

IETF Community Survey 2024

Introduction	2
Key Findings	2
Methodology	4
Survey design principles	4
Changes since the last survey	5
Distribution	6
Data validation	7
Analysis of results	7
Population	7
Percentage analysis	7
Coding, coding means and applying a value judgement	8
Statistical significance	8
Charts	9
Results and Analysis	9
Totals	9
Testing for selection bias	9
Questions: Organisational Demographics (part 1)	9
Q1. How would you best describe your participation in IETF mailing lists?	9
Q1a. Have you participated in an IETF Meeting?	10
Questions: Demographics	11
Q2. In what region do you live?	11
Q3. How old are you?	12
Q4. What is your gender? (check all that apply)	13
Q6. What is your employment status? (check all that apply)	15
Q6a. What sectors do you work in? (check all that apply)	16
Questions: Overall Perceptions	18
Q25. How often are the following statements correct about the work of the IETF?	18
Q28. How important is the IETF?	19
Questions: Organisational Demographics (part 2)	20
Q7b. Have you ever held a leadership role in the IETF (IESG, IAB, IRSG, LLC Board, Trustee, IAOC, WG Chair, Nomcom Chair)?	20
Q9. Do you have a IETF Datatracker account (https://datatracker.ietf.org, used to authenticate for meetings, submit I-Ds, etc)?	22
Q11. Approximately, in what year did you first participate in an IETF meeting or subscribe to an IETF mailing list?	22
Questions: Participation	24
Q12. How important to you are the following for your participation in the IETF?	25
Q26. How often are the following statements correct about your participation in the IETF?	27
Q26a. Do any of the following hinder or deter you from participating in the IETF?	30
Q27. How often are the following statements correct about the IETF working groups (WGs) that you participate in?	33

<u>Q27a. How often are the following statements correct about your participation in IETF working groups (WGs)?</u>	<u>35</u>
<u>Q13. On average, how many hours per week do you spend on IETF activities?</u>	<u>36</u>
<u>Q20. How likely are you to recommend IETF participation to a friend or colleague?</u>	<u>37</u>
<u>Questions: Previous participants</u>	<u>39</u>
<u>Q17. In what year did you cease being a regular participant in the IETF?</u>	<u>39</u>
<u>Q18. Why did you cease being a regular participant in the IETF? (check all that apply)</u>	<u>39</u>
<u>Questions: Communication and Participation Preferences</u>	<u>40</u>
<u>Q22. How do you prefer to be informed of IETF activities?</u>	<u>40</u>
<u>Q24. How do you prefer to participate in the discussions and decisions of the IETF?</u>	<u>41</u>
<u>Questions: Other Standards Development Organisations</u>	<u>42</u>
<u>Q29. Which other standards setting organisations do you participate in? (check all that apply)</u>	<u>42</u>
<u>Q30. How well do you think the IETF compares to other standards settings organisations for the following aspects?</u>	<u>44</u>
<u>Corrections to reports from previous surveys</u>	<u>45</u>
<u>2023 Survey</u>	<u>45</u>
<u>Improvements for future surveys</u>	<u>46</u>
<u>Next steps</u>	<u>47</u>

Introduction

This is the fourth 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 2023 survey was accompanied by a similar report¹.

Key Findings

This is inevitably an imperfect survey as the respondents are self-selected and the IETF has many more people subscribed to its mailing lists than are active in any one year. However, this is now the fourth year for this survey and some consistent results can be seen across the years.

1. The IETF is successfully delivering the goals and principles it sets itself in its mission statement

As clearly shown in [Q25](#) and [Q30](#), IETF participants rate the output of the IETF highly across the key areas of quality and relevance, for having been produced in an open way, and for meeting community consensus. This strongly matches the IETF Mission Statement ([RFC 3935](#)):

The mission of the IETF is to produce high quality, relevant technical and engineering documents that influence the way people design, use, and manage the Internet in such a way as to make the Internet work better.

As well as matching some of the cardinal principles set out in the same RFC:

- *Open process*
- *Technical competence ("engineering quality")*
- *Volunteer Core*
- *Rough consensus and running code*

2. The single biggest process issue in the IETF is the time cost in getting things done, both at the personal and organizational levels

At the personal level, [Q26a](#) reports the time to read emails and documents as the single biggest hindrance to participation, while [Q27a](#) has a relatively low score for WGs being a good use of time.

¹ <https://www.ietf.org/blog/ietf-community-survey-2023/>

At the organizational level, [Q25](#) identifies the time to produce RFCs as a problem. This is supported by the views of the speed of the standards process compared to other organizations in [Q30](#), which is still better but not by much. In [Q27](#) the statement that WG decisions take a reasonable amount of time has one of the lowest scores of support.

3. The IETF still has a low level of participation by women, particularly among regular participants, and they report a different experience from men.

[Q2](#), [Q3](#) and [Q4](#) tell us that the IETF is still predominantly older men from Europe and North America with women a very small percentage of participants.

Women report in [Q26](#) a worse experience than Men when asked if they are treated the same as the rest of the IETF, have good opportunity to share their views and feel part of the IETF community. In other aspects, such as understanding of processes or treatment within WGs, no difference is reported.

4. The demographics and participation preferences of new participants are quite different from those of existing regular participants

[Q2](#), [Q3](#) and [Q4](#) tell us that new participants have a notably different composition by age and gender from other participants, and a small difference by region.

There are a number of questions where there is a pronounced spread of rating by age: [Q26a](#) for being hindered by the reliance on mailing lists, [Q22](#) for a preference for hearing about the IETF in blog posts and social media posts, and [Q24](#) for almost all non-email forms of participation.

5. Regular participation is necessary to get the most from the IETF and that takes a lot of effort

The IETF is, by design, a participative organization not a consultative one and so, perhaps unsurprisingly, regular participants get far more out of it. [Q12](#) shows that regular participants are more strongly and more broadly motivated, in [Q26](#) and [Q27a](#) they rate personal experience higher than others who participate less and in [Q27](#) their rating of how they are valued than the self-rating of others.

As shown in [Q1a](#) there is a strong correlation between regular participation and meeting participation. [Q26](#) also scores personal experience higher for those who have participated in an IETF meeting.

However, the downside as shown in [Q13](#), is that regular participants spend a median of 9 hours per week on IETF activities compared to just 2 hours for those who only monitor/read IETF mailing lists.

6. Currently, it takes many years to learn IETF processes and they are generally considered very complex and not as effective as they could be

In [Q25](#) participants rate the effectiveness of IETF processes as only acceptable and in [Q26](#) give a similar score for their understanding of IETF processes. [Q26a](#) identifies the complexity of IETF processes as a moderate hindrance to participation.

[Q26](#) provides a useful insight that the longer someone has been participating in the IETF the better their understanding, suggesting that these processes need to be learnt by experience not other methods, and that it takes 15-20 years of participation for someone to feel they have a good understanding of processes.

7. Poor participant behaviour, while not something to be ignored, is not a major issue

In [Q27a](#) participants give a good score for the behaviour of other WG participants, in [Q27](#) they give acceptable/good scores for how well the behaviour of WG participants is managed and how well disagreements are resolved. [Q18](#) puts the culture of the IETF as a very minor reason for people ceasing to participate in the IETF.

However, at the IETF level in [Q26a](#) the behaviour of other participants is only scored at acceptable and in [Q30](#) participants only rate the IETF slightly higher than other SDOs for the behaviour of participants.

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.

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.

Changes since the last survey

A number of questions were removed following the last survey:

- *Q5. How do you rate your skills with the English language?* - A general assessment of skills has no value unless the impact can be understood, and there is already a separate sub-question in *Q26a. Do any of the following hinder or deter you from participating in the IETF?* about the use of English.
- *Q8. Which of the following general IETF mailing lists are you subscribed to?* - This was of little use in previous surveys.
- *Q11a. How important are the following reasons for you starting to participate in the IETF?* - This was only asked of new participants but instead of this approach, the reasons listed here were merged into the very similar *Q12. How important to you are the following for your participation in the IETF?* that is asked of all respondents.
- *Q19. How likely are you to participate in the IETF at some point in the future?* - This was removed as future predictions are rarely accurate and so this might give a misleading view.
- *Q21. Why don't you subscribe to ietf-announce@ietf.org (the general announcement list)? (check all that apply)* - With Q8 removed, this question was no longer relevant.

Several questions were amended:

- Q25. How true are the following statements about the work of the IETF? (emphasis added) reworded to Q25. How often are the following statements correct about the work of the IETF?
- Q26. How true are the following statements about your participation in the IETF? (emphasis added) reworded to Q26. How often are the following statements correct about your participation in the IETF?
- Q27. How true are the following statements about the IETF working groups (WGs) that you participate in? (emphasis added) reworded to Q27. How often are the following statements correct about the IETF working groups (WGs) that you participate in?
- Q27a. How true are the following statements about your participation in IETF working groups (WGs)? (emphasis added) reworded to Q27a. How often are the following statements correct about your participation in IETF working groups (WGs)?
- Q28. How important is the IETF for the development of the Internet? was shortened to Q28. How important is the IETF?
- Q12. How important to you are the following reasons for participating in the IETF? was reworded as Q12. How important to you are the following for your participation in the IETF?. Additionally:
 - A number of the choices were reworded to match how they appear in post-meeting surveys, such as "To make the Internet work better" reworded to "Making the Internet work better".
 - The choice "Meeting others who work in the same field" was added from the deleted Q11a.
 - The choice "To bring in new business / find a new employer" was removed as this has previously been reported as very unimportant.
- The choice "My skill in English is good enough for me to participate fully" was removed from Q26. How often are the following statements correct about your participation in the IETF? as it didn't fit with the rest of that question and it is better covered in Q26a. Do any of the following hinder or deter you from participating in the IETF?
- The choices "The time to read emails and documents" and "The reliance on English language" were added to Q26a. Do any of the following hinder or deter you from participating in the IETF?
- The choices "ECMA International", "FIDO Alliance" and "OpenID Foundation" were added to Q29. Which other standards setting organisations do you participate in? (check all that apply) following participant feedback.
- The choice "Vendor control of the standards process" in Q30. How well do you think the IETF compares to other standards settings organisations for the following aspects? was reworded to "Independence of the standards process" following participant feedback.

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 53,105 addresses were silently subscribed to a mailing list with all

members moderated to prevent unwanted use. This is notably more than the 49,078 that were subscribed for the 2023 survey, but no investigation was carried out to understand this.

A pre-announcement² was sent to ietf-announce@ietf.org and then the invitation to participate³ was sent to the survey list on 20 December 2024. A reminder⁴ was sent on 5 January 2025 and a final reminder⁵ on 13 January 2025.

75 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 (Qualtrics), 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 1 was deleted as a result. A further 132 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 53,030 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%.

² <https://mailarchive.ietf.org/arch/msg/ietf-announce/toKq4pYerfHprNzr5L3fQosz99w/>

³ <https://mailarchive.ietf.org/arch/msg/ietf-surveys/QbTqFqm6XC4jLWenED--ZpPf3s/>

⁴ https://mailarchive.ietf.org/arch/msg/ietf-surveys/Tw3teVtsa03zdB1cI_HuWIAwwg/

⁵ <https://mailarchive.ietf.org/arch/msg/ietf-surveys/zBHBceWTEgCJOLU4cAhGgKINY6I/>

- **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

The codes are:

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

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 service⁶.
- Comparison of proportions using a public web service⁷.

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

53,030 email addresses were successfully contacted. 1441 valid responses were received, with 56 excluded for non-participation (see Q1 below), leaving 1385 used responses, a response rate of 2.6% (well down from 3.7% in 2023), giving a maximum margin of error of +/- 2.60% (up from 2.26% in 2023).

Testing for selection bias

In Q1 11.99% of respondents answered "I regularly post". With a margin of error of 2.60%, this indicates a total somewhere between 4,980 and 7,737 people who regularly post to IETF mailing lists. However, a separate analysis has identified that messages sent to IETF mailing lists during 2024 came from 2,717 individual email addresses. This indicates that there is clear selection bias towards more regular participants.

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?

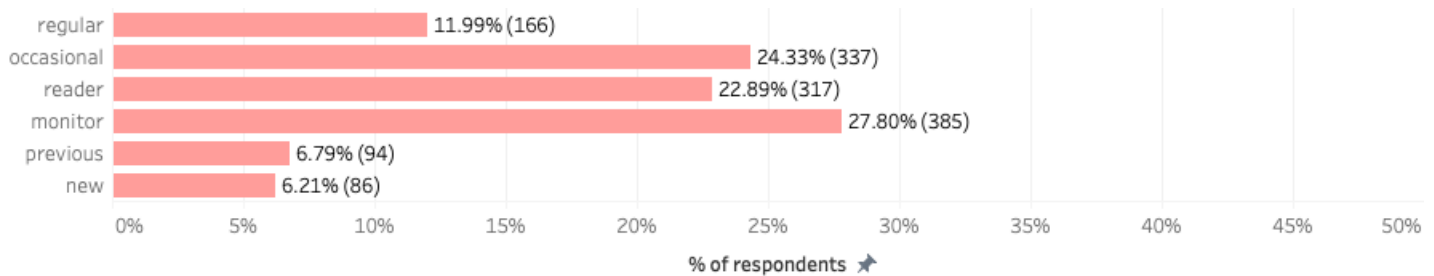
This was the one mandatory question for this survey, with respondents asked to self select a single participant type with textual guidance on those types:

⁶ https://www.medcalc.org/calc/comparison_of_means.php

⁷ <https://www.socscistatistics.com/tests/ztest/default2.aspx>

- 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 ("previous")
- I have recently subscribed and I am still deciding how I fit in ("new")
- 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.

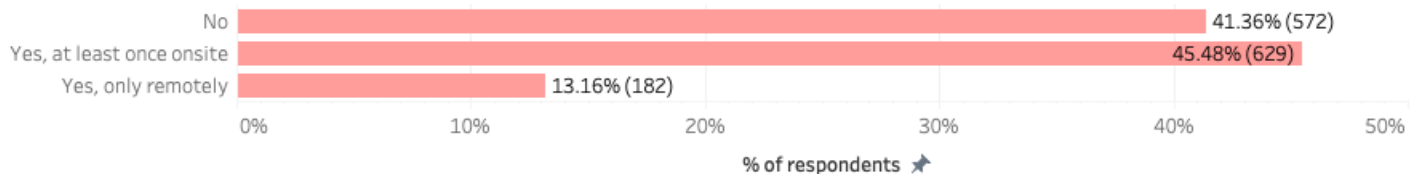


Commentary

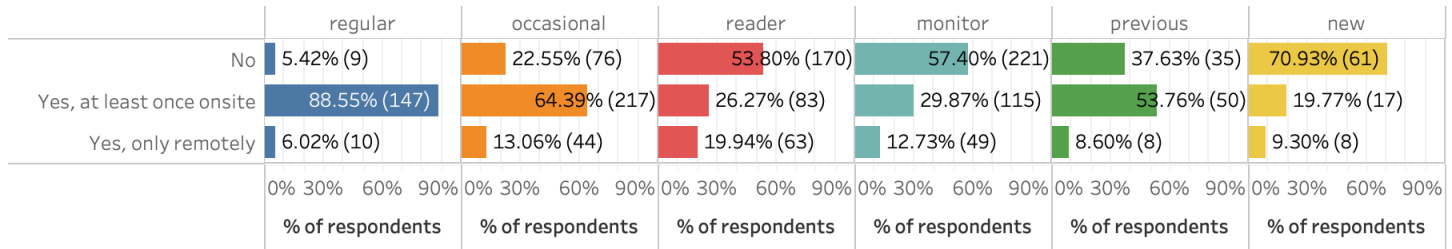
1. Together, readers (those who read but never post) and monitors (those who occasionally read but never post) make up at least 47% of IETF mailing subscribers. This indicates that the impact of the IETF is sufficiently important that people need to watch as RFCs are developed rather than wait for the final product.
2. IETF mailing lists need some tidying up, giving people an easy way to unsubscribe.
3. Note the section above on [Testing for selection bias](#).

Q1a. Have you participated in an IETF Meeting?

This question is not time-bound and as the IETF has been meeting since 1986, some people could have not participated in many years and yet still answered yes to this question.



Normalised by participant type:



Commentary

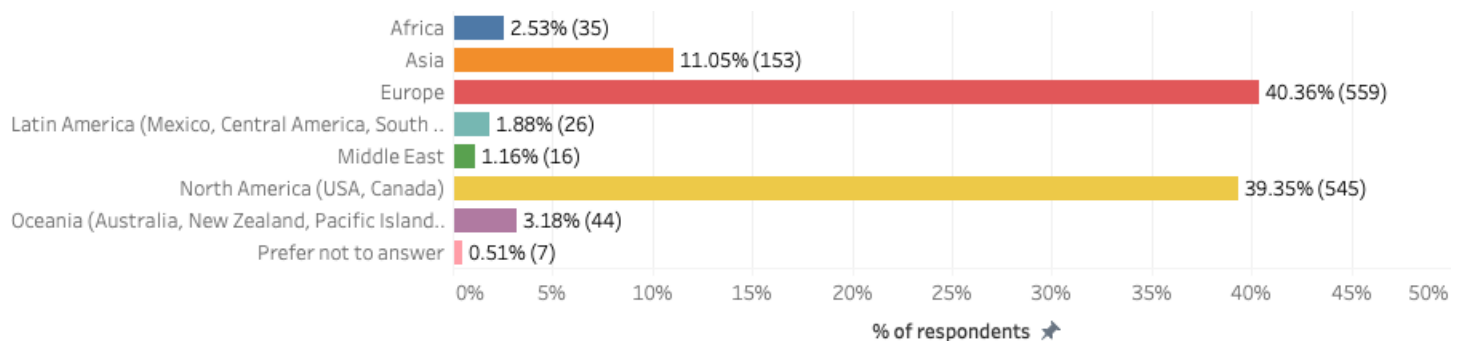
- As with previous versions of this survey, the number of respondents who have participated in a meeting is a high proportion of participants. This perhaps indicates how important participants consider IETF meetings to be.
- There is a strong correlation between regular participation and meeting attendance. Even those groups with a lower degree of participation still have a notable fraction who have participated in an IETF meeting.

Questions: Demographics

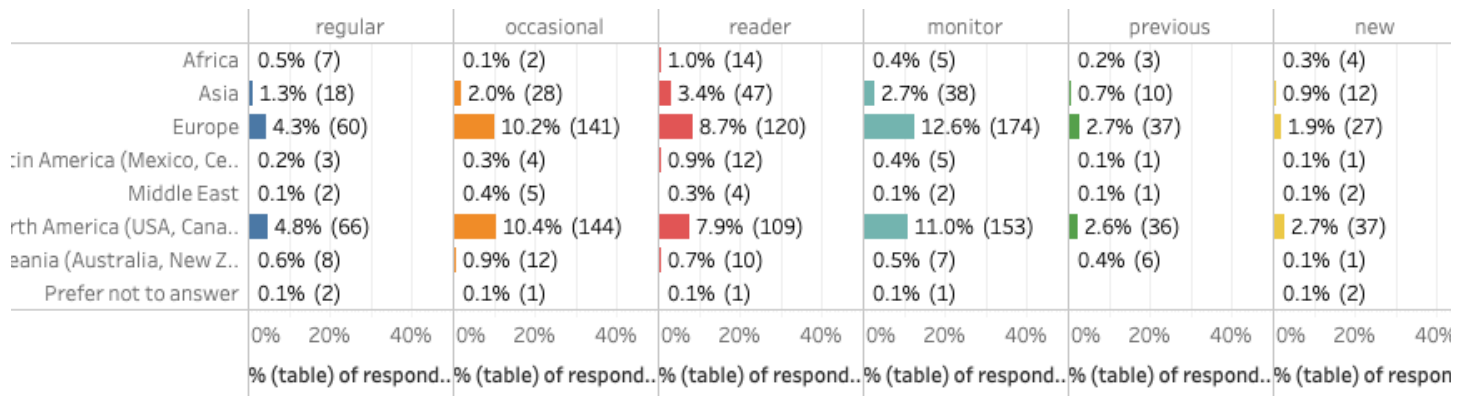
These questions have been asked for the dual purpose of understanding the broad makeup of the IETF community, and how the views and experiences of the community differ by demographics as such differences may indicate problems that need addressing.

Q2. In what region do you live?

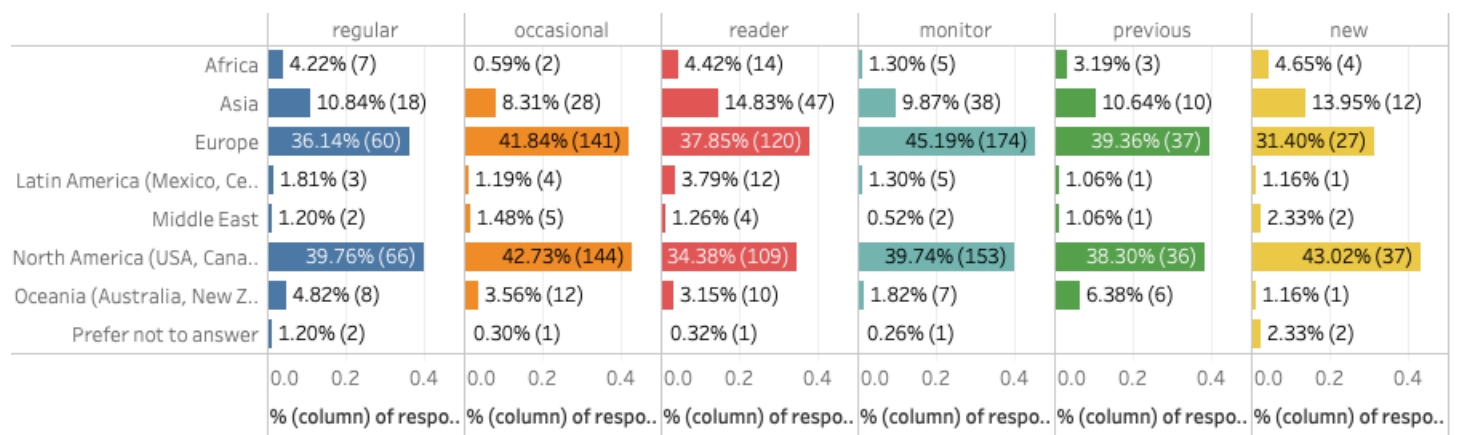
This question uses the standard IETF regions and is the same question asked in most of our other surveys, such as post-meeting surveys.



