ICANN STAFF DISCUSSION PAPER
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OPTIMIZING INCREASED ENGAGEMENT & PARTICIPATION WHILE ENSURING EFFICIENT & EFFECTIVE POLICY DEVELOPMENT

What are the limits of the volunteer model at ICANN? How can ICANN most effectively and efficiently leverage and support community volunteers to produce high quality policy outcomes?

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1. Introduction

A significant focus of recent ICANN outreach and engagement efforts has been to encourage the participation of new volunteers in ICANN policy development and advice activities. As a result, recent initiatives, such as a number of GNSO Policy Development Process Working Groups and Cross-Community Working Groups, have seen a significant increase in the number of volunteers that have signed up to participate (as members or observers) in these efforts. In managing this growth, the question has been raised as to whether there is a limit to the number of volunteers that ICANN's current systems, structures, and platforms can effectively support in conducting policy and advice development without negative impacts. Furthermore, initial research seems to indicate that even though volunteer numbers have substantially increased in certain parts of the community, this has not necessarily translated into more active participation and/or sharing of workload. Therefore, a related key question is how to get new volunteers *more actively involved,* while at the same time addressing the limits of our existing structures and platforms, in order to produce high quality policy outcomes.

This paper elaborates on challenges experienced and observed by staff members supporting ICANN working groups and policy development processes. It draws on some anecdotal input from community members, but the issue has not yet been examined systematically from the community perspective in the period since this growth has occurred.[1] This paper seeks to present challenges, contextualize concerns using lessons from academic research, identify efforts already underway that may address some of the issues identified, and present possible opportunities for future work for community input and discussion.

2. Challenges Identified

Within the last several years, the ICANN community has grown significantly. This expansion is reflected in ICANN public meeting attendance numbers, as well as in the size of ICANN's working groups. Within the GNSO, for example, three major PDP working groups were initiated in 2016, each of which has approximately 150 registered members[2]

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[1] The most recent comprehensive GNSO community survey was published in 2015 as part of the GNSO Review process (see https://www.icann.org/en/system/files/files/gnso-review-final-15sep15-en.pdf). In this survey, 77% of respondents felt that the working group model was effective and 50% responded that GNSO policy recommendations were timely. As this survey was conducted prior to the start of three very large PDPs, additional data collection may be needed.

[2] The three large GSNO PDPs are: New gTLD Subsequent Procedures PDP Working Group (148 members, 64 observers); Next-Generation gTLD Registration Directory Services to Replace Whois (146 members, 134 observers); Review of all Rights Protection Mechanisms (RPMs) in all gTLDs PDP Working Group (150 members, 110 observers).

plus an additional group of "observers."[3] These working groups are far larger than any that the GNSO has previously managed.

With a greater number of participants, the role of the discussion facilitator becomes increasingly important.[4] Large working groups are difficult to moderate, even for the most experienced leaders in the ICANN community. Facilitators must ensure that all interested participants have the opportunity to speak while simultaneously keeping the group moving towards shared goals. Audio conversations require turn-taking. If every person in a 150-member working group spoke in the course of a one-hour or ninety-minute call, each member would have less than a minute to speak, and coherent dialogue would be near impossible. This indicates that even with the most skilled facilitator moderating the discussion, there may be a practical limit to the number of people that can effectively take part in an audio conference. As groups grow, more participants appear to converse over Adobe Connect group chat rather than speaking during meetings, providing an additional challenge for moderators to monitor and respond to substantive discussion on audio and chat inputs simultaneously.

The mental load associated with managing complex group dynamics may be most strongly experienced by group leaders, but it also takes a toll on individual group members. Social loafing, a commonly observed phenomenon in which members of larger groups exert less effort towards group goals, is one outcome.[5] This "motivation loss" is not the only risk in larger groups. Members may also be less productive due to coordination loss (associated with the challenge of getting different parts of a team to work effectively together) and relational loss (the extent to which individuals feel that they will be able to get help and support from teammates in the face of difficulty).[6] With growing size, teams and groups may experience reduced cooperation,[7] higher levels of member dissatisfaction,[8] and increased turnover in membership.[9] Additional research on group size and team dynamics can be found in an annex to this paper.

