

ISO/IEC JTC1/SC7 /N3512

2006-06-11

Document Type	Presentation
Title	SC7 Chairman Presentation and AG Meeting Outputs, SC7 Opening Plenary, Bangkok, 2006-05-15
Source	SC7 Chairman
Project	
Status	Final
Reference	
Action ID	FYI or ACT
Due Date	
Distribution	AG
No. of Pages	39
Note	

Address reply to: ISO/IEC JTC1/SC7 Secretariat
École de technologie supérieure – Département de Software and IT Engineering
1100 Notre Dame Ouest, Montréal, Québec Canada H3C 1K3
secretariat@jtc1-sc7.org

www.jtc1-sc7.org

ISO/IEC JTC 1/SC7 OPENING PLENARY

Bangkok, 2006-05-13
SC7 Chairman Presentation

François Coallier
chair@jtc1-sc7.org
francois.coallier@etsmtl.ca

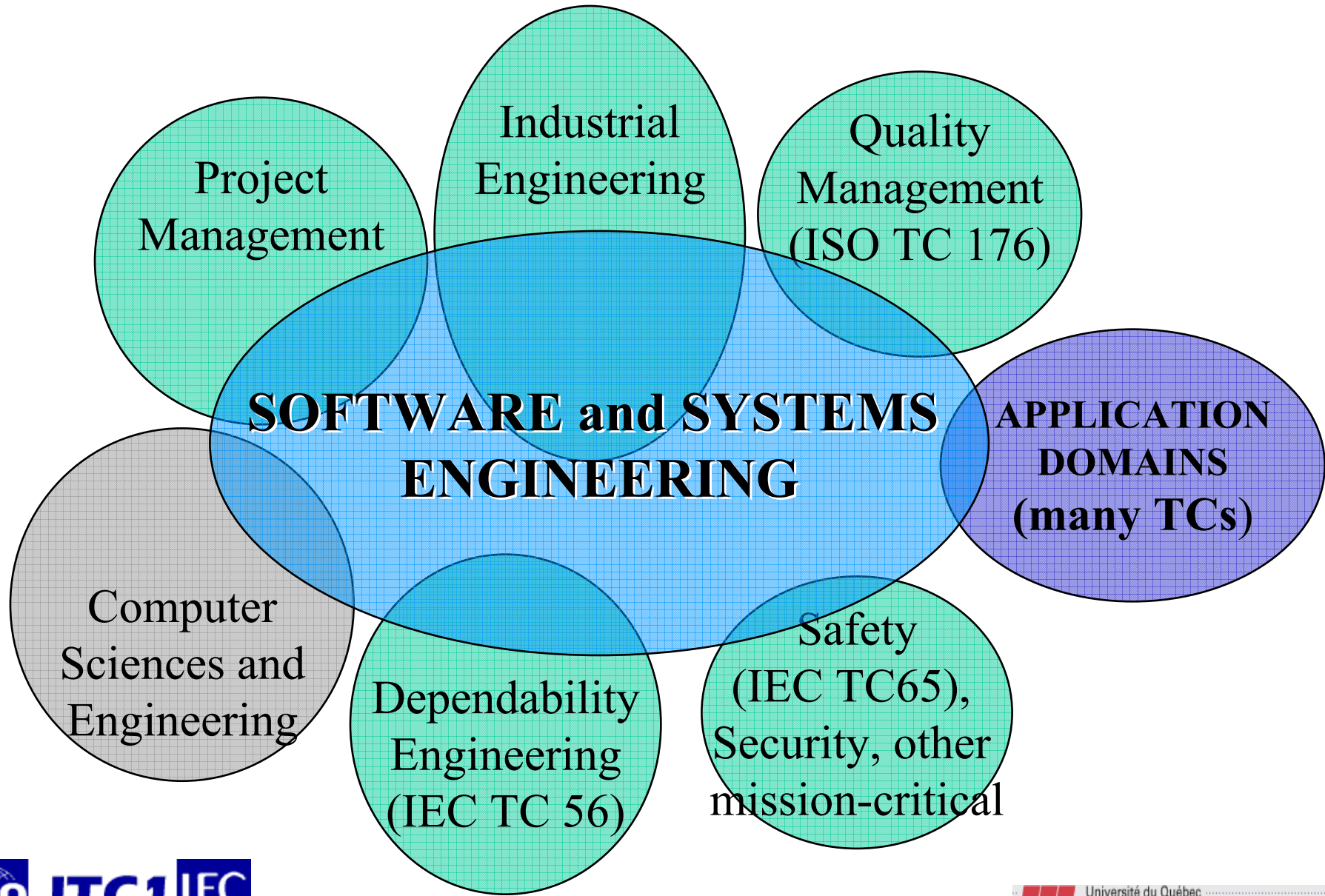
SC7 History

- **1987 - Formation of JTC1/ SC7**
- **1990 - First Business Plan published**
- **1991:**
 - **Name changed to Software Engineering**
 - **Publication of ISO/IEC 9126**
- **1994 - The concept of product plan was proposed to SC7**
- **1995 - Publication of ISO/IEC 12207**
- **1996 - Publication of the first edition of the SC7 Product Plan**
- **1997:**
 - **Terms of references broadened to Software Systems**
 - **First Business Planning Workshop**
 - **Vocabulary and BPG SWG established**
- **1998:**
 - **Transfer of ODP and E-LOTOS projects from SC33**
 - **Process architecture**
- **2000 - Name changed to *Software and System Engineering***

SC7 TERMS OF REFERENCE

Standardization of processes, supporting tools and supporting technologies for the engineering of software products and systems

JTC 1/SC7 Is an Horizontal Committee



Actives SC7 Study Groups