Cross-tabulating this by participant type gives:



Normalising that cross-tabulation by participant type:

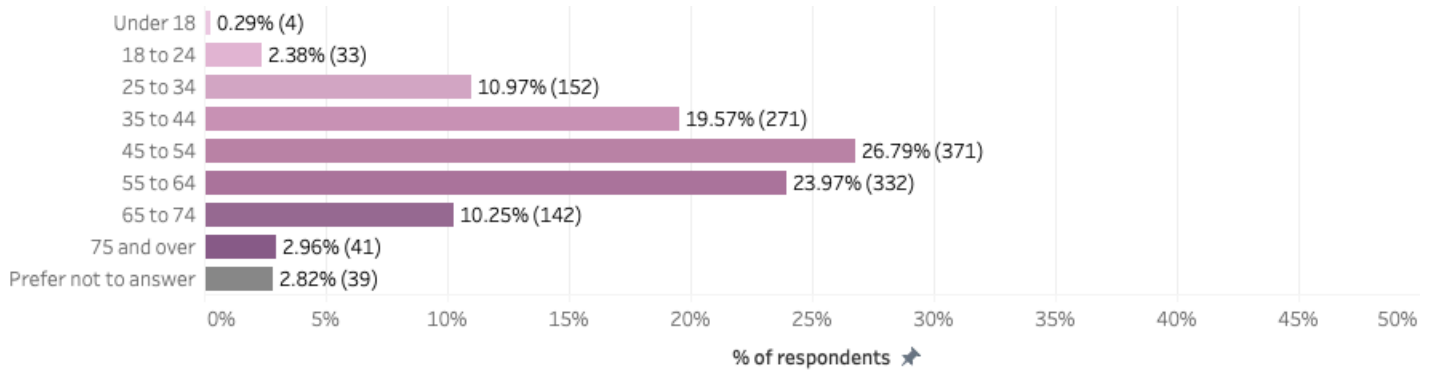


Commentary

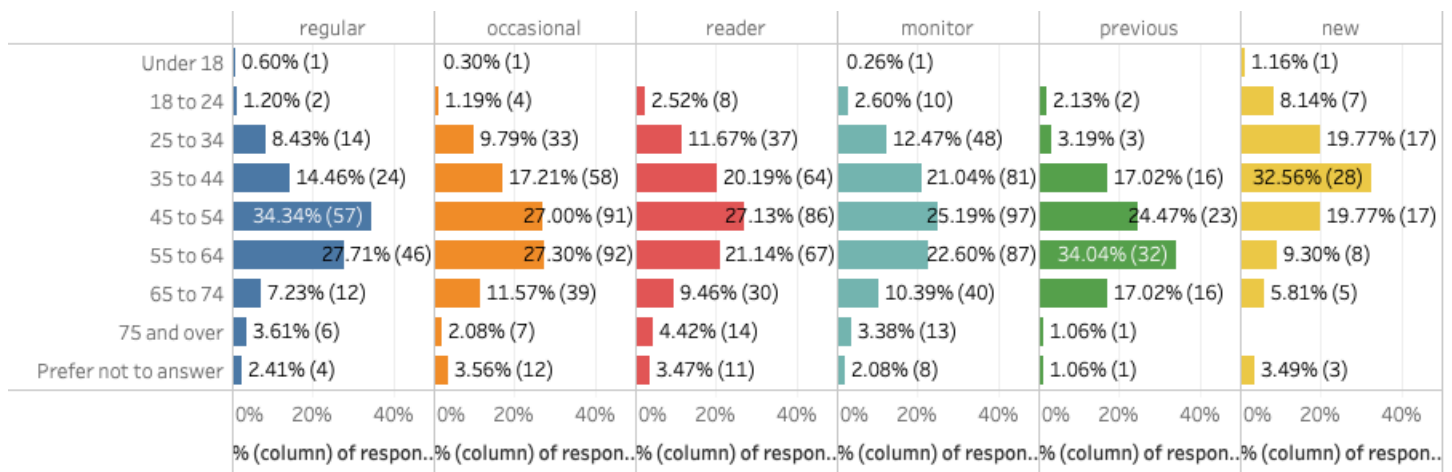
- The overall regional spread, with Europe and North America dominating, is consistent with that seen in previous versions of this survey and post-meeting surveys.
- The spread of new participants is notably different from that of existing participants, with more from the US and Asia, and fewer from Europe. This is different from 2023, indicating that there is no particular trend here.

Q3. How old are you?

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



Normalised cross-tabulation by participant type:

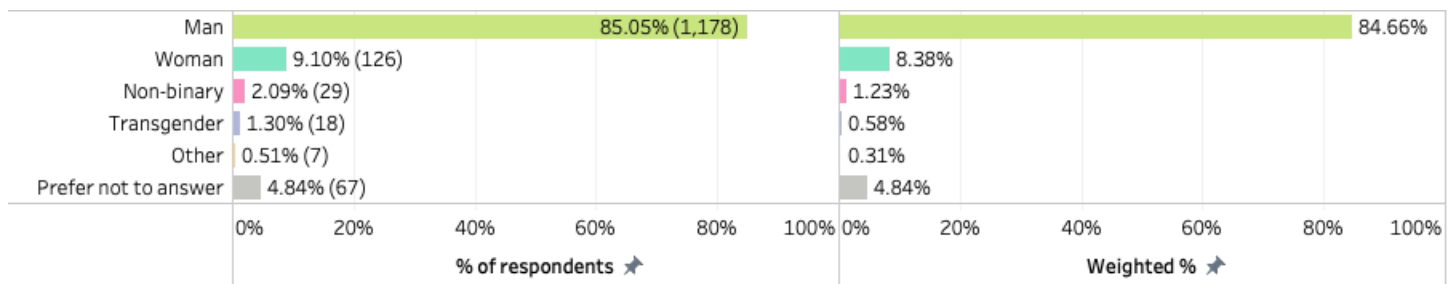


Commentary

- 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.
- New participants are on average much younger than existing participants.

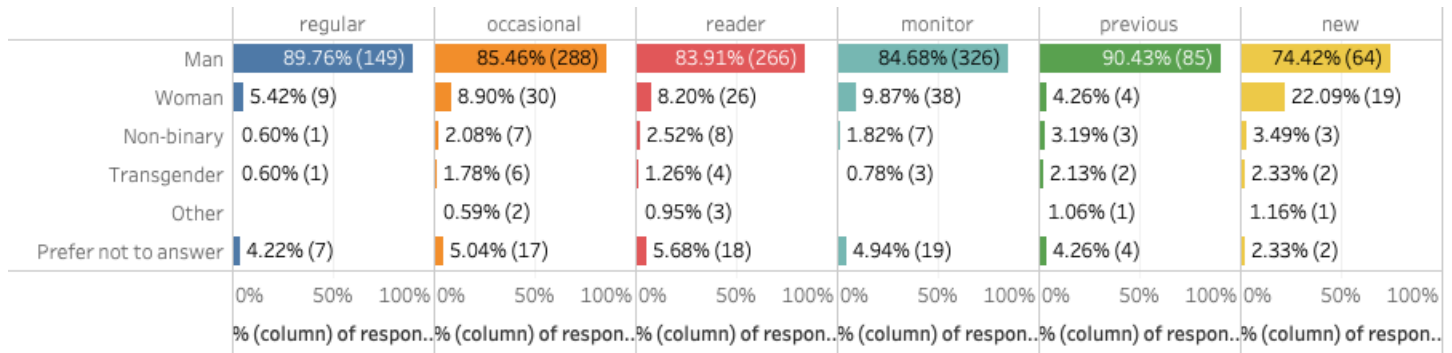
Q4. What is your gender? (check all that apply)

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

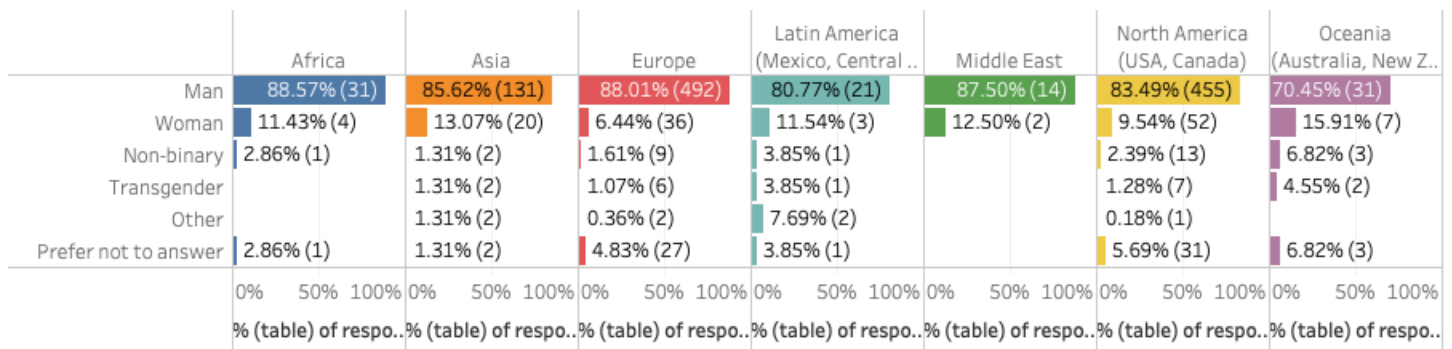


As the focus here is on respondent views, not proportionality between respondents, the percentage of respondents is used throughout the rest of this survey, which will generally mean totals in excess of 100%:

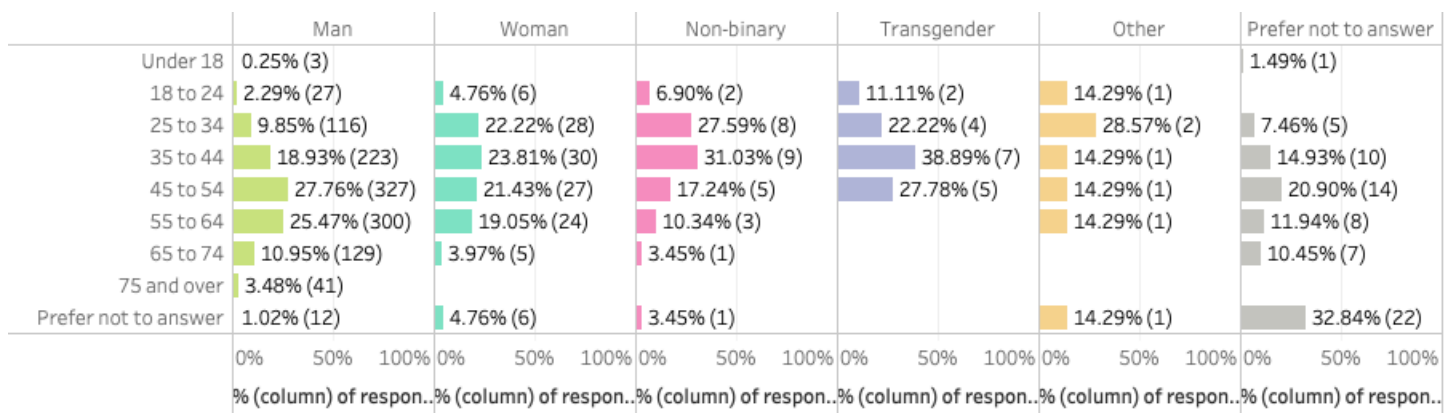
Normalised cross-tabulation by gender:



Cross-tabulating gender with region and normalised by region:



Age (Q2) cross-tabulated with gender and normalised by gender:

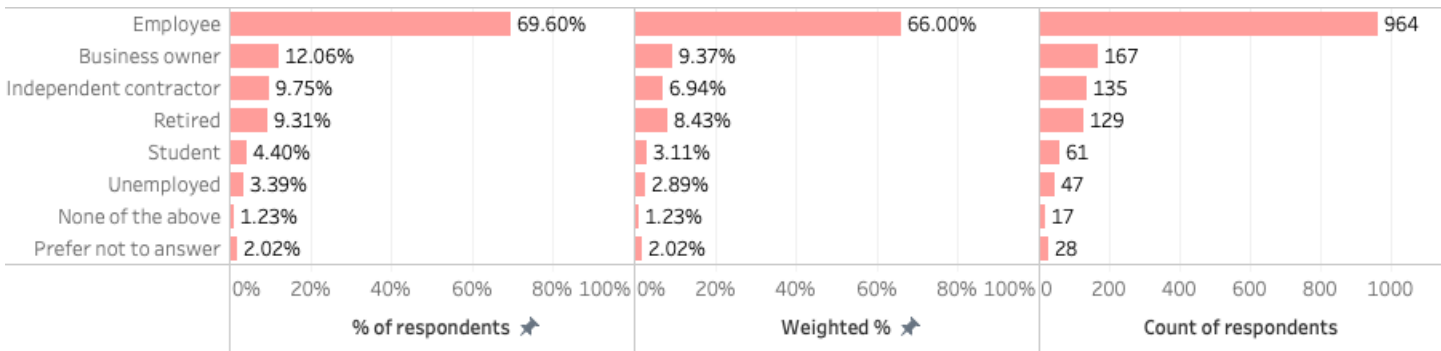


Commentary

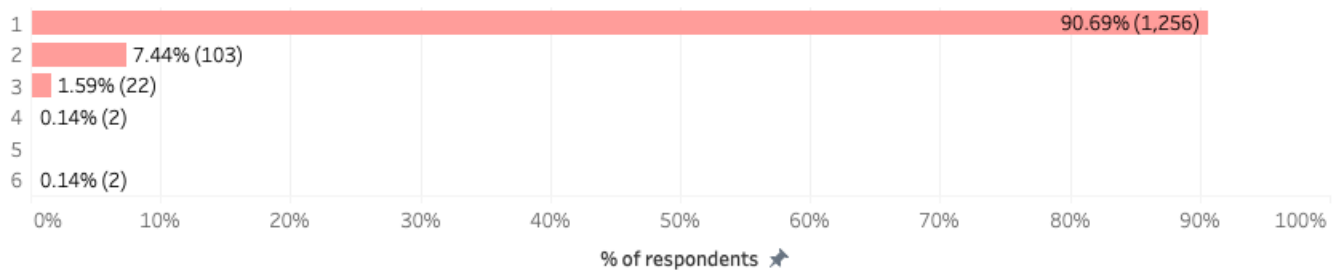
10. The proportion of women is still low at 9.10% overall and 5.42% of regular participants. However these figures vary considerably year to year, suggesting that this may not be representative.
11. Women make up a greater proportion of new participants than existing participants and a lower proportion of previous participants, indicating that the gender proportions are changing overall.
12. The average age of women participating in the IETF is lower than that of men.
13. The proportion of women from Europe compared to men from Europe appears to be notably lower than the comparable measure in other regions.
14. The number of non-binary and transgender respondents continues to grow overall but not among new participants. The overall numbers are still low and using those for analysis may not be representative.

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

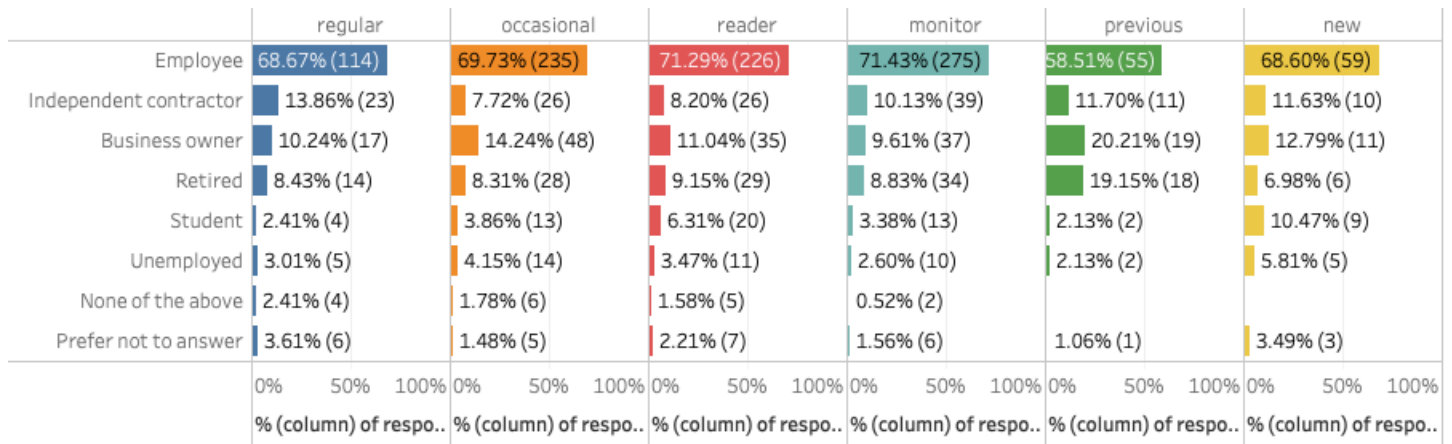
For the second year there are two questions in this survey related to employment. This first one focuses solely on employment status.



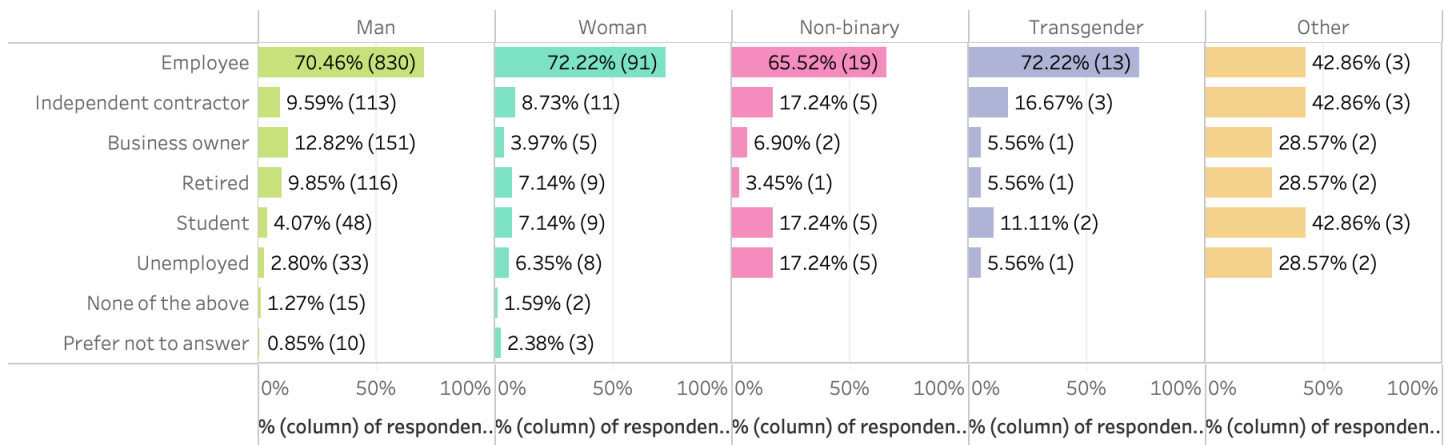
Frequency distribution of the number of options selected per respondent:



Normalised by participant type:



Normalised by gender:

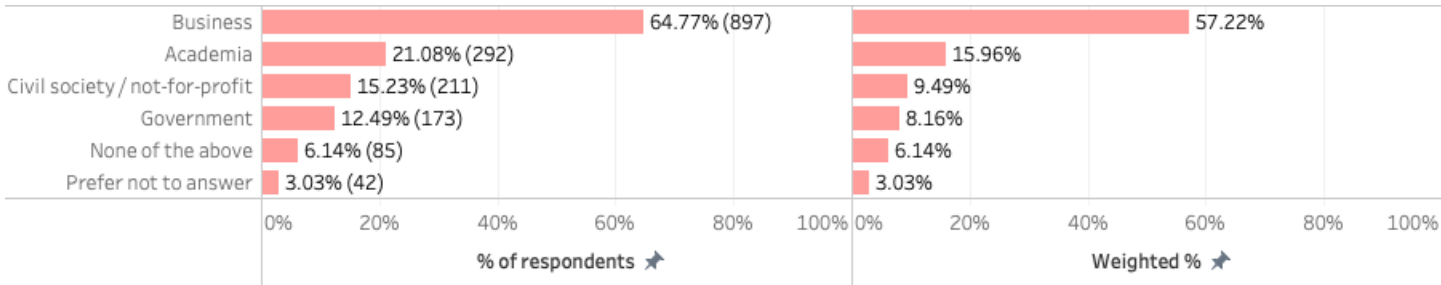


Commentary

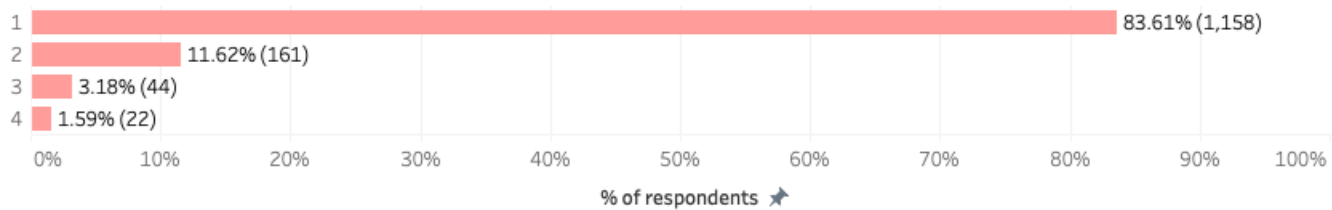
15. A large majority of participants are employees.
16. The profile for previous participants is quite different from active participants with a lower proportion of employees and a higher proportion of business owners. This may just indicate that employees have less personal interest in the IETF than business owners and so are more likely to unsubscribe from our mailing lists when they cease to be participants.
17. Less than 10% of respondents have more than one form of employment.

