

# Fast Flux Lessons Learned, a Personal Reflection

Mike O'Connor

## I. Introduction

There are some observations that I would like to share that fall outside the scope of the deliverables of the Fast Flux working group. The points I will make in this paper relate to several chartering issues which made it very hard for the good people who volunteered for that effort to complete the task they were given. I view this commentary as a way to record some “lessons learned” in hopes that we can avoid some of these issues in the future.

I’m writing this in the first person to highlight that these opinions are strictly my own, and arise from the experience of Chairing the working group. I am deeply honored to be offered the opportunity to serve in this role and quite enjoyed the experience – although there were times when I felt like I had my hair on fire and was putting it out with a hammer. I eventually resigned, mostly because of the issues that I’ll describe below.

I view ICANN and the GNSO as very young organizations that are going through a process of maturing – and transitioning (as many organizations have before) from being a start-up into a more mature and stable organization. This is often the time in the life of the organization that professional management techniques are introduced – and we can see that on the “functional management” side of ICANN with the introduction of strategic-planning and budgeting processes.

I would submit that we need to pay attention to strengthening ICANN and GNSO “project management” capabilities as well. To clarify – “functional management” techniques apply to running organizations that continue forever (a payroll function, a corporation, etc.) while “project management” techniques apply to projects (which have a beginning, middle and end) that produce deliverables of some sort.

I would further submit that the process by which we deliver the primary “product” of ICANN (policies) is through a series of ephemeral projects which develop recommendations for ongoing functional organizations (the Board, the Councils, etc.) to act on. Strong project-management capability **and** functional-management capability will be helpful in ensuring our ongoing success.

Once in my career, I was a project manager who could fairly reliably deliver (or rescue) small to mid-sized (\$1 million to \$5 million) technology projects. My skills are out of date – I haven’t managed a project of that size since I retired almost a decade ago. Nonetheless, there are some fundamental principles that still apply – and perhaps the most fundamental of all is the value of developing good project charters. That old adage “it doesn’t matter which way you turn the wheel if you don’t know which way is West”

applies to projects just as well as functions. Strategic plans are what guide functions, charters are what guide a projects.

The Fast Flux working group suffered from having a poorly defined charter, and I feel very strongly that we need to do better at this if we are to nurture an ever-larger cadre of skillful and energetic volunteers to participate in working groups. Conversely, if we continue to launch projects (PDPs, whatever) without good charters, we will burn out those same volunteers and find it ever more difficult to recruit new ones.

## **II. Chartering – the basics**

Here is a set of questions which, when answered, can provide a pretty good charter for a small project like the ones we run during the PDP process. There are a number of recognized standards in this area, I am using this list only because I developed it and thus can share it without getting in trouble with intellectual property attorneys (a group that is well represented within the GNSO, I say with a smile). I would submit that launching a project without answers to questions like these is a Bad Idea.

### **Mike's Pretty-Good Project-Chartering Questions**

#### **Problem Statement**

What is the problem (or puzzle) to be solved? How does not solving this problem get in the way of achieving the organization's objectives? What is the chronology of the situation - how did you get here? Are there trends at work - social, industry, financial, economic? Is this a 'solution' that has turned into a problem - if so, what is the original problem that this solution-turned-problem was supposed to solve? What alternatives have been explored?

#### **Stake Holders**

Who will be affected by the problem? Which employees? Stakeholders? Customers? Others? Have they been involved sufficiently up to this point? Should they be brought in to the project? When? To what degree do they share the belief that this is a problem that needs to be solved? Who ought to 'champion' this project? To whom should the project team report? Has a project leader been selected yet?

#### **Scope, Size and Perspective**

What written definition clearly distinguishes between what is inside this project, and what is outside? What is the level of detail and precision involved in this effort - is this a sweeping global effort (like a vision or strategy) or is this a project to produce specific outcomes (like install a system, or build a house)? What is the point of view that should be taken during the project - there can be more than one, better to identify them rather than discover them at final review. What is the degree of generalization being sought?

#### **Goals & Objectives**

What tangible, deliverable things do we want to see when this project is completed? How do we know when the project is done?