At the same time that working groups are strained by higher enrollment numbers, the bulk of the work still falls on a relatively small number of community members. While theory about online communities validates that this is not an issue specific to ICANN,[10] it remains a significant challenge

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[3] Observers receive messages posted to working group mailing lists but do not have posting privileges on mailing lists and do not receive invitations to working group meetings.

[4] Gallo, Amy. "The Condensed Guide to Running Meetings." *Harvard Business Review Blog*. 6 July 2015. https://hbr.org/2015/07/the-condensed-guide-to-running-meetings.

[5] Additional reading on social loafing:

De Rond, Mark. "Why Less in More in Teams." *Harvard Business Review Blog*. 6 August 2012. https://hbr.org/2012/08/why-less-is-more-in-teams.

Radner, Erin, Gloria Mark, and Tammie Hertel. "Team Size and Technology Fit: Participation, Awareness, and Rapport in Distributed Teams." *IEEE Transactions on Professional Communication* (March 2005), 48(1).

Chidambaram, Laku, and Lai Lai Tung. "Is Out of Sight, Out of Mind? An Empirical Study of Social Loafing in Technology-Supported Groups." *Information Systems Research* (June 2005), 16(2), pp 149-160.

"Is Your Team Too Big? Too Small? What's the Right Number?" *Knowledge @ Wharton, University of Pennsylvania*. 14 June 2006. http://knowledge.wharton.upenn.edu/article/is-your-team-too-big-too-small-whats-the-right-number-2/.

[6] Mueller, Jennifer. "Why Individuals in Larger TTeams Perform Worse." *Organizational Behavior and Human Decision Processes* (Jan 2012), 117(1), pp 111–124.

[7] Gratton, Lynda and Tamara J. Erickson. "Eight Ways to Build Collaborative Teams." *Harvard Business Review*. November 2007. https://hbr.org/2007/11/eight-ways-to-build-collaborative-teams.

[8] Hackman, J Richard and Neil Vidmar. "Effects of Size and Task Type on Group Performance and Member Reactions." Sociometry (March 1970), 33(1), pp. 37-54.

[9] Butler, Brian. "Membership Size, Communication Activity, and Sustainability: A Resource-Based Model of Online Social Structures." *Information Systems Research* (2001), 12(4), pp 346-362.

[10] ICANN's participation structure appears to mirror a pattern in online communities known as participation inequality. In many online communities, approximately 90% of members are "lurkers." They follow the activity of others but do not actively participate themselves. An additional 9% contribute to some extent but do not do the heavy lifting. Nearly all the

for the core of the community that carries out this work. An ambitious pipeline of current and future projects will generate significant workload in the coming years, posing a real risk of burnout among ICANN's most dedicated community members. This raises important questions about prioritization of work streams within the ICANN community.

An exacerbating factor for core volunteers may be that some community newcomers lack the skills, knowledge, and/or resources to contribute meaningfully from the start, which may frustrate more experienced volunteers. Integrating newcomers takes time and resources, potentially slowing the pace of progress. Similarly, newcomers that join later in the process may intentionally or perhaps unknowingly re-open long-settled fundamental matters of agreement, thus also contributing to delays. Several initiatives are underway to improve newcomer integration (see annex for additional details), but questions remain about how to activate new volunteers so that the workload is more evenly shared, ensuring that expertise and skills match the volunteer opportunities available.

One possible way to better serve a broad base of volunteers with different interests, skills, and motivations could be to experiment with different models of community participation.[11] In the current model, some new volunteers sign up for working groups, complete onboarding activities, and then rarely attend meetings in practice, indicating that the system may not be serving their needs. We do not currently know why this occurs. Do these individuals lack the time, bandwidth, or interest to commit the necessary resources to participate fully? Was their experience in the working group inconsistent with their expectations of the process? Would alternative modes of participation better meet their needs? It is possible, for example, that some individuals would prefer to provide targeted input on specific topics or receive newsletter-style updates if those options were available, rather than follow emails and weekly calls over a multi-year process. Further insight into this phenomenon may be valuable to understand what possible solutions may be. The first step would be research into the interests, motivations, and expectations of volunteers, as well as patterns of participation.[12] With this information in hand, additional work could focus on alternative participation models that serve the needs of volunteers and objectives of the organization.