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

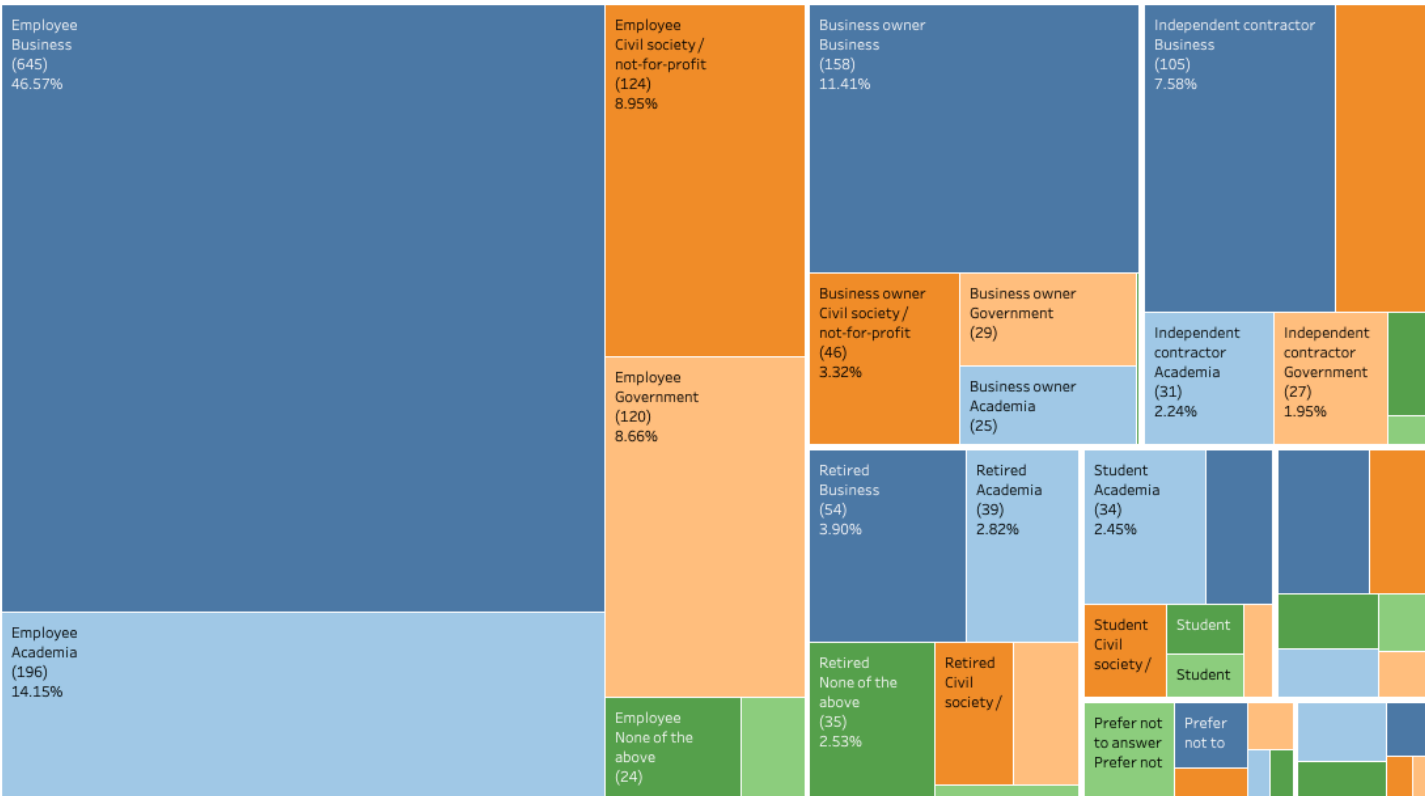
This question focuses solely on what sectors people work in.



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

18. Business is the single largest sector as expected, followed by academia, civil society and government.

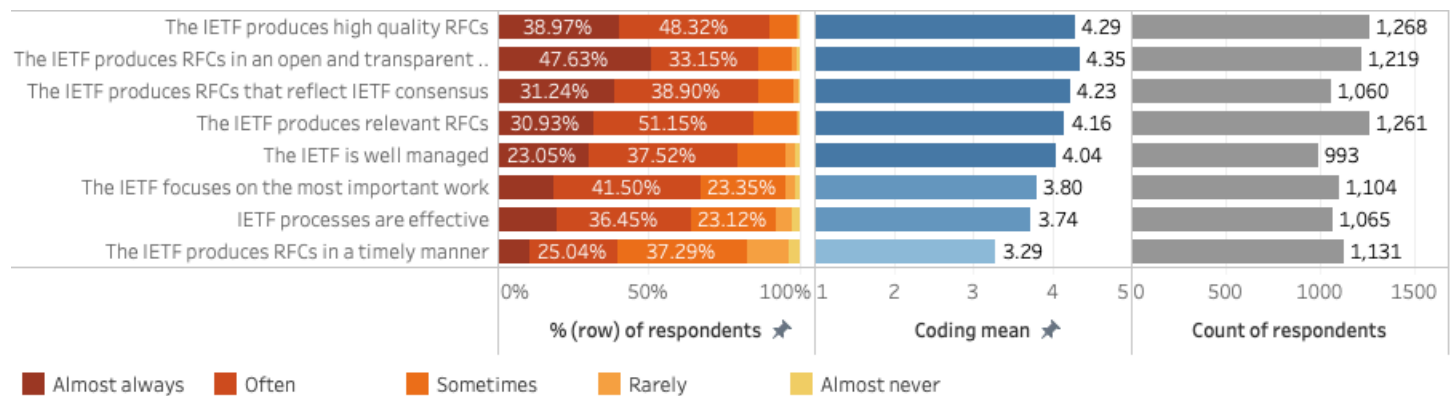
19. On a weighted basis (when someone gives two answers, their 'vote' is split proportionally) business is less than 50% of the total.

Questions: Overall Perceptions

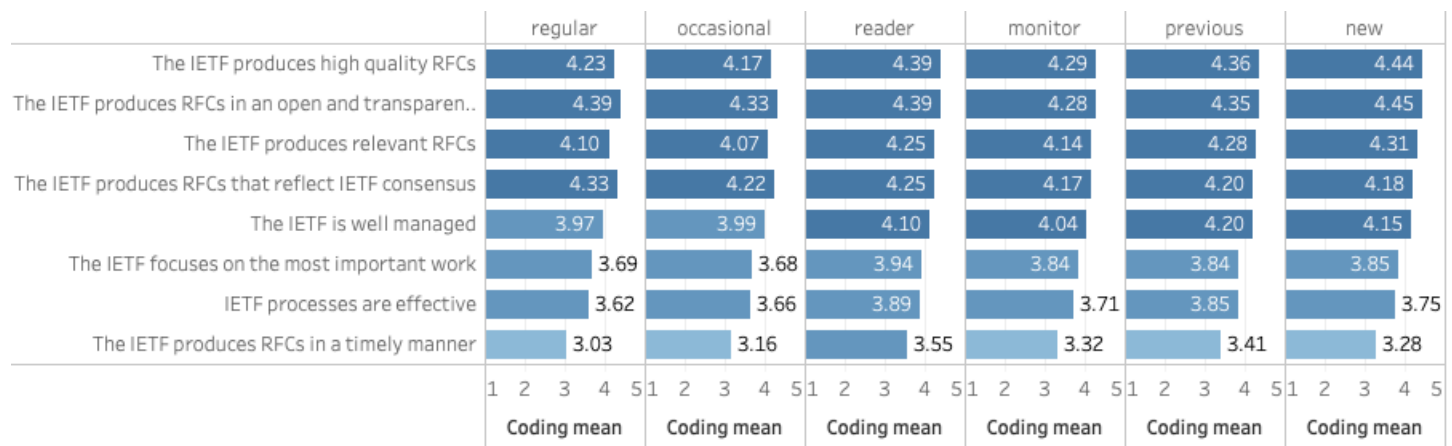
These two questions were asked at this point to provide something substantive for respondents to give an opinion on, breaking up the less interesting demographic questions.

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

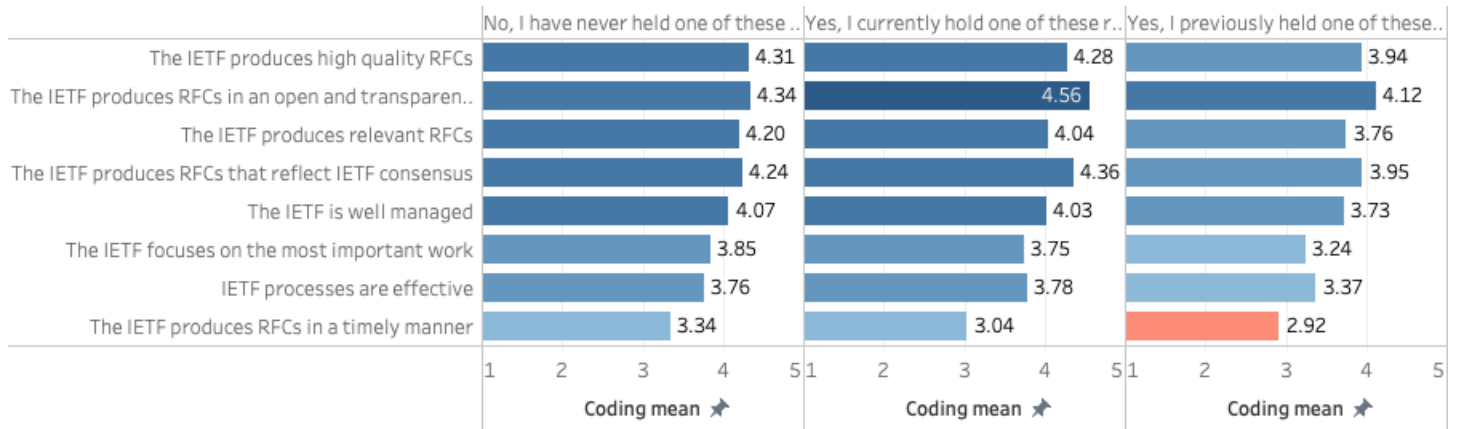
This question asks respondents to rate their perception of the accuracy of a set of statements on a frequency scale of almost always to almost never.



Coding means by participant type:



Coding means by leadership experience:

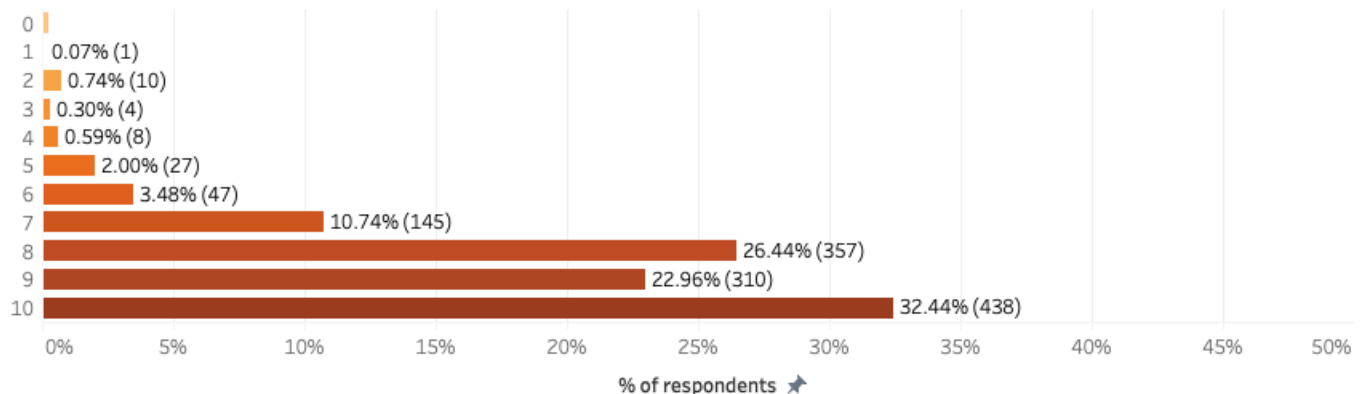


Commentary

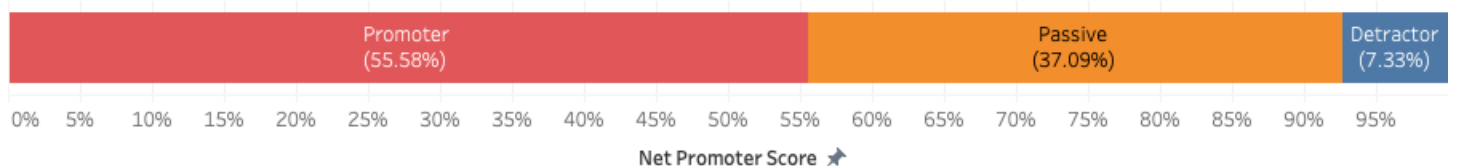
20. The core values of the IETF score well (Good) in the results for quality, transparency, consensus and relevance.
21. The timeliness of RFC production is the worst rated of the aspects queried by some margin, scoring in the Poor range, the only aspect to do so.
22. The effectiveness of processes and importance of the work focused on, again both score as only Acceptable, reinforcing the view that more attention is needed on these aspects of the IETF.

Q28. How important is the IETF?

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:



Commentary

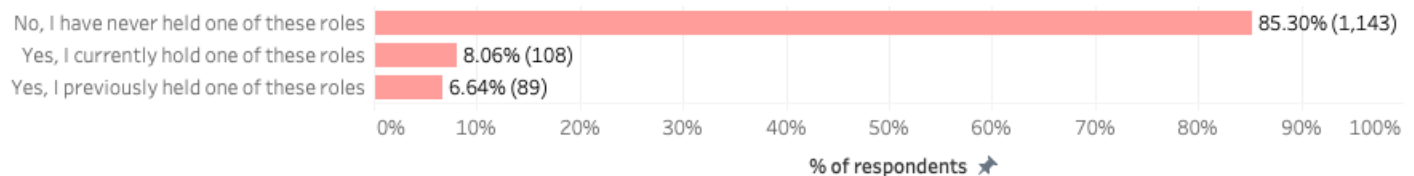
23. The NPS score of promoter percentage minus detractor percentage gives a result of 48.25%, a favourable score according to NPS methodology but down from the 2023 excellent score of 56.17%.

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.



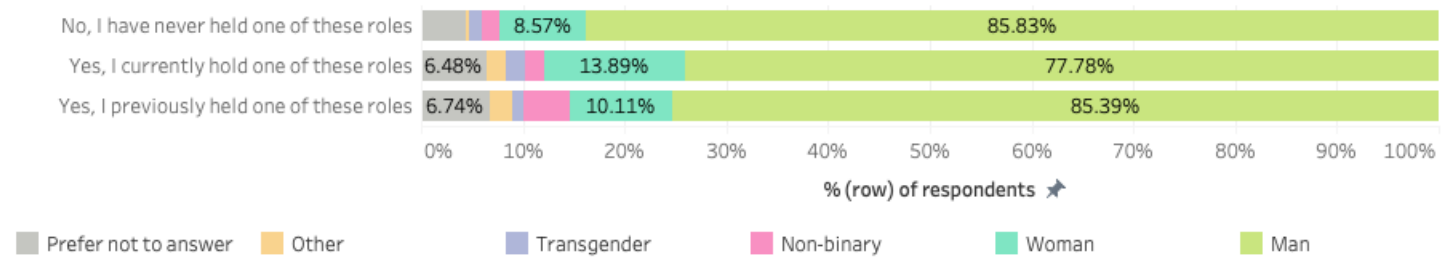
By gender:

	Man			Woman			Non-binary			Transgender			Other		
No, I have never held one of these roles	73.21% (981)			7.31% (98)			1.49% (20)			1.04% (14)			0.22% (3)		
Yes, I currently hold one of these roles	6.27% (84)			1.12% (15)			0.15% (2)			0.15% (2)			0.15% (2)		
Yes, I previously held one of these roles	5.67% (76)			0.67% (9)			0.30% (4)			0.07% (1)			0.15% (2)		
	0%	50%	100%	0%	50%	100%	0%	50%	100%	0%	50%	100%	0%	50%	100%
	% of respondents			% of respondents			% of respondents			% of respondents			% of respondents		

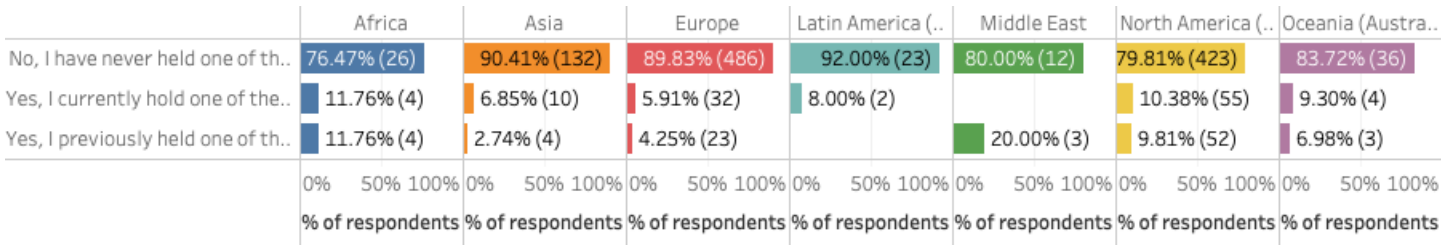
Normalised by gender:

	Man		Woman		Non-binary		Transgender		Other	
No, I have never held one of these roles	85.98% (981)		80.33% (98)		76.92% (20)		82.35% (14)		42.86% (3)	
Yes, I currently hold one of these roles	7.36% (84)		12.30% (15)		7.69% (2)		11.76% (2)		28.57% (2)	
Yes, I previously held one of these roles	6.66% (76)		7.38% (9)		15.38% (4)		5.88% (1)		28.57% (2)	
	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%
	% of q respondents (l..		% of q respondents (l..		% of q respondents (l..		% of q respondents (l..		% of q respondents (l..	

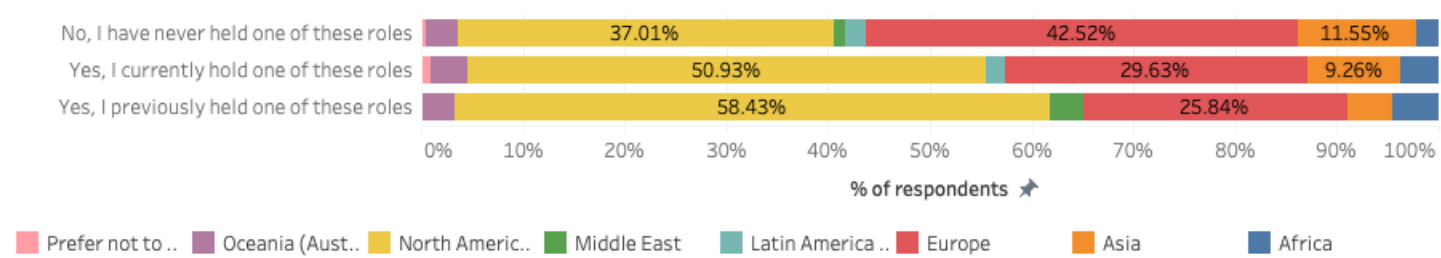
By gender normalised by option:



Normalised by region:



By region normalised by option:

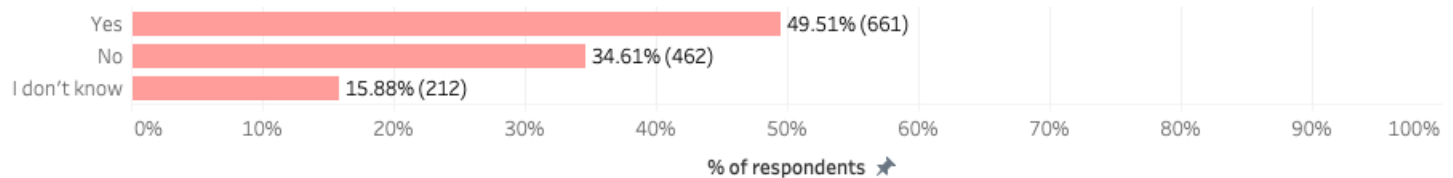


Commentary

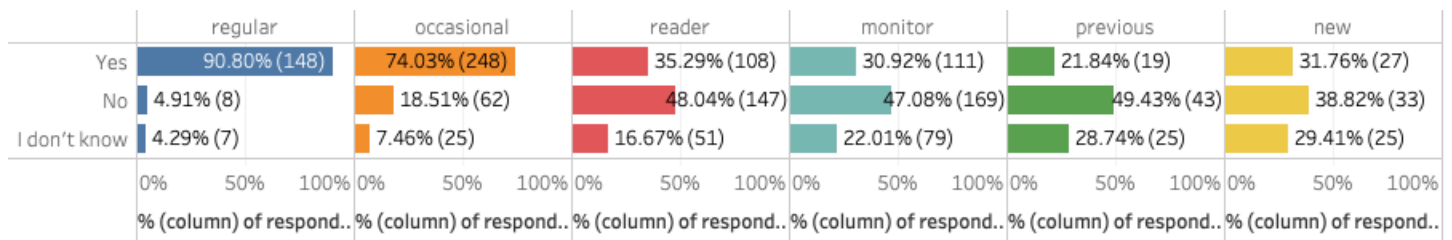
24. Having just 6.64% report themselves as previous leadership compared to 8.06% in current leadership, seems to indicate that the IETF recycles the same people through leadership positions for quite some time.
25. As in the 2023 survey, the percentage of women in leadership roles is significantly higher 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.
26. As in the 2023 survey, 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 and Africa and Oceania over-represented, though the numbers in the latter two cases are very small.

