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Further to the discussions at the last TSG-SA #8 in Duesseldorf, the PCG meeting in Beijing has agreed that it would be useful to establish closer working with the IETF in order to progress some of the IP Multimedia developments for 3GPP.

However, the IETF does not work in the same way as 3GPP and it will be difficult to get the IETF to progress our requirements without a closer relationship at the working level.

It was noted at TSG-SA#8 that the IETF Architecture Board (IAB) sponsored a workshop earlier this year on the use of Internet Technology in Wireless Environments tasked to:

- Assess current and future uses of Internet technology in wireless environments,
- To make recommendations on research and standardisation tasks to improve acceptance of Internet network and transport protocols in wireless environments,
- To evaluate methods to improve communication and collaboration among Internet standards working groups and those of the telephony and wireless sectors.

The report of the workshop was presented to the IAB in August and included specific recommendations regarding interactions between the IETF and other standards bodies. The recommendations are contained in annex 1 of this document and include recommendations on Fostering Interaction with Non-Internet Standards Organisations, including the 3GPP. Here the workshop recommended that (para-phrased):

- **A pragmatic approach should be taken**, rather than formalising liaison agreements.
- **The formation of jointly sponsored working groups and standards should be avoided**, with a preferred mode of operation being to maintain separate standards organisations;
- **Encourage attendance and participation of external experts within IETF proceedings such as BOFs** (Birds Of Feather). It was recommended that sponsoring joint BOF could be beneficial.
- **Mutual document reviews** should be encouraged.

It is proposed, therefore, that TSG-SA supports a BOF (Birds of a Feather meeting) at the next IETF meeting in December, which would be attended by some delegates from 3GPP. The BOF would be set up with the objective of presenting the current status of the work in 3GPP and discussing how the IETF can develop additional protocols and extensions to existing protocols (e.g. SIP).

Annex 1

Extract from the IETF Workshop Report The use of Internet Technology in Wireless Environments

Discussion on Interactions Between IETF and Other Standards Organizations

There were many examples where non-IETF standards organizations would like to directly adopt IETF standards to enable Internet (or similar) services. For example IEEE 802.11 WLAN relies on adoption of IETF standards for mobile IP, end-to-end security, and AAA services. 3GPP is looking into the IETF work on header compression. WAPF derived its transport, security, and application environment from Internet protocols. At first glance these would seem successes for adoption of Internet technologies, however the decision to rely on IETF standards often introduced frustrations too.

One common theme for frustration is differences in standardization procedures. For instance, 3GPP follows a strict model of publishing recommendations yearly; any feature that cannot be finalized must be dropped. On the other hand the IETF working groups have much less formalized schedules, and in fact often seem to ignore published milestone dates. This has led to a common perception within other standards organizations that the IETF cannot deliver [on time].

A second area identified where IETF differs from other organizations is in publication of "system profile". For example defining interoperation of IPsec, QoS for VoIP and video conferencing, and billing as a "service". Wading through all the protocol specifications, deciding on optional features and piecing together the components to deliver a commercial quality service takes considerable expertise.

Thirdly, there was often confusion about how to get involved in IETF standards effort, submit requirements, and get delivery commitments. Many people seem unaware and surprised at how open and simple it is to join in IETF standardization via working group meetings and mailing list.

There wasn't really a large amount of discussions on ways to address these differences in standards practices. However, it did seem beneficial to understand these concerns and frustrations. It seemed clear there can be some benefits in improving communication with other standards organizations and encouraging their participation in IETF activities.

Recommendations

The IAB wireless workshop provided a forum for those in the Internet research community and in the wireless and telephony community to meet, exchange information, and discuss current activities on using Internet technology in wireless environments. However the primary goal from the perspective of the IAB was to reach some understanding on any problems, both technical or perceived deficiencies, deterring the adoption of Internet protocols in this arena. This section documents recommendations of the workshop on actions by the IAB and IESG, IRTF research efforts, and protocol development actions for the IETF to address these current deficiencies and foster wider acceptance of Internet technologies.

Recommendations on Fostering Interaction with Non-Internet Standards Organizations

A clear consensus of the workshop is that dialog needs to be improved. The Internet community should attempt to foster communication with other standards bodies, including WAPF, MWIF, 3GPP, 3G.IP, etc. The goal is to "understand each others problems", provide for requirements input, and greater visibility into the standardization process.

It was recommended to take a pragmatic approach rather than formalizing liaison agreements. The formalized liaison model is counter to the established Internet standards process, is difficult to manage, and has met with very limited success in previous trials. Instead, any relevant IETF working group should be strongly encouraged to consider and recommend potential liaison requirements within their charter.

It was recommended to avoid formation of jointly sponsored working groups and standards. Once again this has shown limited success in the past. The preferred mode of operation is to maintain separate standards organizations but to encourage attendance and participation of external experts within IETF proceedings and to avoid overlap. An exception to this style of partitioning meeting sponsorship is less formal activities, such as BOFs. It was recommended that sponsoring joint BOF could be beneficial. These could enable assembly of experts from multiple domains early in the process of exploring new topics for future standards activities.

It was recommended that IETF standards groups be encouraged to create or more formally document the reasons behind algorithm selection and design choices. Currently much of the protocol design history is difficult to extract, in the form of working group mail archives or presentations. Creation of these documents could form the basis to educate newcomers into the "history" and wisdom behind the protocols.

It was recommended that mutual document reviews should be encouraged. This helps to disseminate information on current standards activities and provides an opportunity for external expert feedback. A critical hurdle that could severely limit the effectiveness of this type of activity is the intellectual property and distribution restrictions some groups place on their standards and working documents.