### **Critical Success Factors**

What things do we need to do well in order for this project to succeed? What are the attributes of projects like this that have succeeded in the past? Describe some projects of this type that have failed. What can we do to avoid those problems this time?

### **Preferred Problem-Solving Approach**

Who will do what, with whom, by when? What are the intermediate milestone events or deliverables that we can use as checkpoints to monitor the progress of the project? Are they more than 1 or 2 weeks apart? Do we need more (or fewer) objectives to keep the project under a reasonable level of control?

### **Readiness**

How dissatisfied are people with the current state of affairs? How clear is the vision? Do people think this project needs to happen? Do people have the tools and training they require in order to perform their role in the project team? What do other people in the organization need to do in order to get ready? Is the project team in need of some time to establish how they are going to work together, or have they succeeded as a group before?

### **Resource Requirements**

What people, time, money, access-to-decision-makers, technology, space, etc. do we estimate this project to take? How well do people understand the resources required to solve the problem? Are those resources available, or do we need to redirect from somewhere else? Is there wide support, and willingness to commit the resource, across the whole organization? Do people think the change is worth the investment? What are the organizational impacts (how broad, how deep)?

I'd like to make a series of points, based on this list of chartering questions.

### **III. Problem statement – ours was too broad**

We struggled on several dimensions because the problem statement we were provided needed to be narrowed before our initiative was launched. Were we to be a research group trying to understand the definition and impact of fast flux? Or were we a design group, trying to craft good responses for the community? Were we chartered as a policy group, trying to hammer out changes to rules that would be applied to various Constituencies? The questions we were posed touch on all of these and more. Which, to use an engineering example, is like trying to buy the steel for a bridge at the same time that we're determining whether a bridge needs to be built while simultaneously developing tools to test how deep the water is.

#### **IV. Stakeholders** – we had uneven representation

A number of working group members observed that we needed to have more people at the table. This was a very healthy observation. Countless projects have failed because the project team didn't include participation from all the people who had a stake in the outcome. To again hold up an example from another industry, a Human Resources project will fail if they install an employee system without involving the security and regulatory staff, a Manufacturing project will fail if they don't have the cost-accounting people at the table, etc.

At the same time, we had a cadre of people who represented one stakeholder group, who had a tendency to drown out the voices of the others. This project "leaked" members pretty much right from the start as moderate and opposing voices drifted on to other things. I've got some ideas about how to address this – take a look at the "Resource Requirements" section below.

#### **V. Scope** – ballooned dramatically, almost immediately

We had a very difficult time managing the scope of this project, partly due to the issues in the Problem Statement, but also because we didn't have a written definition of what was in scope (and what was not) before we started the effort. That blew up when we realized that some definitions of Fast Flux are much broader than others. That, combined with the overly broad Problem Statement, resulted in a project with a gigantic scope on a fixed timeline. Much like trying to make a baby in a month by putting 9 women on the project, this resulted in some weird tensions.

"Scope creep" is a phenomenon that kills a lot of projects if it's not managed. Fast Flux was a project afflicted with "scope gallop." With perfect hindsight I realize that I should have taken this issue back to my Steering Committee and gotten a ruling on this the first time I recognized what was going on. Part of the trouble there was that I didn't have a Steering Committee, nor was I required to make periodic status reports to anybody. Thus, there really wasn't an avenue for this discussion, except through my Council Liaison, who happened to be the primary advocate for the flawed charter we were given. Take a look at "Resource Requirements" for a discussion of that issue as well.