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:



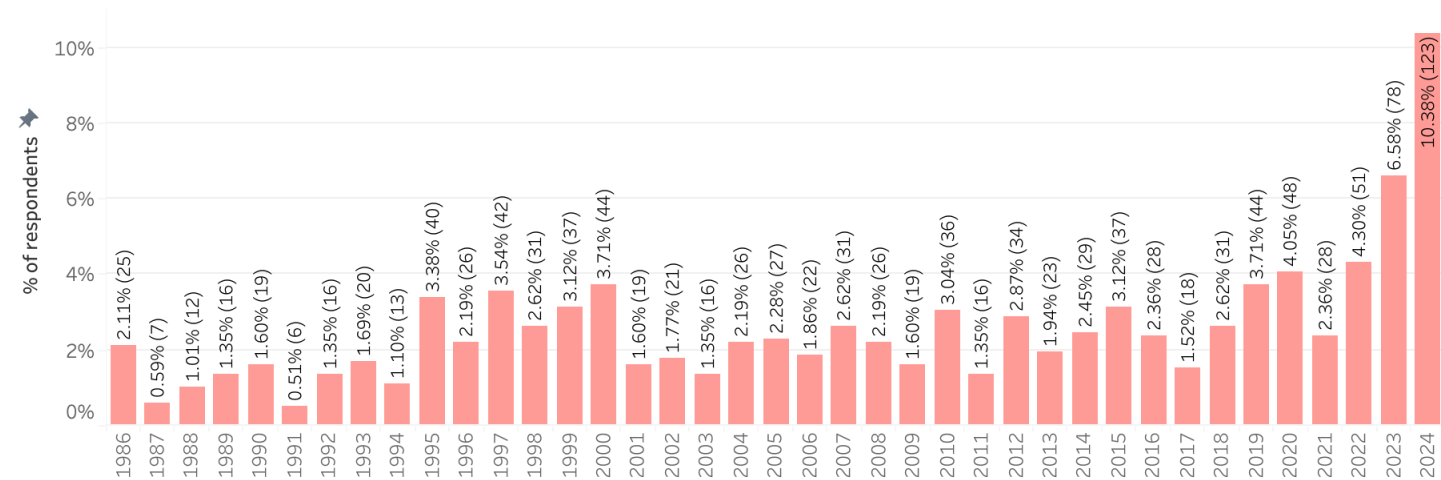
Commentary

27. The number responding “yes” continues to increase significantly over the years: 2021 (27.60%), 2022 (40%) and 2023 (43%) likely driven by the requirement to have a Datatracker account to register for a meeting.

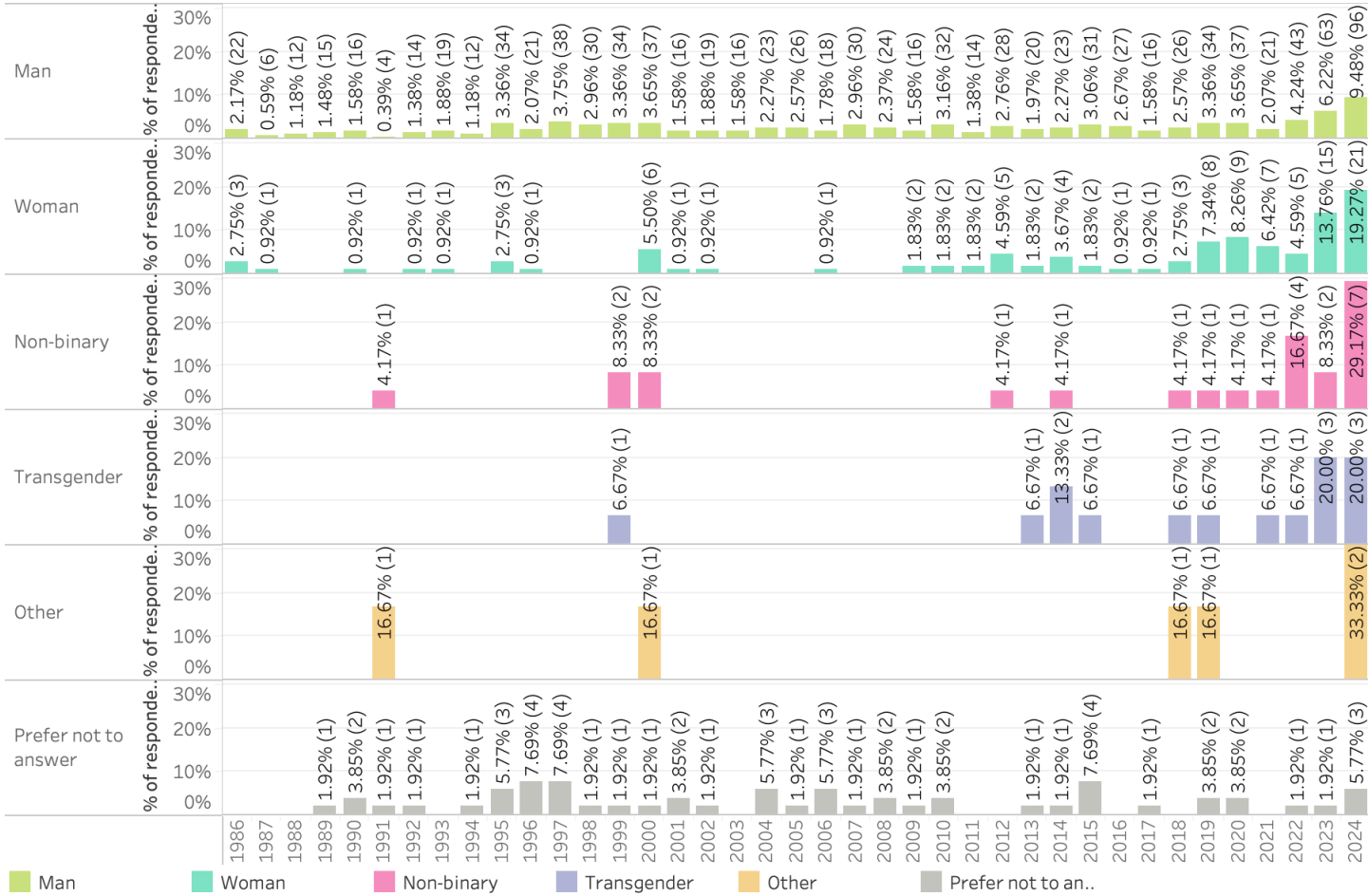
28. As expected, regular participants almost all have a Datatracker account.

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

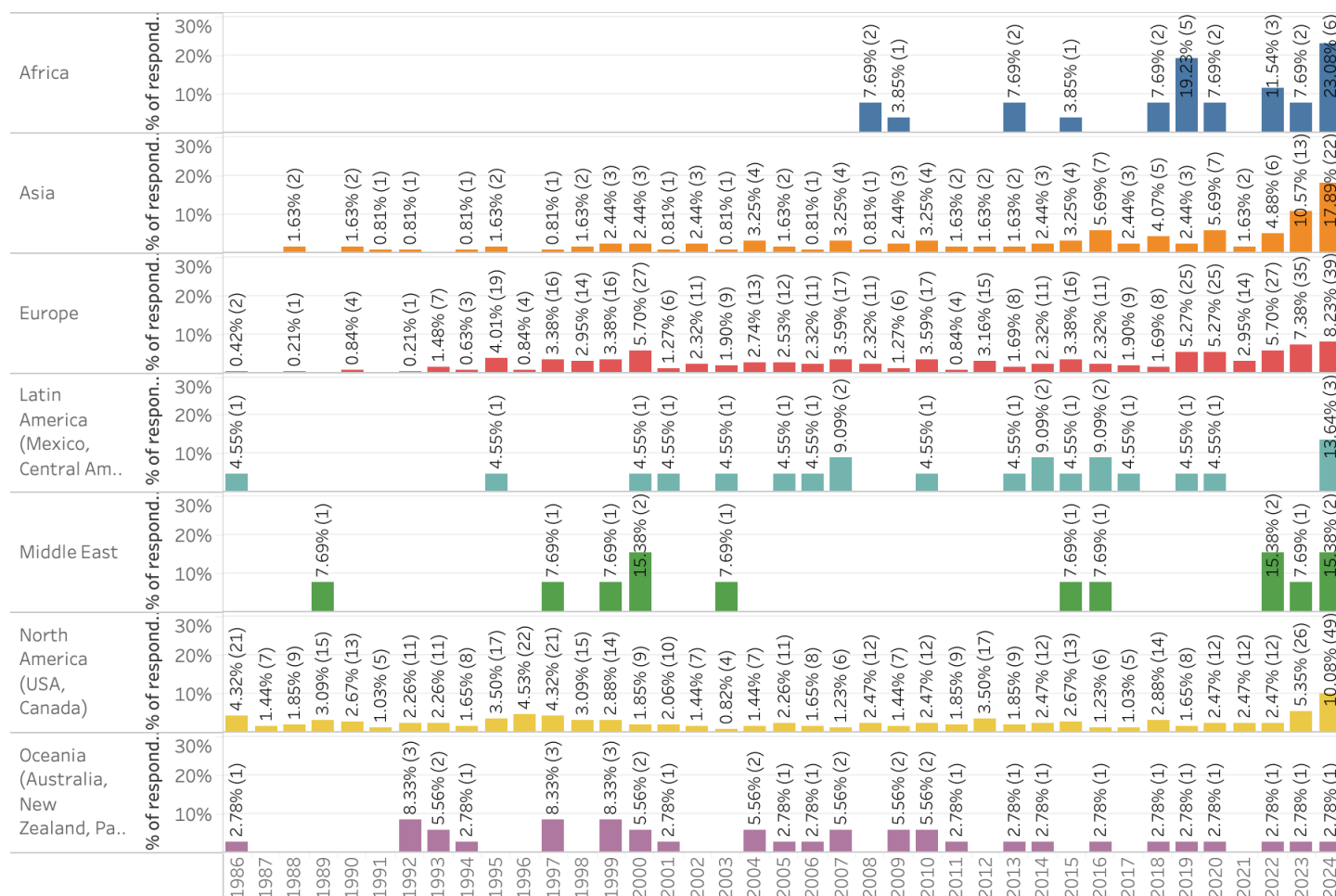
This is a fixed choice question only listing the years from 1986 to present.



Normalised by gender:



Normalised by region:



Commentary

29. IETF participants stay around a long time. 50% of respondents started before 2009, which is 15 years ago.
30. While under-represented, women have been active participants since the start of the IETF with numbers picking up considerably in 2023 and carrying into 2024. Data from the 2023 survey confirms this.
31. Participation from Africa, Latin America, Middle East and Oceania is low, but in the case of Africa it appears to have only started in earnest from 2008.

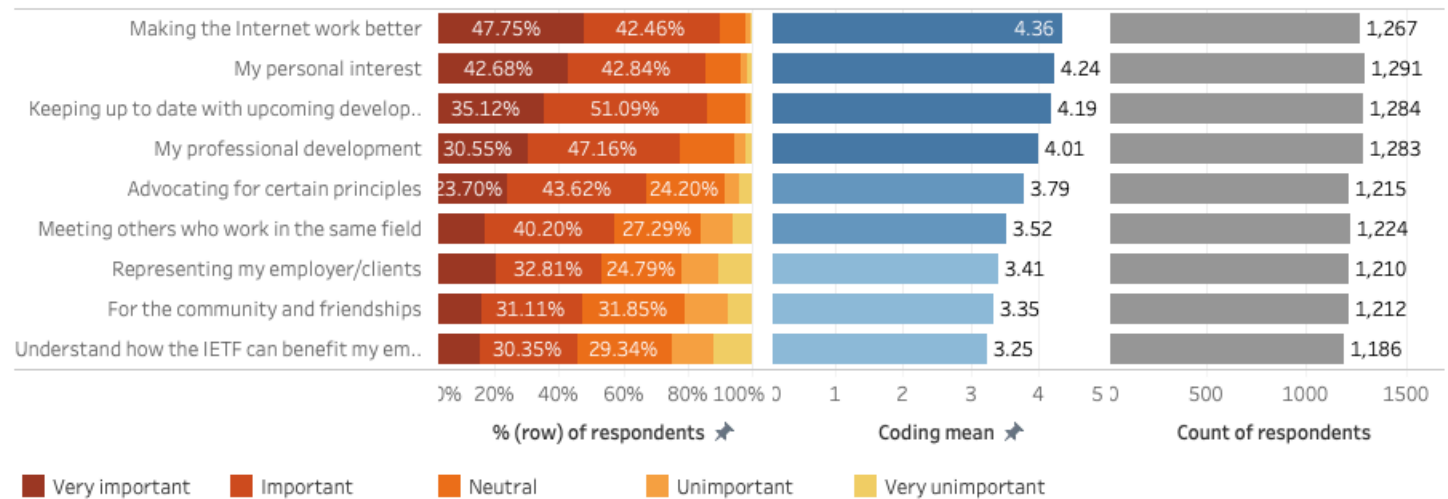
Questions: Participation

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.

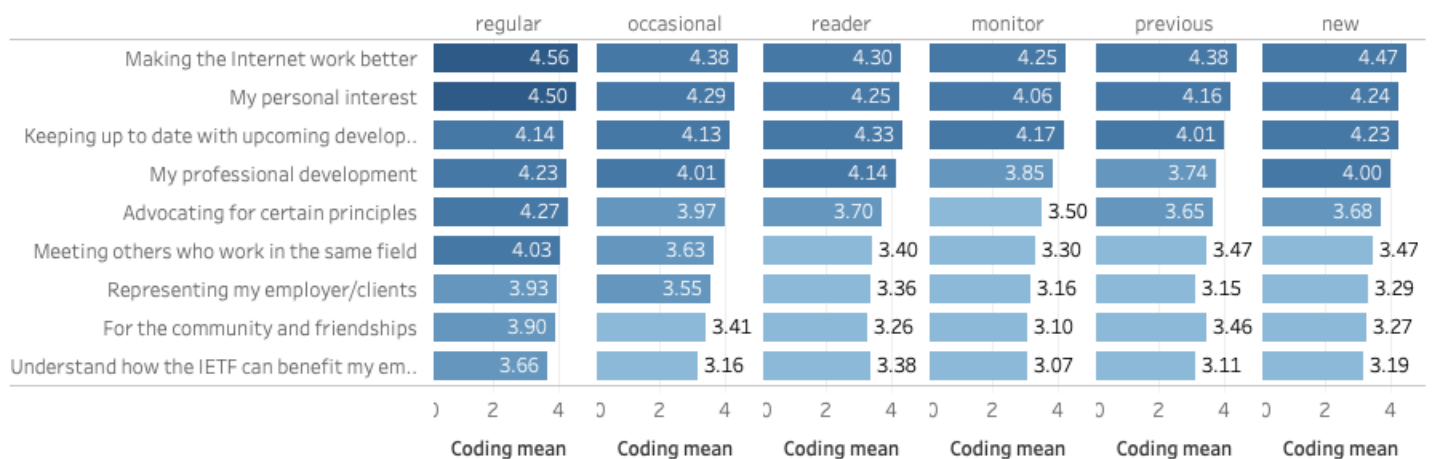
Q12. How important to you are the following for your participation in the IETF?

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.

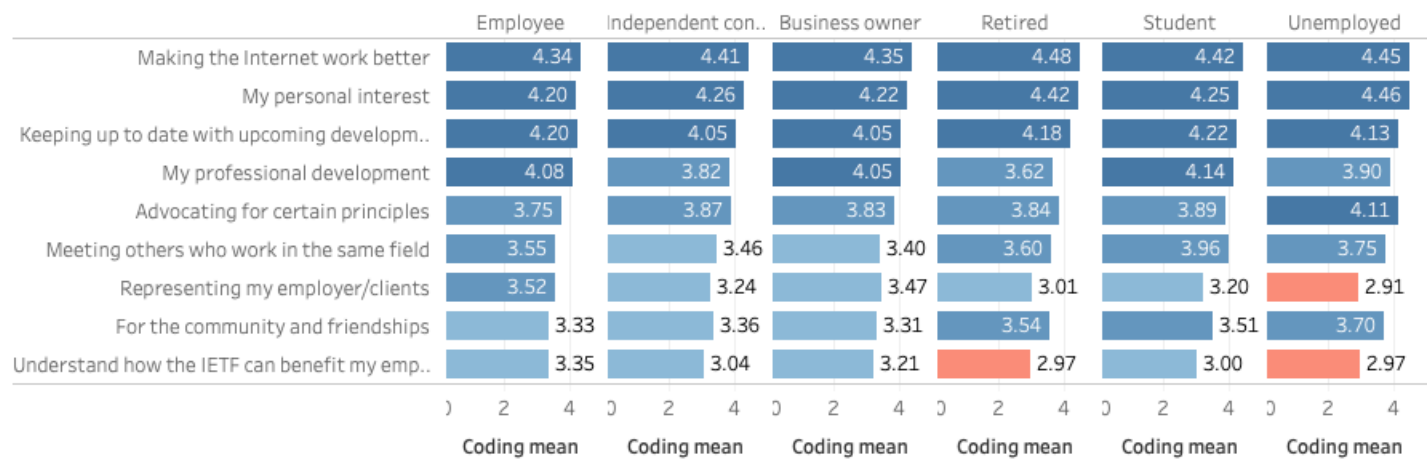
Importance rating and the coding mean for importance.



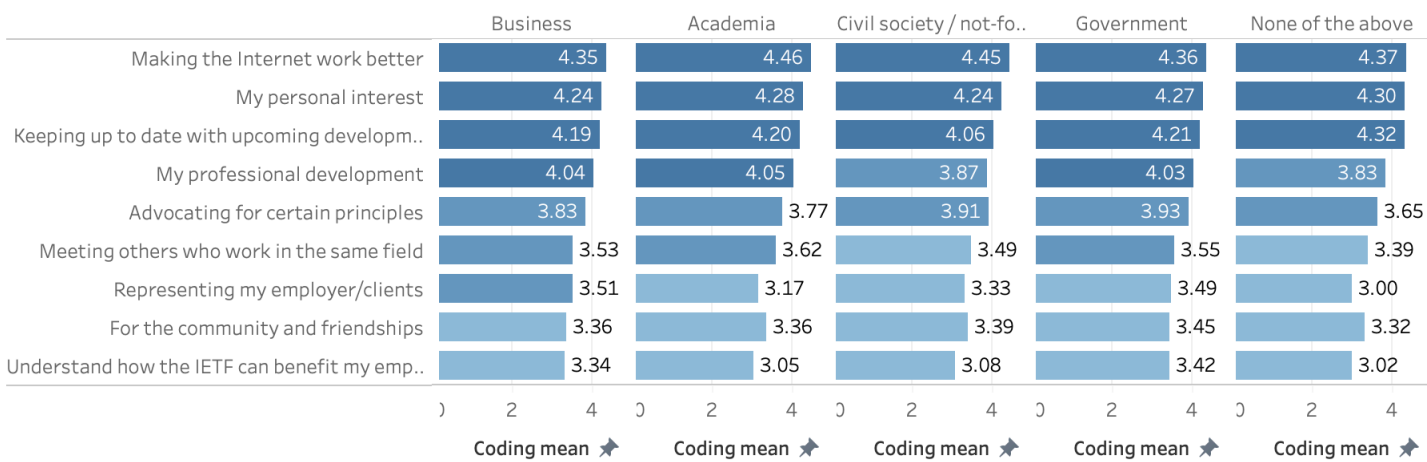
Coding mean by participant type:



Coding mean by employment:



Coding mean by sector:



Coding means of regular participants only, split by leadership experience:

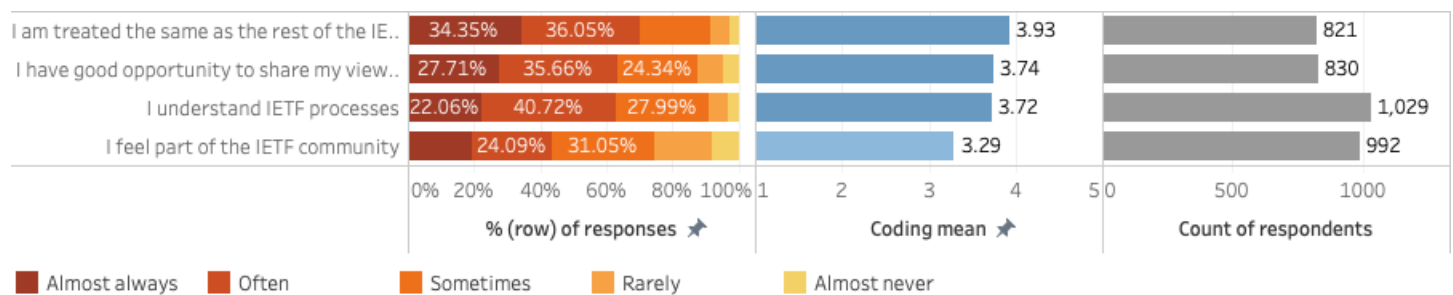


Commentary

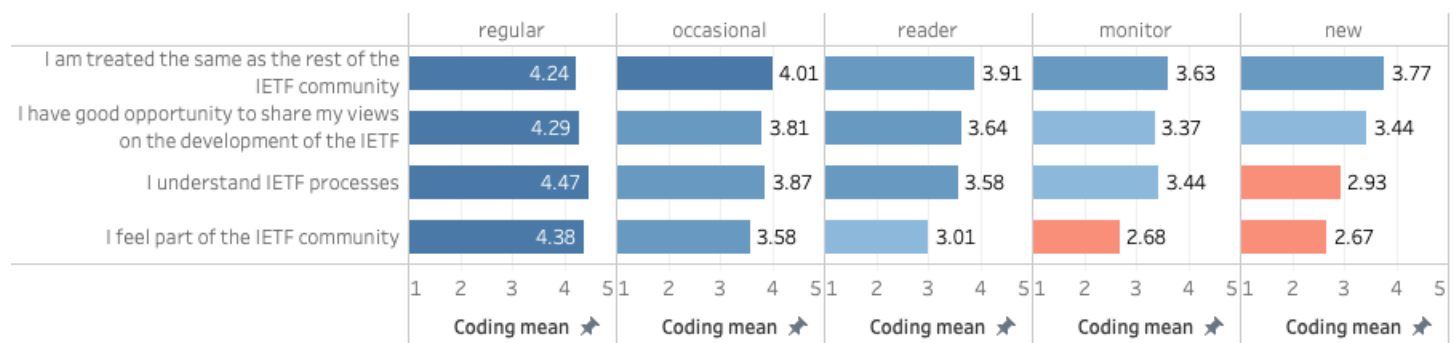
32. "Making the Internet work better" is now the top motivation, both overall and across participant types and employment types, except amongst the unemployed.
33. While "my personal interest" is high up the list of motivations, "community and friendships" is low down the list, indicating that the overall focus is professional/skills based.
34. Not only are regular participants more strongly motivated than other participant types, but they are more broadly motivated.
35. Ex-leadership regular participants are less motivated in a number of areas than other regular participants.

