IETF Community Survey 2023

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Introduction

This is the third annual survey directed at everyone who in some form participates in the IETF, however limited their participation. The aim is to deliver these three outcomes:

- 1. A current size and demographic breakdown of the IETF community.
- 2. Data to inform the IETF community, particularly those in leadership roles, on what are some of the key issues affecting the IETF and why sometimes asserted issues are not actually issues.
- 3. A step in a time series of data that can be used to assess the natural changes affecting the IETF and the effectiveness of major programs, organisational changes and community/leadership actions.

The 2021 survey was accompanied by a similar report¹ but the 2022 survey only by an interactive dashboard.²

Key Findings

It is important to begin this section with the observation that there are multiple questions where the overall result is strong and indicates there is no significant problem that needs to be looked at, but cross-tabulation by one or more demographic factors shows that one or more groups within that have a much less positive view. This is sometimes referred to as the tyranny of the majority.

The IETF is good at delivering its mission and principles but could do much better

The answers to <u>Q25</u> show that IETF participants believe the IETF produces high quality, relevant RFCs in an open, transparent and consensus process.

The key areas for improvement in Q25 are shown by the lower ratings for "The IETF focuses on the most important work" and "IETF processes are effective", and a much lower rating for "The IETF produces RFCs in a timely manner". These match the low ratings for "WG decisions take a reasonable amount of time" and "WGs meet their goals" in Q27.

The IETF is considered a very important organisation that outperforms its peers in all respects

Q28 asks how important the IETF is for the development of the Internet using Net Promoter Score (NPS) methodology and the NPS score of +56% indicates that participants consider it to be very important.

¹ <u>https://www.ietf.org/blog/ietf-community-survey-2021/</u>

https://ietf.col.qualtrics.com/results/public/aWV0Zi1VUl8zT3laRG9JQWxidUkxZ0otNjM3NGQ1YWQzOWUwMj gwMDE10WE4YzJI#/

<u>Q30</u> asks respondents to compare the IETF to other SDOs for multiple aspects and overall. On all aspects: openness, fairness, barriers, quality, cost, administration, behaviour and speed, the IETF is rated better than other SDOs. The only negative is in the breakdown of <u>Q30</u> by participant type, which shows that regular IETF participants rate the behaviour of IETF participants as worse than for other SDOs.

Participation is driven by personal interest and a specific technology, not business or employer goals

In <u>Q12</u> participants rate the most important reasons for participation as those related to personal interest and development, with those related to business and employment much lower. In <u>Q11a</u>, which is only asked of new participants, the most important reasons for people starting to participate are all related to specific technologies (though this question has a high rate of "None of the above" answers) and those related to employers are rated lower.

In <u>Q27a</u>, "I learn a lot from participating in WGs" is rated the truest of the provided statements about individual participation in WGs.

The IETF still has a problem with gender diversity but there are signs of improvement

The percentage of respondents who identify as women in Q4, 7.84% (between 5.58% - 10.10% by the margin of error), is very low compared to the percentage in the general population. No benchmarking is presented as multiple participants have commented that the best benchmark is with the percentage of women in engineering roles rather than general IT roles, and that data has not been sourced.

In multiple questions, women report a worse experience of the IETF than men. In Q26 women report a significantly lower rating for "I am treated the same as the rest of the IETF community". In Q26a women report a significantly higher degree of hindrance from "The behaviour of IETF participants" and "The diversity profile of the IETF community". The one positive to note is that the percentage of women in leadership roles, as shown in Q7b, is significantly higher than their percentage overall.

The trend from <u>Q11</u> indicates that the percentage of women in recent annual cohorts is significantly higher than the current overall percentage. <u>Q4</u> does not show a disproportionate number of women in previous participants and so it is reasonable to assume that this change in the intake of participants will lead to a change over time.

Participation is dominated by people from just two regions and there are multiple factors behind that

 $\underline{O2}$ shows that North America and Europe together account for approximately 40% each of all IETF participants, with Asia a distant third at 11%.

Participants from other regions report various factors that adversely impact their participation. In Q5, participants from Asia and Latin America report much lower levels of skills with English, particularly oral skills, and in Q26 participants from those two regions give much lower ratings, only in the Acceptable range, for "My skill in English is good enough for me to participate fully". Also in Q26, participants from Latin America give much lower ratings for "I understand the IETF well enough to participate fully" and "I feel part of the IETF community". Q26a presents a number of additional factors, particularly the cost of participating in IETF meetings (Asia, Africa, Latin America), the complexity of IETF processes (Africa, Latin America) and the reliance on email and mailing lists (Asia, Africa and Middle East).

There is a problem with behaviour but it is hard to pin down

The breakdown of Q30 by participant type shows that regular IETF participants rate the behaviour of IETF participants as worse than that in other SDOs. This correlates with the answers this same cohort gives in Q26a about "The behaviour of other IETF participants". Also, in Q26a it appears that the more someone is engaged with the IETF (by participant type) the lower they rate the behaviour of participants. Finally in Q26a, there is a significant difference in views between men and women about how much of a hindrance, behaviour is. Together these indicate that there is a problem with participant behaviour.

<u>Q27</u> and <u>Q27a</u> ask about perceptions of WGs and personal participation in WGs and while behaviour is rated lowest for regular participants, overall it is middling.

New participants need to learn a lot to be effective and without that, people can feel excluded

In <u>Q26</u> new participants give very low ratings for "I understand the IETF well enough to be effective" and "I feel part of the IETF community", much lower than other participant types. Those who have not participated in an IETF meeting (onsite or remote) rate these two much lower than those who have.

In <u>Q26a</u> new participants identify "The complexity of IETF processes" as their biggest hindrance to participation, more than any other hindrance identified by any participant type. Then in <u>Q27a</u> new participants give the lowest ratings to "I am able to share my views in WGs" and "My contributions to WGs are valued".

<u>Q18</u> asks previous participants to select their reasons for ceasing participation and "I was unable to get my ideas adopted" and "It was too hard to learn how to participate effectively" are both selected by approximately 10% of respondents.

Taken altogether, this indicates that there is a lot for new participants to learn, not knowing these things adversely affects participation, and this can lead to people feeling excluded.

Email is still universally preferred, but new participants are more comfortable with multiple mechanisms of participation

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long way, across all age ranges. Similarly in Q24 email is the preferred method of participating in IETF discussions and decisions, across all age ranges. In Q26a the reliance on email is rated as a low hindrance.

However, most of the other participation mechanisms in Q22 and Q24 have a wide spread of preference by age range, with the younger participants comfortable with most of them. In Q26a younger participants are more hindered by the reliance on email. When these results are taken together it indicates that the likely trajectory is from email as the dominant mechanism to a range of mechanisms with email the first among equals.

Methodology

Survey design principles

The survey was designed and questions were constructed following the same principles as previous community surveys:

Return a representative sample of the wider IETF community

The intent of this survey was to reach as widely as possible in order to get a representative sample of the ~50,000 mailing list subscribers, recognising that there are varying degrees of participation within that population.

As people self-select whether or not to respond to the survey, there is the possibility of selection bias and no cross-checking was carried out to test as the data to do so is not available, so this possibility remains.

Design for an international survey

The IETF community is global and the language was carefully chosen to ensure that all respondents interpret the questions easily and similarly through simple, direct and idiom-free language.

Maximise the number of responses

This principle influenced the question design in a number of ways, all of which aimed to reduce the cognitive load required to complete the survey.

The friction people feel with mandatory questions was largely eliminated by allowing them to skip almost all the questions. The only mandatory question was used for self-identifying the level of participation.

FINAL

For questions with a scale that includes a 'neutral' option, a 'No opinion' option was added to avoid people choosing the neutral option and distorting the results. Those who skipped such a question are counted as having no opinion.

For questions with a "prefer not to answer" option, anyone that did not answer was classified as having answered "prefer not to answer" even though they did not explicitly select it.

Ensure that the responses can be processed

As this was going to 50,000+ email addresses it was expected that there would be thousands of responses and it simply would not be possible to process that number of free text answers so there are no free text boxes.

Prioritise questions that can be repeated every year

The intent is to repeat this survey every year at roughly the same time so that a trend can be seen over multiple years. This also means that there are no trend questions in the survey (e.g "Has community behaviour got better or worse over the last year?") as that is more accurate if derived from multi-year analysis because perception over a period of time differs so much from individual to individual.

Don't ask questions that are best answered by other means

There is a basic question about mailing list subscriptions, but more accurate answers can be obtained from mailing list analysis. Similarly, it would be better to send each WG a survey than ask for information about specific WGs in this survey.

Distribution

To distribute this survey, an address list was created by amalgamating the membership lists of all active IETF mailing lists and de-duplicating for addresses using '+' notation. From this list, all addresses that unsubscribed to previous surveys were removed, along with those that we are confident are not able to receive email. The resulting 49,078 addresses were silently subscribed to a mailing list with all members moderated to prevent unwanted use.

A pre-announcement³ was sent to ietf-announce@ietf.org and then the invitation to participate⁴ was sent to the survey list on 22 December 2023. A reminder⁵ was sent on 3 January 2024 and a final reminder⁶ on 16 January 2024.

³ https://mailarchive.ietf.org/arch/msg/ietf-announce/JmVwgl_J19fKzTLto88ttE4_axY/

⁴ <u>https://mailarchive.ietf.org/arch/msg/ietf-surveys/GQi_PdzIWQoqVZZodOqHZ09yTm4/</u>

⁵ <u>https://mailarchive.ietf.org/arch/msg/ietf-surveys/ivA2qWsbBfjip2qhBYhtl6kg2QQ/</u>

⁶ <u>https://mailarchive.ietf.org/arch/msg/ietf-surveys/dEL_Salqqm5N4tBRnKm3QpPulJY/</u>

73 addresses were unsubscribed or hard bounced and automatically unsubscribed. The unsubscribed addresses will be noted and added to a "do not contact" list for future iterations of this survey.

Data validation

The initial protection of the integrity of the data was left to the survey system, which was configured to detect bots and prevent repeated survey responses. After the survey the data was examined to identify obviously invalid survey responses and 7 were deleted as a result. A further 158 were deleted as they had been started but no data provided.

Analysis of results

Population

The population of participants is taken to be the same as the number of addresses subscribed to mailing lists after correction for the use of "+" address notation and those known to be unreachable. There are two known issues that will affect this, but neither are corrected for due to the lack of data:

- Participants subscribed to different lists with different addresses.
- The use of role addresses and internal email expanders going to multiple people.

For analysing the survey, a population of 49,005 is used.

Percentage analysis

Most of the question analysis displays the results as a percentage, with different forms of percentage used:

- **Percentage of (question) respondents**. The majority of questions are analysed using this percentage. Where the question is mandatory, or there is a "no opinion" or "prefer not to answer" option then this is equivalent to the total number of survey respondents, otherwise it is less. For questions where respondents can select multiple options, this means that the percentages will total more than 100%.
- Weighted percentage. Used for multiple choice questions where each option selected by the same respondent is assigned a fractional 'score' that is inversely proportional to the number of selections made i.e. if they select 1 option then the score is 1, if they select 2 then a score of 0.5 is used for each option, and so on. This shows the number of responses to a particular option as a percentage of the total number of responses to the question. These percentages will always add up to 100%.

