

# Workshop report

Internet Governance Forum 2014  
Turkey, Istanbul

**WS72**

Building Technical Communities  
in Developing Regions

Wednesday September 3, 2014

WORKSHOP ROOM 09

## 1. Workshop overview

Independent, volunteer-based special-interest communities fill a very significant role in the Internet ecosystem. These communities of technical specialists provide an important forum for knowledge and resource sharing, skill development, relationship building and global networking. While common in developed economies, there is still much to be done to develop robust local and regional technical communities in developing regions.

A common challenge in developing regions is to have robust technical communities but, what are they, how do they work and what are the main opportunities and challenges that bring?

This workshop focused on how such communities emerge and evolve; models for management, support and regional and international collaboration; and the role they play in strengthening Internet Governance at a local and regional level in developing countries.

### Start and finish time

15:50 - 16:50

### Attendance

35 participants.

### Moderator

Bevil Wooding - Internet Strategist, Packet Clearing House.

### Speakers

Nishal Goburdhan - Internet Analyst at Packet Clearing House.

Mehmet Akcin - Founder of the TRNOG.

Marteen Van Horenbeek - Chairman of FIRST.

Alejandro Acosta - Research and Development Engineer of LACNIC.

### Remote Moderator

Bill Woodock - Executive Director, Packet Clearing House.

### Host Organisations

Packet Clearing House (PCH), the Caribbean Networks Operators Group (CaribNOG), the global Forum for Incident Response and Security Teams (FIRST), the Latin American and Caribbean Network Information Centre (LACNIC) and the Turkish Network Operators Group.

## 2. Session summary

The theme of the workshop was introduced by the moderator, Bevil Wooding, one of the founders of CaribNOG ([www.caribnog.org](http://www.caribnog.org)), the Caribbean Networks Operator Group. The meeting has been successfully organised since 2010 and it's heading towards its 8th edition. It has become the knowledge forum for network operators, IT professionals, Internet entrepreneurs and regulators in the Caribbean region.



**Nishal Goburdhan** explained that the technical communities are fundamental pieces of the Internet ecosystem because they become a reference for the country and region. One of the common activities is to discuss and share experiences about implementing new technologies arriving to the market. Having access to open groups of individual professionals, involved in the same topics, greatly increases the chance of a common approach to large scale problems.

One of the topics discussed in technical communities is the creation and operation of Internet exchanges. Nishal shared that the main challenge implementing IXPs is to create the trust among the community, meaning to be able to get people together, overcoming the competing environment and work collaboratively.

**Mehmet Akcin** presented the history of TRNOG, the network operator group in Turkey. The experience started in Istanbul around the year 2010. Originally, a mailing list was created by network operators to report fibre cuts and other network disruptions affecting Internet operators. Later, the mailing list transformed into a technical community with two meetings in 2010 and 2012.

The main challenge inside Turkey is the lack of trust among people, which creates the backbone of the community. He explained that initiatives to engender trust were a priority in the initial stages. These included outreach and education initiatives.

**Marteen Van Horenbeek**, presented a slightly different model of community also relevant to the ecosystem. FIRST is a membership-based organization of institutions working on security and incidents response. Major corporations worldwide are represented in this forum. Trust is a major issue also for FIRST. In fact, to join the organization the applicant needs to be recommended by at least another two FIRST members and there is a veto process to ensure that each participant organization in the community is trustable.

As part of FIRST's capacity building and outreach efforts, there is an annual incident response conference that travels around the world so that local members can always find a meeting nearby them. One of the practical methods in which organizations build trust among themselves is by working together, for instance, creating standards and security processes.

**Alejandro Acosta** discussed how the Latin American and Caribbean Internet registry, LACNIC, supports community-led activities in the region, particularly in the topics of Internet exchange, implementation of IPv6 and security best practices.

**Bevil Wooding**, founder of CaribNOG, explained how important technical communities have been in the Caribbean region to build trust and collaboration, and to show the value of building relationships in the Caribbean region.