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

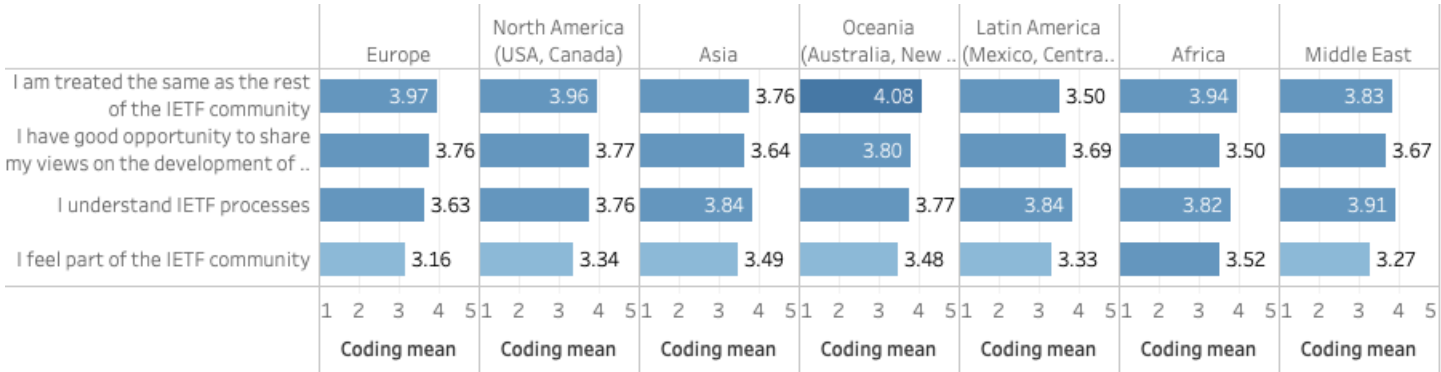
This is the same question asked in previous years, where respondents are asked to rate each option by frequency (almost always to almost never).



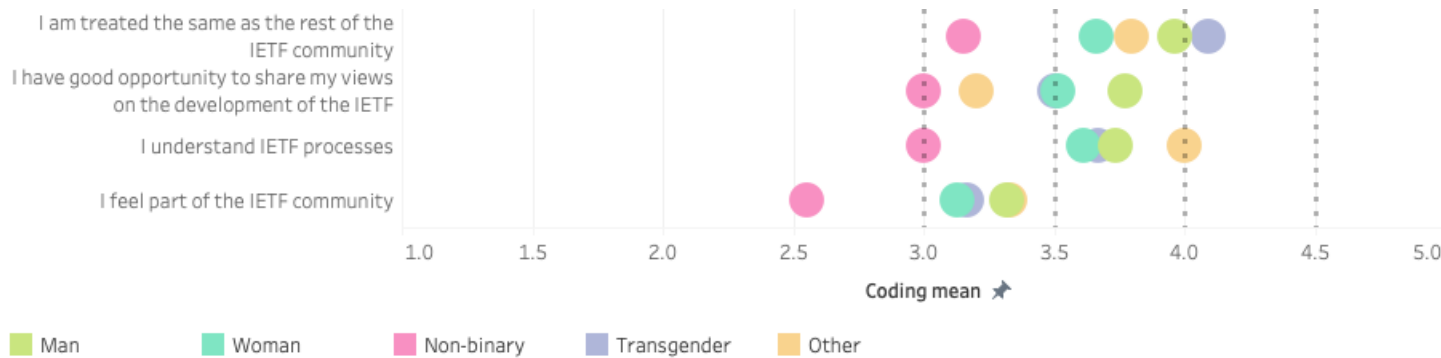
Coding means by participant type:



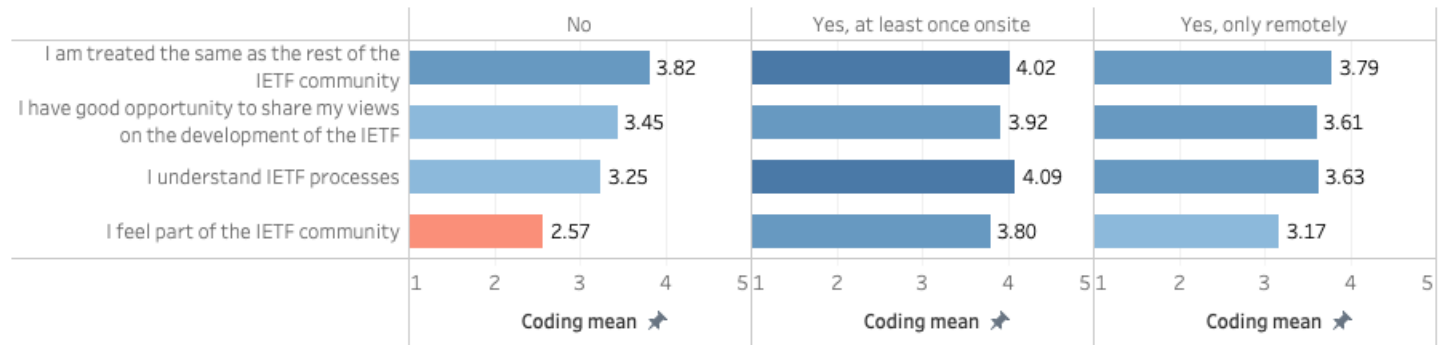
Coding means by region:



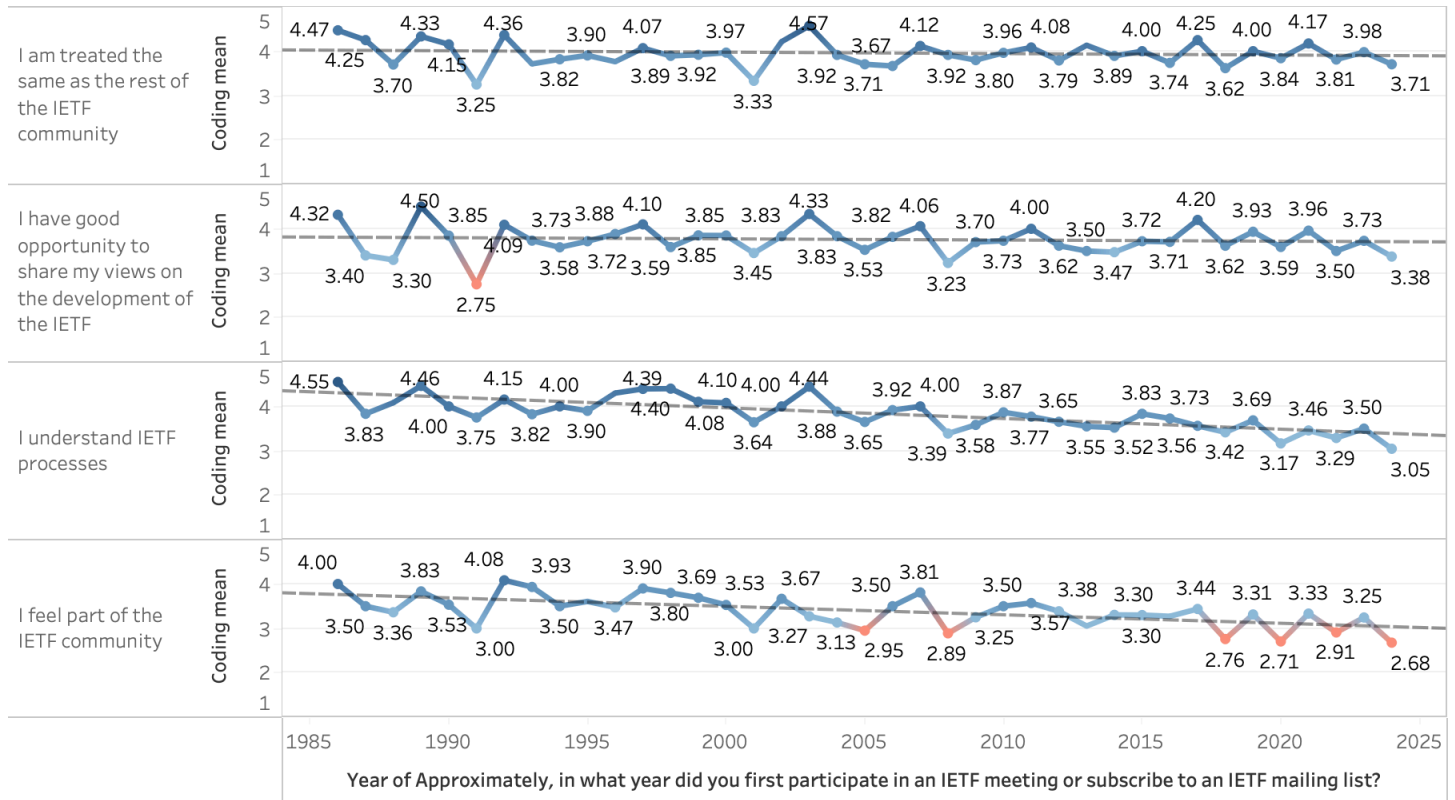
Coding means by gender:



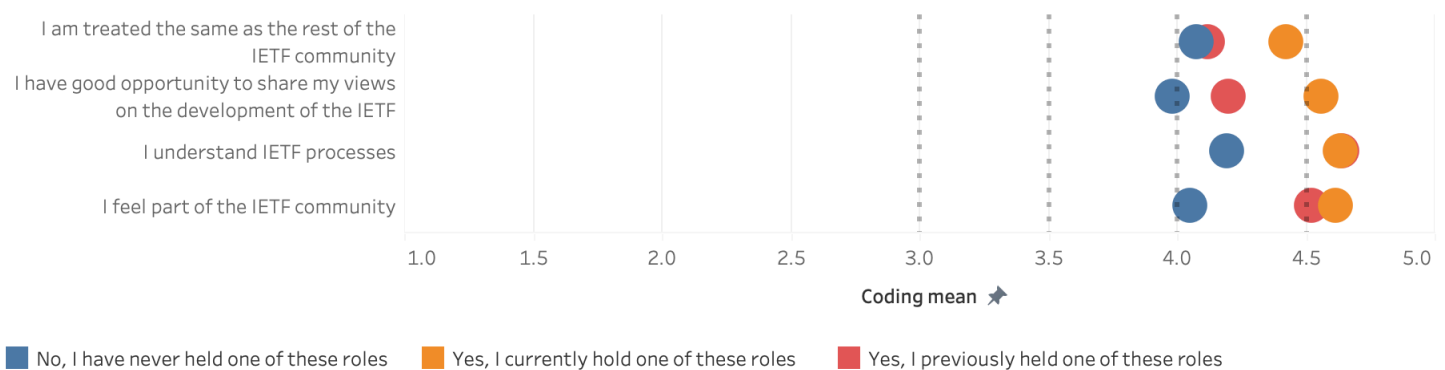
Coding means by meeting participation:



Coding means by year of first participation:



Coding means of regular participants only, split by leadership experience:



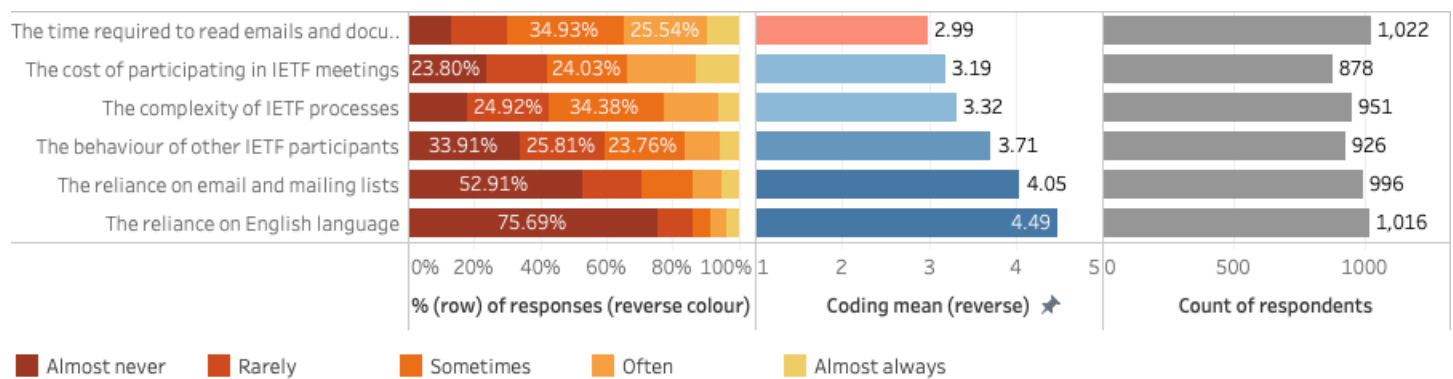
Commentary

36. Overall, none of these are rated above "Acceptable" but for regular participants they are all rated much higher. This reflects the design of the IETF as a participative model of development, not a consultative model.
37. The concept of an IETF community can only be said to exist among regular and occasional participants, not those who do not participate or new participants.
38. The understanding of IETF processes is very much dependent on how long someone has been participating and whether or not they have participated at an IETF meeting, with onsite participation having the larger effect.

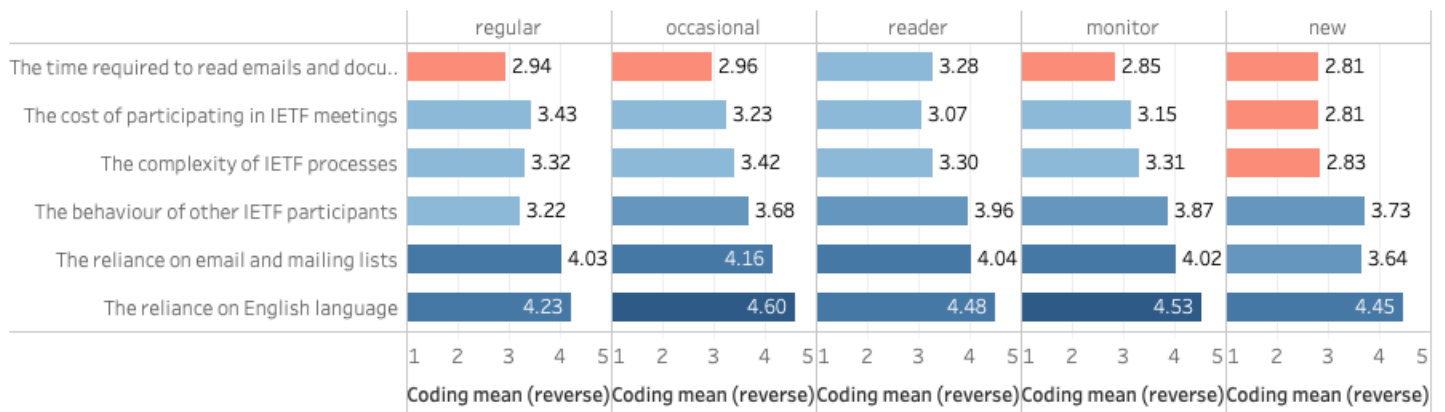
39. Women score "I am treated the same as the rest of the IETF community" and "I have good opportunity to share my views on the development of the IETF" lower than men.
40. Among regular participants, both current and ex-leadership give higher scores for understanding IETF processes and feeling part of the community, while only those currently in leadership score higher for being treated the same as the rest of the community and having good opportunity to share their views on the development of the IETF.

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

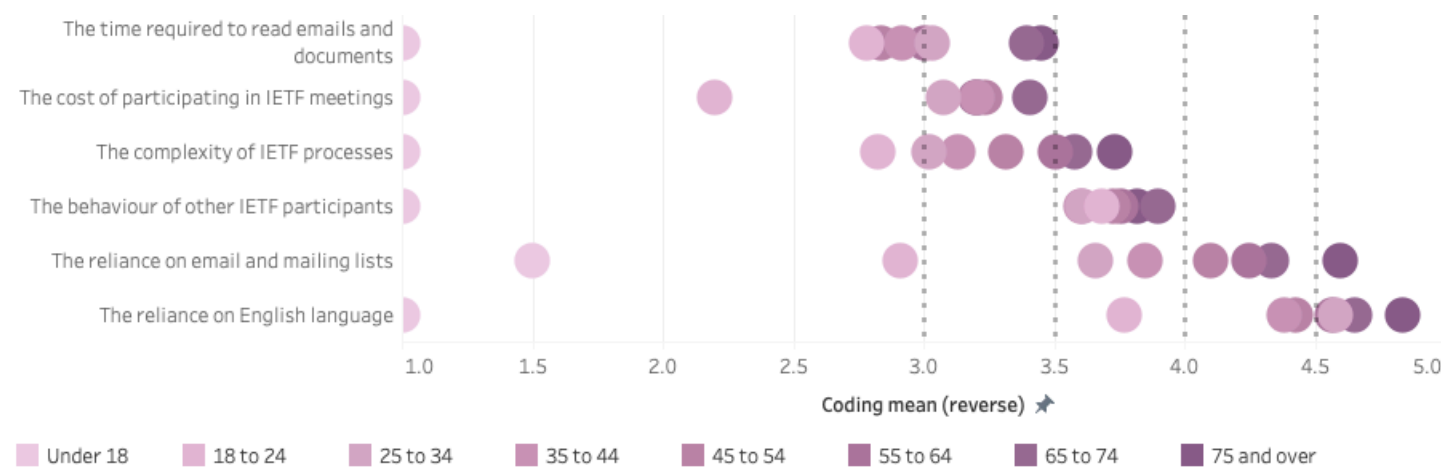
This was the second time this question was asked and for this survey, the choices "The time required to read emails and documents" and "The reliance on English language" were added. This rating and coding means here are presented in reverse so that that at-a-glance "higher the better" impression remains correct.