In almost all of the analysis below, the percentage of respondents is used as it represents the views of respondents as accurately as possible as we have from the data, even though it makes

comparisons to the total non-intuitive. For example, 71% of respondents indicated that they are employees, which covers both those who are only employees and those who are say part-time employees and part-time students. The weighted percentage for the same option is much lower at 59% and so it may seem a fairer percentage to use but this is based on the untested assumption that respondents who give two answers, split their time/role 50/50.

Coding, coding means and applying a value judgement

A number of questions have categorical responses on a scale. For example, "Much more" through to "Much less". For the analysis, each response is assigned a code that is then used to calculate a mean between 1 and 5. These means can then be compared between questions and/or over time.

For some questions it is appropriate to apply a value judgement where we assume that we want as high a score as possible and therefore need to assess the value of a score. In those cases, while there's no hard and fast rule, a mean of 4.50 or above is sometimes considered excellent, 4.00 to 4.49 is good, 3.50 to 3.99 is acceptable but not good, and below 3.50 is either poor or very poor if below 3.00

Quality	Quantity	Preference	Frequency	Reverse Frequency	Code
Excellent	Much more	Strongly preferred	Almost always	Almost never	5
Good	More	Preferred	Often	Rarely	4
Average	About the same	Neutral	Sometimes	Sometimes	3
Poor	Less	Not preferred	Rarely	Often	2
Terrible	Much less	Strongly not preferred	Almost never	Almost always	1

The codes are:

Statistical significance

Only a limited number of significance comparisons have been performed due to the nature of the data:

- Comparison of means, using a public web service⁷.
- Comparison of proportions using a public web service⁸.

⁷ https://www.medcalc.org/calc/comparison_of_means.php

⁸ <u>https://www.socscistatistics.com/tests/ztest/default2.aspx</u>

Charts

The chart types and settings have been chosen as follows:

- The scale for percentages is always 0%-100% except where the figures are quite small and that would make it difficult to read.
- Stacked bars are used where the answers are on a scale.
- As well as percentages, raw counts are shown so that the reader can calculate their own comparison tests and check the percentages.
- Some figures and headings have been omitted for space reasons and where meaningful those are referenced in the text. Any missing figures can be provided on demand.

Results and Analysis

Totals

49,005 email addresses were successfully contacted. 1888 valid responses were received, with 76 excluded for non-participation (see Q1 below), leaving 1812 used responses, a response rate of 3.7%, giving a maximum margin of error of +/- 2.26% In 2021 the response rate was 3.6%.

Questions: Organisational Demographics (part 1)

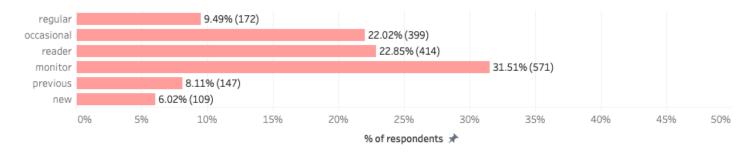
These questions of fact about the respondents participation in the IETF. They are split into two parts as this first question is used as an initial routing and qualification question.

Q1. How would you best describe your participation in IETF mailing lists?

This was the one mandatory question for this survey, with respondents asked to self select a single participant type with textual guidance on those types:

- I regularly post ("regular")
- I occasionally post ("occasional")
- I regularly read messages but never post ("reader")
- I monitor message subjects and occasionally read but never post ("monitor")
- I no longer read or post but I used to ("ex-participant")
- I have recently subscribed and I am still deciding how I fit in ("new participant")
- I have never read or posted to any IETF mailing list ("non-participant")

Those that answered "non-participant" were taken immediately to the end of the survey and not asked any further questions. They are therefore not included in the following analysis.

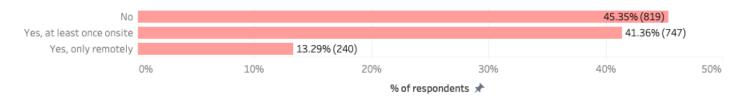


Commentary

- 1. The number of regular participants as a proportion of total mailing list subscribers is low at 9.49%, which equates to somewhere between 3500 and 5750 people.
- 2. 76 non-participant responses indicate that anywhere up to ~2000 mailing list subscribers are not IETF participants, though it is assumed that some of this is due to role address or email expanders being used.

Q1a. Have you participated in an IETF Meeting?

This question was first asked in 2022.



Commentary

3. These numbers are close to those in the 2022 survey. Taken at face value, they indicate that a large proportion of participants of the IETF community has made the effort to participate in at least one meeting.

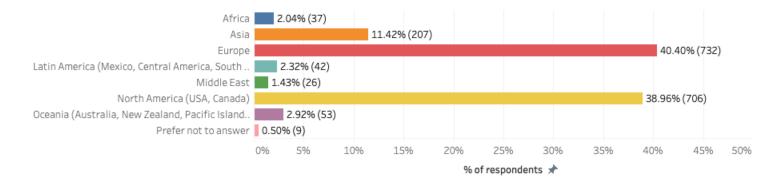
Questions: Demographics

These questions have been asked for the dual purpose of understanding the broad makeup of the IETF community, and how the views and experiences of the community differ by demographics as such differences may indicate problems that need addressing.

Q2. In what region do you live?

This question uses the standard IETF regions and is the same question asked in most of our other surveys, such as post-meeting surveys.

IETF Administration LLC



Cross-tabulating this by participant type gives:

	regular	occasional	reader	monitor	previous	new
Africa	0.1% (2)	0.3% (6)	0.9% (16)	0.6% (11)		0.1% (2)
Asia	1.2% (21)	1.7% (30)	3.8% (69)	2.8% (51)	1.0% (19)	0.9% (17)
Europe	3.5% (63)	9.2% (166)	8.2% (148)	13.7% (248)	3.0% (54)	2.9% (53)
Latin America (Mexico, Ce	0.2% (3)	0.3% (5)	0.8% (14)	0.7% (12)	0.2% (3)	0.3% (5)
Middle East	0.2% (3)	0.3% (5)	0.4% (7)	0.4% (8)	0.2% (3)	
North America (USA, Cana	4.0% (73)	9.7% (175)	8.2% (149)	12.3% (222)	3.3% (60)	1.5% (27)
Oceania (Australia, New Z	0.3% (5)	0.6% (11)	0.6% (10)	0.9% (17)	0.4% (7)	0.2% (3)
Prefer not to answer	0.1% (2)	0.1% (1)	0.1% (1)	0.1% (2)	0.1% (1)	0.1% (2)
	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%
	% (table) of respon	d% (table) of respond	% (table) of respond	% (table) of respond	% (table) of respon	d% (table) of respond

Normaling that cross-tabulation by participant type:

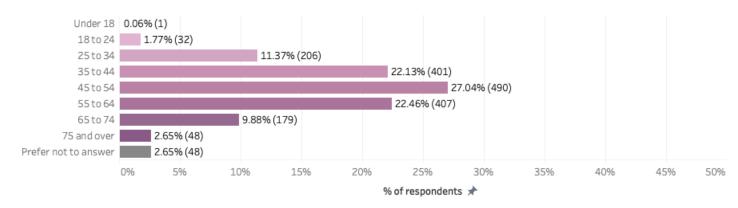
	regular	occasional	reader	monitor	previous	new
Africa	1.16% (2)	1.50% (6)	3.86% (16)	1.93% (11)		1.83% (2)
Asia	12.21% (21)	7.52% (30)	16.67% (69)	8.93% (51)	12.93% (19)	15.60% (17)
Europe	36.63% (63)	41.60% (166)	35.75% (148)	43.43% (248)	36.73% (54)	48.62% (53)
Latin America (Mexico, Ce	1.74% (3)	1.25% (5)	3.38% (14)	2.10% (12)	2.04% (3)	4.59% (5)
Middle East	1.74% (3)	1.25% (5)	1.69% (7)	1.40% (8)	2.04% (3)	
North America (USA, Cana	42.44% (73)	43.86% (175)	35.99% (149)	38.88% (222)	40.82% (60)	<mark>2</mark> 4.77% (27)
Oceania (Australia, New Z	2.91% (5)	2.76% (11)	2.42% (10)	2.98% (17)	4.76% (7)	2.75% (3)
Prefer not to answer	1.16% (2)	0.25% (1)	0.24% (1)	0.35% (2)	0.68% (1)	1.83% (2)
	0.0 0.2 0.4	0.0 0.2 0.4	0.0 0.2 0.4	0.0 0.2 0.4	0.0 0.2 0.4	0.0 0.2 0.4
	% (column) of respo					

Commentary

- 4. Europe and North America dominate overall and all types of participation with Asia a distant third and all other regions with very low participation rates. This matches what we see in post-meeting surveys.
- 5. The spread of new participants is notably different from that of existing participants, with fewer from the US and more from Europe and Asia.

Q3. How old are you?

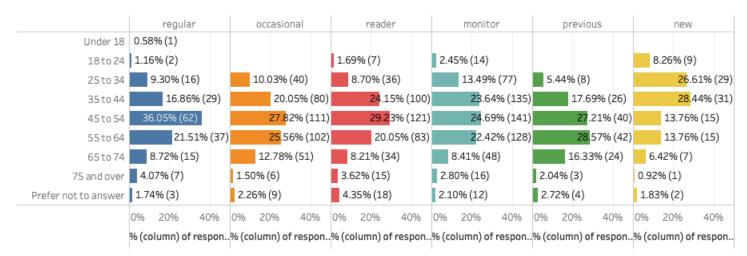
This was first asked in 2021 and is not normally asked in our post-meeting surveys.



Cross-tabulated by participant type:

	regular	occasional	reader	monitor	previous	new
Under 18	0.06%(1)					
18 to 24	0.11% (2)		0.39% (7)	0.77% (14)		0.50% (9)
25 to 34	0.88% (16)	2.21% (40)	1.99% (36)	4.25% (77)	0.44% (8)	1.60% (29)
35 to 44	1.60% (29)	4.42% (80)	5.52% (100)	7.45% (135)	1.43% (26)	1.71% (31)
45 to 54	3.42% (62)	6.13% (111)	6.68% (121)	7.78% (141)	2.21% (40)	0.83% (15)
55 to 64	2.04% (37)	5.63% (102)	4.58% (83)	7.06% (128)	2.32% (42)	0.83% (15)
65 to 74	0.83% (15)	2.81% (51)	1.88% (34)	2.65% (48)	1.32% (24)	0.39% (7)
75 and over	0.39% (7)	0.33% (6)	0.83% (15)	0.88% (16)	0.17% (3)	0.06% (1)
Prefer not to answer	0.17% (3)	0.50% (9)	0.99% (18)	0.66% (12)	0.22% (4)	0.11% (2)
	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%
	% (table) of respond.	. % (table) of respond	% (table) of respond	% (table) of respond	% (table) of respond.	% (table) of respond

Normalising that cross-tabulation by participant type:

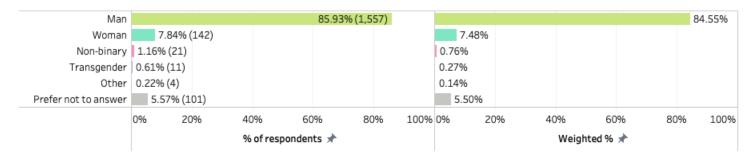


Commentary

- 6. The median age for the IETF community is in the 45-54 age range. This is the same as for 2021 but the overall profile is older.
- 7. New participants are on average much younger than existing participants.