It may also be helpful to examine the impact of group size from a resource management perspective. Large working groups require a significant amount of staff support, particularly when new members are unfamiliar with ICANN processes and systems. Staff manually add new members to mailing lists, manage Statements of Interest, update lists of members on wikis, provide orientation on working group tools (such as Adobe Connect), share information about protocols and norms, and host a range of informational webinars for working group participants.[13] Staff "dial out" to members for working group calls upon request, troubleshoot connection difficulties during meetings, and assist with the logistics of managing email lists. As groups grow, all of these tasks become more time-consuming and challenging to manage.

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contributions come from a very small group of participants, approximately 1% of users. See https://www.nngroup.com/articles/participation-inequality.
While it may be impossible to eliminate this pattern, active community management may alleviate its impact (see annex for additional information).
[11] ICANN Strategy Panel Report on Multistakeholder Innovation offers some interesting ideas on this topic: https://www.icann.org/en/system/files/files/msi-quest-blueprint-21may14-en.pdf.
[12] The proposed Group Enrollment Portal has the potential to offer better and more complete data on participation patterns. The current set of requirements does not include features to capture information about participant's motivation for joining and leaving groups, but this type of functionality could potentially be added in the future.
[13] The proposed "Group Enrollment Portal" tool would automate some of these manual tasks, including management of working group enrollment, SOIs, and membership preferences. This project is currently in the very early planning stages.

Large groups have technical, logistical, and cost implications. The standard Adobe Connect room supports a maximum of 100 people. For larger groups, a special "seminar" room must be used, which under the current licensing agreement requires administration by the ICANN technical support team. Larger groups need more dial-outs, which comes at an increased cost. At ICANN meetings, more people translate into fewer venue options and more expensive facilities. There are also budget implications regarding community financial support for meeting travel. These impacts on staff and the overall budget also need to be factored in when looking ahead.

3. Why does this matter?

With ongoing outreach efforts to grow the ICANN community and new publicity associated with the IANA transition, it is likely that interest in ICANN policy activities will continue to grow. While the exact trajectory of growth in the volunteer base is difficult to predict, it is important for ICANN to be prepared and plan proactively for a range of scenarios.

Without properly addressing challenges faced in implementing the current volunteer model, there is a risk of strain on staffing resources, logistical problems, climbing costs, and attrition by core community members. These issues could result in stagnation of policy and advice development activities. At stake is the credibility and legitimacy of the ICANN global multistakeholder model, especially as ICANN faces greater scrutiny following the IANA-transition.

4. Core values and priorities

It is impossible to fully address the concerns raised in this discussion paper without more broadly examining ICANN's goals, values, and priorities with respect to its policy work. The key underlying question: What does "good" or best practice look like for the ICANN multistakeholder model, and more specifically, the working group model at ICANN? The answer to this question informs how the ICANN organization and community should prioritize problems and evaluate possible solutions related to the volunteer model.

ICANN's mission is to ensure the stable and secure operation of the Internet's unique identifier systems. In serving this mission, ICANN makes a commitment to "employ open, transparent and bottom-up, multistakeholder policy development processes."[14] In practice, this commitment is implemented through a complex set of processes and institutional structures, some of which leverage representatives working on behalf of particular sub-sets of the community, others which assemble small groups of individuals with specialized expertise to address a particular issue, and yet others that are completely open to participation by all. The working group model adopted by the GNSO uses this open participation model for its policy development initiatives.

