Regional Development Forum 2008
"Bridging the Standardization Gap in Developing Countries"
Accra, 26-28 May 2008

Major issues and status related to ITU-T work programme and organization

John Visser, P.Eng.

Chairman, ITU-T SG 19

Nortel Networks (Canada)

jvisser@nortel.com

Outline

- ■ ITU-T Past and Present:
  - ➤ SG structure changes since 1980
  - ➤ WTSA-08
  - ➤ Current SG structure
- ■ Future
  - ➤ TSAG restructuring discussions
  - ➤ Some key industry directions
  - ➤ Translation to a SG structure
  - ➤ Moving to this industry-directions-driven new structure

Caveat

- Some of the views expressed in this presentation are those of the author
- Other information reflects the current state of discussions
- This topic is very much subject to refinement and consensus development at TSAG, and to decisions taken at WTSA-2008

WTSAs

- WTSAs takes place on a 4 year cycle
  - Next is October 2008 (Johannesburg)
- WTSAs define ITU-T Study Groups, assign mandates, allocate Questions and appoint leadership.
  - As a 4 year study period draws to a close, each Study Group considers its future activities and defines new or modified Questions for the next study period

4

TSAG and Study Group structure

- TSAG's last meeting before WTSA is a key opportunity to review individual SG inputs, develop a comprehensive proposal for input to WTSA

- TSAG's challenge:
  - coalesce individual SG views into a coherent overall proposal for WTSA, …
  - … and develop consensus on this!

Study Group changes in the last 28 years

- **1980 (Geneva): 7th CCITT Plenary Assembly**
  - "completely revamped" SG structure but was mostly combining telegraph studies
- **1984 (Málaga-Torremolinos)**
  - discontinued SG XVI Telephone circuits
  - added new SG X Languages and methods for telecoms applications
- **1988 (Melbourne)**
  - no significant changes
- **1992: CCITT --> ITU-T, Plenary Assemblies --> WTSCs**

- **1993 (Helsinki):**
  - SG 9 becomes focal point for Cable TV
- **1996 (Geneva)**
  - SGs 1 and 14 merged into other SGs
  - created SG 16 (Multimedia)
- **2000 (Montreal): WTSC renamed WTSA**
  - WP 3/11 becomes a Special SG
  - SGs 7 and 10 merge and continue as SG 17 in 2001
  - SG 8 closed
- **2004 (Florianopolis)**
  - SSG now a regular SG: 19

Present: Current ITU-T Study Groups (2005-2008)

13 Study Groups plus TSAG:

2	Operational aspects of service provision, networks and performance
3	Tariff and accounting principles
4	Telecommunication management
5	Protection against electromagnetic environment effects
6	Outside plant and related indoor installations
9	Integrated broadband cable networks and television and sound transmission
11	Signalling requirements and protocols
12	Performance and quality of service
13	Next Generation Networks
15	Optical & other transport network infrastructures
16	Multimedia terminals, systems and applications
17	Security, languages & telecommunication software
19	Mobile telecommunication networks
TSAG	Telecom Standardization Advisory Group

TSAG SG Restructuring Correspondence Activity

- Discussions now accelerating as we get closer to July 2008 final TSAG meeting of current study period
  - Broad directions of discussions show significant convergence on many points but there are still details to be resolved
  - TSAG meeting in July will still have much to discuss

ITU-T SG Restructuring Principles

Members' views on principles summarized:

1. Restructuring should reduce participation and ITU-T costs.

2. Restructuring should not compromise the efficiency and effectiveness of the work; avoid duplication across SGs.

3. Activities with limited participation and activity should be considered for elimination.

4. The work structure should reflect current technological realities.

5. More efforts to enhance participation, e.g., electronic working methods.

Paraphrased

9

Some Restructuring Specifics

- SG 2
  - Block 17B Interntionalized Domain Names (Q.16/17) is a candidate for possible transfer to SG 2 (or possibly other places, e.g., ITU-D). SG 17 is not proposing a Question to continue this and suggests SG 2 look at this.
  - There is general support except in SG 2 that Block 2D (Q.3/2 Human Factors) should be transferred to SG 16.
  - Proposals to move Block 2Bx (Operational Aspects of Telecommunication Network Service Quality; Network and Service Operations; Traffic engineering for mobile communications; Traffic engineering) to SG 4 seem to be appropriate.