- Study Group on Interoperability (N3488)
- Study Group on Requirements Process (N3489)
- Study Group on Non-Developed Components
- Study Group on Architecture Description
- Study Group on Review of TR 14143-3 – Functional Size Measurement – Validation and Verification (N3443)
- Study Group on Review of TR 14143-4 – Functional Size Measurement – Reference Models (N3487)
- Study Group on Service Delivery and Management, ITC Governance (N3486)

Chairman's theme for Bangkok

CONSOLIDATION

-> Taking stock, completing
ongoing activities
& optimizing

Markets Size (10⁹ US \$)

ICT Vendor 2002

**Reference: R.Fulton,
COM-15-1667, Predicts
2002 – What’s Ahead for
the IT Industry, Gartner
Research, Research Note,
2002-01-08**

http://www.adabasnatural4ever.com/industry_news/media/predicts_2002_whats_ahead_for_the_it_industry.pdf

Telecommunications equipment	380
Computer Systems Hardware	240
Software Licenses	70
Project Oriented IT Services	250
Semiconductors	150
Support/Management IT Services	350
TOTAL	1 440

SC7 Markets

Includes:

Producer/Consumers/Operator/... of

- Shrink Wrap / Consumer Software
- Embedded Software Systems
- Corporate/Enterprise Information Systems (IS)
(*Management Information Systems (MIS); Data Processing*);

What is Enterprise IS?

Enterprise IS is a Systems of Systems:

*Multiple, heterogeneous, distributed systems
that are embedded in networks at multiple
levels.*

http://en.wikipedia.org/wiki/System_of_systems

*...and have been developed independently
through time*

Figure 1. Architectural levels of scope.