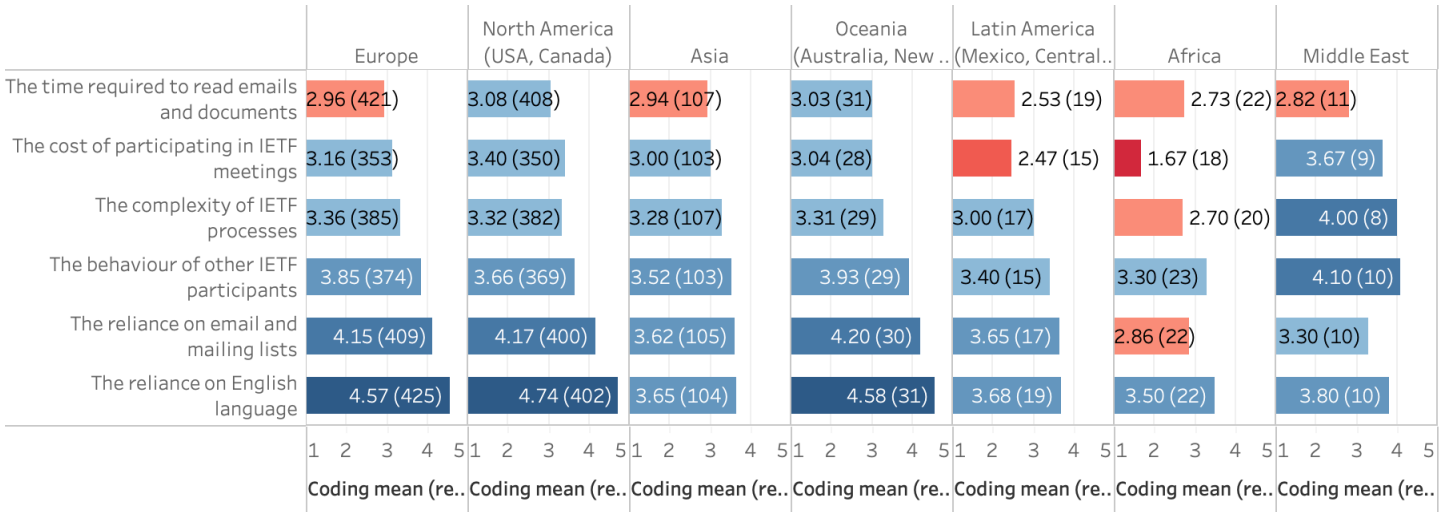
Coding means by participant type:



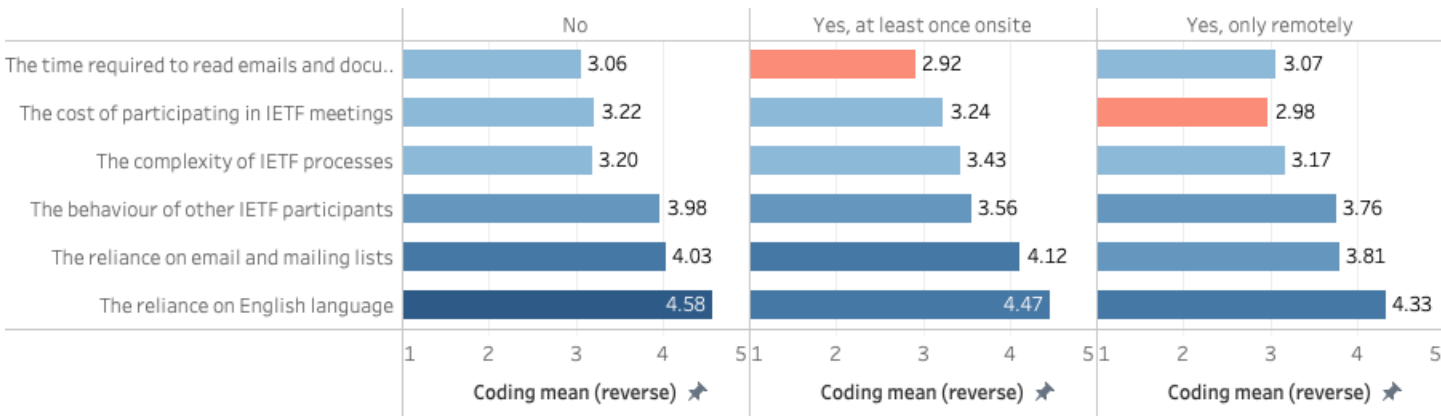
Coding means by age:



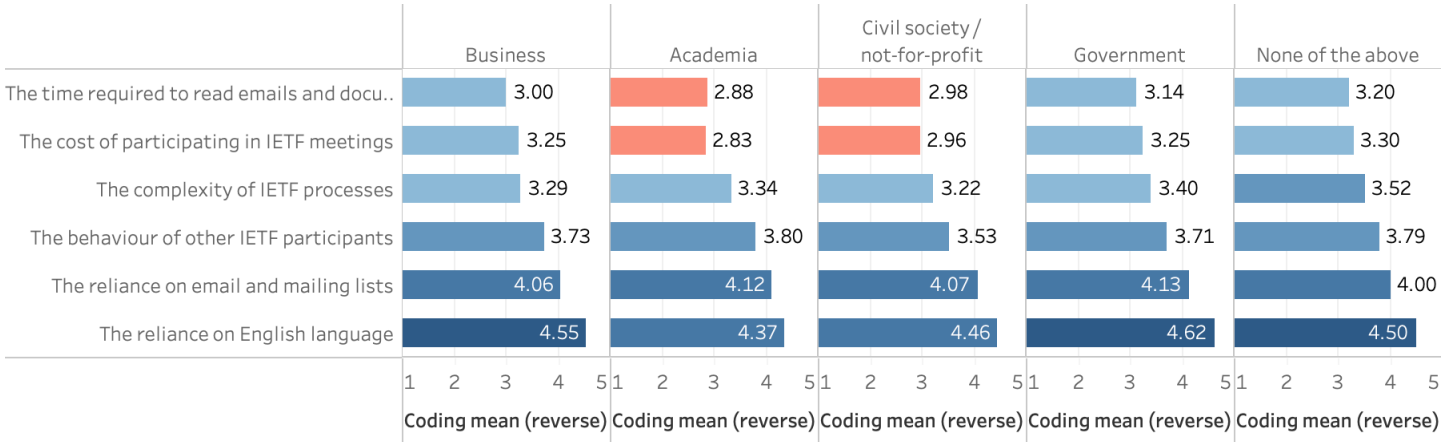
Coding means by region:



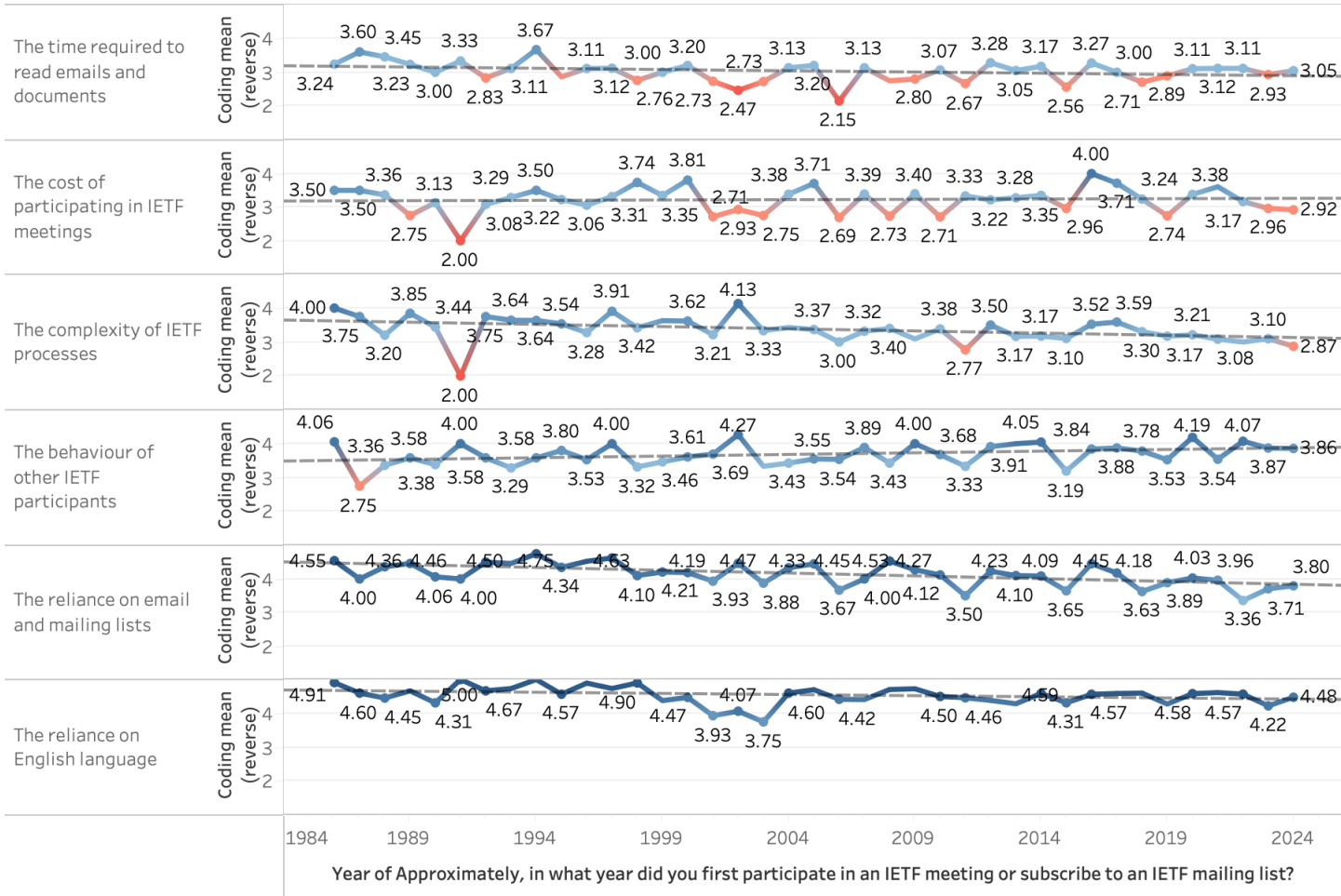
Coding means by meeting participation:



Coding means by sector:



Coding means by year of first participation:

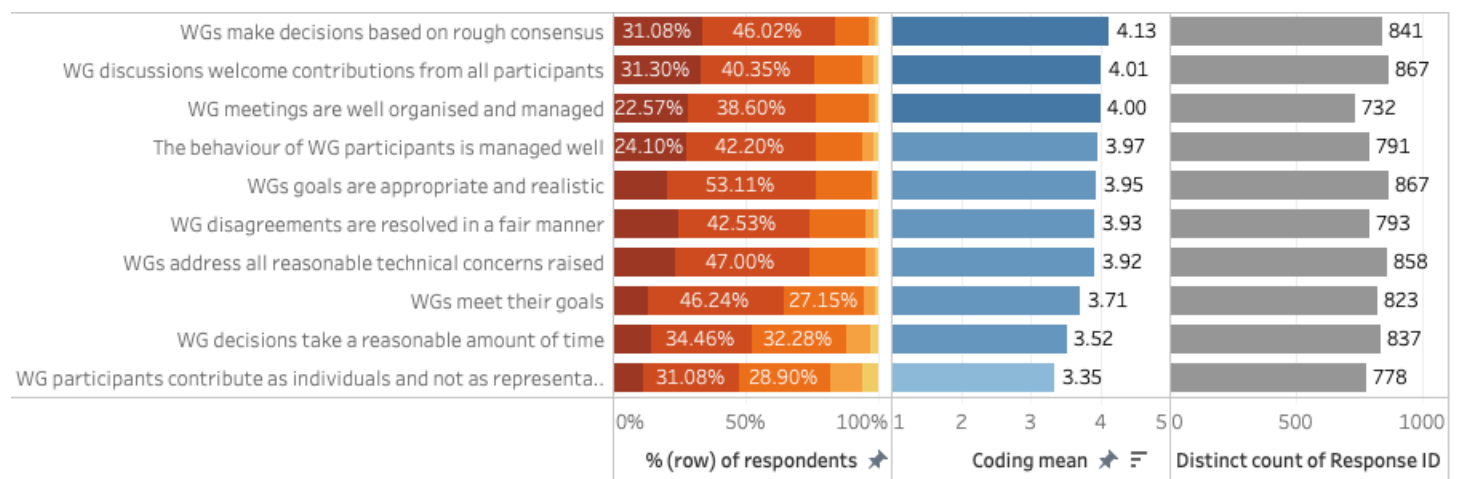


Commentary

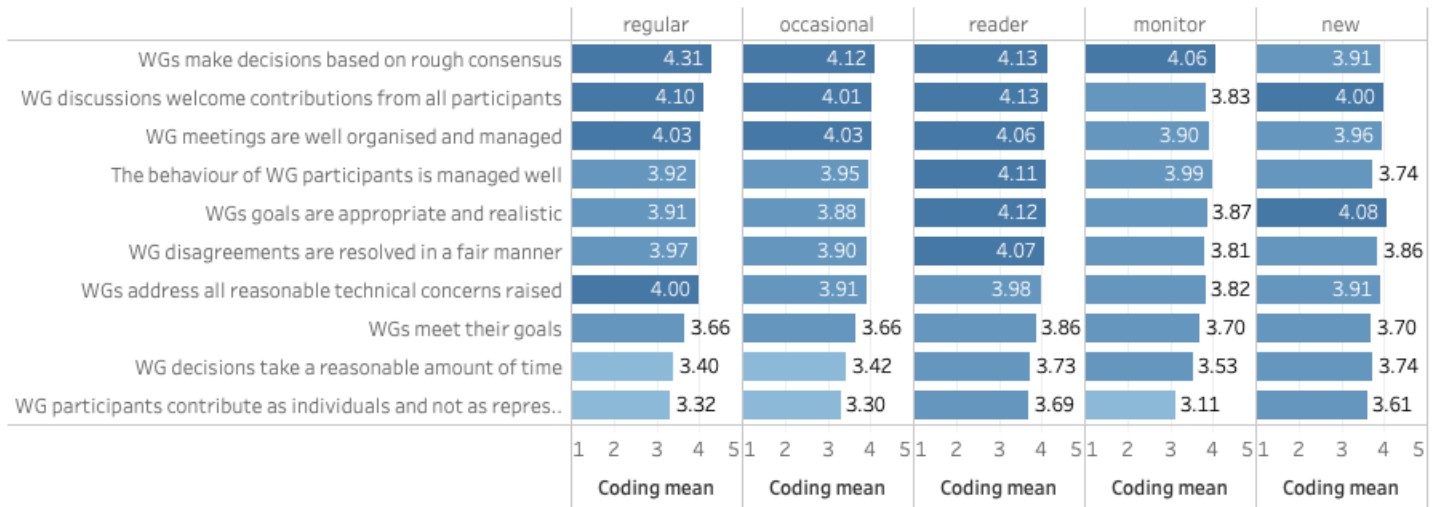
41. The greatest hindrance overall is the time required to read email and documents.
42. The reliance on email and mailing lists is not considered much of a hindrance except for participants under 24 and participants from Africa. This is likely due to those two demographics having a much higher use of phones than laptops and the sub-optimal experience of using email on phones. In the IETF context, this may be worsened by the various email formatting styles of IETF participants (e.g. lines manually wrapped at 78 characters per line) that are difficult to read on mobile devices.
43. The behaviour of participants is the only hindrance that trends upwards by year of first participation (i.e. is more of a hindrance the longer you have been participating). This could be due to people becoming less tolerant the longer they participate, or a leftover from times when behaviour in the IETF was noticeably worse.
44. Reliance on the English language is much more of a hindrance for participants from Africa, Asia, Latin America and the Middle East.
45. Participants from Africa report significant hindrance from the majority of the factors asked about.

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

This question is unchanged from the previous survey.



Coding means by participant type:



Coding means by leadership experience:

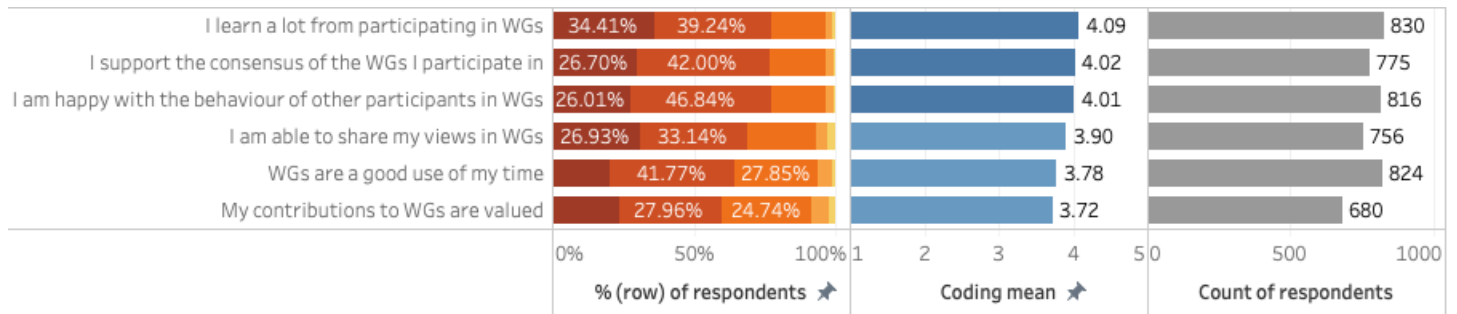


Commentary

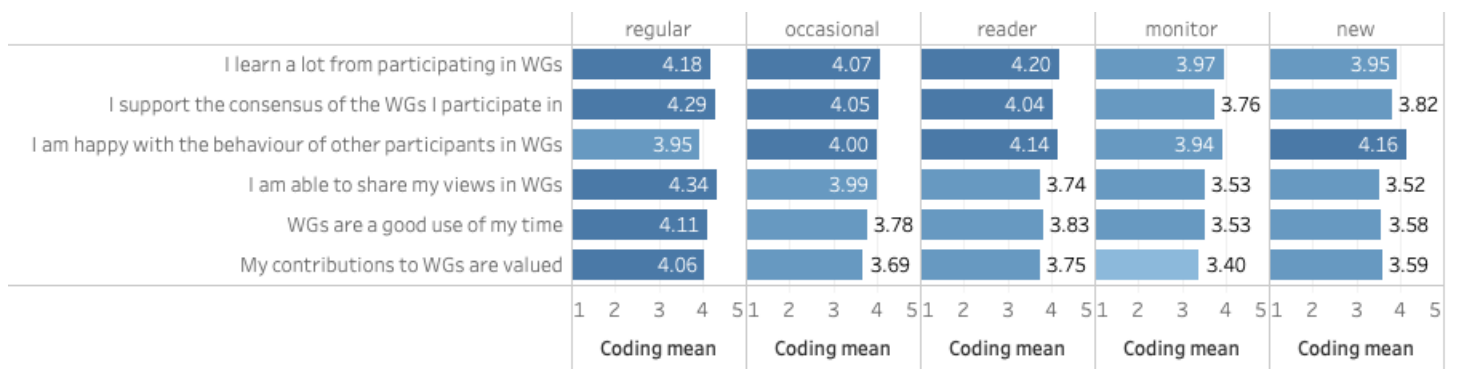
46. There is good support for the statement that WGs make decisions based on rough consensus, particularly by regular participants.
47. The scores could be higher across the board, with few comfortably in the Good range.
48. The lowest score is once again for "WG participants contribute as individuals and not as representatives of their employer", indicating that there is something here that needs to be addressed.
49. "WG decisions take a reasonable amount of time" has a low score, reflecting the answers to other questions that focus on timeliness.
50. As with the previous survey, among regular participants previous leaders score the IETF lower on almost every aspect than others, while those currently in leadership score higher.

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

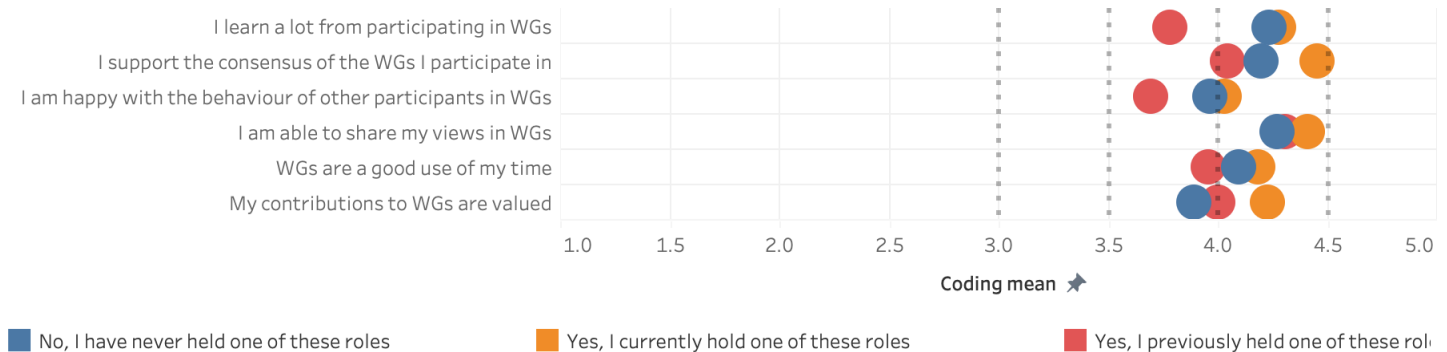
This question aims to establish the internal perceptions of WG participants, distinct from their perceptions about the WG.



Coding means by participant type:



Coding means by leadership experience:



Commentary

51. As with previous surveys, the overall scores for the choices within this question are in a narrow range on the Acceptable/Good boundary so while there are no issues, there is room for improvement.

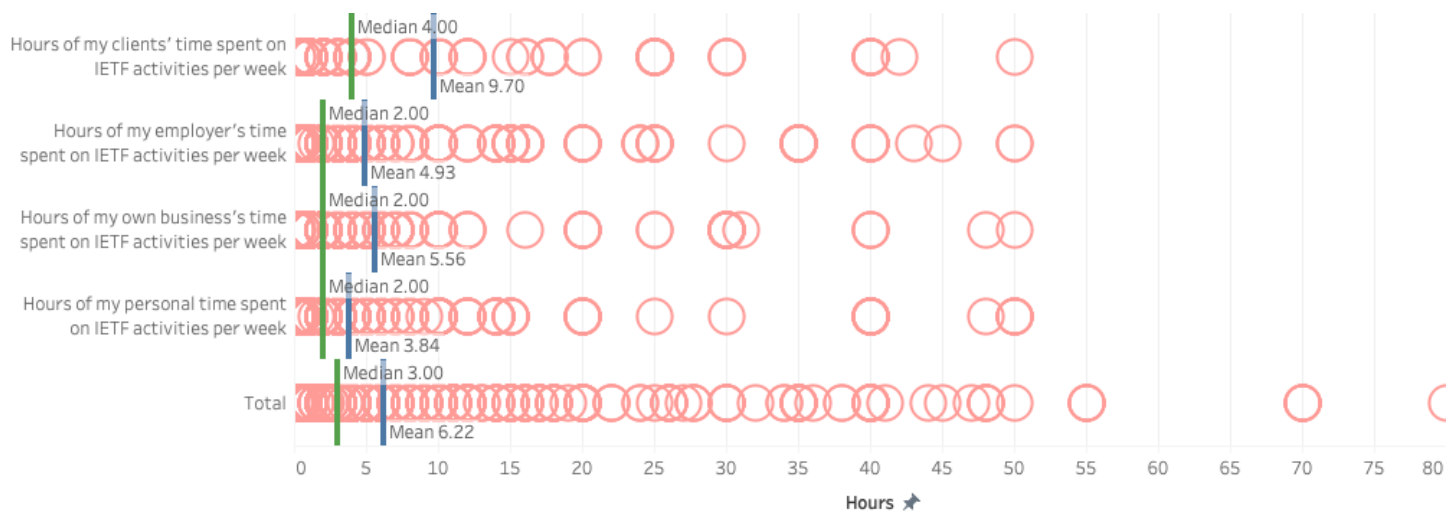
52. Again we see a divergence between regular participants and new participants on perceptions of the behaviour of other participants, with new participants seeing this more favourably.
53. Regular participants score higher on those aspects of participation that bring personal satisfaction, indicating again that the IETF is a participative model.
54. Among regular participants, previous leadership have a worse view of participant behaviour than others.