Charts 10-16: from 2-4 April teleconference plus notes from documents of SG meetings held since

Some Restructuring Specifics

- SG 3
  - No change.
- SG 4:
  - There was no opposition to a proposal to move Q.5/2 (Network and Service Operations) to SG 4.
  - There was no opposition to the proposal to move Q.4/4 and Q.5/4 to SG 15, but it was noted that SG 4 is taking a second look at moving Q.4/4. SG 4 also feels that Q.4/4 and Q.5/4 should remain together as block 4Y (Test and Measurement).
  - There are proposals to merge SG 4 and SG 12. SG 4 is meeting 13-23 May.

Some Restructuring Specifics

- **SG 5**
  - Block 6D (Copper cables) should be transferred to SG 5.
- **SG 6**
  - Move Blocks 6A (Optical physical layer), 6B (Physical network planning) and 6C (Protection and security of other aspects of the outside plant) to SG 15.
  - Move Block 6D to SG 5.
- **SG 9**
  - Proposals exist to merge / not merge SGs 9 and 16 as well as to transfer part of SG 9 to SG 12.
  - SG 9 met 5-9 May: mixed views on whether to merge hence will likely end up continuing as a separate SG.
  - Will likely become a TSAG topic of discussion.

Some Restructuring Specifics

- **SG 11**
  - Proposals exist to merge with SGs 13 and 19
  - Proposals exist to retain as a stand alone SG
  - Can co-locate meetings with other SGs as appropriate
  - SG 17 Questions on "Formal Languages and Telecommunication Software" and "Testing Languages, Methodologies and Framework" could be moved to SG 11: SG 17 left this for TSAG to consider placement

- **SG 12**
  - See notes under SGs 4 and 9. No other changes proposed.