Many values come into play when discussing what "good" looks like for ICANN's policy processes. Some of these values are explicitly stated in ICANN's bylaws, while others are reflected in other foundational/governance documents, systems, processes, and structures. The following are two examples of values stated in the bylaws:

> *(ii) Seeking and supporting broad, informed participation reflecting the functional, geographic, and cultural diversity of the Internet at all levels of policy development and decision-making to ensure that the bottom-up, multistakeholder policy development process*

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[14] See ICANN bylaws: https://www.icann.org/resources/pages/governance/bylaws-en

is used to ascertain the global public interest and that those processes are accountable and transparent;

(v) Operating with efficiency and excellence, in a fiscally responsible and accountable manner and, where practicable and not inconsistent with ICANN's other obligations under these Bylaws, at a speed that is responsive to the needs of the global Internet community;

Translating values into practice can be a challenging undertaking. What does "efficiency and excellence" mean in a Policy Development Process, for example? How can it be measured consistently and effectively, and over what period of time should it be measured?[15] There are similarly questions about putting the value of diversity into practice. For example, is it truly feasible for the ICANN community to reflect the diversity of the Internet at all levels of policy development and decision-making? What does diversity even mean in this context? Is complete openness of working groups a pre-requisite for promoting diversity, or is openness a value in and of itself to be considered? What is the correct course of action if, due to resource constraints and operational limitations, one must weigh objectives associated with one value, for example diversity or openness, with goals serving another value, for example efficiency?

These questions point to the importance of continuously examining the link between values, goals, and institutional practices. They also underscore the value of collecting and analyzing data to support evidence-based decision-making throughout the organization. Evaluating "good" is an especially difficult exercise for an organization as unique at ICANN, but it is essential to the organization's legitimacy and ongoing success.

5. Questions for Discussion

- Does the community view effective participation in an expanding ICANN communityas an issue that needs further consideration / discussion?
- What is the current status of projects listed in Annex A? What other initiatives should be included? How do these projects intersect with issues raised in this discussion paper and inform next steps?
- What factors prevent ICANN working group members from more fully participating? How can the ICANN organization reduce these barriers?
- What values underpin the ICANN volunteer model? How do we measure and evaluate success with respect to implementation of these values?
- To what extent should alternative volunteer models be explored vs. focusing on tools, processes, and resources to better support the existing model?
- What additional data would be helpful to support future discussion on this topic?

Based on the community's input, a decision can be made concerning what steps, if any, should be undertaken by the community, supported by staff as needed, to further explore and address the issues identified in this discussion paper. Recognising the need for additional data, it could be helpful, as an intermediate next step, to have input from members of large working groups about their experiences. Input from working group leaders would also offer valuable data. A community survey is one possible vehicle for collecting this input. Interviews with co-chairs and other dedicated volunteers could provide additional insight. This work, if undertaken, should be carefully coordinated with other initiatives underway to avoid duplication of effort and promote learning

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[15] GNSO policy development processes are currently evaluated through a self-assessment questionnaire distributed to working group members at the conclusion of their work. The GNSO policy team is in the process of developing Key Activity Indicators that will provide additional quantitative data. There is not currently a method for evaluating the success of working groups while their work is underway.

across the organization. In particular, the stakeholder journey project may offer data points about the experiences and motivations of volunteers in the ICANN community.

Annex A: Related ICANN Initiatives

The ICANN organization and community have a number of initiatives underway related to volunteer onboarding, community capacity building, and other topics raised in this paper. This annex lists some of the activities and programs that may be relevant to consider in planning next steps for the volunteer model project.

   a. The Stakeholder Journey project seeks to build pathways for interested stakeholders to become active participants in bottom-up policy processes.
   b. The ICANN Academy Leadership Program provides training in leadership and facilitation skills for members of the ICANN community across the ACs, SOs, and SGs.[16]
   c. The ICANN Academy Chairing Skills Program Pilot seeks to prepare community members to take on leadership roles in working groups and stakeholder groups.[17]
   d. The Volunteer Engagement Project seeks find ways to improve ICANN's ability to identify and attract new and productive community participation while retaining existing participants who dedicate their time and efforts to ICANN's work?[18]
   e. NextGen@ICANN sponsors young adults to attend ICANN meetings, focusing on individuals ages 18-30 from the region in which the meeting is taking place.[19]
   f. The ICANN Fellows Program offers sponsorship to ICANN meetings and capacity-building activities for select participants, focusing on individuals from underserved and underrepresented communities.[20]
   g. ICANN Learn offers a free and open learning platform for members of the community.[21]
   h. Within the GNSO, several activities support onboarding of newcomers: Monthly webinars for working group newcomers co-hosted with GNSO Council members; PDP Working Group Member Onboarding Program; and the Membership Enrollment Portal (currently in the planning stages).

