

- o Evolution at the S+A levels
  - MM systems will have to be able to support the rapid evolution of MM services and applications:
    - present trends includes RFID, GRID, IPTV, Webservices, ...
    - future trends... we still not know!
  - Concept of evolutionary capabilities needs to be further defined
  - Consider both enterprise (segmentation!) and residential markets



## CONCLUSIONS (2)

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### Limitations of existing protocols (2<sup>nd</sup> generation):

- Poor or complex capability exchange
- Poor error handling and fault management
- Poor separation between service logic and call processing
- No clear separation of UNI and NNI
- Interoperability issues abound
- SIP and H.323 are problematic for mobile systems; operators have adopted H.324M
- Little consideration given to NAT/FW and other IP network issues
- Important aspects, such as QoS, security, lawful interception, emergency services, provisioning, and management were considered later, resulting in less-than-ideal solutions
- Do not take full advantage of IP networks (e.g., downloadable codecs that plug-in on demand)



## CONCLUSIONS (3)

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### Limitations of existing protocols (2<sup>nd</sup> generation):

- Operator and enterprise IT requirements neglected
- Designers wanted intelligence in the endpoints
- Operators and enterprise IT want to manage and control services

.....

**→ There is a need to start to think about a new generation of MM protocols!**

- o Different scenarios have to be considered:
  - Short term: improvements and extensions to existing protocols (2<sup>nd</sup> Generation):
    - H.323: ongoing activities in SG16
    - H.323/SIP interworking is a work item in SG16
    - SIP: ?
      - Who defines the requirements?
      - Who develop the improvements and the extensions?
      - How can SG16 help to progress this work?
  - Lo.....ng term: 3rd Generation of protocols
    - Project H.325 in SG16
  - Migration SIP/H323 → H.325

What next?

- o Limitations of existing protocols:
  - Continue to discuss the list
  - Produce a living document
  
- o H.325 Project:
  - Progress the work on requirements
  - Discuss and Integrate the workshop material into the requirements
  - Increase the visibility of the work
  - Improve communication, in particular on the objective and the timeframe