Some Restructuring Specifics

- ### SG 13
  - Move Q.E/13 (OAM and network management for NGN) to SG 15.
  - Merge SG 19 into SG 13
- ### SG 15
  - Add Q.E/13.
  - Add Blocks 6A, 6B and 6C to SG 15
  - The proposal to move Bock 4Y to SG 15 remains under consideration within SG 4
- ### SG 16
  - Move Block 2D Q.3/2 (Human Factors) to SG 16.
  - There are proposals to merge SG 16 and all or part of SG 9. See SG 9 notes. SG 16 did not reach a conclusion.
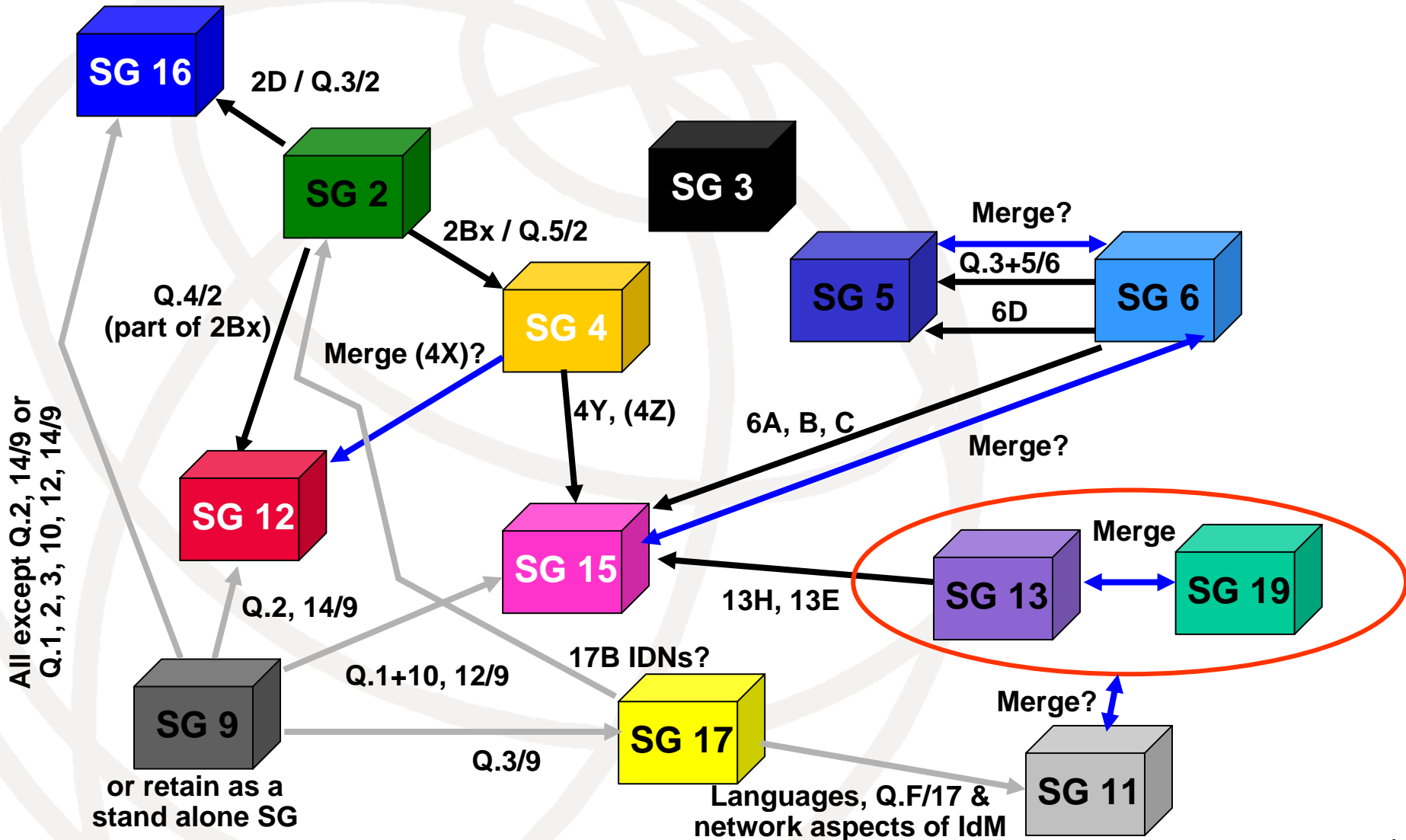
Some Restructuring Specifics

- SG 17
  - Moving formal languages work to SG 11: see SG 11 notes

- SG 19
  - Important that mobility remain a highly visible part of the work of ITU-T
  - Merge SG 19 into SG 13 (work should continue as a contiguous block) and ensure "mobility" is included in title of group

Anticipated and possible evolution of current Study Groups at WTSA-08

SG 16

2D / Q.3/2

SG 2

2Bx / Q.5/2

SG 3

Merge?

SG 5 — Q.3+5/6 — SG 6

6D

Q.4/2
(part of 2Bx)

SG 4

Merge (4X)?

4Y, (4Z)

6A, B, C

Merge?

SG 12

All except Q.2, 14/9 or
Q.1, 2, 3, 10, 12, 14/9

SG 15

Merge

SG 13 — SG 19

Q.2, 14/9

13H, 13E

17B IDNs?

Q.1+10, 12/9

Merge?

SG 9

Q.3/9

SG 17

SG 11

or retain as a
stand alone SG

Languages, Q.F/17 &
network aspects of IdM

Looking forward: key industry directions

- Telecommunications is a dynamic field subject to significant regulatory and technological changes

- Current industry directions point to three closely related megatrends:
  - Hyperconnectivity
  - Communication-enabled applications
  - True broadband

Author's view

Key industry directions

Hyper-Connectivity

- Evolve from being fully connected (everybody is on the network) to being hyperconnected (the range of devices and entities on the network far outpaces the number of people consuming the services offered by those devices).