Q4. What is your gender? (check all that apply)

This question was changed for the 2022 survey to allow multiple answers. This first chart show the different ways that this data can be presented and used:



As the focus here is on respondent views, not proportionality between respondents, the percentage of respondents is used throughout the rest of this survey, which will generally mean totals in excess of 100%:

Cross-tabulating gender with participant type:

	regular occasional		reader	monitor	previous	new
Man	7.89% (143)	19.48% (353)	19.81% (359)	26.71% (484)	7.23% (131)	4.80% (87)
Woman	0.83% (15)	1.43% (26)	1.60% (29)	2.70% (49)	0.44% (8)	0.83% (15)
Non-binary	0.22% (4)	0.22% (4)	0.22% (4)	0.33% (6)	0.06% (1)	0.11%(2)
Transgender	0.06% (1)	0.17% (3)	0.06% (1)	0.22% (4)		0.11%(2)
Other	0.06% (1)	0.06% (1)		0.06% (1)		0.06% (1)
Prefer not to answer	0.72% (13)	0.94% (17)	1.27% (23)	1.99% (36)	0.39% (7)	0.28% (5)
	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%

% (table) of responses% (table) of responses

Normalising that cross-tabulation:

	regular	occasional	reader	monitor	previous	new
Man	83.14% (143)	88.47% (353)	86.71% (359)	84.76% (484)	89.12% (131)	79.82% (87)
Woman	8.72% (15)	6.52% (26)	7.00% (29)	8.58% (49)	5.44% (8)	13.76% (15)
Non-binary	2.33% (4)	1.00% (4)	0.97% (4)	1.05% (6)	0.68%(1)	1.83% (2)
Transgender	0.58% (1)	0.75% (3)	0.24%(1)	0.70% (4)		1.83% (2)
Other	0.58% (1)	0.25% (1)		0.18%(1)		0.92% (1)
Prefer not to answer	7.56% (13)	4.26% (17)	5.56% (23)	6.30% (36)	4.76% (7)	4.59% (5)
	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 1009

% (column) of respon..% (column) of respon..% (column) of respon..% (column) of respon..% (column) of respon..%

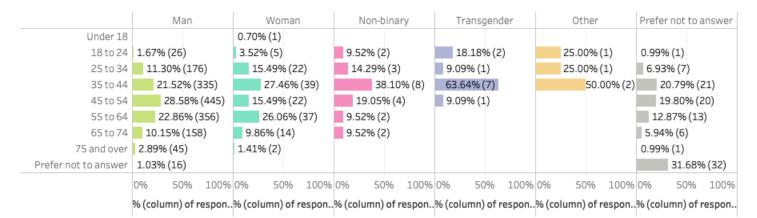
	Afr	rica	Asia		Eu	rope	Latin Ar (Mexico, G		Middle	East	North A (USA, C			ceania Ilia, New Z.
Man	91.89	9% (34)	85.51% (1	77)	88.93	%(651)	80.95%	(34)	96.1	5% (25)	83.71%	(591)	83.0	2%(44)
Woman			10.63% (2	22)	5.19%	(38)	14.299	6) (6)	3.85% (1	.)	9.49% ((67)	9.439	% (5)
Non-binary			1.45% (3)		0.27% ((2)	2.38% (1)			1.98% (1	4)	1.89%	(1)
Transgender			0.48% (1)		0.27% ((2)	2.38% (1)			0.85% (6)		
Other					0.27% ((2)	2.38% (1)			0.14% (1)		
Prefer not to answer	8.11%	(3)	2.90% (6)		5.74%	(42)	4.76% (2)			5.67% (4	40)	5.66%	6 (3)
	0% 50	0% 100%	0% 50%	100%	0% 5	0% 100%	0% 50	% 100%	0% 50	% 100%	0% 50	% 100%	0%	50% 100%
	% (table)	of respo	% (table) of	respo	% (table) of respo	% (table) d	of respo	% (table)	of respo	% (table)	of respo	% (tabl	e) of respo

Cross-tabulating gender with region and normalised by region:

Region (Q2) cross-tabulated with gender:

	Man	Woman	Non-binary	Transgender	Other	Prefer not to answer
Under 18		0.06% (1)				
18 to 24	1.43% (26)	0.28% (5)	0.11% (2)	0.11% (2)	0.06% (1)	0.06% (1)
25 to 34	9.71% (176)	1.21% (22)	0.17% (3)	0.06% (1)	0.06% (1)	0.39% (7)
35 to 44	18.49% (335	2.15% (39)	0.44% (8)	0.39% (7)	0.11% (2)	1.16% (21)
45 to 54	24.56% (445	1.21% (22)	0.22% (4)	0.06% (1)		1.10% (20)
55 to 64	19.65% (356	2.04% (37)	0.11% (2)			0.72% (13)
65 to 74	8.72% (158)	0.77% (14)	0.11% (2)			0.33% (6)
75 and over	2.48% (45)	0.11% (2)				0.06% (1)
Prefer not to answer	0.88% (16)					1.77% (32)
	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%	0% 20% 40%
	% of respondents					

Age cross-tabulated with gender and normalised by gender:



Commentary

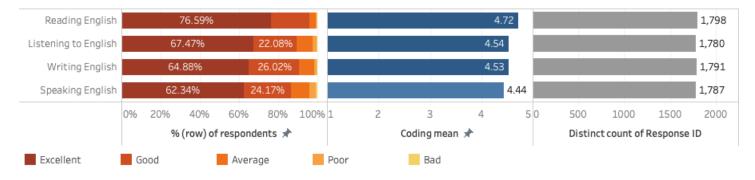
8. The proportion of women is still very low and while it appears to have dropped since 2021 the difference is not significant. Since the 2021 survey there have been a number of

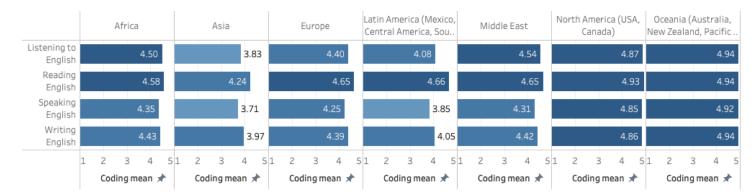
suggestions that a benchmark of women in IT is too broad and it should instead be women in engineering roles, but that data has not yet been sourced.

- 9. The proportions vary significantly between regions.
- 10. Women make up a greater proportion of new participants than existing participants.
- 11. The numbers for non-binary and transgender are very low and using those for analysis may not be representative.

Q5. How do you rate your skills with the English language?

In response to feedback, this question was split into four different aspects of the use of English.





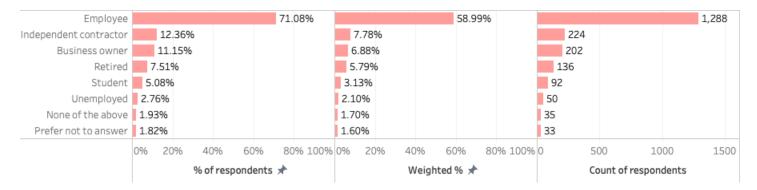
Cross-tabulating this by region:

Commentary

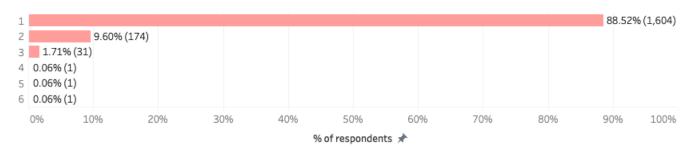
- 12. Respondents rate their skill with reading English higher than any other aspect of use. This holds across all regions, and while those from Asia rate themselves lowest of all the regions, the absolute level is still Acceptable.
- 13. Those from Asia and Latin America rate their skills at the other aspects of English, listening, speaking and writing, much lower than those in other regions. For listening and speaking, this highlights the risk of exclusion from in-person meetings and the need for live transcription and all decisions to be taken to the list. For writing English, this is more complicated as this is a required skill for participation in the IETF.

Q6. What is your employment status? (check all that apply)

Previous surveys used a single question for what are now two questions in this survey. This first one focuses solely on employment status.



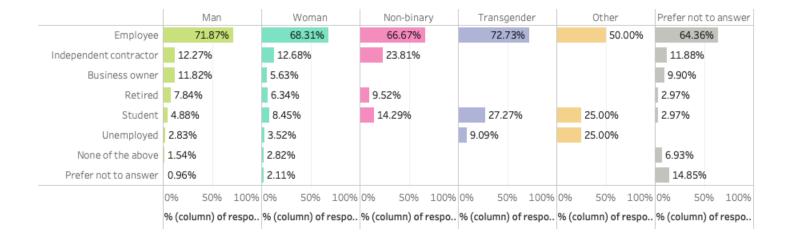
Frequency distribution of the number of options selected per respondent:



Normalised by participant type:

	regular	occasional	reader	monitor	previous	new
Employee	73.26% (126)	68.17% (272)	70.29% (291)	73.38% (419)	70.75% (104)	69.72% (76)
Independent contractor	16.28% (28)	14.04% (56)	10.87% (45)	13.13% (75)	9.52% (14)	5.50% (6)
Business owner	12.79% (22)	13.03% (52)	10.87% (45)	9.46% (54)	10.20% (15)	12.84% (14)
Retired	7.56% (13)	8.52% (34)	7.00% (29)	5.95% (34)	15.65% (23)	2.75% (3)
Student	4.65% (8)	2.76% (11)	6.04% (25)	5.43% (31)	2.04% (3)	12.84% (14)
Unemployed	4.65% (8)	3.76% (15)	3.14% (13)	1.75% (10)	0.68%(1)	2.75% (3)
None of the above	1.16% (2)	1.75% (7)	2.42% (10)	2.45% (14)		1.83% (2)
Prefer not to answer	1.74% (3)	1.50% (6)	2.66% (11)	1.05% (6)	2.72% (4)	2.75% (3)
	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%
	% (column) of respo	% (column) of respo.				

Normalised by gender:

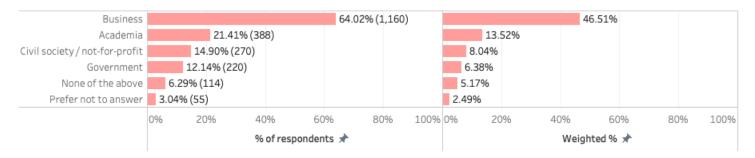


Commentary

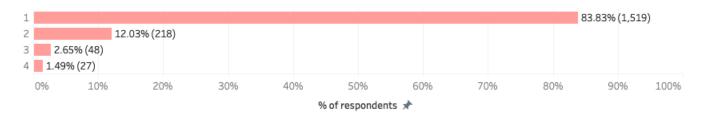
- 14. A large majority of participants are employees. The types of participant with greater levels of participation, reader and monitor, have higher proportions of employees.
- 15. Gender diversity is significantly greater among students than other forms of employment.
- 16. 11.48% of respondents have more than one form of employment.