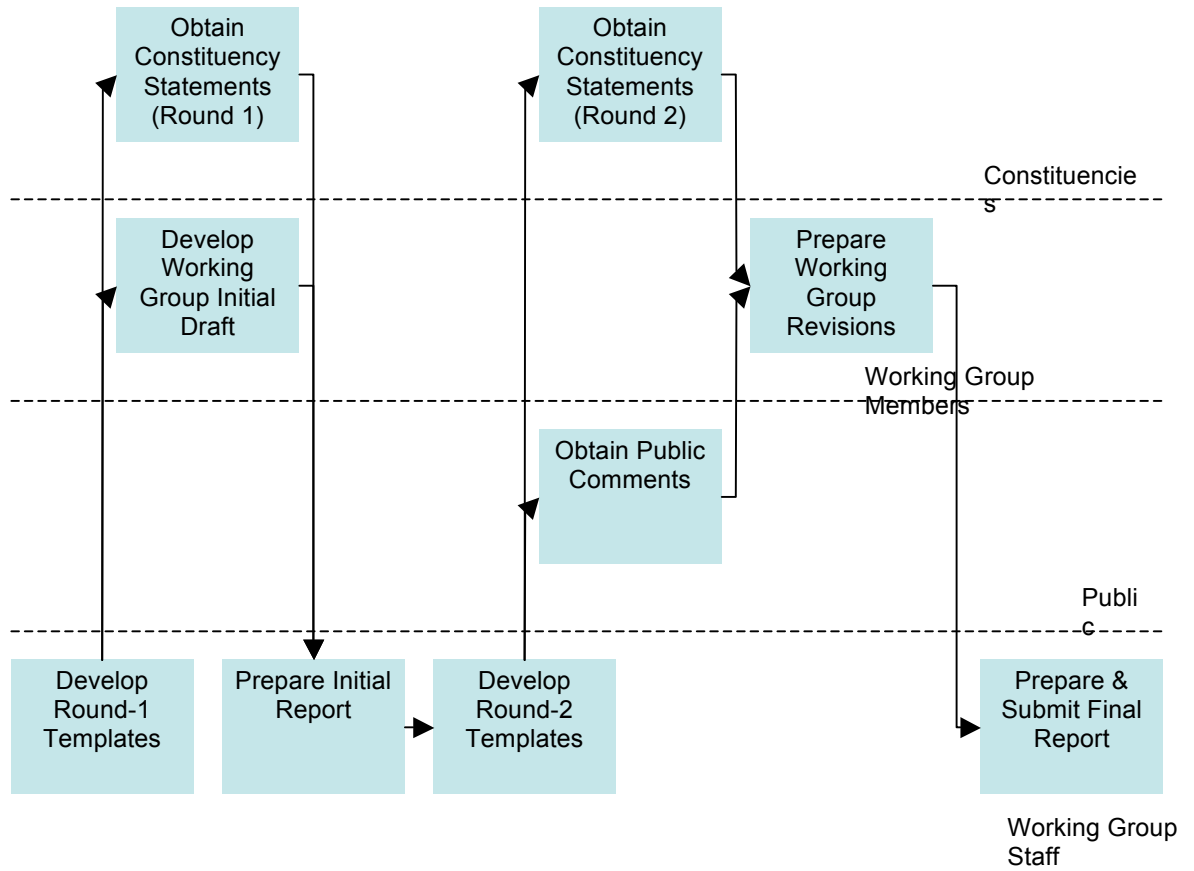
#### **VI. Approach** – we had several kinds of project, all in the same wrapper

"Approach" in project-manager-speak is the description how the work is broken down – what tasks need to be done, what sequence they should be done in, what deliverables should be produced, etc.

We used a PDP "approach" to structure the work of the Fast Flux working group. That approach is best suited to making very narrowly-cast, incremental changes to an existing body of policy. Unfortunately, that approach was **not** well suited to the work that we were engaged in, nor did it address all the deliverables we were asked to produce.

Sometimes pictures are helpful, so here are several illustrations of this point.