Author's view

Key industry directions

- **Communications-Enabled Applications**
  - Reinvention of services and applications to support new levels of and an intuitive interaction experience through advanced technology frameworks such as IMS and Services Oriented Architecture (SOA).

Author's view

Key industry directions

- ## **True Broadband**

    - Seamless communication: users simply communicate anywhere, anytime, from any device, whether wired or wireless. Most importantly, the broadband experience becomes so economical that the range of uses exceeds any experience of the past.
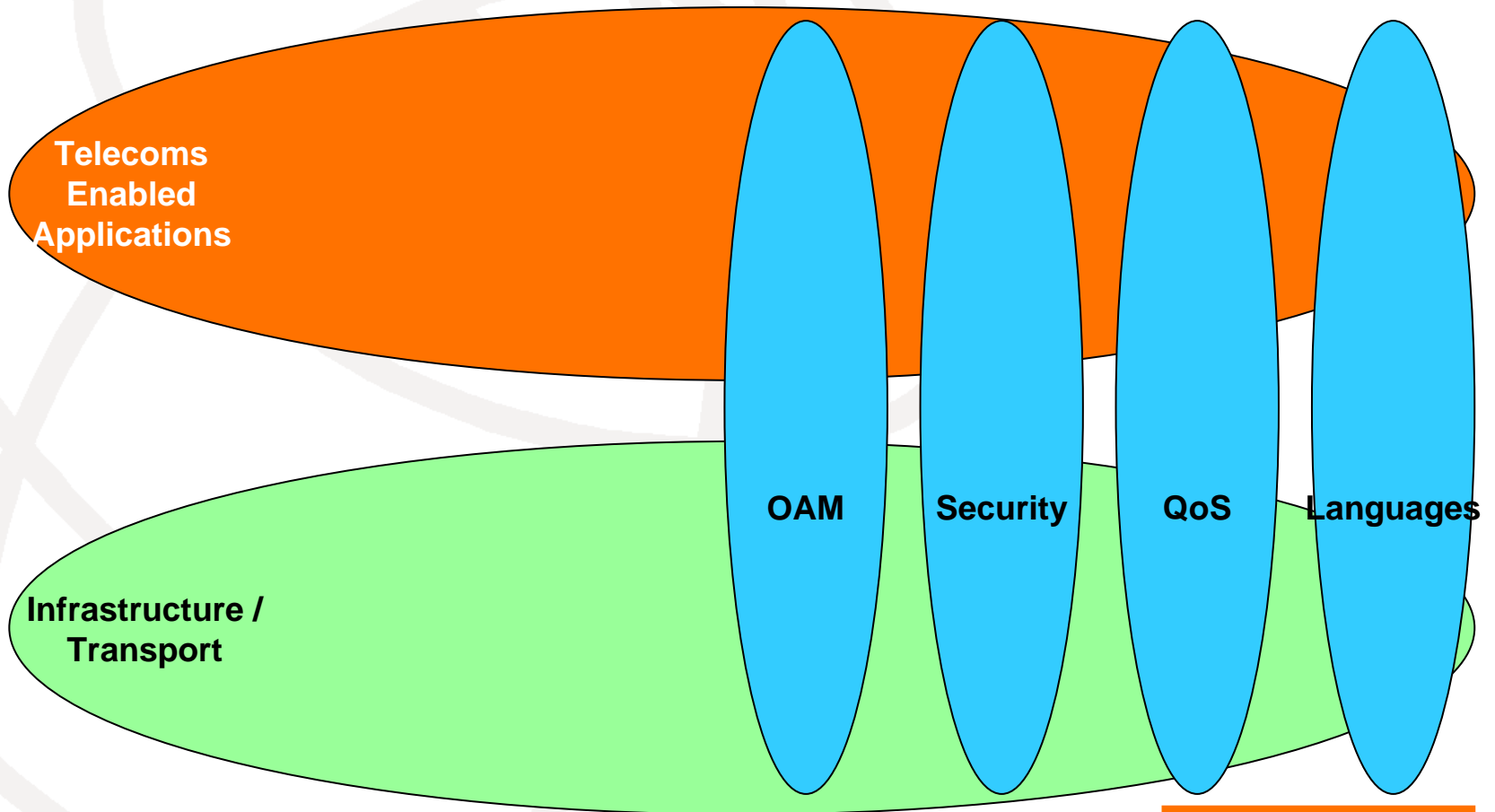
Author's view