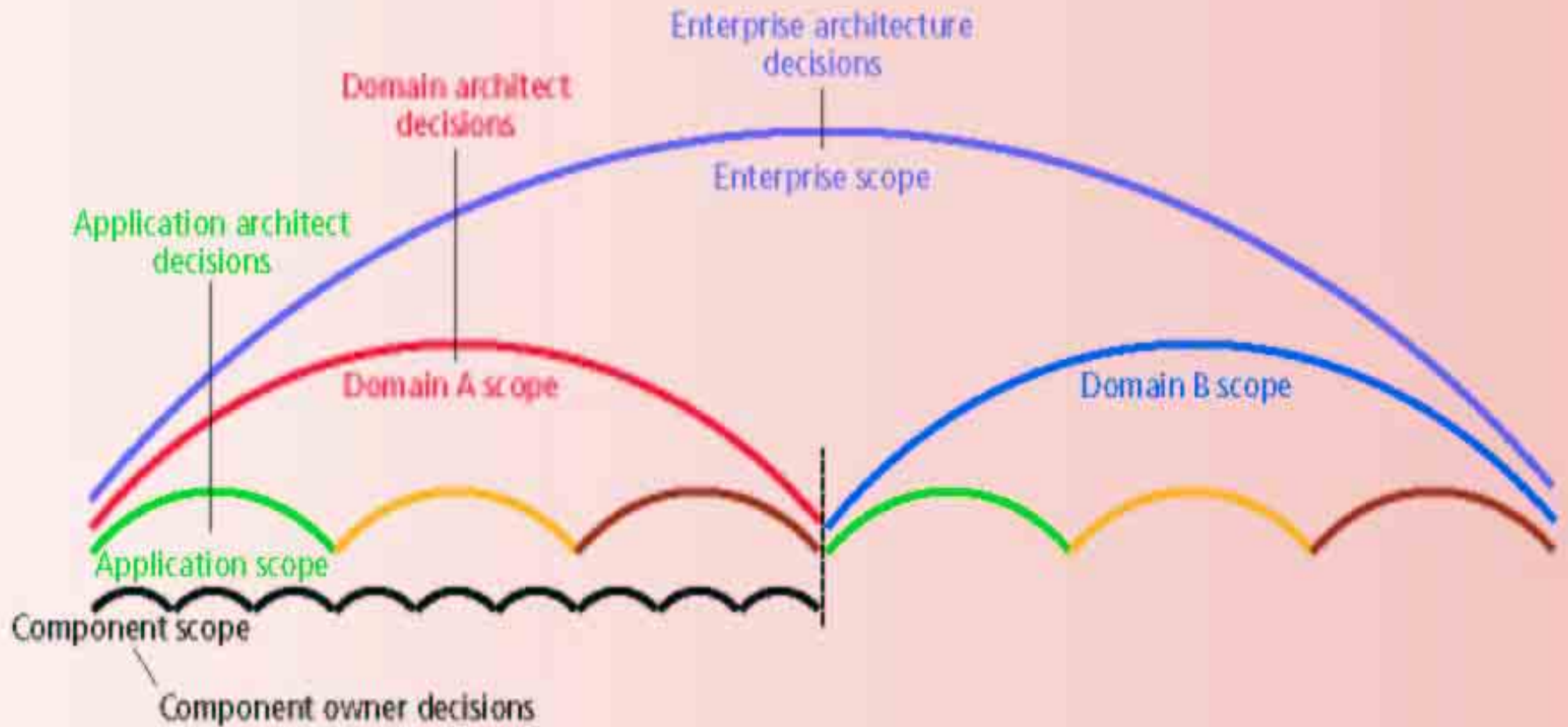


Fig. 1 de « Less is More with Minimalist Architecture », R. Malan et D. Bredemeyer, *IEEE IT Pro* 4 (5), septembre-octobre 2002

Embedded vs Enterprise

(Traditional) Embedded

- Control the 'real' world
- Hard or soft real time
- May impact Health and Safety