Q6a. What sectors do you work in? (check all that apply)

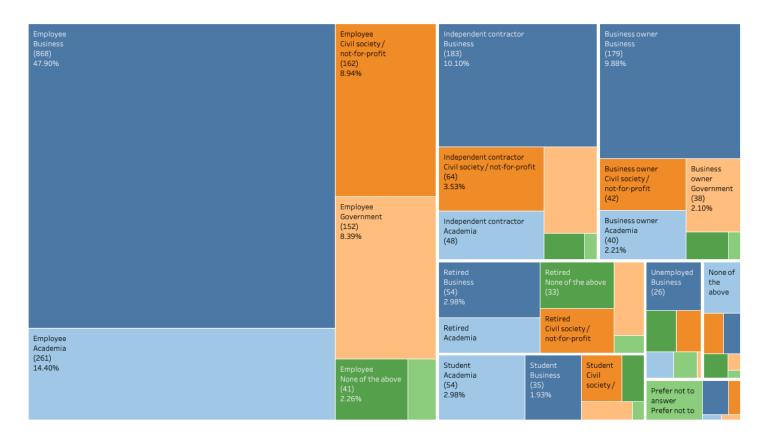
This is the second of the two new questions split out from the previous question 6. This question focuses solely on what sectors people work in.



Frequency distribution of the number of options selected per respondent:



The relationship between employment and sectors is shown in the following treemap (the colours are consistent and can therefore be used to identify those boxes that are too small for a label):



Commentary

- 17. These two new questions give a better picture than previous surveys. Business is the single largest sector as expected, academia much larger than previously measured at 21.41% and civil society slightly larger at 14.90%.
- 18. Government has been measured for the first time at 12.14%, the majority of which is government employees.
- 19. 16.16% of respondents work in more than one sector.

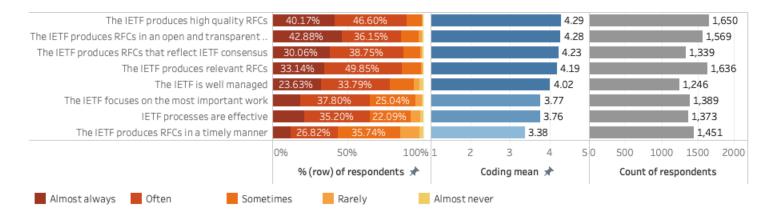
Questions: Overall Perceptions

These two questions were asked at this point to provide something substantive for respondents to give an opinion on, breaking up the less interesting demographic questions.

Q25. How true are the following statements about the work of the IETF?

This question asks respondents to rate their perception of the accuracy of a set of statements on a frequency scale of almost always to almost never.

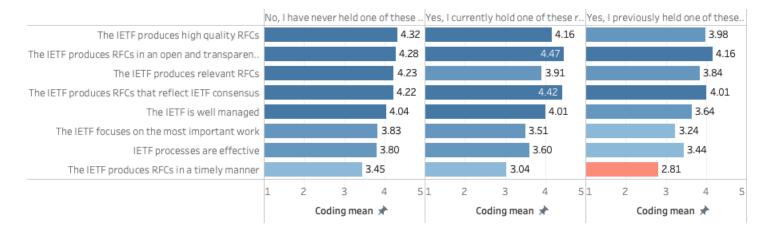
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Coding means by participant type:

	regular	occasional	reader	monitor	previous	new
The IETF produces high quality RFCs	4.16	4.22	4.41	4.33	4.18	4.28
The IETF produces RFCs in an open and transparen	4.30	4.23	4.35	4.30	4.21	4.09
The IETF produces relevant RFCs	4.04	4.10	4.37	4.22	4.06	4.05
The IETF produces RFCs that reflect IETF consensus	4.31	4.20	4.32	4.19	4.12	4.02
The IETF is well managed	3.86	3.98	4.13	4.11	3.88	3.83
The IETF focuses on the most important work	3.58	3.67	3.99	3.81	3.57	3.74
IETF processes are effective	3.59	3.69	3.99	3.81	3.57	3.54
The IETF produces RFCs in a timely manner	2.98	3.25	3.66	3.45	3.34	3.33
	12345	12345:	12345:	12345	12345	12345
	Coding mean					

Coding means by leadership experience:



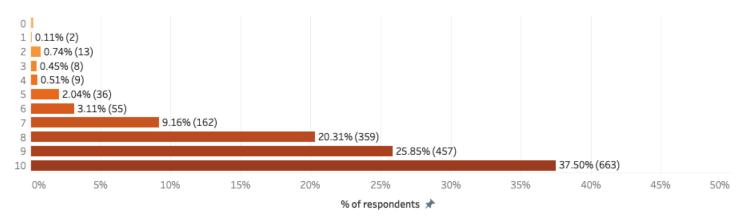
Commentary

20. The core values of the IETF score well (Good) in the results for quality, transparency, consensus and relevance.

- 21. Regular participants and leadership experience, particularly ex-leaders, have strongly negative views about the timeliness of RFC production, while overall this is the worst rated of the aspects queried.
- 22. The effectiveness of processes and importance of the work focused on, both score as only Acceptable, perhaps indicating the lack of big picture focus on these aspects of the IETF. Despite this, as noted, the resulting output is well rated.

Q28. How important is the IETF for the development of the Internet?

Respondents were asked to rate this on a scale of 0-10. While not strictly a Net Promoter Score (NPS) question, that methodology is used to analyse the result.



Using NPS categories:

						Promo (63.35										ssive .47%)			Detractor (7.18%)
0%	5%	10%	15%	20%	25%	30%	35%	40%	45% Net P	50% romoter	55% Score >	60%	65%	70%	75%	80%	85%	90%	95%

Commentary

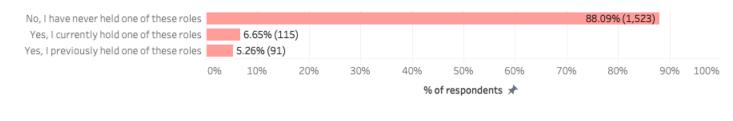
23. The NPS score of promoter percentage minus detractor percentage gives a result of 56.17%, an excellent score according to NPS methodology.

Questions: Organisational Demographics (part 2)

This is the second set of factual questions about respondents' participation in the IETF. These questions were not asked in the sequence reported below.

Q7b. Have you ever held a leadership role in the IETF (IESG, IAB, IRSG, LLC Board, Trustee, IAOC, WG Chair, Nomcom Chair)?

This question replaces the general question in previous surveys where one of the options was to indicate having served in leadership a position, as this provides for better cross tabulation.



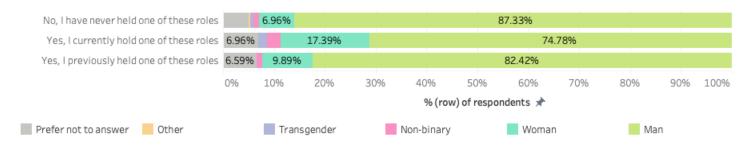
By gender:

		Man			Woman		No	n-bi	nary	Trans	sgender	()ther	
No, I have never held one of these roles	76.92%	(1,330)	6.139	6 (106)		0.98% ((17)		0.52% (9)	0.23% (4	1)	
Yes, I currently hold one of these roles	4.97%	(86)		1.16%	(20)		0.17% (3)		0.12% (2)			
Yes, I previously held one of these roles	4.34%	(75)		0.52%	(9)		0.06% (1)						
	0%	50%	100%	0%	50%	100%	0%	509	% 100%	0% 5	0% 100%	0%	50%	100%
	0% 50% 100% 0%				respond	lents	% of r	espo	ondents	% of re	pondents	% of re	spond	ents

Normalised by gender:

	Man	Woman	Non-binary	Transgender	Other
No, I have never held one of these roles	89.20% (1,330)	78.52% (106)	80.95% (17)	81.82% (9)	100.00% (4)
Yes, I currently hold one of these roles	5.77% (86)	14.81% (20)	14.29% (3)	18.18% (2)	
Yes, I previously held one of these roles	5.03% (75)	6.67% (9)	4.76% (1)		
	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%	0% 50% 100%
	% of respondents				

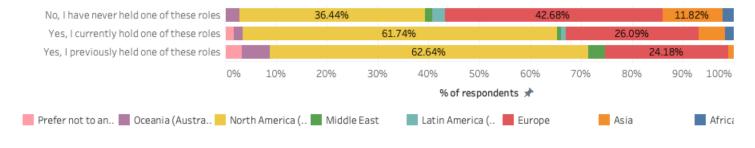
By gender normalised by option:



Normalised by region:

	Af	rica	A	sia	Eu	irope	Latin An	nerica (Middl	e East	North Ar	nerica (Ocear	nia (Austra
No, I have never held one of th	94.4	4% (34)	96.26	5% (180)	92.59	9% (650)	97.5	0% (39)	84.009	6(21)	81.26% ((555)	86.	00% (43)
Yes, I currently hold one of the	5.56%	(2)	3.21%	(6)	4.27%	(30)	2.50% (1)	4.00% (1)	10.409	% (71)	4.00	% (2)
Yes, I previously held one of th			0.53% ((1)	3.13%	(22)			12.00	% (3)	8.35%	(57)	10.	00% (5)
	0% 5	0% 100%	0% 5	0% 100%	0% 5	50% 100%	0% 50	0% 100%	0% 50	0% 100%	0% 50)% 100%	0%	50% 100%
	% of res	pondents	% of res	pondents	% of res	spondents	% of res	pondents	% of res	ondents	% of resp	ondents	% of r	espondents

By region normalised by option:

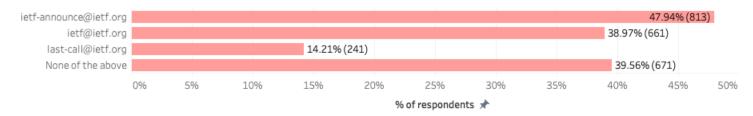


Commentary

- 24. The percentage of women in leadership roles is significantly higher than the percentage of women overall. The pool of women for leadership roles is much smaller than for men and so a greater proportion of women are in leadership roles than the proportion for men.
- 25. North America is better represented in current leadership roles compared to its overall representation in the IETF and this is consistent with previous holders of leadership roles. Europe by contrast is notably under-represented, with Asia slightly under-represented.

Q8. Which of the following general IETF mailing lists are you subscribed to?

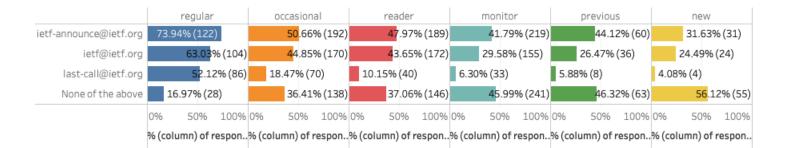
This is an old question that only includes three lists and was primarily used to inform decisions about mass communication with IETF participants. A decision on that has now been made⁹ and is awaiting the tools changes necessary for implementation. It is expected that the proposed important-news list will be active by the time this survey is repeated for 2024, at which point this



Normalised by participant type:

⁹ <u>https://mailarchive.ietf.org/arch/msg/ietf-announce/WwIF6_s8YYIVz3fEtwWGZwMIRqA/</u>

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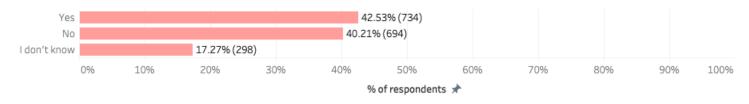


Commentary

26. No commentary this year given the changes being planned. (see above).

Q9. Do you have a IETF Datatracker account (https://datatracker.ietf.org, used to authenticate for meetings, submit I-Ds, etc)?

This is the same question as asked previously, but in 2020 the explanation of Datatracker "used to ..." was added.