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[16] https://community.icann.org/display/LTP/Leadership+Program
[17] https://community.icann.org/pages/viewpage.action?pageId=62395123
[18] https://community.icann.org/display/gsenorthamwkspc/Volunteer+Engagement+Project
[19] https://www.icann.org/development-and-public-responsibility/nextgen)
[20] https://www.icann.org/fellowshipprogram
[21] http://learn.icann.org/

Annex B: Literature on Group Dynamics and Team Management

This annex summarizes findings from experts in the fields of psychology, sociology, and business on group dynamics and team management. The literature review focuses on research that may inform discussions about the ICANN volunteer model. The three primary research questions explored in this annex are:

- How does group size impact collaboration and productivity?
- What are the unique benefits and challenges of groups that complete the bulk of their work using computer-mediated communication?
- What management techniques can be adopted to improve process and outputs for large and/or remote groups?

Group Size

What is the ideal size of a group or team? What is the upper limit? Researchers have attempted to answer these questions using lab experiments, observations of teams "in the wild," corporate surveys, and more recently through big data analysis.* Two takeaways are most important. First, ICANN is a unique organization, so the existing body of research is unlikely answer all of our questions about how ICANN community work could most effectively be organized. At the same time, lessons about human nature and interpersonal dynamics drawn from other settings may be applicable to and inform our work at ICANN. Second, there is no one answer to the question of ideal group size. There are rules of thumb and generalities that might be applied, but ultimately, every team or group is unique. When approaching management issues, it's important to look at group size in conjunction with goals, methods, dynamics, and skills within the team.

Some of the most interesting and well-publicized work on group size comes from anthropologist and evolutionary psychologist Robin Dunbar. In studying different types of primates, Dunbar found that the size of the brain's neocortex is related to average size of natural groupings of the primate species. Larger groups require greater mental capacity to maintain relationships with the other members of the group and manage group dynamics. Management of group interaction carries a social and intellectual burden. For humans, the maximum number of social relationships a person can maintain is approximately 150. The number of roughly 150 appears in the natural groupings of hunter-gatherer societies, agricultural colonies, and military units (Dunbar, 1992) (Dunbar, 1996).

Recent literature has found new applications for Dunbar's findings. In his popular book *The Tipping Point*, Malcolm Gladwell examines a highly successful apparel company that organizes its factories around the Dunbar number, assigning no more than 150 employees to each site (Gladwell, 2006). There is also evidence that Dunbar's hypothesis applies to the number of active ties people can maintain in online networks and communities, although the upper limit may vary somewhat in different contexts (The Economist, 2009) (Goncalves, Perra, and Vespignani, 2011) (Allen, 2004).

Dunbar's research does not indicate that 150 is the ideal number for a group, but rather posits that it appears to be a natural limit, after which further growth may be challenging to sustain. While 150 is the most famous Dunbar number, there are other thresholds mentioned in Dunbar's writing. For example, fifty is "the typical overnight camp size among traditional hunter-gatherers." Twelve to fifteen is the number of people whose death the average person would find devastating. Three to five is the size of an individual's closest circle of friends (Dunbar, 2011). Closer connections require more mental effort. In both personal and professional settings, closer and more intensive

interpersonal relationships and collaborations may naturally reach a limit at smaller number of individuals.

Long before groups reach 150 members, individuals experience social and psychological burdens associated with peer interaction. Professor Jennifer Mueller at the University of Pennsylvania studies losses in productivity associated with larger groups of individuals working together. Members of big teams may experience performance losses due to three interconnected concepts. Motivation loss is the tendency of individuals to work less hard in larger groups if they feel that individual contributions are likely to be lost or go unnoticed. Coordination loss occurs due to challenges in getting the different parts of a team to work effectively together. Relational loss occurs when individuals feel that they will not be able to get help and support from teammates in the face of difficulty (Mueller, 2012). Mueller is particularly interested in strategies for minimizing relational loss in large teams. According to Mueller: "Finding a way to enhance the connections between members of those large teams is critical to improving their individual effectiveness" (Knowledge @ Wharton, 2012).

