



# **3GPP/IETF Release 6 Workshop Major Conclusions**\*

January 27-28, 2003 San Francisco, USA

# **1** General Conclusions

# 1.1 Release 5

- 3GPP Rel 5 frozen including items left over from liaison statement. Major fixes will have to wait until Rel 6

# 1.2 Release 6

- An updated dependency list includes some Rel 6 dependencies but not all of Rel 6 items are known yet.
- Way forward: 3GPP may want to introduce an item for further cleanup of interoperability with SIP (completing the liaison items), which may play in with the existing work item on interoperation with external networks, but needs to include the BYE cleanup, e.g.

# 2 Conclusions from Technical Discussions

# 2.1 Stack reusability between environments

- 3GPP shall implement and use all MUSTs.
- 3GPP may upgrade IETF SHOULDs in its specs on a case by case basis (but recognize that peers in the general case may not match their capabilities prefer the use of negotiation)
- 3GPP shall NOT downgrade IETF SHOULDs in its specs, but may give guidance on how to interpret the IETF conditions for use in the 3GPP environment.
- 3GPP implementers are urged to implement all extensions and optional behaviour, but 3GPP shall not upgrade IETF SHOULDS as a general policy.
- All user agents including 3GPP user agents should be able to fall back to baseline capability when an extension negotiation failure occurs (405 or 420)
- The SIP community in general is urged to implement full stacks and all extensions.

# 2.2 3GPP vs. IETF Security models

- 3GPP and IETF will collaborate on requirements, threat analysis, and protocol for enrollment of user certificates (PIC mitm attack not solved, for instance, so expertise is needed)
- 3GPP will adopt a goal for the protocols of graceful security failure (or graceful interoperation) with the 3261 features (S/MIME and TLS)
- 3GPP and IETF will try to understand together the various service authorization requirements at the application level

<sup>\*</sup> See Workshop Notes for elaboration of discussion points

- Hop-by-hop architecture: IETF comfort level with access security and edge-to-edge models in particular
  - IETF would prefer strengthening of security between the proxies in the model (particularly we would prefer TLS between the proxies, or at least that there be mandatory IPsec between the SIP proxies and the security gateways, still open)
- 3GPP will use presence and IM as a driver for enhancing the 3GPP security model

#### 2.3 Network vs. User Control

#### 2.3.1 Presentations

- The intermediaries should have ability to express and impose control, with a careful architecture. IETF will develop requirements for generalized solutions beyond 488. The initial text for 3GPP to review against operator needs is draft-rosenberg-sipping-session-policy-req-00.txt. 3GPP will study these requirements. IETF will on directions in this area. RFC 3238 provides an architectural perspective overall.
- The longevity of the policies, how they will change from one session request to another, e.g. how dynamic they will be are questions that may affect the nature of the work we have described. This is referred to the requirements development in 3GPP.

#### 2.3.2 BYE issues

- IETF view is that the only reliable source of time-based information is the bearer layer (accounting can be based on a mixture of signaling and bearer but the accounting for timing needs to be based on the bearer).
- Given that the bearer information needs to be synchronized at both ends of the call, 3GPP considers that there is currently no good alternative to the BYE usage (thus it remained unchanged in Release 5).
- Possible ways forward in Release 6 context:
  - 3GPP will investigate enhancing the requirements so that loss of the bearer results in notifying the UE and other entities in the network
  - IETF will investigate mechanisms that are not unduly high overhead and that allow notifications of changes in bearer state.

#### 2.4 Deployment issues

# 2.4.1 DNS

- 3GPP should not specify use of private TLDs in the future
- IETF should produce a "DNS recommends" draft giving guidance to the 3GPP community with regards to the .gprs TLD
- It is the operator community "GSMA" that needs be convinced before the 3GPP specs are changed.

#### 2.4.2 Ipv6

- Documents relevant to 3GPP RAN3 decisions on Ipv6 are RP-010499, RP-010416, RP-010405, TR 25.933

-IETF will develop a SIP/SDP/RTP Ipv4/Ipv6 transition story. 3GPP encourages this work.

-3GPP needs this for Rel 6 (approx Dec 2003)

# 2.5 WLAN Interworking in 3GPP

- 3GPP should consider and define their requirements for the WLAN link layers
- 3GPP should open communication channels with 802.11i
- IETF will work on EAP-SIM and EAP-AKA
- IETF will address the keywrap question.
- 3GPP should consider commissioning a review to validate that 3GPP WLAN security meets any security claims made in the referenced EAP specs or IEEE specs (keying framework, EAP-SIM, EAP-AKA methods) and any 3GPP security requirements of set forth for WLAN-3GPP interworking.

#### 2.6 3GPP specific considerations

- IETF needs to be aware of 3GPP need to support regional requirements.

#### 2.7 Presence & IM

- 3GPP can extend PIDF. However 3GPP is urged to consult with IETF on the list of proposed extensions.
- Partial notifications and if possible partial publication should be developed in IETF.
- IETF should provide feedback to 3GPP on the functionality/protocol selection for the data manipulation interface.
- 3GPP should refresh the presence and messaging requirements and provide priorities and timescales for the work.
- 3GPP and IETF should work to ensure requirements are covered by work ongoing in IETF.

#### 2.8 IMS Transcoding

- 3GPP needs to provide Transcoding (discovery and invocation) requirements to the IETF.

# 2.9 Other technical issues

- AAA multimedia draft and credit control draft would be chartered contingent on finishing Nasreq and more progress on Ipv4.
- Work on the AAA drafts should continue independently of whether they are chartered.
- 3GPP is requested to provide necessary resources to complete the AAA drafts

# 3 Process Conclusions

# 4 Other Conclusions

- 3GPP and IETF happy with the current collaboration.