Normalised by participant type:

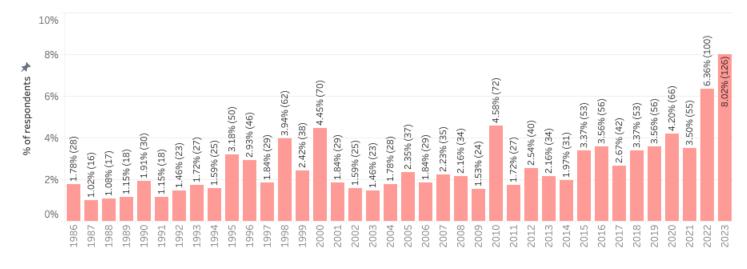
	regu	lar	occas	ional	rea	der	m	onitor		previous			new	
Yes	95.1	8% (158)	69.25% (2	.68)	27.1	5% (107)	21.9	96% (119)		30.22% ((42)		40.82	% (40)
No	3.61% (6)		21.199	% (82)	5:	1.52% (203)		55.17% (299)		49.64	4% (69)		35.71%	(35)
I don't know	1.20% (2)		9.56% (3	7)	21.329	% (84)	22.8	88% (124)	20).14% (28	3)		23.47% (2	3)
	0% 509	6 100%	0% 50	% 100%	0% 50	% 100%	0%	50% 100%	0%	50%	100%	0%	50%	100%
	% (column) o	f respond	% (column)	of respond	% (column)	of respond	% (colum	n) of respond	% (colu	mn) of re	spond	% (coli	umn) of re	spond

Commentary

- 27. The number responding "yes" has increased significantly between 2021 (27.60%) and 2022 (40%) when the new explanation was added and the increase since is within the margin of error. Similarly for the number responding "don't know". This indicates that the explanation added in 2022 helped people recognise if they had a Datatracker account and the answer now is accurate but stable.
- 28. As expected, regular participants almost all have a Datatracker account.

Q11. Approximately, in what year did you first participate in an IETF meeting or subscribe to an IETF mailing list?

This is a fixed choice question only listing the years from 1986 to present.



Normalised by gender:

Non-binary	% of responde. % of responde.	10% 0% 30% 20%	1.63%	4.07%		1.63%	0.81%	% 0.81%		2.44%					1.63%	0.81%	5.69%	0	2.44%		% 3.2.5% % 0.81%		% 0.81%		2.44%		3.25%	4.07%					11.11% 3.25%	3.25%	5.69%		% 7.32%
		10% 0% 30%						5.56%					5.56%	5.56%			C EF04	00.0			5.56%	5.56%	5.56%	9% 5.56%							30.00% 5.56%	5.56%	H				5.56%
Transgender	% of responde.	20% 10% 0%																						10.00%						20.00%	30.0		20.00%				
Other		30% 20% 10% 0%									25.00%																						25.00%			25.00%	
Other Prefer not to answer	% of responde% of responde	20% 10%	2.47%		1.23%	1.23%	2.47%	2.47%	2.47%		1.23% 25.00%	8.64%	2.47%	1.23%	2.47%	4.94%	4.94% 2.47%	3.70%	1.23%	1.23%	2.47%0	3.70%		2.47%	3.70%	1.23%			1.23%	4.94%	3.70%	1.23%	3.70% 25.00%	3.70%	2.47%	25.00%	11.11%

Normalised by region:

Africa	% of respond.	30% 20% 10%										3.70%									7.41%	3.70%		3.70%	3.70%		7.41%		7.41%	7.41%	3.70%		7.41%		7.41%	3.70%	7.41%	11.11%		14.81%
Asia	% of respon % of respond. % of respond. % of respond.	30% 20% 10%					1.18%	0.59%	1.76%			2.94%			1.76%	2.35%	4.71%	1.18%	2.35%	1.76%	3.53%	1.76%	1.18%	3.53%	3.53%	0.59%	3.53%	2.35%	4.71%	1.18%	2.94%	2.94%	3.53%	2.94%	4.12%	5.88%	4.71%	5.29%	9.41%	11.76%
Europe	% of respond.	30% 20% 10%	0.32%	0.16%	0.48%	1.12%	1.12%	1.12%	0.64%	1.60%	1.44%	2.88%	2.72%	1.60%	4.16%	1.60%	4.32%	2.24%	1.28%	1.60%	2.08%	2.40%	1.92%	2.08%	2.24%	1.76%	4.80%	2.24%	2.24%	2.08%	1.76%	4.48%	4.16%	3.20%	4.00%	4.00%	4.32%	2.88%	7.20%	9.76%
Latin America (Mexico, Central Am		30% 20% 10%	2.56%	2.56%							2.56%		2.56%			2.56%	7.69%			2.56%		2.56%	2.56%		5.13%	2.56%	7.69%	2.56%		10.26%	2.56%	5.13%		2.56%	10.26%		7.69%	2.56%	10.26%	2.56%
Middle East	% of respond.	30% 20% 10%							8.70%				8.70%				13.04%	8.70%			4.35%	4.35%				8.70%	8.70%		4.35%		4.35%	8.70%		4.35%	4.35%	4.35%		4.35%		
North America (USA, Canada)	% of respond.	30% 20% 10%	3.63%	2.05%	2.21%	1.74%	3.00%	1.58%	1.90%	2.53%	2.37%	4.11%	3.48%	2.53%	4.74%	3.48%	4.27%	1.58%	1.74%	1.26%	0.79%	2.37%	2.21%	2.21%	1.58%	1.26%	4.27%	1.11%	2.21%	1.58%	1.90%	2.21%	2.84%	2.37%	2.21%	2.84%	3.48%	3.32%	5.21%	5.85%
Oceania (Australia, New Zealand, Pa	% of respond. % of respond. % of respond.	30% 20% 10%	2.00%	2.00%			4.00%		4.00%	2.00%			6.00%	6.00%	6.00%	2.00%	4.00%	2.00%	2.00%	2.00%		2.00%								6.00%		4.00%	8.00%			2.00%	8.00%	4.00%	4.00%	4.00%
			1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

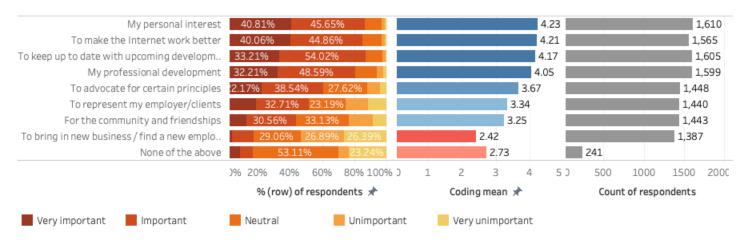
Commentary

- 29. The 'longevity' of IETF participants is clear, with Ideally, data from comparative organisations could be used to determine if the longevity profile of IETF participants is unusual.
- 30. 2023 saw notable increases in participation from women and non-binary people compared to other genders
- 31. 2023 saw notable increases in participation from people from Africa and Asia compared to other regions.

Questions: Participation

The first of these questions, about motivation, was inserted in the middle of the organisational demographics questions above as it was rated by importance. The rest came together in a page of questions immediately following, all rated by frequency.

This question asked respondents to rate the importance of various motivations for participating in the IETF. In previous years respondents were presented with the same list of motivations but only asked to indicate a yes/no for their relevance, not rate their importance.

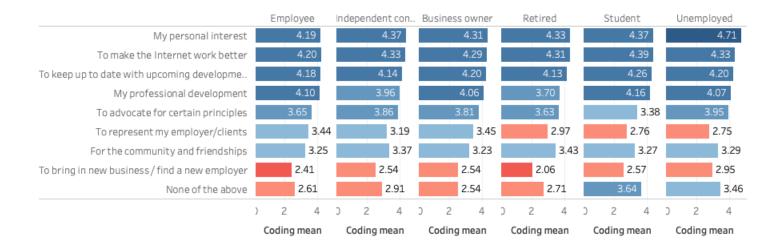


Importance rating and the coding mean for importance.

	regular	occasional	reader	monitor	previous	new
My personal interest	4.52	4.33	4.31	4.12	3.96	4.08
To make the Internet work better	4.47	4.32	4.22	4.06	4.03	4.24
To keep up to date with upcoming developm.	4.14	4.14	4.33	4.17	3.80	4.22
My professional development	4.23	4.16	4.18	3.92	3.68	4.03
To advocate for certain principles	4.16	3.97	3.62	3.31	3.60	3.75
To represent my employer/clients	3.79	3.56	3.21	3.12	3.31	3.27
For the community and friendships	3.92	3.34	3.20	2.99	3.22	3.23
To bring in new business / find a new emplo	2.74	2.39	2.52	2.24	2.47	2.46
None of the above	3.43	2.68	2.56	2.66	2.78	2.88
)	2 4 3) 2 4 3) 2 4 3) 2 4 3) 2 4 3) 2 4
	Coding mean					

Coding mean by participant type:

Coding mean by employment:



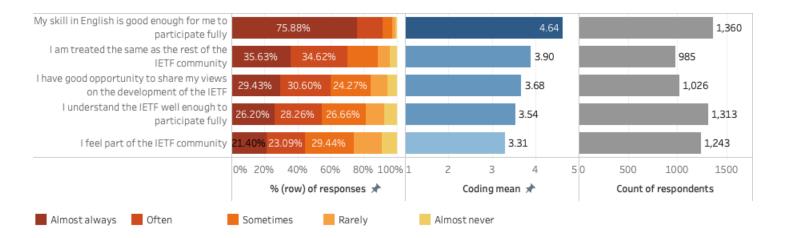
Commentary

- 32. Further work is required to identify options for future surveys that capture the motivation of individuals who answered "None of the above" as approximately 15% of those who answered this question gave that response.
- 33. Apart from those who are unemployed, the motivation of bringing in new business or finding a new employer is very low, and even among the unemployed is still one of the lowest motivations. Overall this is the lowest motivation by some way.
- 34. Representing employers/clients is a low motivation but, as might be expected, higher for employees, independent contractors and business owners.
- 35. There appears to be a strong correlation between the motivation of personal interest and the level of participation as it scores highest for regular, occasional and monitor participant types.

Q26. How true are the following statements about your participation in the IETF?

This is the same question asked in previous years, where respondents are asked to rate each option by frequency (almost always to almost never).