Timely standards require an appropriate work structure

■ Industry directions are pointing to two "super" work groupings with sub-groups as needed:

➤ Telecommunications Enabled Applications

➤ Infrastructure / Transport

Author's view

Timely standards require an appropriate work structure

- We will also need a few specialized work groups for "cut across" topics such as OAM, Security, QoS, etc.
- Broadband radio access addressed in ITU-R
  - Broadband access to the network, whether radio or wired, needs to provide consistent capabilities to enable a truly seamless user experience
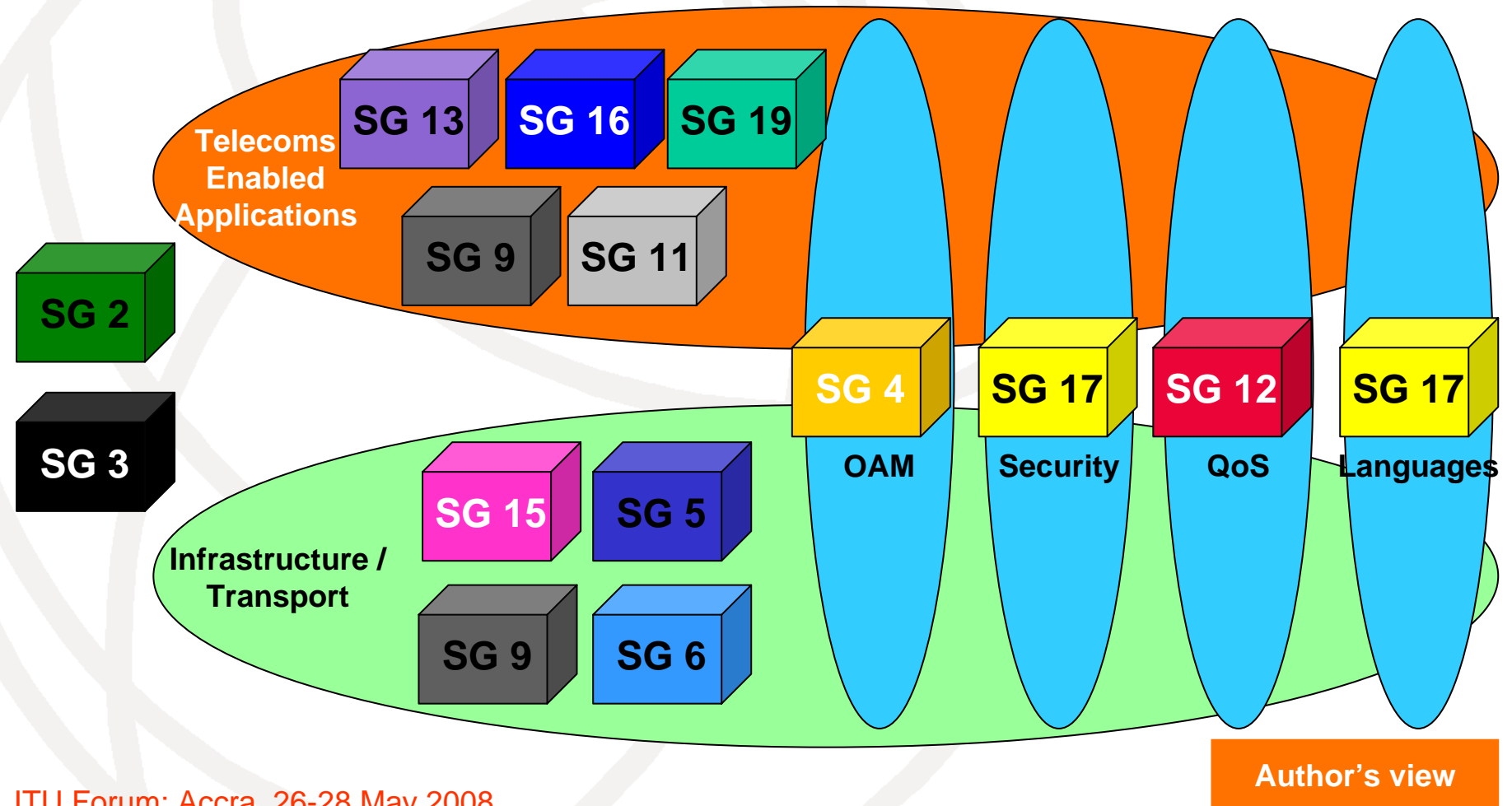
Future: what the work structure could look like