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

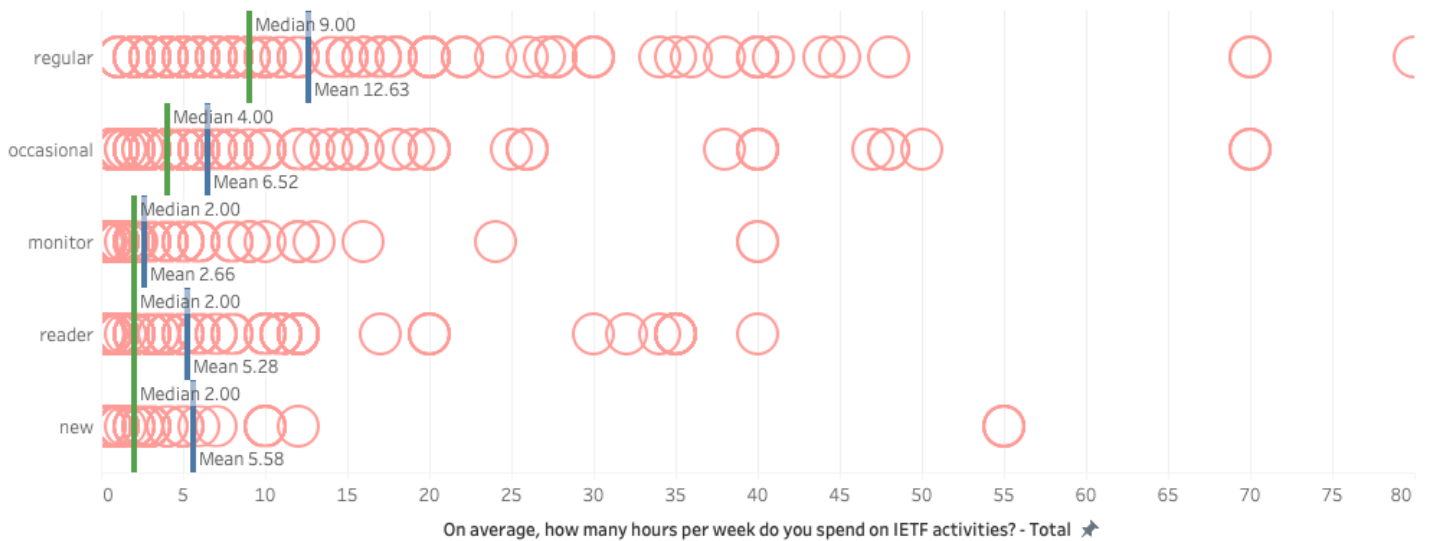
For this question, respondents are asked to provide four measures that are then summed to give a total. Seven results where the total exceeds 80 hours per week have been excluded.

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". Unfortunately, the visualisation tool used cannot display medians on a binned axis.

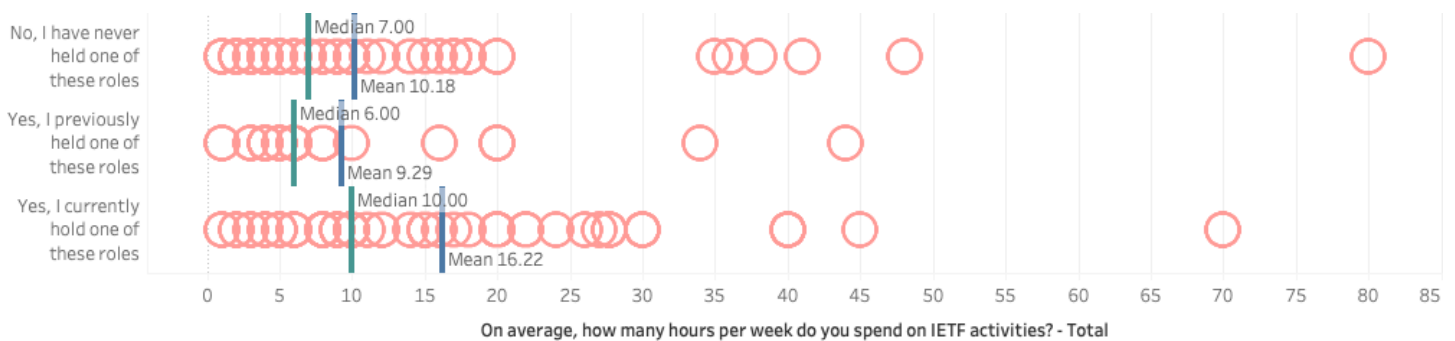
NOTE: The charts in the 2023 survey showed incorrect calculations. See [Corrections for reports to previous surveys](#) below for a corrected chart.



By participant type:



Regular participants by leadership experience:

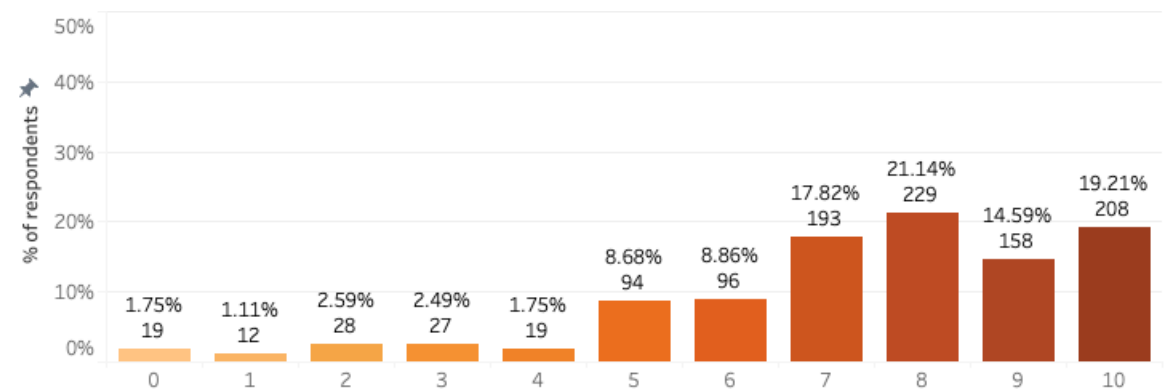


Commentary

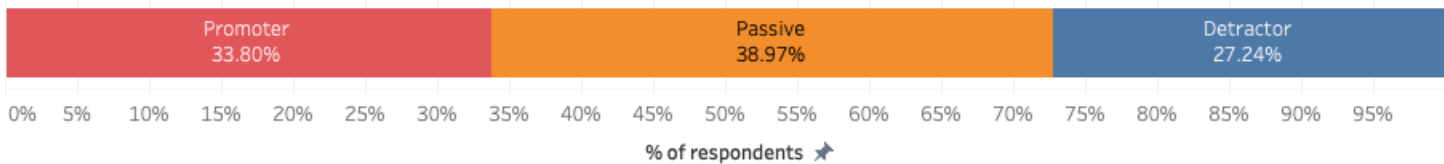
55. Participation in the IETF is time-consuming, even for those who rarely participate if at all.
56. For regular participants, the time commitment is ~20% of their working week.

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

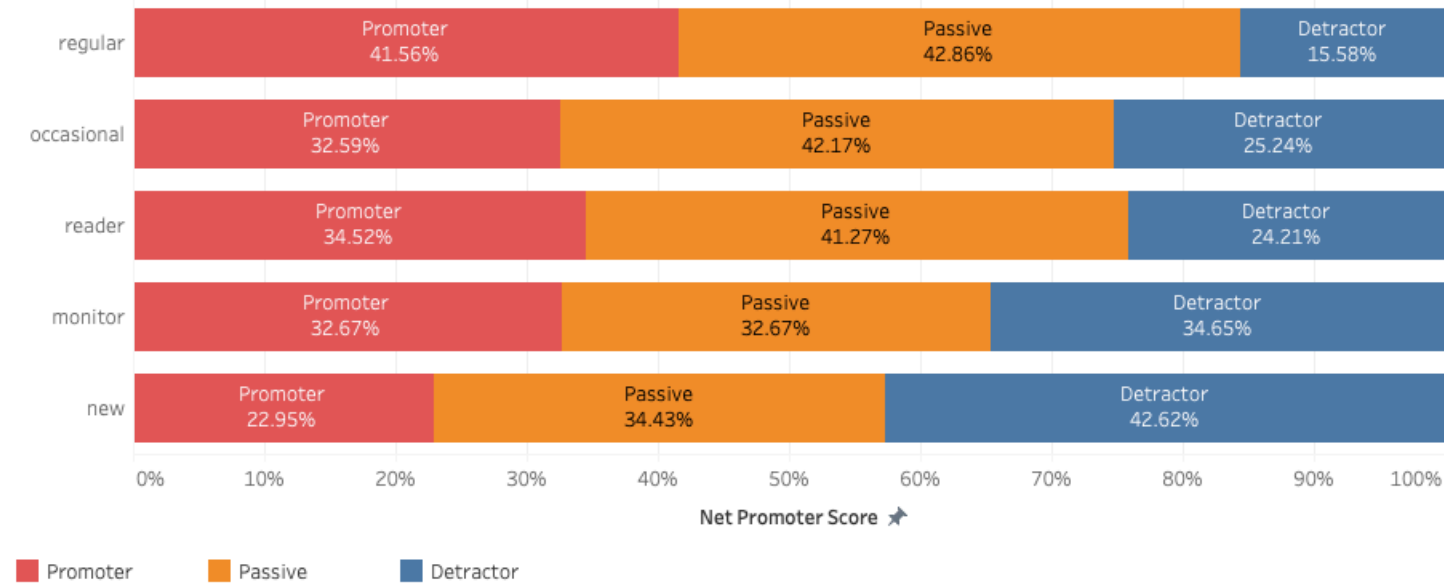
This uses the Net Promoter Score methodology where people are asked to rank likelihood on a scale of 0-10.



NPS categories:



NPS by participant type:



Commentary

- 57. 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.
- 58. This is basically the same overall result as in 2023 and 2022.
- 59. Regular participants score a net 26%, well down from a net 38% in 2023.

60. Those who are new to the IETF give an NPS score below 0 as has been the result for a number of years, which is not satisfactory.

Questions: Previous participants

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

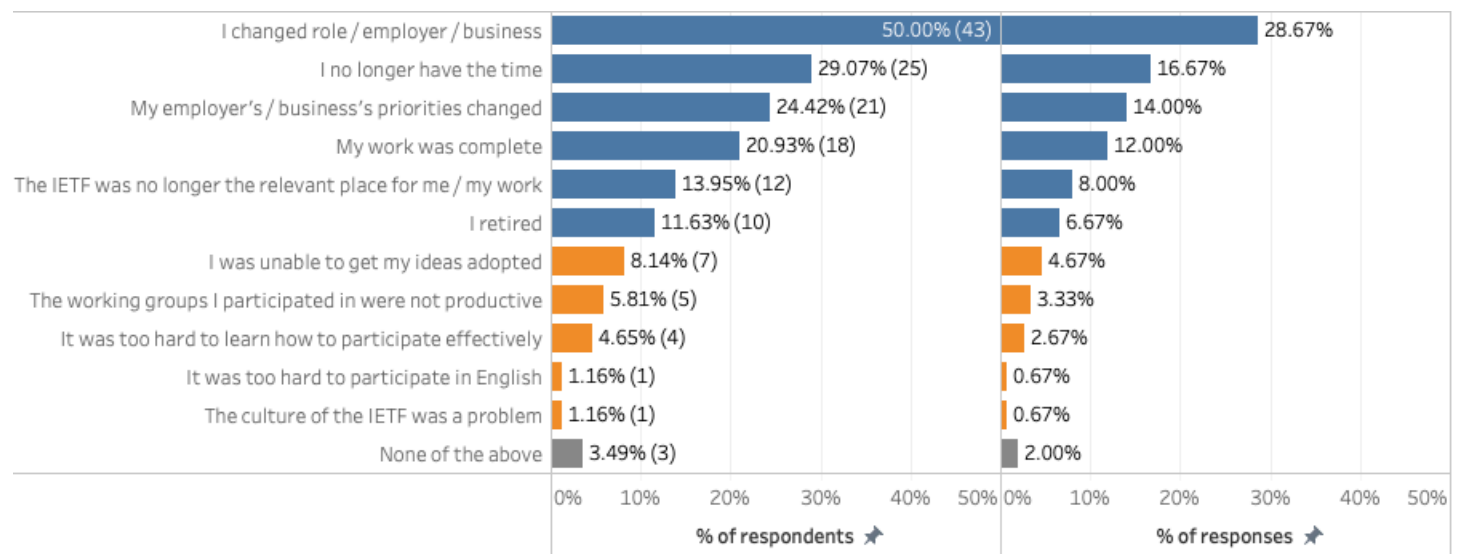
Q17. In what year did you cease being a regular participant in the IETF?

Due to an error in this question, the results are not analysed.

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).



Commentary

61. By definition, this only records views from people who cease participation but remain subscribed to at least one list and so receive the survey invitation.

62. The primary factors, which account for 90% of responses, are all outside of the control of the IETF.

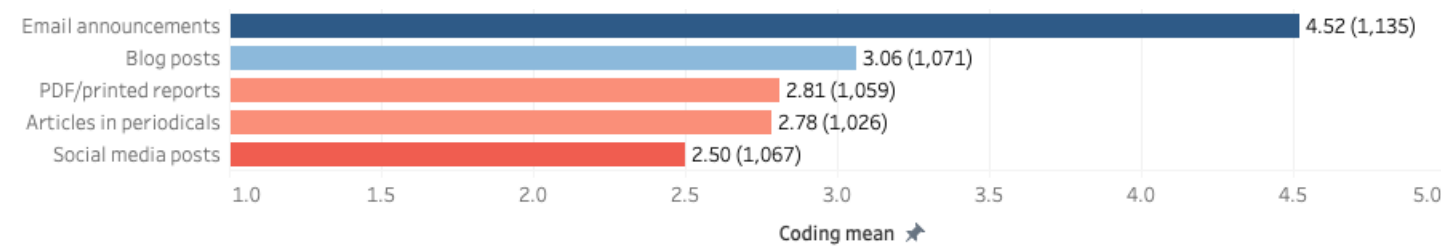
63. Behaviour, which is often anecdotally cited as a reason for people leaving, scores very low.

Questions: Communication and Participation Preferences

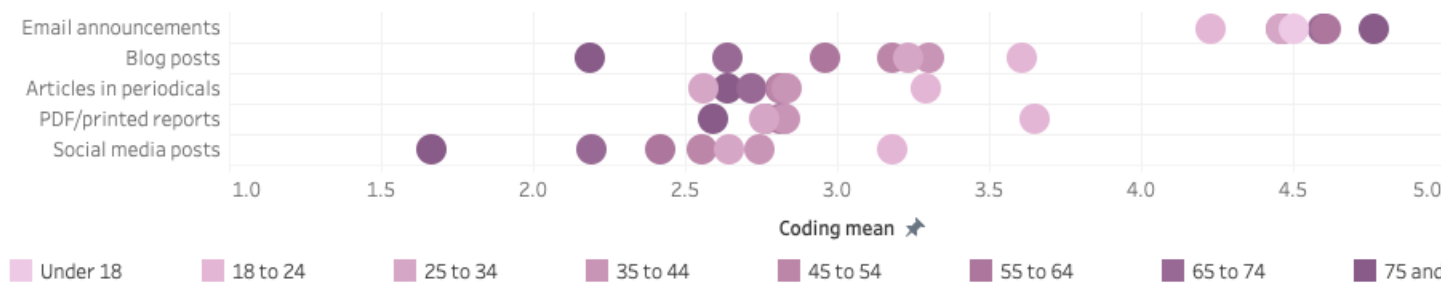
These are a small number of questions to understand individual preferences for communications and participation.

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.



Coding means by age:



Coding means by participant type:

	regular					occasional					reader					monitor					previous					new				
Email announcements	4.66					4.54					4.55					4.47					4.41					4.33				
Blog posts	2.99					2.94					3.13					3.08					3.18					3.34				
Articles in periodicals	2.50					2.58					2.97					2.86					3.12					3.14				
PDF/printed reports	2.48					2.59					3.11					2.92					2.87					3.07				
Social media posts	2.47					2.39					2.68					2.44					2.52					2.69				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
	Coding mean					Coding mean					Coding mean					Coding mean					Coding mean					Coding mean				

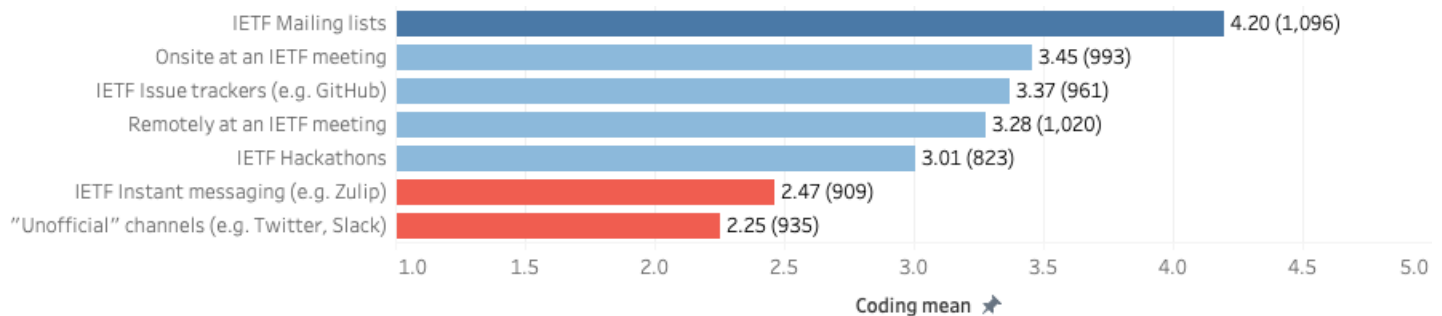
Commentary

64. Overall, email is the preferred method to be informed by a very long way, however it is broken down.

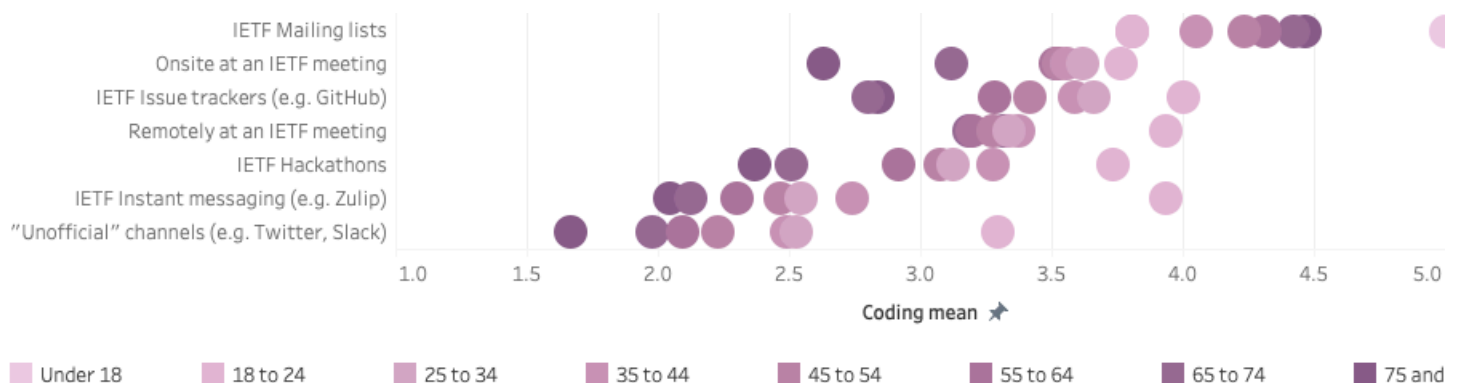
65. Online content, including both blog posts and social media posts, have a very wide spread of preference, consistent with age range - the younger the participant, the more they prefer these other methods.

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

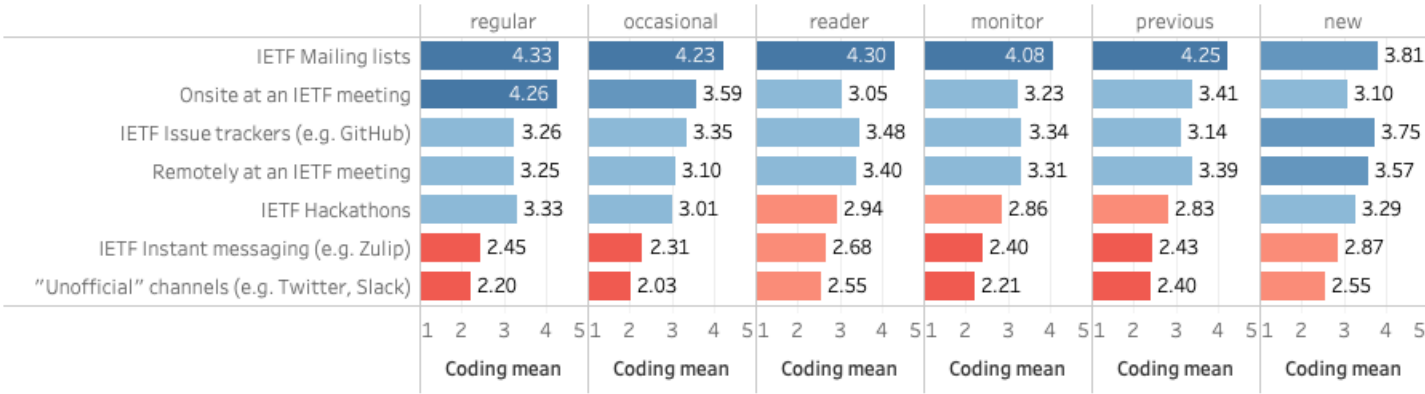
This question asked respondents to rate a set of options by preference, from strongly preferred to strongly not preferred. This question is unchanged from 2021 and 2022.