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Coding means by participant type:

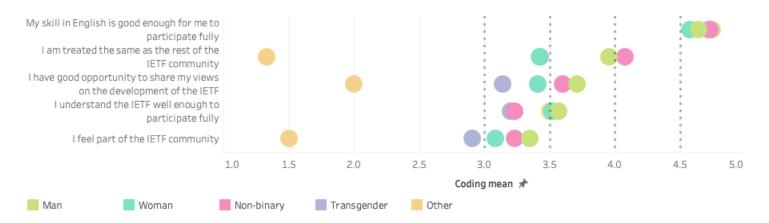
	regular	occasional	reader	monitor	new
My skill in English is good enough for me to participate fully	4.70	4.76	4.55	4.62	4.39
I am treated the same as the rest of the IETF community	4.23	4.00	3.85	3.65	3.55
I have good opportunity to share my views on the development of the IETF	4.31	3.90	3.50	3.29	3.27
I understand the IETF well enough to participate fully	4.54	4.03	3.43	3.00	2.47
I feel part of the IETF community	4.35	3.68	3.29	2.68	2.35
1	2 3 4 5	1 2 3 4 51	1 2 3 4 51	1 2 3 4 51	1 2 3 4 5
	Coding mean 🖈				

Coding means by region:

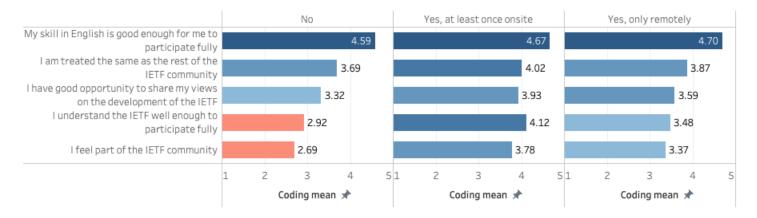
	Europe	North America (USA, Canada)	Asia	Oceania (Australia, New	Latin America (Mexico, Centra	Africa	Middle East
My skill in English is good enough for me to participate fully	4.59	4.89	3.91	4.92	3.93	4.58	4.63
I am treated the same as the rest of the IETF community	3.94	3.94	3.64	4.04	3.75	3.95	3.71
I have good opportunity to share my views on the development of I understand the IETF well enough	3.68	3.76	3.44	3.72	3.57	3.58	3.64
to participate fully	3.41	3.70	3.59	3.59	2.69	3.64	3.87
I feel part of the IETF community	3.24	3.36	3.32	3.31	2.68	3.83	3.67
	1 2 3 4 5 Coding mean	1 2 3 4 5 Coding mean	1 2 3 4 5 Coding mean	1 2 3 4 5 Coding mean	1 2 3 4 5: Coding mean	1 2 3 4 5: Coding mean	1 2 3 4 5 Coding mean

Coding means by gender:

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Coding means by meeting participation:

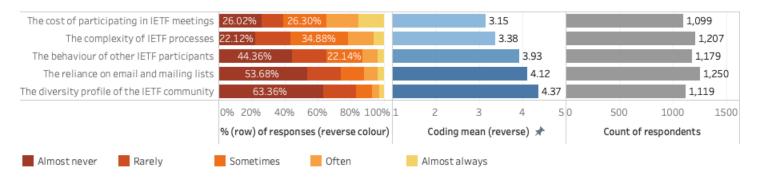


Commentary

- 36. While the overall score for "My skill in English is good enough for me to participate fully" is Excellent, there are regional differences as both Asia and Latin America score these much lower in the Acceptable range.
- 37. The five options include two knowledge based, English and understanding of the IETF, and three perception based. For the knowledge based options, there is little gap between men and women, but for the perception options there is a notable gap with women scoring these options lower. The biggest of these is for "I am treated the same as the rest of the IETF community".
- 38. New participants have Very Poorscores for "I understand the IETF well enough to participate fully" and "I feel part of the IETF community".
- 39. There is a strong correlation between participating in an IETF meeting and higher scores. While the full causal relationship is not known, it can be assumed that meeting participation contributes at least in part to this.

Q26a. Do any of the following hinder or deter you from participating in the IETF?

This was a new question for this survey, added to test various often heard anecdotal views on what hinders participation. This rating and coding means here are presented in reverse so that that at-a-glance "higher the better" impression remains correct.

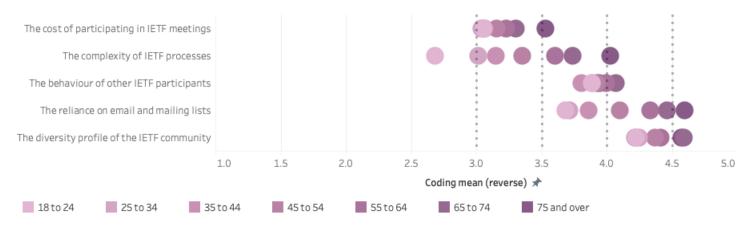


Coding means by participant type:

		re	egula	r		00	casio	nal			reade	er		r	nonit	or		n	iew	
The cost of participating in IETF meetings				3.36			3	3.13				3.18			3	.10			2.92	
The complexity of IETF processes				3.7	77			3.41				3.38				3.28			2.72	
The behaviour of other IETF participants				3.60				3.7	3		4	.05			4	.18				3.98
The reliance on email and mailing lists			4	4.28			4	1.22				4	.00		4	.14			3	.56
The diversity profile of the IETF community			4	4.32				4.43				4.22				4.49)		4.06	
	y 4.32 1 2 3 4 51				2	3	4	51	2	3	4	51	2	3	4	51	2	3	4 5	

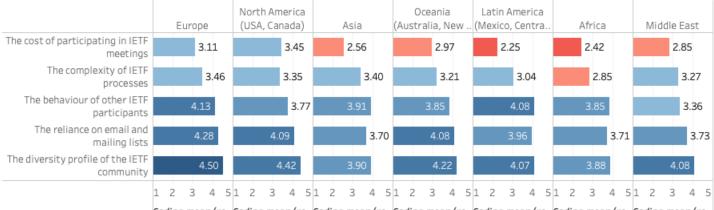
Coding mean (reverse)Coding mean (reverse)Coding mean (reverse)Coding mean (reverse)Coding mean (reverse)

Coding means by age:



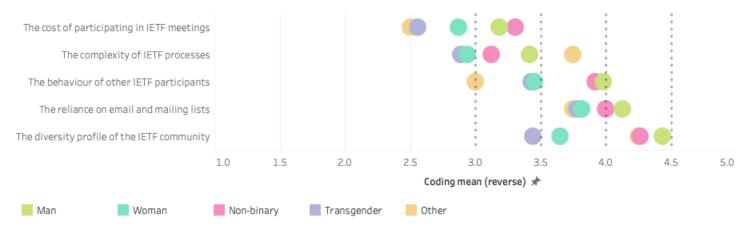
Coding means by region:

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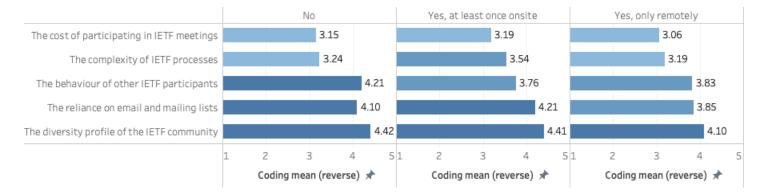


Coding mean (re.. Coding mean (re..

Coding means by gender:



Coding means by meeting participation:



Commentary

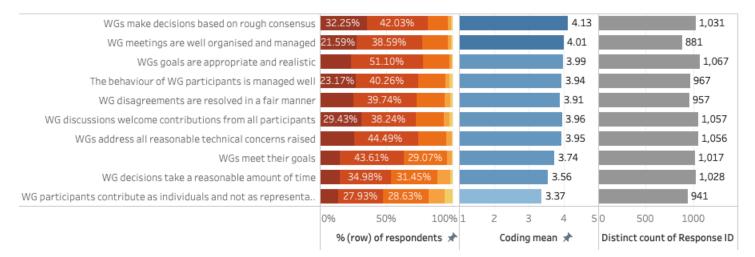
40. The greatest hindrance overall is the cost of participating in an IETF Meeting and when cross tabulated by respondent region, those from Latin America and Asia rate it

significantly lower (more of a hindrance) than those who rate it the least hindrance, from North America and Europe.

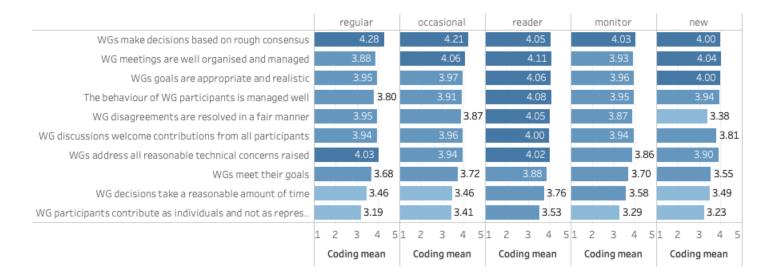
- 41. Overall the diversity profile of the IETF is not a hindrance, but when broken down by gender, women score this significantly lower than men.
- 42. Two of the choices are directly controlled by the IETF, the complexity of its processes and the reliance on email, whereas the other three are only indirectly influenced. When looked at by age, there is a wider spread in hindrance for the former two choice with younger participants more hindered than older, and both scored by the youngest as notable concerns. The three indirectly influenced choices have a much tighter spread but still with younger participants more hindered in these areas than older participants.
- 43. Those who have participated in an IETF are more hindered by the behaviour of other IETF participants than those who have not. This suggests that any focus on poor behaviour should focus on in-meeting participation.

Q27. How true are the following statements about the IETF working groups (WGs) that you participate in?

One new option was added to this question regarding the management of the behaviour of WG participants.



Coding means by participant type:



Coding means by leadership experience:

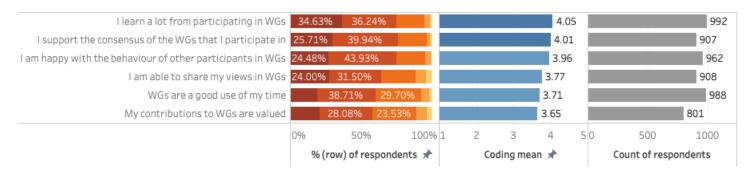


Commentary

- 44. Consensus again comes out the highest and the next six are all narrowly spread on the boundary of Acceptable/Good. Two lowest are "WG decisions take a reasonable amount of time" which scores Poor and echoes the results for Q25.
- 45. The lowest score is for "WG participants contribute as individuals and not as representatives of their employer" at 3.37 (Very Poor). This indicates that either more education is required here, or that this is an ideal that can never be met in practice.
- 46. The breakdown by leadership experience has previous leaders scoring the IETF lower on every aspect

Q27a. How true are the following statements about your participation in IETF working groups (WGs)?

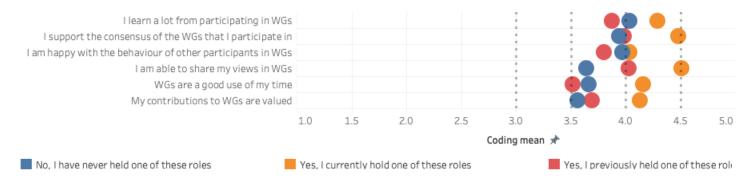
This question was added in 2022 to establish the internal perceptions of WG participants, distinct from their perceptions about the WG.



