Questionnaire on the status of Conformance and Interoperability of Equipment and Systems

Questionnaire Outline 1/2

- Fixed and Mobile Networks – what kind?
  - TDM, NGN Softswitch, NGN IMS, Other, 2G, 3G
  - What services?
  - What equipment?
- Conformance and Interoperability
  - Issues between new and legacy systems
  - Main C&I problems experienced
  - Impact of C&I problems
  - Pre-installation activities to mitigate C&I problems
  - Type Approval regime in place?
  - Type Approval Body established?
  - Acceptance of other product Marking schemes e.g. EC, FCC, IC
  - National Accreditation Bodies, Certification Bodies and Test Labs for Type Approval established?
  - MRAs with other parties?
  - Market Surveillance procedures and practices?
Questionnaire Outline 2/2

- Training and Capacity Building
  - Awareness of Res 47, Res 76 and Res 177
  - In light of these, what training and capacity building is desirable in your country?

- Are you ready to participate in:
  - Regional programs including capacity building and expert training
  - Exploring opportunities (finance, human resources, location/sites) to set up Test Centres in your country
  - Are there ICT labs in your country that could host testing and other ITU initiatives

- Any other comments

Responses to Questionnaire
Results broken down into 3 groups – based on similarities in experiences and deployment of network technologies

- **Group 1** Limited variety of equipment, services and providers
  - Internet/IP Gateway services
  - 2G and 3G GSM network services

- **Group 2** Medium variety of equipment, services and a few providers
  - TDM voice, fax, international voice, data
  - Internet/IP ADSL, Cybercafe, VoIP
  - NGN Softswitch voice, data
  - 2G voice, SMS local and international, prepaid
  - 3G internatnl SMS, local SMS, data and Internet

- **Group 3** Wide variety of equipment, services and providers
  - TDM voice, data, ISDN
  - Internet/IP VoIP, data, email, wimax, metro ethernet
  - NGN Softswitch voice, fax, ISDN
  - NGN IMS VoIP, digital fax
  - 2G GPRS/EDGE, circuit switched data, voice, SMS
  - 3G HPSA + mobile broadband, voice, AMR-WB

voice, CS video call, SMS, R99 PS data
Fixed and Mobile Network Equipment

- **Group 1**
  - No equipment listed in response, referred/deferred to service provider for detailed information
- **Group 2**
  - Tended to have a dominant equipment supplier
- **Group 3**
  - Tended to have a wide mix of suppliers

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Conformance and Interoperability 1/3

- **Group 1**
  - Reported no problems – likely single operator
  - Type Approval regime reported in place
  - No Type Approval responsible body
  - Marking – recognized either a body recommended by service provider or well known Mark such as EC, FCC
  - No national accreditation, certification bodies or test labs
  - No MRAs
  - No market surveillance
  - No ICT labs
Conformance and Interoperability 2/3

- Group 2
  - New equipment can affect legacy systems
  - Lists of interoperability problems such as: signalling in core networks, CDR equipment malfunctions, problems implementing new features on all platforms
  - Impact of interoperability problems high, affects QoS, customer satisfaction and loss of business
  - Pre installation activities carried out to mitigate interoperability problems
  - Half of this Group have Type Approval regimes
  - Half have Type Approval bodies
  - No national accreditation and certification bodies
  - No MRAs
  - No market surveillance

Conformance and Interoperability 3/3

- Group 3
  - Longer lists of interoperability problems such as: MSAN-Softswitch conformity, ISDN support, IMS core, software features in general
  - Lists of economic impacts such as: additional costs, company image, QoS, project delay, upgrade costs, extra testing costs
  - Pre installation work always done to mitigate interoperability problems
  - Type Approval regimes in place
  - Type Approval Bodies in place
  - Recognize EU, or FCC, or IC or all three
  - Accreditation and certification bodies in place as well as test labs
  - MRAs active
  - Market surveillance in place
Training and Capacity Building 1/3

- Group 1
  - Interested in follow-up training/capacity building related to WTDC 2010 Res 47, WTSA 2008 Res 76, PP-10 Res 177
  - Would participate in development of regional program in capacity building and expert tutorials
  - Interested in opportunities to establish national, sub-regional and regional test centres
  - No ICT Labs capable of hosting test events or ITU activities

Training and Capacity Building 2/3

- Group 2
  - Interested in follow-up training/capacity building related to WTDC 2010 Res 47, WTSA 2008 Res 76, PP-10 Res 177
  - Would participate in development of regional program in capacity building and expert tutorials
  - Interested in opportunities to establish national, sub-regional and regional test centres
  - No ICT Labs capable of hosting test events or ITU activities
Training and Capacity Building 3/3

- Group 3
  - Interested in follow-up training/capacity building related to WTDC 2010 Res 47, WTSA 2008 Res 76, PP-10 Res177
  - Would participate in development of regional program in capacity building and expert tutorials
  - Interested in opportunities to establish national, sub-regional and regional test centres
  - ICT Labs capable of hosting test events or ITU activities available