- Independent or interrelated systems

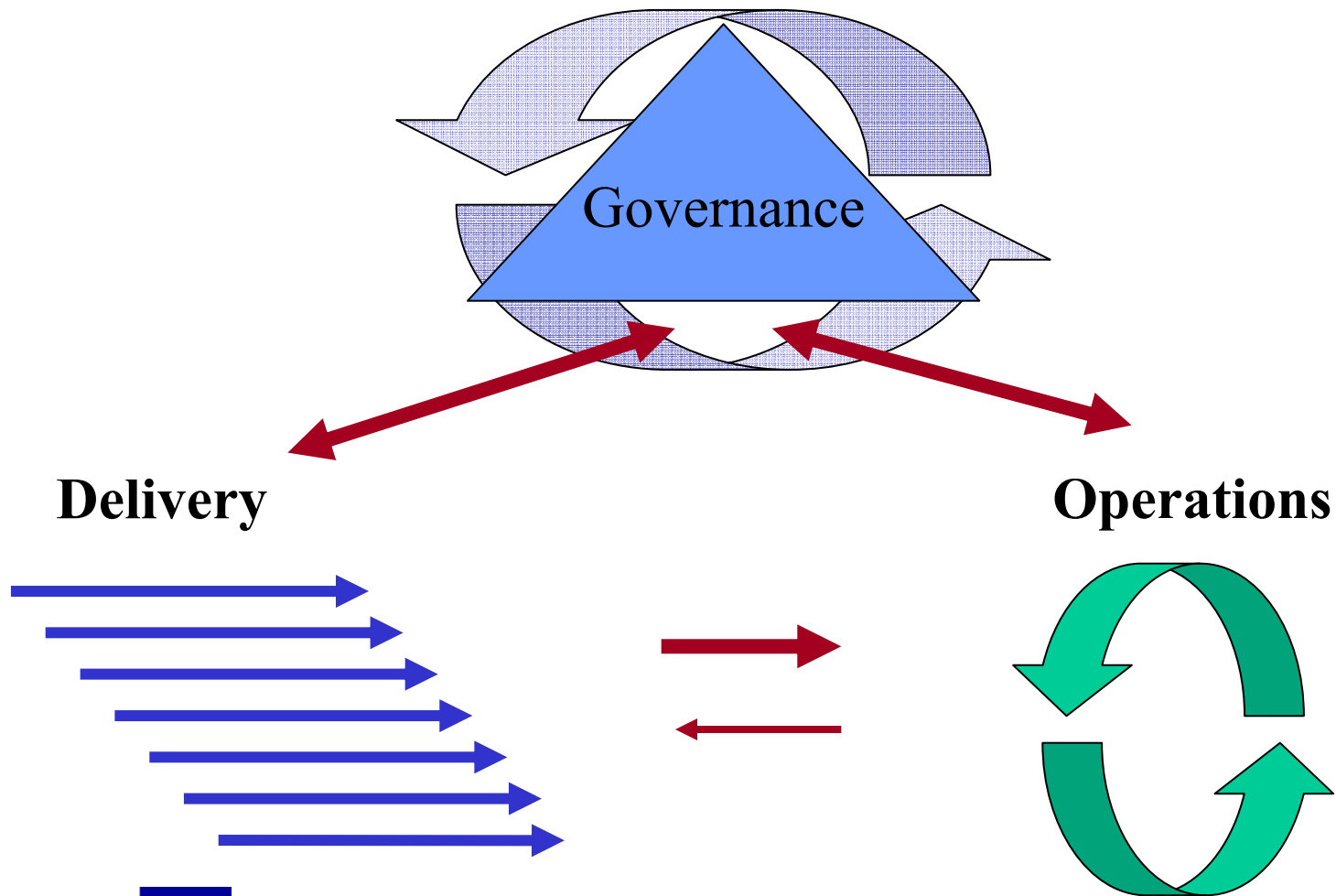
- May be mass manufactured

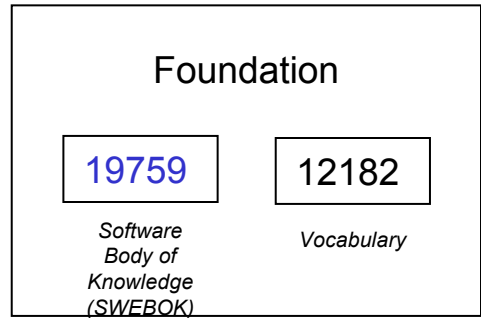
- Enter maintenance once delivered.
Many types of updates possible.

Enterprise

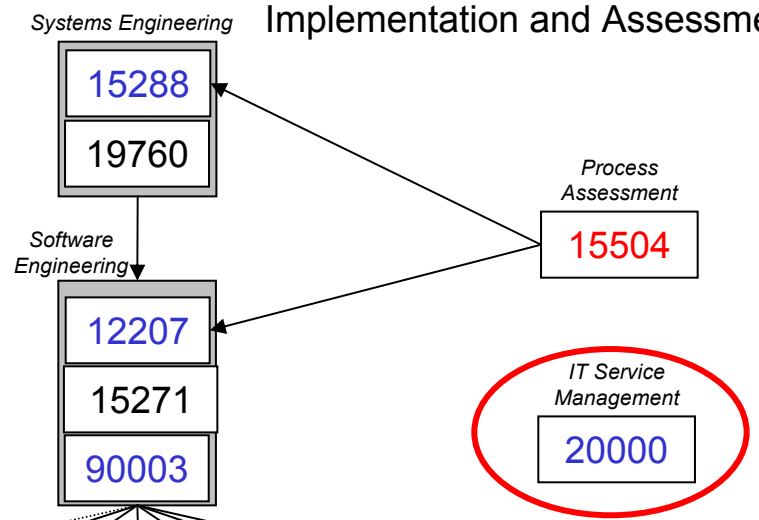
- Process information
- Soft real time
- Financial/Economic impacts. May impact Health and Safety in some cases
- Set of distributed heterogynous systems integrated into an organization.
- Include processes, business rules, data/information
- Continuous addition, modifications or retirements of components/subsystems/systems. Configuration changes.