Coding means by participant type:

			reg	gular	r			occ	asior	nal			re	adei	r		r	nonit	or			ſ	new		
I learn a lot from participating in WGs				4.2	25				4.0	5				4.1	12			3.8	39				4.0	0	
I support the consensus of the WGs that I participate in				4.	35				4.0	3				3.93	3				3	8.82				3.8	3
I am happy with the behaviour of other participants in WGs				3.95	5				3.9	2				4.0	9			3.	94					3.8	1
I am able to share my views in WGs				4.	41				3.9	6					3.38				3.4	19			2.9	91	
WGs are a good use of my time				4.0	5					3.7	76				3.6	59			3.4	6				3.54	
My contributions to WGs are valued				4.0	2					3.6	57				3.44	1			3.5	51			3	.05	
	1	2		3	4	5	1	2	3	4	51	1 2	2	3	4	51	2	3	4	5	1	2	3	4	5
		Co	din	g me	ean			Codi	ng m	ean		Co	odin	g m	ean		Cod	ling	near	1	1	Codi	ng m	ean	

Coding means by leadership experience:



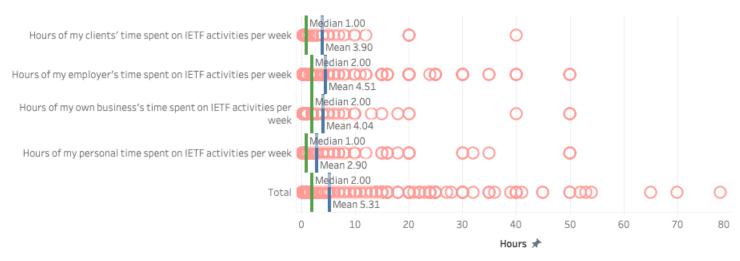
Commentary

47. The overall scores for the choices within this question are in a narrow range, largely scoring Acceptable.

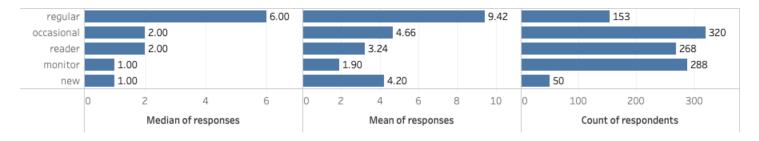
- 48. New participants score "I am able to share my views in WGs" and "My contributions to WGs are valued" notably lower than other participant types.
- 49. Those currently in a leadership role score their experience much higher on four of the six choices.

Q13. On average, how many hours per week do you spend on IETF activities?

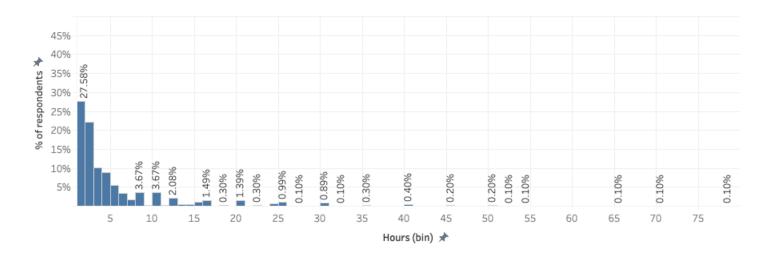
NOTE: For all of these charts, responses of zero are excluded. This should then be read as "Of those that spend hours of their personal time on IETF activities, then this is what they spend". One total exceeded 80 and was excluded from the analysis.



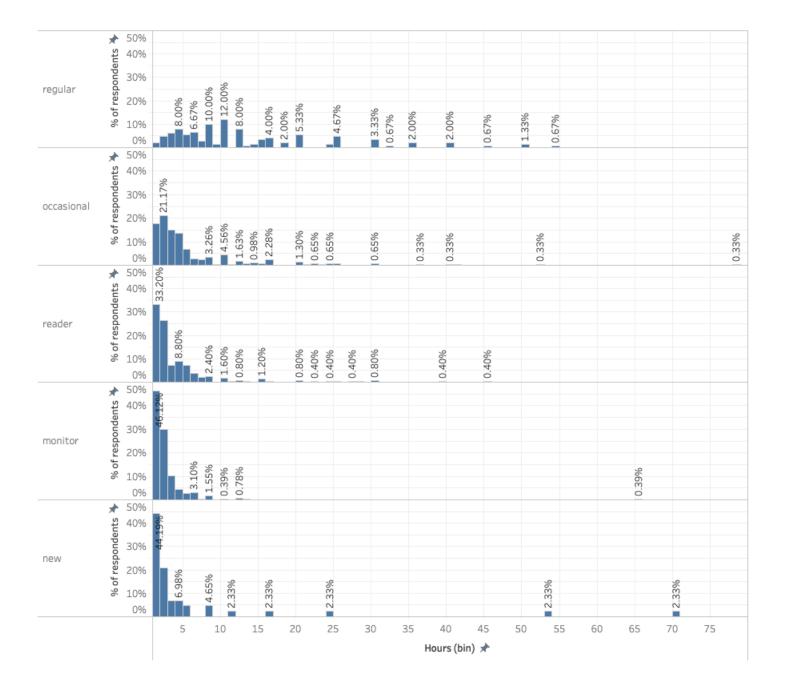
Cross-tabulated by participant type and only showing medians and means, with zeros excluded:



Binned by the total number of hours spent per week on IETF activities, on a continuous scale:



Cross-tabulated by participant type, binned by the total number of hours spent per week on IETF activities, on a continuous scale:



- 50. While the median total number of hours spent per week on IETF activities is relatively low at 2 hours, the top 10% spend 45 hours or more, the top 20% spend 30 hours or more and the top 30% spend 25 hours or more.
- 51. Regular participants on average spend much more time on IETF activities than other types of participant.

Q16. Over the next year do you expect to spend more or less time on IETF activities?

This question is a basic five point rating from much more to much less.

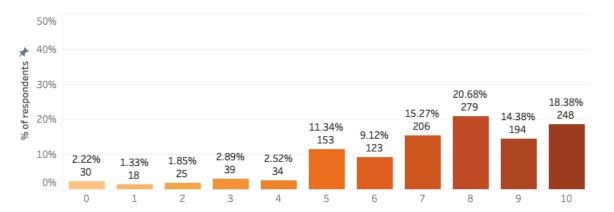
	27.63% 354			58.00% 743														3.32					
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0		
	% of respondents 🖈												Coding mean 🖈										
	Much more		More			About the same			Less	5		Much less									1		

Commentary

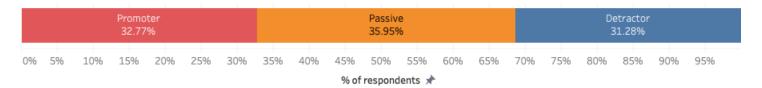
52. This indicates that overall people expect to spend more time on IETF activities next year, but this is almost exactly the same result as in 2022 so this may be the neutral setting for forward expectations.

Q20. How likely are you to recommend IETF participation to a friend or colleague?

This uses the Net Promoter Score methodology where people are asked to rank likelihood on a scale of 0-10.

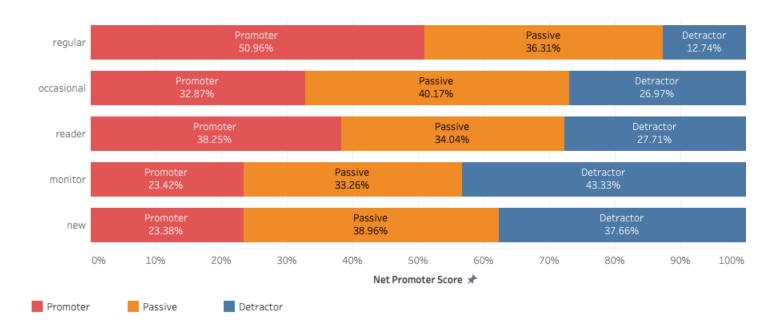


NPS categories:

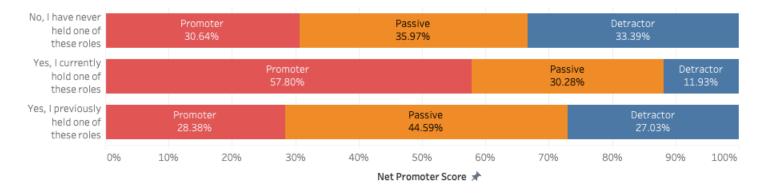


NPS by participant type:

IETF Administration LLC



NPS categories by leadership experience:



Commentary

- 53. The NPS score is promoters minus detractors, which is greater than 0 for the overall response. This is considered a good result by proponents of NPS.
- 54. This is basically the same overall result as in 2022 but that was a significant improvement over 2021.
- 55. Both regular participants and those in leadership roles have an NPS score well over 20, which is considered a great score.
- 56. Those who are new to the IETF, those who only monitor lists and those who have never held a leadership role, all give an NPS score below 0, which is not good at all.

Questions: Previous participants

These questions were only asked of those who self-selected 'previous participant' in question 1.

25 April 2024

Q17. In what year did you cease being a regular participant in the IETF?

This again had a constrained set of years from 1986 to 2022, that could be given as an answer. This was an error as 2023 should have been included. This data was analysed by age, region and gender, but the numbers are too small for any inference to be drawn.



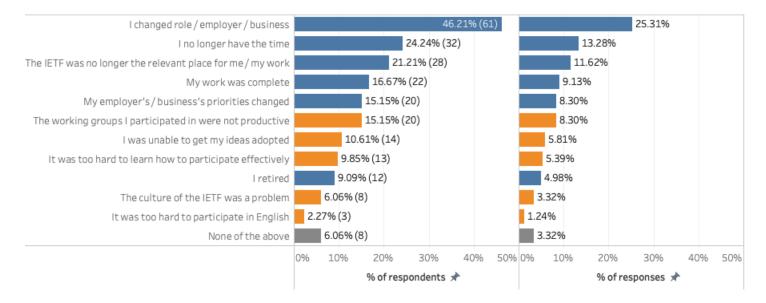
Commentary

- 57. Given the mistake in not including 2023 in the list of possible answers, it is not clear how many of those that answered 2022 did so because 2023 was not available.
- 58. The unusual spike for 2020 may be related to COVID and the cessation of global travel.

Q18. Why did you cease being a regular participant in the IETF? (check all that apply)

This question asks for the respondent to select any number of options, without any rating. The list of options are those that have been raised directly by individuals in various fora. No cross-tabulations are presented as the numbers are too small.

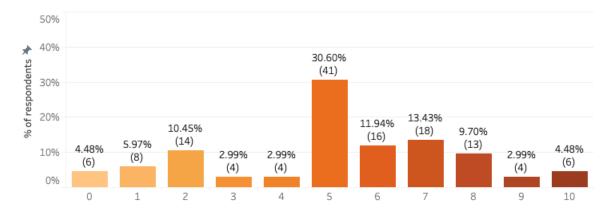
The colour coding below separates out those options that are outside of the control of the IETF (blue) from those that we may be able to influence (orange).



- 59. The primary factors are all outside of the control of the IETF.
- 60. Of those under the control of the IETF, the most prominent are artefacts of the IETF working processes not behaviour.

Q19. How likely are you to participate in the IETF at some point in the future?

This question is only asked of those that used to participate but no longer do. It uses a 0-10 scale.



Commentary

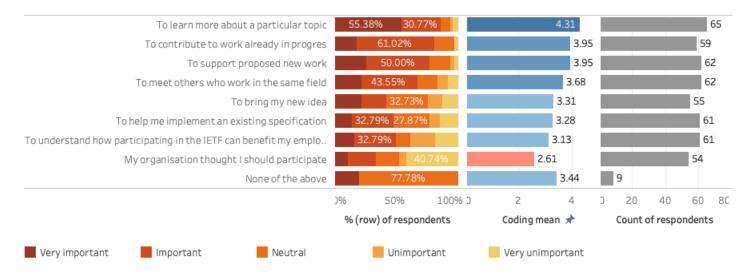
61. This question does not really tell us much and is probably an unfair question to ask, so it will not be asked in future surveys.

Questions: New Participants

This question was only asked of those who self-selected 'new participant' in Q1.

Q11a. How important are the following reasons for you starting to participate in the IETF?

This question presented a list of options, as presented in previous surveys, and this time asked respondents to rate them by importance.