Telecoms Enabled Applications

Infrastructure / Transport

OAM　Security　QoS　Languages

Author's view

Mapping SGs to this work structure

- **Mapping must necessarily be approximate since current SG structure, mandates and industry directions are not fully aligned**
  - Some current SGs have mandates that include work in both "super" groupings

Author's view

Present and Future: approximate mapping of current Study Groups

- See comment on previous slide

SG 13 — Telecoms Enabled Applications
SG 16
SG 19
SG 9
SG 11

SG 2

SG 3

SG 4 — OAM
SG 17 — Security
SG 12 — QoS
SG 17 — Languages

SG 15 — Infrastructure / Transport
SG 5
SG 9
SG 6

Author's view
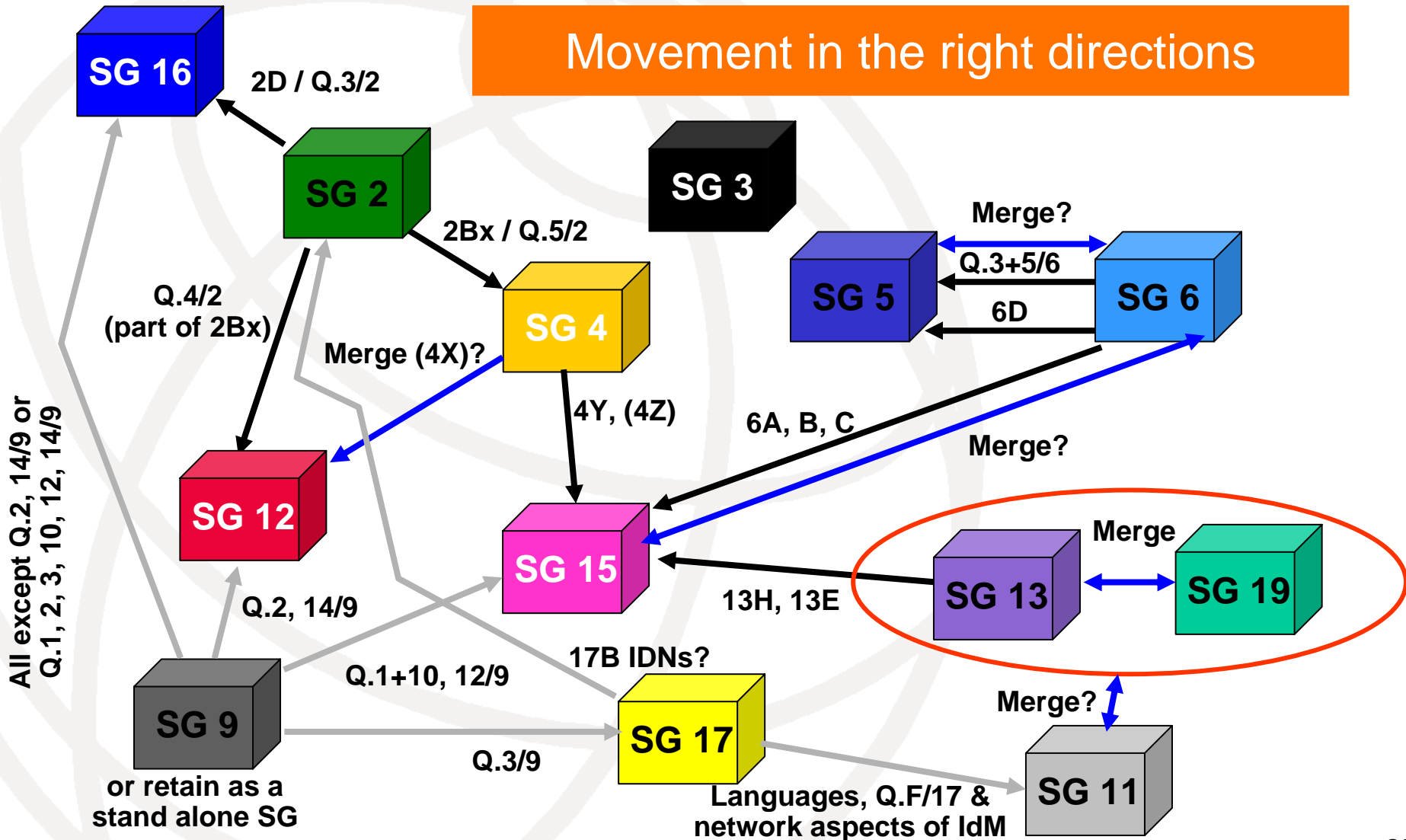
WTSA-2008

- A significant opportunity to revitalize ITU-T through an appropriate SG structure
  - Anticipate some discomfort with too many changes all at once
  - Should consider at least the changes enumerated earlier (moving in the right direction), plus set the stage for substantive discussions during the study period on better organizing the technical work, including more dynamic and less "quantum-level" SG structure evolution.

Author's view

Anticipated and possible evolution of current Study Groups at WTSA-08

Movement in the right directions

SG 16

2D / Q.3/2

SG 2