#### **Current approach – a working-group PDP**



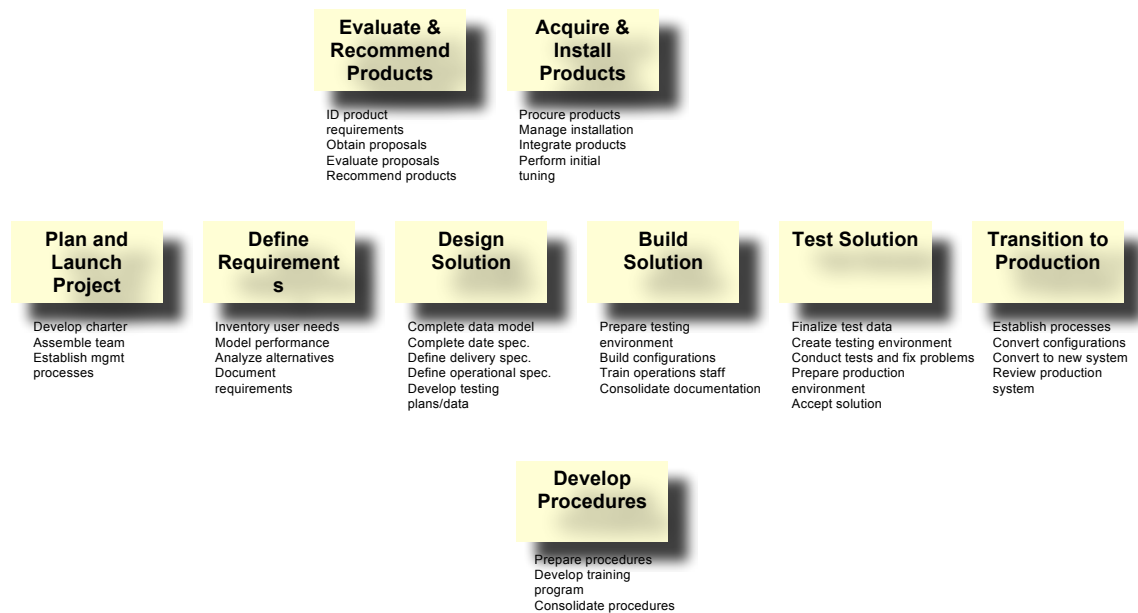
This is the series of tasks and deliverables that we operated under in this project. It caused a little stress because of the need to adhere to fixed timing defined in GNSO bylaws, rather than timing that's defined by the amount of work to be done. But the biggest problem is that this is an approach designed to deliver policy – which isn't all of what we were asked to do in our charter.

## Alternate Approach #1 – Traditional System-Selection and Implementation

One component of what the working-group was asked to do was to answer the question “what technical and policy measures could be implemented by registries and registrars to mitigate the negative effects of Fast Flux?”

This is a huge question – not unlike the question “what new systems could we put in place to fix our payroll processes, or improve manufacturing efficiency?”

This is not just a policy question – it’s a solution-selection question. Here’s a diagram of an “approach” that’s often used to answer that kind of question in the systems world. We weren’t asked to do all of this, but we were asked to do the things on the left side of the diagram.



Several observations are in order. First, this is work that’s usually done in phases, not all at once. Each phase takes longer, uses more (but less senior) people, and will fail if managed badly. This kind of project typically takes between 6 and 36 months, depending on the scope of the problem being addressed. Trying to accomplish this kind of work within the constraints of a PDP “approach” is doomed from the start.

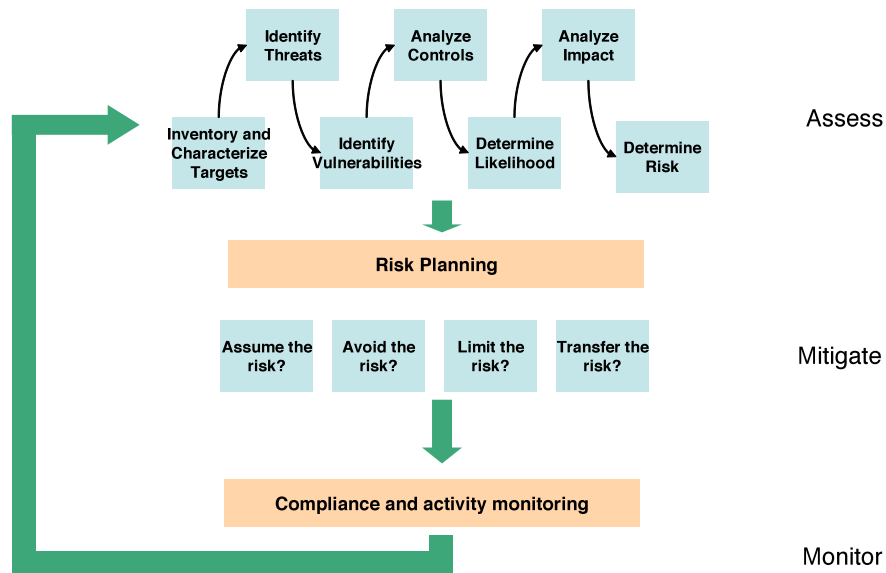
Another important point – this kind of project is almost always preceded by a project to assess the need and develop a (financial and operational) **justification**. Questions of “who pays for what?” are almost always answered before a project like this are kicked off. Please note that nowhere has there been any justification work done when it comes to the issue of Fast Flux. Indeed the staff report alludes to this in their Staff Recommendations section when they say that they “recommend that the GNSO sponsor further fact-finding and research