Loss of individual motivation in larger teams is often discussed using the term "social loafing." Social loafing is a phenomenon in which individuals in larger groups put less effort towards group goals (De Rond, 2012). First observed in the context of people playing a game of tug-of-war, social loafing is now examined in professional and educational settings as well. It has been observed not only in face-to-face teamwork but also in computer-mediated collaboration (Chidambaram and Tung, 2005). In one study of distributed teams, researchers found that members of smaller teams participated more actively than counterparts on larger teams (Radner, Mark and Hertel, 2005).

At what size of group does social loafing begin to occur? According to one expert, in some types of teams social loafing results in diminishing returns as group grows beyond 8 or 9 people. Generally, optimal team size is between 5 and 12, but the specific number depends on the type of task the group is executing (Knowledge @ Wharton, 2006). A study of large, virtual teams found that as teams grew beyond 20 members, collaboration decreased. Cooperation also decreased as teams became more virtual, unless management took measures to improve collaboration (Gratton and Erickson, 2007).

The type of task may impact the extent to which group size impacts productivity and satisfaction. In a study by Hackman and Vidar, members of larger groups expressed greater dissatisfaction with group process.[22] Size was a particular concern for participants when completing production-oriented tasks, such as writing a document (Hackman and Vidmar 1970). For other types of tasks, there may be benefits to having more team members. In one study, for example, larger groups outperformed smaller groups with respect to idea generation (Valacich et al, 1995).

Group composition may also be a factor to consider when looking at group size. In a study of big virtual teams, Gratton and Erickson found, for example, that groups with a larger number of experts experienced more non-productive conflict and stalemate than smaller groups (Gratton and Erickson, 2007). Diversity and heterogeneity may also have an impact.[23] Cummings found that in larger groups, marginal productivity decreases with increasing heterogeneity in the group (Cummings et al,

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[22] Interestingly, the relationship between increasing group size and dissatisfaction may not be linear. One researcher found, for example, a notable dip in satisfaction around a group size of 16 (Allen, 2005).
[23] It is important to note that diversity and heterogeneity can be defined in many different ways. The specific context of the studies referenced in this discussion paper should be examined and understood before attempting to generalize the findings to other contexts.

2013). Groups with a mix of different types of individuals allow for more and different perspectives, which can be a significant benefit. At the same time, more diverse groups may face greater challenges with effective communication and collaboration (Haas, 2015). Therefore, when looking at ideal and maximum group size, it may be helpful to examine group membership and interpersonal dynamics as part of this analysis.[24]

So how does one ensure the success of large teams? A few lessons can be drawn from relevant literature. Especially in larger teams, members benefit from leadership that promotes social relationships, collaborative behavior, and effective conflict resolution (Gratton and Erickson, 2007). For meetings with a larger number of participants, the role of the facilitator becomes more important in ensuring participants remain engaged and everyone has an opportunity to contribute (Gallo, 2015). To reduce the effects of social loafing in groups, it can be helpful to create a sense of urgency, break work into smaller pieces, and improve feedback and transparency (De Rond, 2012).

Virtual Teams

ICANN working groups rely heavily on technology tools and teleconferencing to get their work done. A growing body of research looks at remote collaboration, virtual teams, and group work leveraging computer mediated communication (CMC). None of the groups or settings mentioned in this discussion paper exactly match the circumstances and dynamics of ICANN working groups, but lessons from the literature may be able to help groups improve process and outputs in the face of challenges associated with size and distance. Experts agree that effective remote group collaboration requires several elements: a clear sense of common ground (goals/norms/roles/processes), effective leadership, open and clear communication, and trust.

In some respects, groups using computer mediated communication face more challenges than their face-to-face counterparts. Group processes involving CMC may be more challenging and therefore may result in groups completing tasks more slowly (Baltes et al, 2002). Groups using CMC may also have more trouble reaching consensus-based decisions compared to groups meeting face-to-face (Adrianson and Hjelmquist, 1991).