Commentary

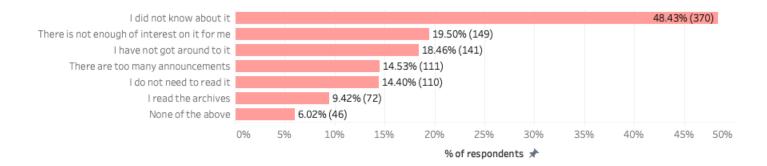
- 62. The number who answered "None of the above" and the importance coding mean for that, indicate that there is a gap in the options provided that needs exploring.
- 63. The high coding means for motivations related to a specific piece of work or topic, whether new or existing, suggest that extrinsic, teleological factors dominate motivation. If there is a group of people who join without a specific end goal in mind, then this is no more than approximately 15% of new participants.
- 64. The low scores for organisational factors are notable.

Questions: Communication and Participation Preferences

These are a small number of questions to understand individual preferences for communications and participation.

Q21. Why don't you subscribe to ietf-announce@ietf.org (the general announcement list)? (check all that apply)

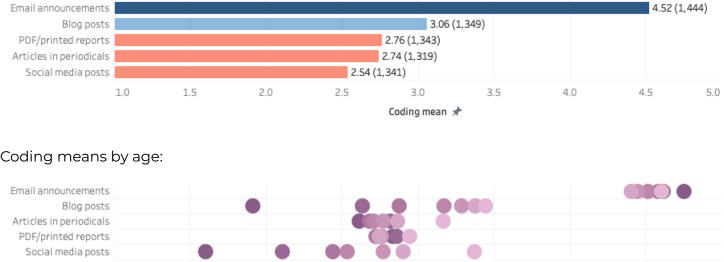
This question was only asked of those that indicated in Q8 that they do not subscribe to ietf-announce. Respondents were asked to select any number of options with no rating. It is unlikely that this question will be asked in future surveys.



- 65. A large number of respondents do not know about ietf-announce, which is not surprising given that there is no advertising or promotion of the list.
- 66. Two of other top factors relate to relevance, which is expected to be tackled with the proposal for a new important news list (see Q8).

Q22. How do you prefer to be informed of IETF activities?

This question asked respondents to rate a set of options by preference, from strongly preferred to strongly not preferred. This question is unchanged from 2021 and 2022.



2.5

45 to 54

3.0

55 to 64

Coding mean 🖈

3.5

65 to 74

4.0

4.5

75 and over

2.0

Coding means by age:

Coding means by participant type:

25 to 34

1.0

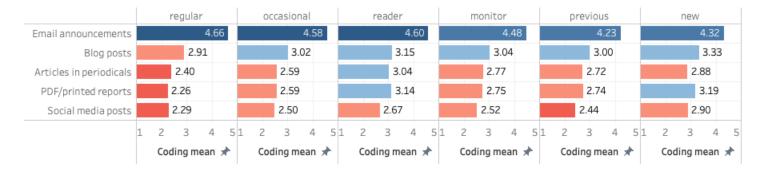
1.5

35 to 44

18 to 24

5.0

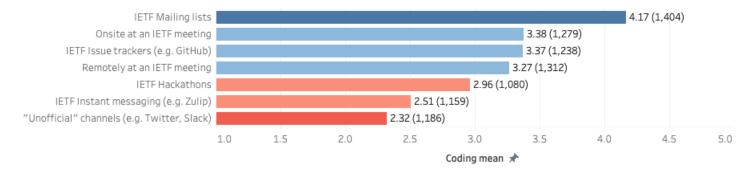




- 67. Overall, email is the preferred method to be informed by a very long way and however it is broken down.
- 68. Online content, including both blog posts and social media posts, have a very wide spread of preference, consistent with age range the younger the participant, the more they prefer these other methods.

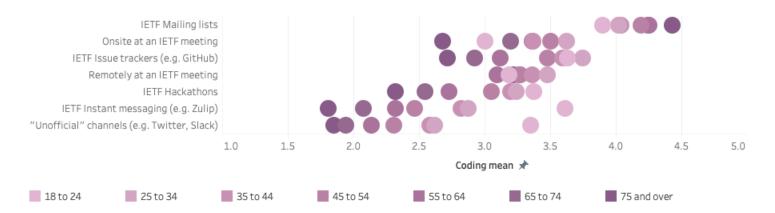
Q24. How do you prefer to participate in the discussions and decisions of the IETF?

This question asked respondents to rate a set of options by preference, from strongly preferred to strongly not preferred. This question is unchanged from 2021 and 2022.

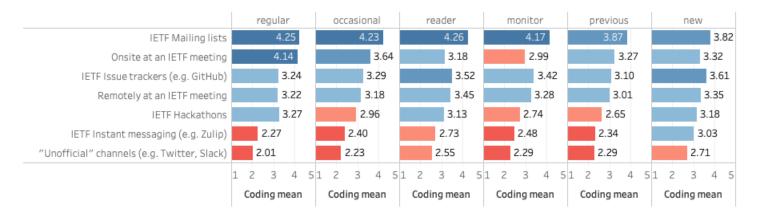


Coding means by age:

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Coding means by participant type:



Commentary

- 69. Email is the most preferred method of participation by some way. Only new participants score any other method close, issue trackers.
- 70. Issues trackers have jumped in preference from fourth in 2021 to almost joint second with onsite meeting participation.
- 71. The age-related spread for most of the options, except for mailing lists and remote meeting participation, is very wide and generally consistent by age range the younger the participant, the more they prefer these other methods. This is particularly acute for issue trackers, hackathons, instant messaging and social media.

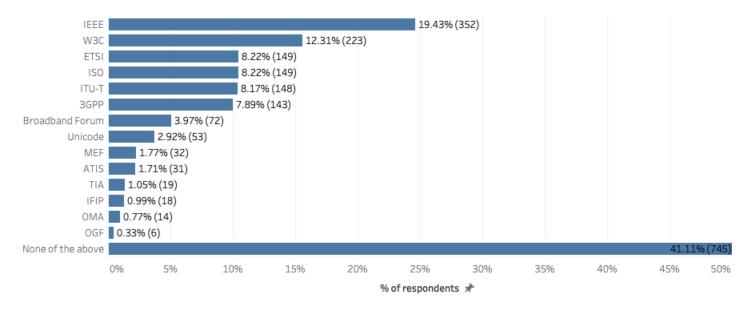
Questions: Other Standards Development Organisations

These two questions aim to help understand how IETF participants also work in other SDOs and to provide some basic comparative analysis.

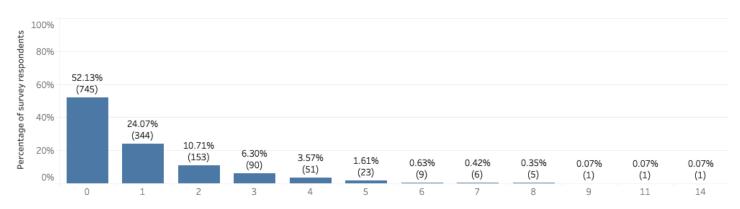
Q29. Which other standards setting organisations do you participate in? (check all that apply)

Respondents were asked to select other SDOs from a list with no rating of their participation. The list of choices is curated by the IESG and only includes those they consider the most relevant to the IETF.

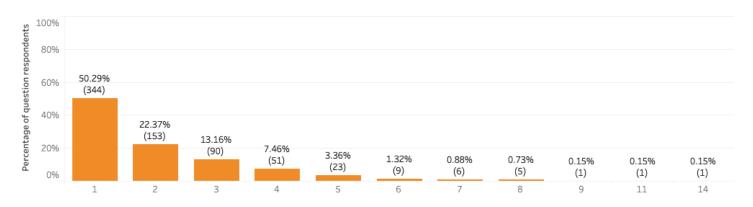
The following chart does not include respondents who answered "none of the above" as that would show a misleading percentage. This is better captured on the next chart.



The following chart shows the distribution of the number of other SDOs participated in, per respondent (as one respondent answered that they participated in all 14 listed, the full set of answers for that respondent were carefully checked for signs of a bot answering or deliberate data corruption, but none were found). Those who answered "None of the above" are shown as the zero column.



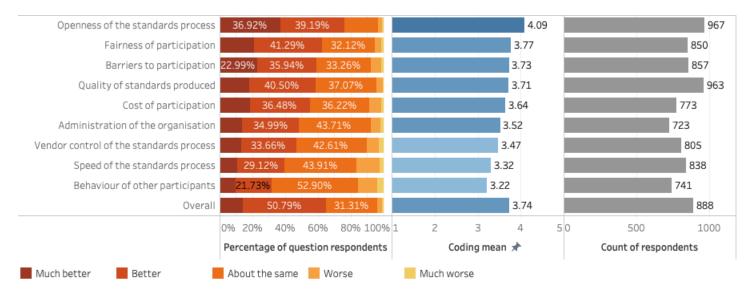
Similar distribution, but only for those who participate in 1 or more other SDOs:



- 72. Almost half of IETF participants (~48%) participate in at least one other SDO. Given that the choices presented are a non-exhaustive set of SDOs, this is lower than the true level.
- 73. The ordering of other SDOs is very similar to the results from 2022 with the IEEE a clear standout, then the W3C and then a close group of ITU-T, ETSI, ISO and 3GPP, with the others trailing far behind.

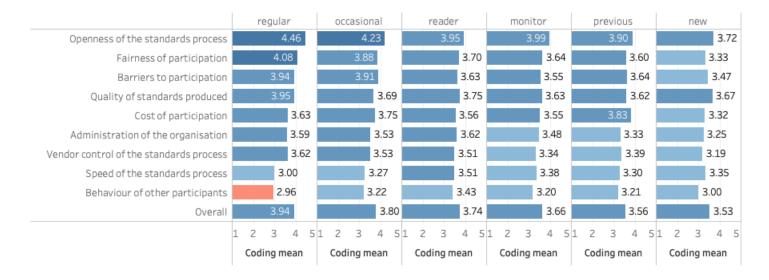
Q30. How well do you think the IETF compares to other standards settings organisations for the following aspects?

Respondents were asked to rate a series of aspects of the IETF using a comparative scale from much better to much worse. This question was not restricted to those that listed one or more SDOs in the previous question as respondents may have experience of an SDO not listed.



Coding means by participant type:

IETF Administration LLC



Commentary

- 74. A number of respondents made contact to indicate that "Vendor control of the standards process" could be interpreted either as this being a good thing or a bad and therefore this answer is not considered reliable.
- 75. For comparative purposes, a coding mean greater than three means that the IETF is rated as better than other SDOs. Overall this is true for all aspects.
- 76. Speed of the standards process is only rated marginally better, confirming the results of Q25, and rated the same as other SDOs by regular IETF participants.
- 77. Regular IETF participants rate behaviour lower than that in other SDOs.

Next steps

The results of this survey will be used by the IESG and IETF Administration LLC over the next year as they plan and carry out their work. In particular, the survey will be regularly referenced in decision making to ensure a data-driven approach is taken that emphasises addressing areas that the evidence shows are high priority concerns reducing time spent on those the evidence shows are not actually concerns.

This survey will be repeated annually, with some adjustments, in order to build up a time series of data and to see whether the high priority concerns are being addressed. Finally, thank you to all those who took part in this survey and provided us with such valuable feedback. Please raise any questions or feedback on the <u>admin-discuss@ietf.org</u> mailing list.