Enterprise IT Processes

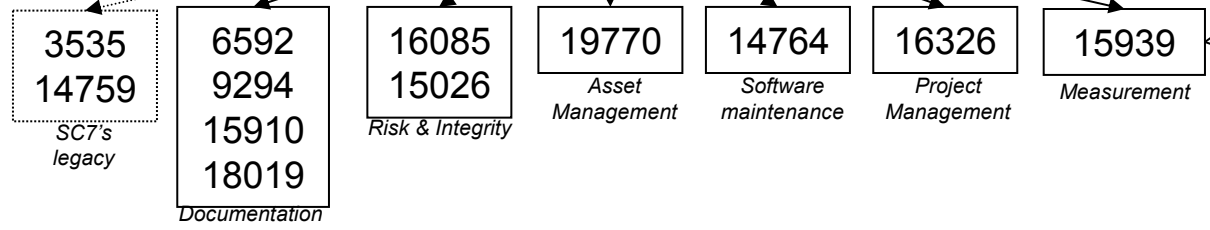
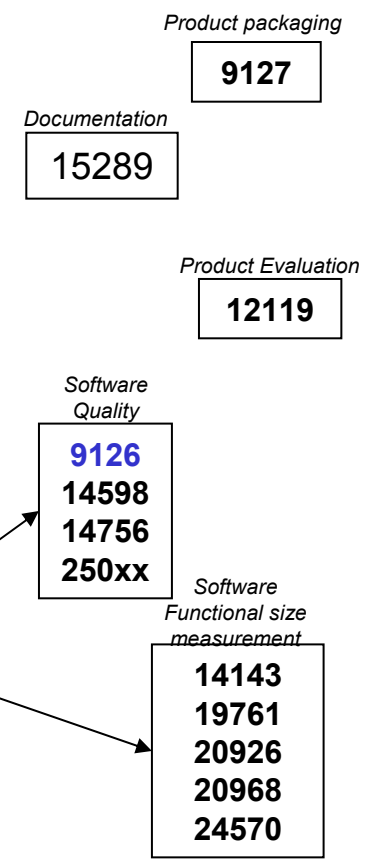




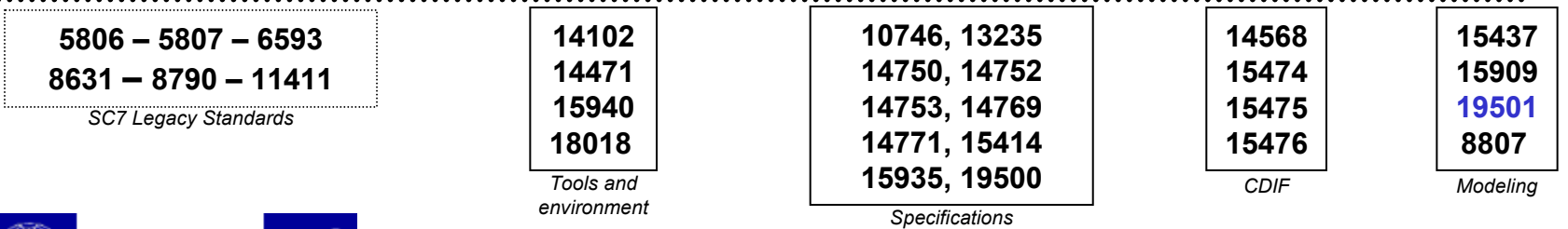
Process Implementation and Assessment



Product



Tools, Methods



SC7 Terms of References

Standardization of processes, supporting tools and supporting technologies for the engineering of software products and systems.

Note: The processes, tools and technologies are within the scope of JTC1 terms of references and exclude specific tools and technologies that have been assigned by JTC1 to other of its SC's.”

Need to update SC7 Terms of References

- to better reflect our current Program of Work, and our strategic directions.

JTC 1 Terms of References

Standardization in the field of Information Technology.

Information Technology includes the specification, design and development of systems and tools dealing with the capture, representation, processing, security, transfer, interchange, presentation, management, organization, storage and retrieval of information

Proposed new terms of reference

Standardization of processes, methods and supporting technologies for the engineering and management of software and systems [products and services] throughout their life cycles.

Note: The processes and technologies are within the scope of JTC1 terms of reference and exclude specific technologies that have been assigned by JTC1 to other of its SCs.”