concerning guidelines for industry best practices before considering whether or not to initiate a formal policy development process.”

But wait! There’s more!

### Alternate Approach # 2 – Risk Management

Another question the working group was asked to answer was “how are Internet users affected by Fast Flux hosting?” This is quite different from the “policy” and “solutions” questions discussed above. Indeed, I would argue that this is a risk-management question – and for that, there’s yet another industry-standard approach that could be applied;



Actuaries the world over will recognize this approach. It’s what they do for a living, as do corporate risk-managers. Projects like this are also undertaken by information-security teams that are trying to inventory and manage the risks associated with the systems they are charged with protecting. Indeed, new law in the United States requires this kind of work be done (and documented) on a regular basis. The scope of this question is breathtaking, and this kind of project also typically takes anywhere from 6 to 36 months to complete.

I would submit that the quite-spectacular lack of factual evidence backing up the claims of the Fast Flux team would have been avoided had we included some of this here Risk Management stuff in our project charter.

All of this discussion (and all of these pictures) is simply a series of examples to show that:

- the “Approach” section of a project charter is not trivial,
- one size (PDP in this case) does not fit all, and
- the charter we were given did not acknowledge the scope and scale of work that would be required.

## VII. Readiness – we weren’t ready

Another component of a good project charter is an operational and organizational readiness assessment. The important thing here is not to focus on the negative (I would propose that the Fast Flux working group suffered from several readiness issues) but rather to discover what the organization and the team need in order to get ready for the work to follow.

For example – I’m not ready to run a marathon today. That’s not a good thing or a bad thing, it’s just a statement of my readiness. It’s also clear what I would need to do if I wanted to get ready to run such a race (change diet, graduated training program, etc.).

We faced several readiness issues during this project. Probably the most fundamental was the **lack of agreement that this effort should be undertaken at all**. That disagreement (both on the GNSO Council, and among the working-group members) resurfaced time and again during our deliberations – and should have been resolved by the people developing the charter, before the project was launched. Another approach to this would have been for the working group to recast its charter in such a way that everybody could agree to it, but that was impossible because there was no mechanism available to make charter revisions.

Another readiness issue has to do with the makeup of the team. Unlike most PDP teams which are limited to members of GNSO constituencies and who are familiar with the constraints of the policy-making process, the Fast Flux working group included a much broader range of people. With crystal clear hindsight, I should have recognized this problem and spent some time bringing people to a shared understanding of the limits of what can be accomplished in a policy-making project defined by the PDP process.