In other respects, CMC groups experience benefits: In one study, groups solving problems through asynchronous CMC found the collaboration more satisfying and higher quality compared to face-to-face interaction (Jonassen and Kwon, 2001). Another study found that CMC can minimize the negative impacts that group size can have quality of group communication (Lowry et al, 2006). These benefits make sense, because chat, email, and other software tools allow users to brainstorm and share ideas as they arise without having to worry about the turn-taking that is necessary in face-to-face interaction.

Ferrazzi emphasizes that remote collaboration is most successful when groups are kept small. Larger groups may benefit from the use smaller sub-teams to complete tasks. According to Ferrazzi, it is important to foster trust through strong leadership, promote open dialogue, set clear goals and guidelines for interaction, and meet face-to-face at key moments in the group process. Technology should foster collaboration and "messy talk" (Ferrazzi, 2014).

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[24] Even within a single organization, there may not be one single collaboration model that applies across the board. A study of working groups within the W3C found that groups with different subject-matter focus and composition had very different patterns of communication and interaction between group members (Gloor et al, 2003).

Siebdrat, Hoegl and Ernst offer similar observations, explaining that virtual teams are most effective when they focus on task-related processes, have a shared commitment to goals, maintain a group identity, and promote trust through face-to-face meetings (Siebdrat, Hoegl, and Ernst, 2009). Hertel, Geister, and Konradt emphasize the importance of clear goals and roles, effective communication and collaboration processes to compensate for reduced communication cues, and experiences of interdependence through goal setting, task design, or team-based incentives (Hertel, Geister, and Konradt, 2005). Lurey and Raisinghani cite the importance of shared goals, formalized work processes, and clearly defined roles (Lurey and Raisinghani, 2001).[25]

Online Communities

Online communities involve networks of individuals organized around a shared set of interests or goals who participate on a voluntary basis and rely on technology tools to make contributions. While online communities are somewhat different from ICANN working groups, studies on volunteer participation and network dynamics may offer data points that inform discussions about the ICANN volunteer model.

One concept from the study of online communities that may be particularly applicable is the idea of "participation inequality." Researchers have observed that in many online communities, there is a predictable pattern of participation among members. Approximately 90% of are "lurkers." These individuals follow the activity of others but do not actively participate themselves. An additional 9% contribute to some extent but do not do the "heavy lifting." The final 1% serve as the core of the contributor base. A significant majority of work comes from this tiny minority of individuals (Nielson, 2016). Participation inequality appears in a range of online settings (Allen, 2009).

It may not be possible to completely overcome participation inequality, but disparity can be reduced through proactive community management. For example, reducing barriers to entry may prompt a greater number of individuals to participate. User-friendly tools and interfaces can increase the number of active contributors. Asking community members to respond to a proposal or edit existing work may be another way to increase participation. These types of activities require less effort than producing something completely new. Rewarding and promoting quality contributions is another way to encourage more members to engage (Nielson, 2016).

Research about online communities may also shed light on patterns of group enrollment. In a study of such communities, Butler found that increasing group size results in an increased ability to attract new members. Larger communities allow for members to connect with a greater number of new ideas and have more people receive and respond to their own contributions, therefore adding value. At the same time, growing online communities may experience a reduced ability to retain members. This "churn" results from the fact that each member makes a personal calculation about the benefits and costs of membership. Larger online social structures may involve longer meetings, more email, or other costs to time and energy that may result in existing members leaving the network. For some, the benefits of growth will outweigh the costs, but for others a larger community may come

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[25] The characteristics of successful remote teams do not appear to be so different from teams in general. For example, successful teams tend to have a shared sense of goals, roles, and norms. Strong teams promote a safe environment where people can openly share their thoughts (Moussa, 2016). A study of teams at Google reinforced that groups with better performance tend to have strong communication skills. Researchers found, in particular, that strong teams exhibit ''equality in distribution of conversational turn-taking,'' meaning that members tend to speak for roughly equal amounts of time in conversation (Duhigg, 2016).

with too many drawbacks to remain attractive (Butler, 2001).

Annex B Sources

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Annex C: Group Membership Graph

*** Last updated October 2016 – ([return to text])