details](#)) and gets a correspondingly higher share of voice.

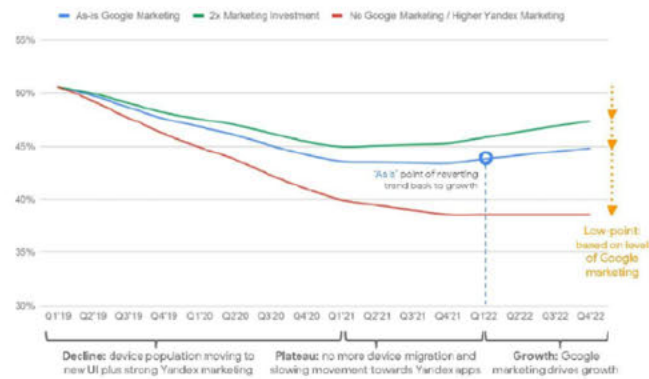
Yandex has distribution deals that place Yandex apps in prominent positions on the DHS and/or sets Yandex search as default.

Confidential - Proprietary

The view in June 2019

Maintaining as-is marketing, Google mSearch share will stabilise in Q1'21 at 43% and revert to growth from Q1'22

Google Mobile share scenarios (2019-2022)



What causes the bounce-back?

All devices activated post-Settlement have the required choice screen that results in lower Google search usage

As the proportion of existing vs new devices shifts to more new (normal device population evolution), the overall Google mSearch share decreases

However, after ~3.5 years, the device population will all be new, so this decline due to device shift plateaus in Q1 2021 (i.e. the shift has completed)

Additionally, there is growth in Yandex app usage but this is slowing and predicted to plateau in late 2021

Once these two drivers have plateaued, Google marketing begins to grow Google mSearch share

The level of Google marketing will lessen the overall impact of these drivers of decline: users still have a choice, but more choose Google

Confidential - Proprietary

Assumptions:

The forecast browser share for Yandex search access points is equivalent to what Google had before the FAS Agreement.

2x Google marketing assumes +40% additional DAUs (to be verified by a regional pilot).

Without marketing, ballot choice for Google plateaus at 52%.

In as-is and 2x Google marketing cases, assuming no additional marketing spend by Yandex.

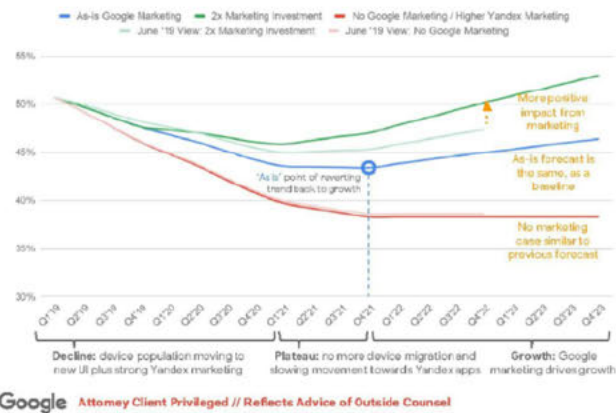
Assuming Yandex does not have a breakthrough product.

REDACTED FOR PUBLIC FILING & ABRIDGED

December 2019 update

What's changed since June 2019? Same overall trends but a more positive estimated impact from marketing

Google Mobile share scenarios (2019-2022)



What's changed?

The phasing from Existing to New devices has been slower than expected, reducing the speed of mSearch decline

More positive impact on increasing DAUs from Google marketing investment, raising the estimated minimum-% before plateau and growth

Confidential - Proprietary

Assumptions:

The forecast browser share for Yandex search access points is equivalent to what Google had before the FAS Agreement.

2x Google marketing assumes +40% additional DAUs (to be verified by a regional pilot).

Without marketing, ballot choice for Google plateaus at 52%.

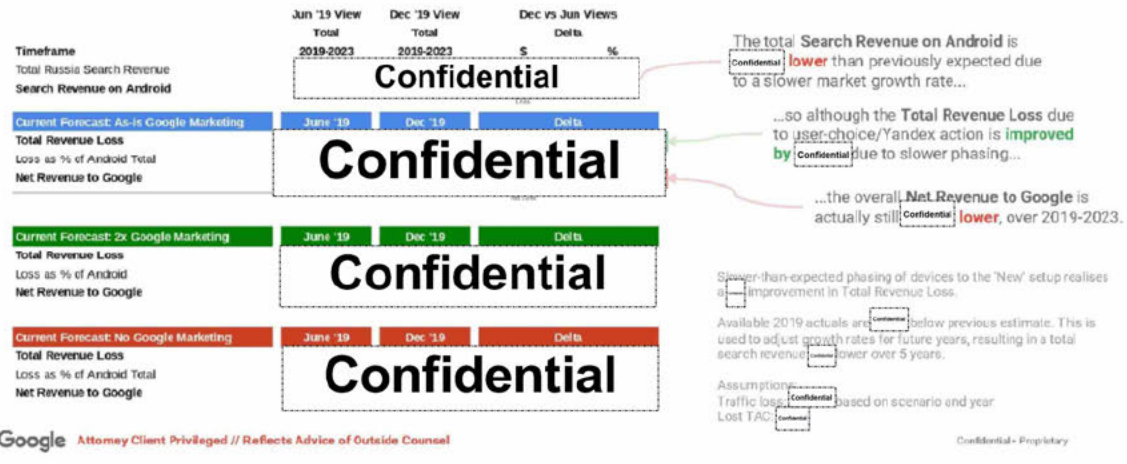
In as-is and 2x Google marketing cases, assuming no additional marketing spend by Yandex.