Most of the computer network engineers in the Caribbean region had little exposure to volunteer-based technical communities at either the national or regional level. Even fewer were aware of the existence of such groups internationally or the role they play in supporting the wider context of Internet operations. CaribNOG had to bring local relevance to global issues such as DNSSEC, IXPs and IPv6. These topics formed some of the initial focal points for CaribNOG.

In the Caribbean, the need for Internet exchange points became a central focus for the forum. IXP development was used to stimulate community discussion and participation around key issues such as strengthening domestic internet infrastructure, mobilizing local technical expertise, and building a digital economy and knowledge economy. Five years on, the topics have expanded and evolved, finding points of common interest and opportunities at regional and national level. At the moment, there is a semi-annual regional event and several national events

In the process the mindset that “nobody shares anything for nothing” has been broken. It is being replaced by an understanding of the value of collaboration, particularly triggered by the cyber-security incidents that affected the region which obliged people to collaborate and work together to fix the infrastructure and policy gaps.

### 3. Q&A Session

This is a summary of the most important questions formulated when the floor was open for the Q&A session:

#### **Q: What are some of the key challenges and how did you solve them?**

Marteen Van Horenbeek: *Trust* was key challenge to overcome. FIRST has 200 members and despite the ‘veto’ that can be used by members to prevent an organisation to join, that doesn't automatically make organisations sharing knowledge among them. It's necessary for organisations to work together, one by one, and in small working groups.

A practical challenge is event *participation*. FIRST organised paid events, with entry fees that are acceptable for an organisation but might be not for another. This was solved by introducing small size events organised by the members, generally free of charge in different countries.

Fellowships for members of the CERT teams in developing countries were also introduced to boost the participation.

#### **Q: How do you balance regional vs national priorities**

Alejandro Acosta: proactive attitude to ensure that the assistance provided by LACNIC activities is aligned with the needs of the community. In particular there has been special focus on security and interconnection, with workshops and fellowships available for the community members.

### **Q: Do technical communities in developing regions need assistance to be created?**

Marteen Van Horenbeek: FIRST organises teaching courses with technical content for CERT teams in developing countries, generally through a local training institution that will make sure that there's some support and follow-up available. Sometimes, the mailing list is transformed as a de-facto community that keeps people involved and engaged.

Involving other communities in the technical community is something important to keep in mind, to enrich the content and learn from other groups. Technical communities represent the engine that keep the Internet alive.

#### **Comment from Nurani Nimpuno/Netnod**

Nurani shared some the elements observed as key to strengthen technical communities:

- Increase cooperation in the community, identifying areas of common interest.
- Lead by example: sharing your experiences in tutorials and workshops helps to draft the way through for others.
- Identify and involve the key players and champions in your respective community to get the buy-in of the rest of the community.
- The community capitalises in learning and grows over time.
- Build ownership on the topics creating activities that community members can own and drive.
- Important to have informal gathering and social space to serve as lubricant.
- TShirts!

#### **Comment from Adil/Representative from APNIC**

In the Asia-Pacific region, outreach is very challenging due to the geography of the region and the travel costs involved. However, there is a lot of demand and interest for it.

Finding a local partner is very important, since they can organise local events and dramatically drive costs down. With the time, a country might organise another event with a neighbouring country which will be a "regional" event.

#### **Comment from Andreij/Representative from former Soviet Union NOG**

It is essential to support young students that will become engineers through organisation of meetings before the events. It is important to balance the content of the workshops between too technical and/or policy depending on the audience, and have local companies to attend these meetings.

## **4. Conclusions**

Trust and collaboration are the key elements that make technical communities emerge and evolve into a forum of knowledge and resource sharing. There should be a central rallying issue about which a strong community culture can evolve. Effort is required to create material and keep community discussions going, but the reward is in stronger relationships and trust connections, and a sense of community momentum. While in the developed world, these communities may have a longer standing tradition, emerging regions can still build effective technical communities, drawing on the lessons and experiences from those who have gone before

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Operational support and security  
to critical Internet infrastructure



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