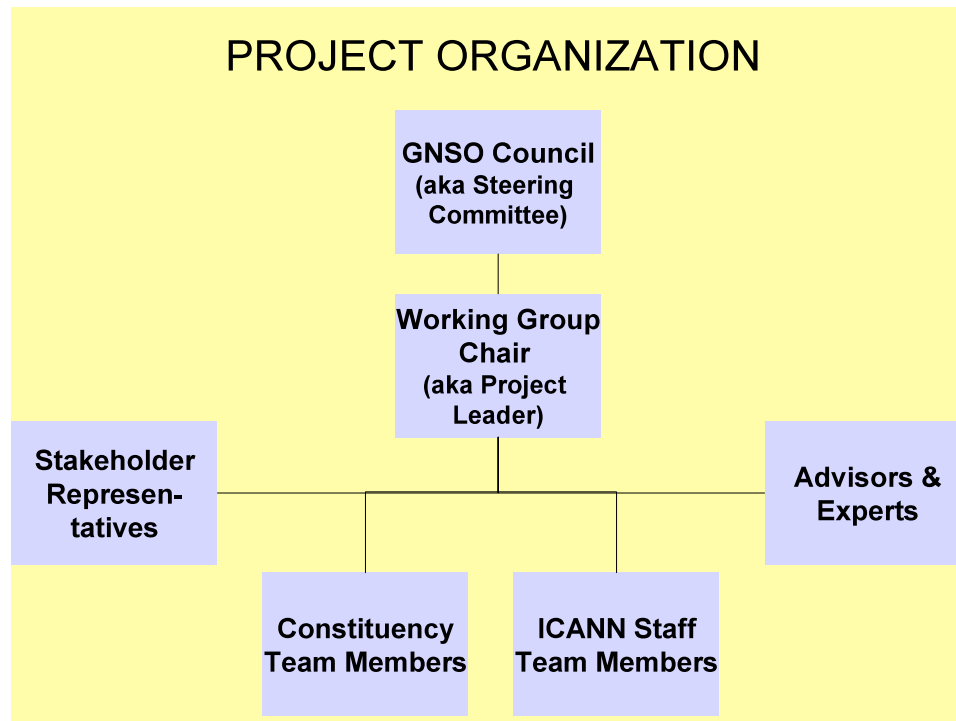
## VIII. Resource Requirements – we didn’t know our respective roles and responsibilities

I’m starting to see a pattern in PDP projects. They suffer not being well chartered when it comes to resources. I’m used to a process where resources, organization, roles, responsibilities, and project timing are laid out before the project starts (once the problem-statement, scope, approach, etc. have been defined). That hasn’t happened in the PDPs I’ve been involved with and certainly didn’t in this one. The upshot is that roles weren’t clear, dates were missed, people get frustrated and so forth.

Several issues in the Fast Flux PDP were caused by classic mistakes in the way the effort was organized. Again, my analysis benefits from 20/20 hindsight. The good news here is that we are presented with a substantial opportunity to improve the odds of success **and** provide the means to develop volunteers and leaders.



Here is an example of a classic project organization chart (lightly edited to reflect a GNSO context)



And here are the roles and responsibilities that are typically associated with each of these;

- **GNSO Council (aka Steering Committee)** – Provides sponsorship, sets policy and direction, resolves key issues, provides resources, accepts and acts on findings

Note what an active statement of participation that is. Steering committees are generally considered part of a project team, and are assigned a very important role to play. I think it would have been very helpful to have an active Steering Committee for the Fast Flux working group. We got into a fair amount of trouble because we didn't have a clear path to resolving these chartering issues. Having a clear understanding of who the Chair reports to would go a long way to solving this problem. If the Council finds it too cumbersome to act as that committee, one option might be to designate a subset of the committee to act in this role.

- **Working Group Chair (aka Project Leader)** – Has overall day to day project responsibility; planning, outreach, coordination and control

Here's a puzzler. If we have projects that need to be done (like PDPs) and we want them led by constituents rather than staff, how are we going to ensure that those leaders have the skills and tools that they need to be successful? Most of us aren't trained as project leaders and yet that's the role that's being asked of the Chair. A Chair also needs to be credible within the GNSO's cultural and political landscape. Since it's impossible to create instant history within GNSO, I

think that we will need to focus on providing project-management training and support for our constituent-Chairs. I have a bit more to say about this in the “Progression” section below.

It’s important to make the distinction between project leadership and project administration (or project management). Project administration is a staff function that can quite appropriately be handled by a staff person who has the right training and skills. Work planning, scheduling, status reporting and so forth fall into this bailiwick. T’would have been lovely to have had this kind of role called out right from the start.

- **Constituency and ICANN-Staff Team Members** – Are responsible for work products, analyses and deliverables

One of the interesting moments I had was when one of the working group members announced that, since I’d signed up to be Chair I’d also signed up to summarize all the email we’d exchanged (something on the order of 1500 messages at that point) and produce a first-draft report. I think we’d all have benefitted from clearer definitions of our roles before we got under way. What do we expect of team members? Is it the same each time? Who decides? A good charter could have helped with this.