2Bx / Q.5/2

SG 3

Merge?

Q.3+5/6

SG 5   SG 6

6D

Q.4/2 (part of 2Bx)

SG 4

Merge (4X)?

4Y, (4Z)

6A, B, C

Merge?

SG 12

SG 15

Merge

SG 13   SG 19

13H, 13E

All except Q.2, 14/9 or Q.1, 2, 3, 10, 12, 14/9

Q.2, 14/9

17B IDNs?

SG 9

Q.1+10, 12/9

Merge?

SG 17

SG 11

Q.3/9

or retain as a stand alone SG

Languages, Q.F/17 & network aspects of IdM

What about 4 and 8 years from now?

- We'll be preparing for WTSA-12 and -16
- A lot of water will have gone under the bridge: global economic changes, unexpected developments, enhanced and new technologies, etc.
- ITU is an enduring organization*
- ITU-T's ongoing long term success will correlate strongly with its continuing responsiveness to the evolving international standardization environment.

* http://www.boozallen.com/media/file/143411.pdf

What about 4 and 8 years from now?

- Some quotations:
  - "We always over-estimate the change that will occur in the next two years, and underestimate the change that will occur in the next ten years." *
  - "When you get to a fork in the road, take it!" **
  - "Prediction is very difficult, especially about the future." ***

*	*Bill Gates, Microsoft Corporation*
**	*Yogi Berra, American baseball player*
***	*Neils Bohr, Danish Physicist*

Thank you for your attention!