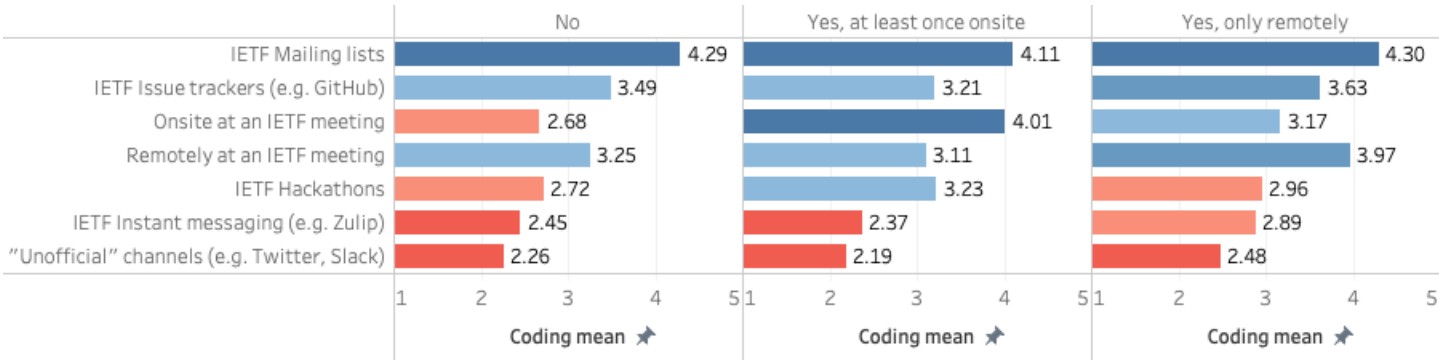
Coding means by age:



Coding means by participant type:



Codings means by meeting participation:



Commentary

- 66. Email is the most preferred method of participation across the board
- 67. New participants rate issue trackers almost as high as email.
- 68. Regular participants and those who have participated onsite at an IETF meeting, rate participating onsite at an IETF meeting almost as high as participating on mailing lists.

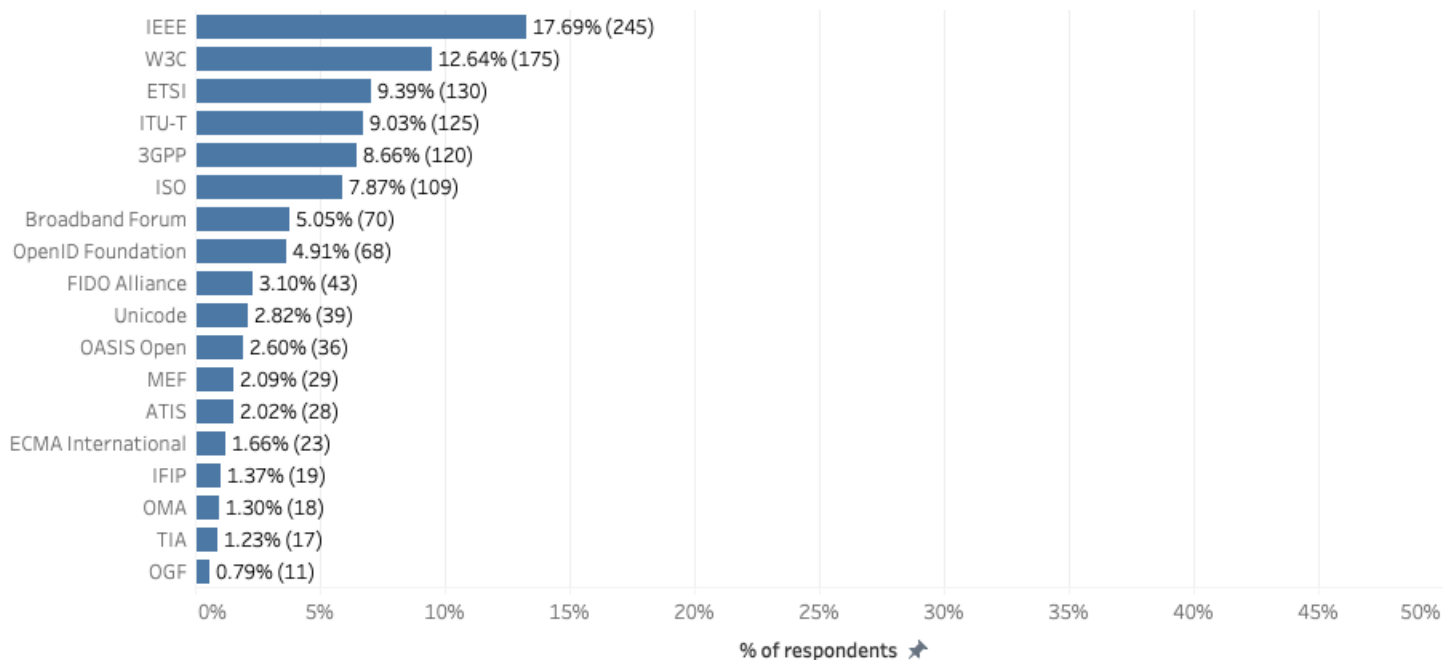
Questions: Other Standards Development Organisations

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

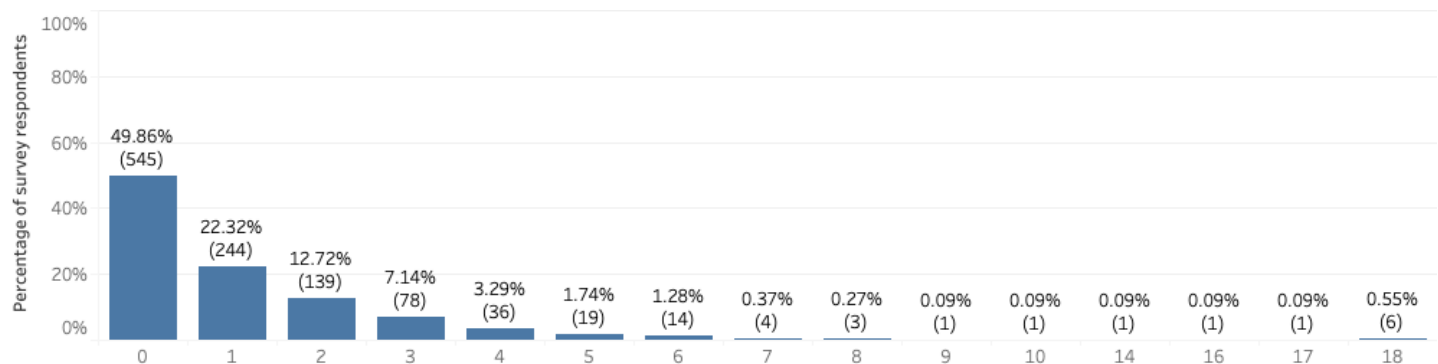
Q29. Which other standards setting organisations do you participate in? (check all that apply)

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.

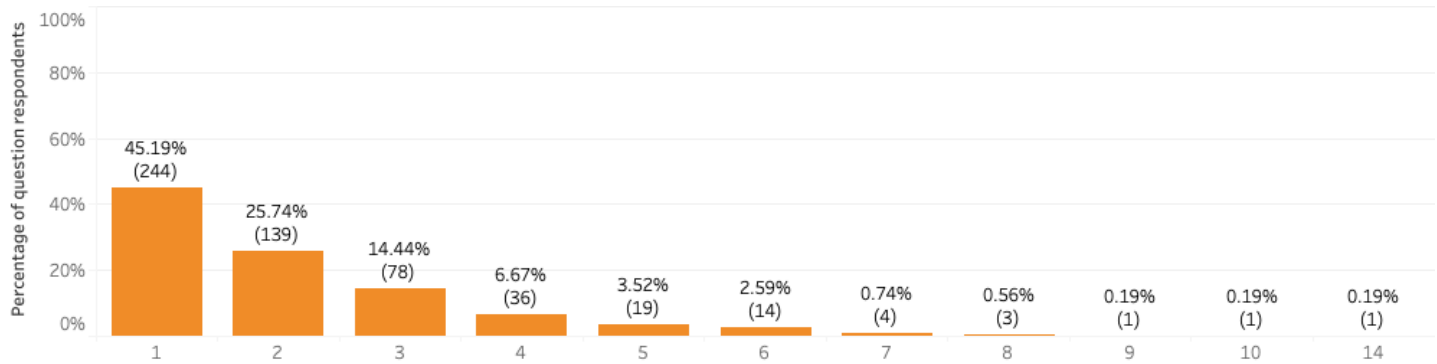
The following chart does not include respondents who answered "none of the above" as that would show a misleading percentage. This is better captured on the next chart.



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:



Commentary

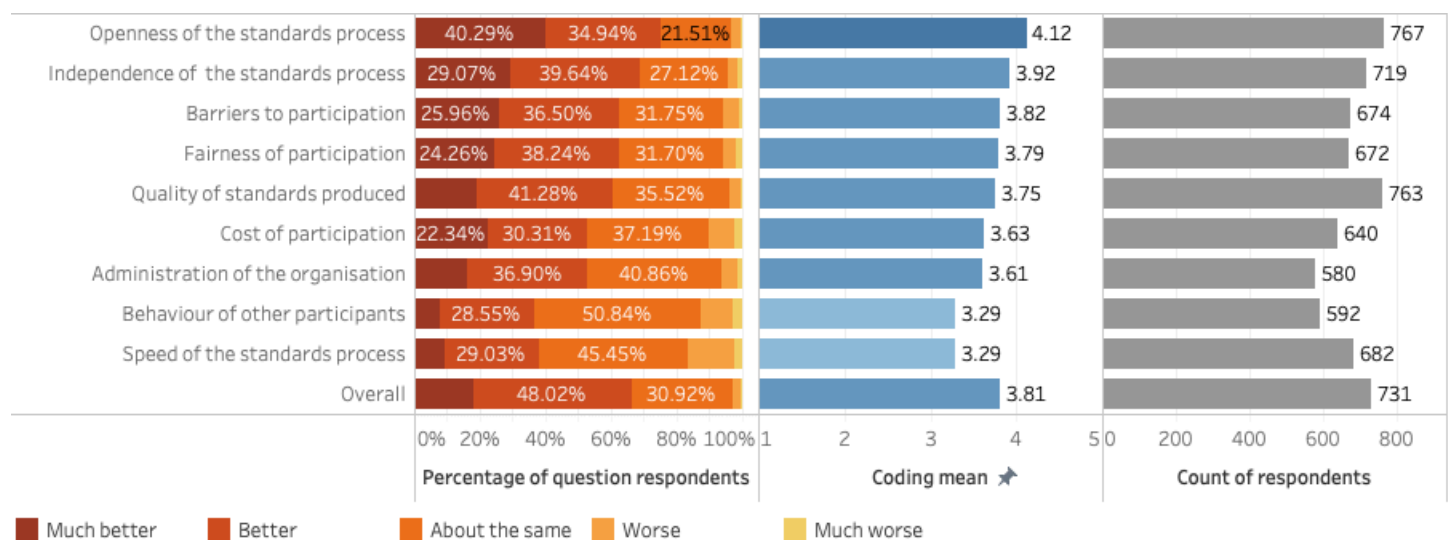
69. About half of IETF participants participate in at least one other SDO. Given that the choices presented are a non-exhaustive set of SDOs, this is lower than the true level.

70. The ordering of other SDOs is very similar to the results from 2023 and 2022 with the IEEE a clear standout, then the W3C and then a close group of ETSI, ITU-T, 3GPP and ISO, with the others trailing behind.

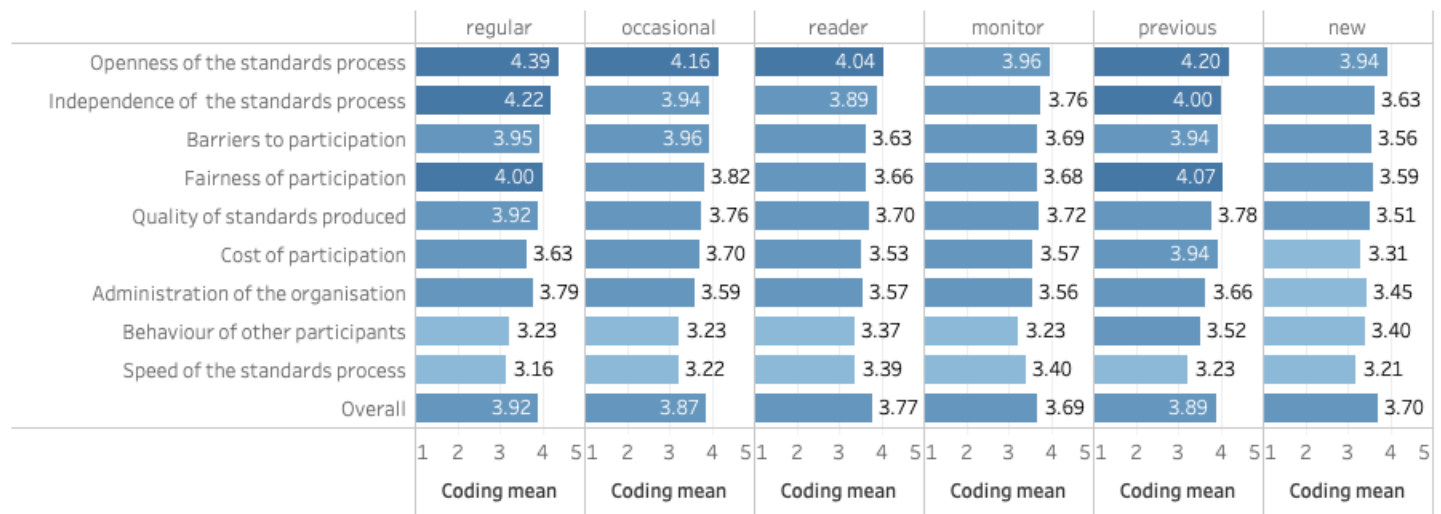
Q30. How well do you think the IETF compares to other standards settings organisations for the following aspects?

Respondents were asked to rate a series of aspects of the IETF using a comparative scale from much better to much worse. A coding mean of 3 is neutral, above that is better than other SDOs and below that, 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.

The choice "Independence of the standards process" was added to replace a previous choice that was confusing.



Coding means by participant type:



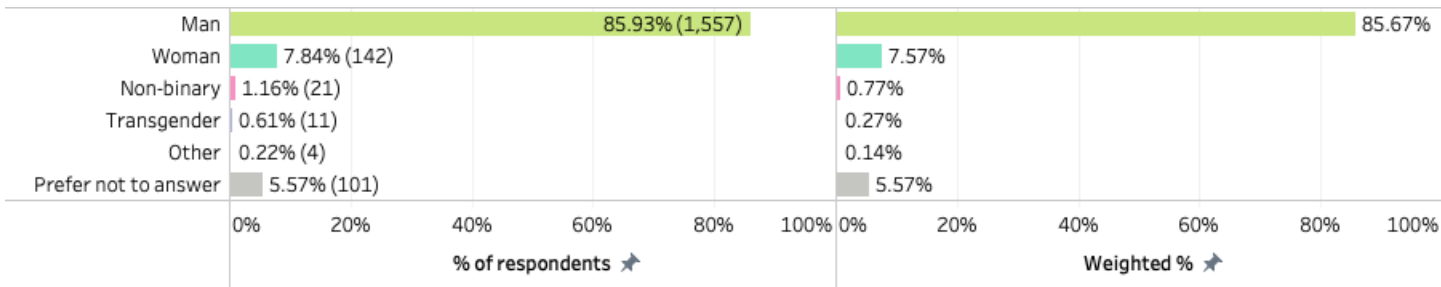
Commentary

- 71. IETF participants rate the IETF better than the other SDOs they participate both overall and across a range of attributes, noting that we list a set of attributes that matter to the IETF.
- 72. The new attribute of independence of the standards process, scores second highest overall.
- 73. The two attributes with the lowest score, though both still better than other SDOs, are the behaviour of other participants and the speed of the standards process.

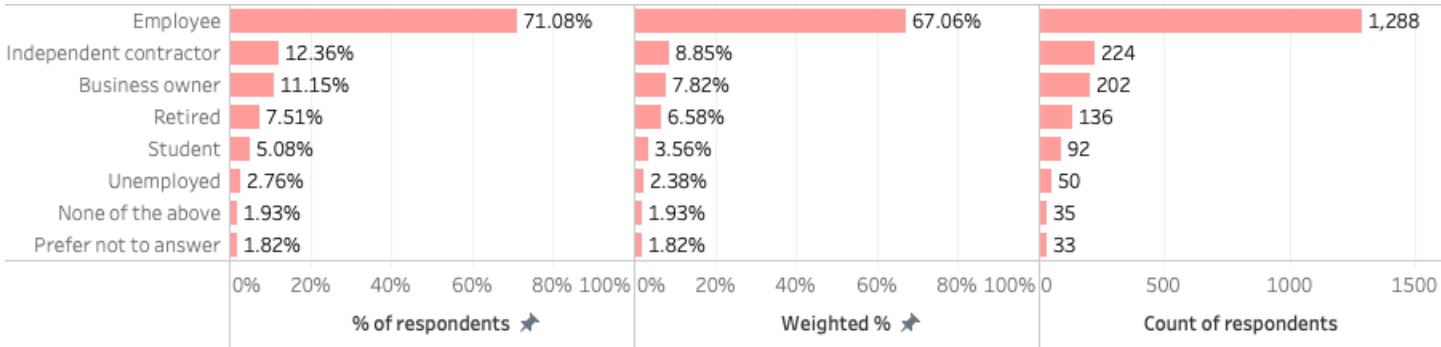
Corrections to reports from previous surveys

2023 Survey

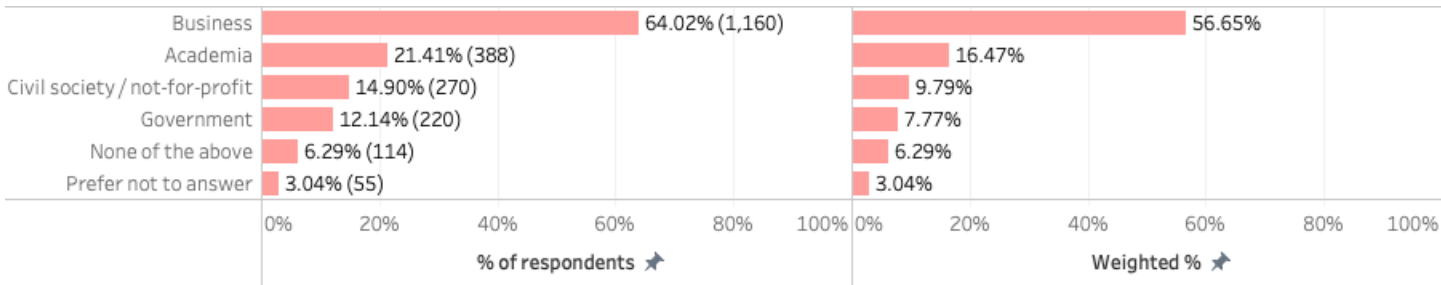
The main chart for gender showed incorrect calculations for the weighted column. The corrected chart is



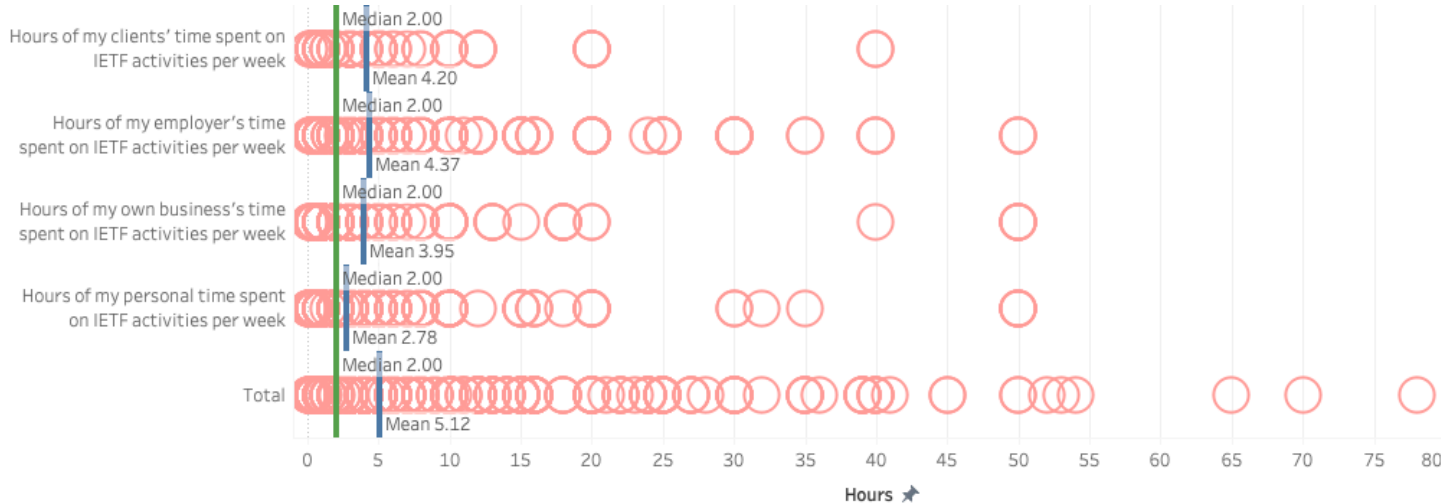
The main chart for employment showed incorrect calculations for the weighted column. The corrected chart is



The main chart for sector showed incorrect calculations for the weighted column. The corrected chart is



The charts for the hours spent on IETF activities showed incorrect calculations for the median and mean. The corrected main chart is:



Improvements for future surveys

During this survey process, feedback was provided that will be considered for future surveys:

- Consider alternative words for 'hinder' and 'deter' as these are not commonly used by non-native English speakers.
- Change the phrasing of the questions about employment so that people who are retired or unemployed can answer them about their previous employment.
- Various recommendations on additional SDOs to add to the list of other SDOs that people participate in.

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 admin-discuss@ietf.org mailing list.