Another puzzler – right now constituent team members are self-selected volunteers. How do we protect a PDP project from being captured by an enthusiastic bloc of volunteers who share the same views? Should we really rely on self-selection to populate the core working-team of a PDP, or should we find a way to recruit an effective core team and find another place to engage volunteers? See below.

- **Stakeholder representatives** – Raise issues overlooked by the team, improve preliminary conclusions and endorse findings

One phenomenon I’ve observed is that there are people who sign up for working groups simply to keep tabs on what’s happening, and only participate if things don’t seem to be going their way. This makes it hard to build cohesion within the core working-team because it’s hard to know who’s in that core group and who’s there as a representative of a point of view. I think it would have been good for the working group if the “representing” folks had been separated into their own group and engaged differently than the core day-to-day working-team members. See above.

- **Advisors and Experts** – Provide skills and knowledge not available from GNSO volunteer and staff team members

Same goes for this group. I had a pretty wild time on the Fast Flux working group coping with the dynamics between the people who were in the working group as subject-matter experts and those who were there as GNSO constituents. Again, if I were granted unlimited powers, I’d put the experts in a separate group and treat them differently than core work-team members.

- **Council Liaison**

Note that I left the Council Liaison role out of this picture. I'm not convinced that it's a good idea to put a filter between project leaders and their steering groups. In our case, the liaison was also the sponsor of the project on the GNSO Council and that made the communication between the team and the Council even more complicated. If the liaison idea stays, I think it would be a good idea to clarify what that person's duties are and make sure that they're an impartial player in the conversation between Chair (project leader) and Council (steering committee).

## **Progression**

One useful byproduct of all this organization-chart and role-definition stuff is that we might be able to kill two birds with one stone. For sure we'll improve the way our PDP projects work, but we could also use this to provide an orderly way to deepen our pool of volunteer participants and avoid putting people into roles before they are ready.

We (ICANN and the GNSO) are like any organization that needs to deliver a lot of projects – we need to be aware of how we develop our (paid and volunteer) human resources. One model we might want to look at is the large consulting firms. In those organizations, your role in projects changes as you progress. At first, you are a junior member of a working-team and you get lots of support and supervision. As your skills mature, you are given progressively more responsibility within working-group teams. If you turn out to be a person with the potential to be a leader, you are then given the opportunity to assist in the project-management duties. If you prove to have the skills and inclination, you get to lead larger and larger projects. I call this the “let no good deed go unpunished” school of HR development.

The Fast Flux working group would have benefited a lot from having this structure in place. As it was, we had a Chair (that would be me) that was in there before he was ready, and it hurt us.

If we crafted this “progression” idea well, we could create an orderly framework to broaden participation (and build a shared culture) within the GNSO. As a relatively new member of the GNSO gang, I can testify that it's pretty hard to figure out who's who and what's going on. It would have been great to be introduced to the organization by somebody saying “if you want to get to know us, you might consider signing up a small role in a Working Group as a place to start.”

## **IX. Conclusions**

Enough. This has already grown too long. Here's a little series of bullets for those of you who've made it this far:

- The group thought it was outside the scope of the working group to either fix its own charter, or recommend changes for the future (I disagree, hence this narrative)

- The working group’s charter was flawed – it was too broad, contained several fundamentally different kinds of work, was shoehorned into an inappropriate (PDP) “approach,” had weak/narrow sponsorship and ill-defined organization structure.
- GNSO should consider using a more rigorous chartering process before launching PDPs – in the case of larger efforts (like Fast Flux) the chartering effort may have to be a project in and of itself
- GNSO should consider developing alternative approaches when the required work falls outside the narrow bounds of the PDP process (e.g. research projects, solution-evaluations, risk management, etc.)
  - Develop in-house (staff or volunteers) capability, or
  - “Outsource” the work to better-qualified organizations, or
  - Contract to have the work done
- The benefits of good chartering and human-resource development are;
  - Greater odds of success (on-time, on-budget, meet need)
  - Improved buy-in for recommendations and work products
  - Easier projects to run, and deliver
  - Less stress on project participants
  - Broader involvement
  - Deeper pools of policy-making volunteers and leaders

Again, thanks for the opportunity to Chair this effort. Sorry I didn’t quite get it across the finish line.

Mike O'Connor