Assuming Yandex does not have a breakthrough product.

REDACTED FOR PUBLIC FILING & ABRIDGED

Since July 2019...

Estimated revenue loss is improved... but revenue to Google still sees a net reduction due to slow growth



Model here

Yandex-forward devices reduce use of Google apps



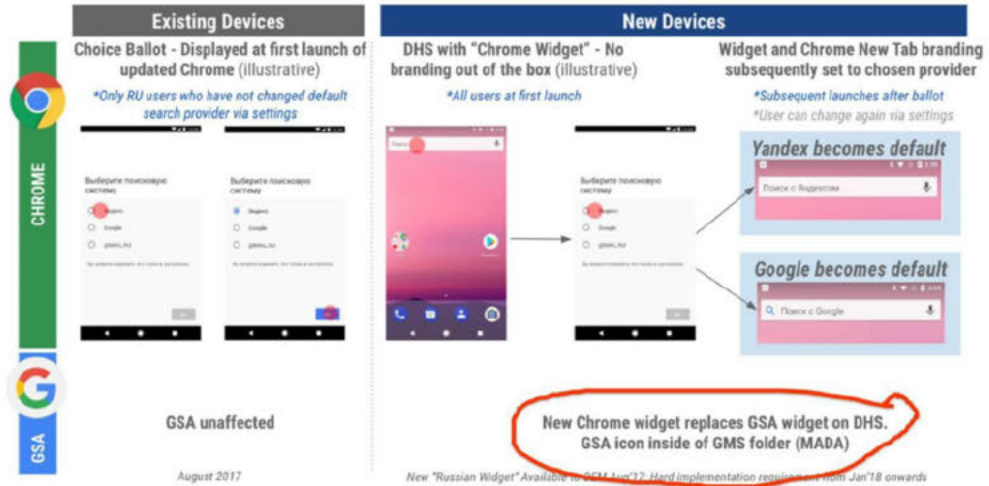
Yandex have revshare agreements to place their **apps in prominent positions**

Both Chrome and search-widget **require user-choice** of search engine

Yandex also has a very similar set of **capable consumer services:**

- Yandex for a Search Engine
- Yandex Browser
- Yandex Search App
- Yandex Assistant
- Yandex Maps
- Etc.

User journey: implementation of FAS Settlement UI



Yandex outspend Google on marketing by 4 to 11x

Share of Voice and Marketing Spend in Russia



Google share of voice (SOV) appears to increase proportionally with marketing spend...

...but Yandex SOV is much larger than Google.

Yandex spend includes all B2C products, assuming the ecosystem affects customers' preferences

Note that total planned marketing budget is lower in 2019 than 2018

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Note: Yandex total spend inferred from Share of Voice data [from market team] on all B2C products; ignores Mail.ru [believed ~1%]

Confidential - Proprietary

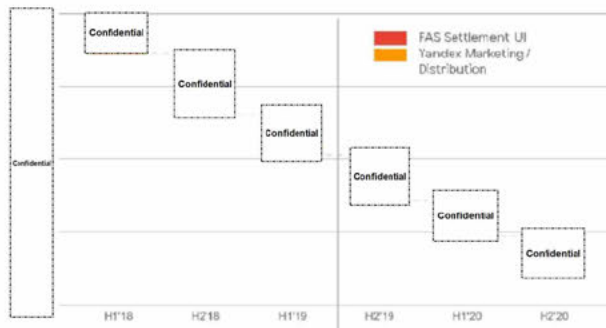
REDACTED FOR PUBLIC FILING & ABRIDGED

Redacted

GOOG-DOJ-12478993

Penetration of FAS Settlement UI devices will be the key driver of mSearch share loss until 2021

Incremental Impact of Key Drivers on mSearch



In the next 2.5 yrs 70% of users will need to transition from a Google Search Widget UI to a Yandex UI device

Yandex Search access points (YaApp, YaBrowser) are expected to reach 38% browser share in the next 3 yrs via OEM distribution deals and Assistant (Alisa) marketing

In 2021 Yandex is expected to reach the point of saturation in distribution and FAS Agreement Yandex UI device penetration

To offset mSearch share loss we would need to drive **Confidential** times more than the Russia market team plan to deliver in 2019

Note this deliberately does not show the positive impact of Google marketing that partially offsets this loss

Google Attorney Client Privileged // Reflects Advice of Outside Counsel

Confidential - Proprietary