Rationale

- 'Methods' - is a more exact term than 'tool' and is aligned to TR 19759 (SWEBOK)
- 'Management' mach what is already in 15288 (the investment management process for instance) and some of our other standards, including 20000. Its is an explicit opening to the IT governance work that is currently under consideration by one of our Study Group. It is somewhat redundant with the term 'engineering', but some redundancy can help in our communications.

Rationale

- 'Services' - make our terms of reference more explicitly aligned to some of our standards, even if services are part of systems.
- 'throughout their life cycle' - stress the coverage of systems maintenance and operation - already in many of our standards.

Action items for the plenary

ITEM	ACTIONNEE(S)
SC7 will convert to the ISO electronic balloting system	Secretariat Drafting Committee
Resolution on P Members participation to ballots: reminding P Members of their obligation to vote + requesting JTC 1 to reconsider its 50% ballot validity rule	Secretariat Drafting Committee

AG Meeting Report

Action items for the plenary

ITEM	ACTIONNEE(S)
Prepare resolutions on WG convenerships	Drafting Committee
Refresh liaison officers appointments	Secretariat Drafting Committee
Identify active C liaisons Take appropriate action on inactive C liaisons	Secretariat WGs

Action items for the plenary

ITEM	ACTIONNEE(S)
<p>AS8015:2005 - Corporate Governance of Information and Communication Technology (N3463) – Fast Track</p>	<p>WG25 to come with recommendations to AG (draft resolution at the Thursday evening meeting)</p>
<p>Future of WG09 - not enough participation – will be disbanded and work transferred to appropriate WG(s)</p>	<p>WG09 & Drafting Committee</p>
<p>IEEE Offer to come with 1st WD of 15026</p>	<p>IEEE-CS, WG09 Drafting Committee</p>

Action items for the plenary

ITEM	ACTIONNEE(S)
WG 19 Convener presentation on terms of references (<u>N3442</u>)	WG19 to consult other WGs BPG to come with view of WG 2, 7, 19 & 25 mandate
WG 25 Convener presentation (<u>N3502</u>)	None
WG 07 Convener presentation (<u>N3497</u>)	None

Action items for the plenary

ITEM	ACTIONNEE(S)
Winding Down of WG12	WG12 to come with timetable to AG and recommendations for maintenance
Japanese Proposal – NWI on re-organisation of 14143-1 (N3501)	WG12 to come with recommendations to AG

Action items for the plenary

ITEM	ACTIONNEE(S)
SC22 Liaison Report (N3499): need to respond to SC22/WG9 resolution requesting that all modeling languages (such as UML) be transferred from SC7 to SC22 because it can be used for code generation.	Drafting Committee, liaison officer and WG19 to draft resolution stating modeling formalism work should stay with SC7 since it is used principally for engineering work.

Action items for the plenary

ITEM	ACTIONNEE(S)
ISO Risk Management Project (N3454) SC27 Risk Management Project TC62A NWI on Risks Management	WG9 to come with 1) Comments 2) Liaison officer for ISO Project
Establishment of a JWG with ISO TC159/SC4 (N3431, N3478)	Secretariat to complete transaction

Action items for the plenary

ITEM	ACTIONNEE(S)
TC62A NP on guidelines for S/W Eng for medical device	Liaison Officer to send to Secretariat for circulation
INCOSE offer of Systems Engineering Handbook to SC7	WG7 to come with recommendations to AG
International Systems Security Engineering Association - ISSA (N3449) A liaison request	WG7 & WG6 to come with recommendations to AG

Action items for the plenary

ITEM	ACTIONNEE(S)
Proposed modifications to the SC7 Terms of Reference to be presented to the full plenary and finalized during the week	Chairman & BPG to consult and come with recommendation to AG.
SC7 liaison presentation to JTC 1/SC27 (<u>N3498</u>)	Drafting Committee to draft resolution endorsing presentation.

Action items for the plenary

ITEM	ACTIONNEE(S)
OMG liaison presentation(N3495): request endorsement of SC7 to get ARO (Approved Reference Specification Originator) status	Drafting Committee to draft resolution endorsing request.
Category B liaison between the CEN WS DPA and ISO/IEC JTC 1/SC 7 (N3492)	Drafting Committee to draft resolution endorsing request.

Action items for the plenary

ITEM	ACTIONNEE(S)
Study Group on Interoperability (<u>N3488</u>): work was not completed	BPG to recommend if SG is to be extended.
Study Group on Requirements Process (<u>N3489, N3507</u>): 3 NWI recommended	NWI-1: WG7 NWI-2: WG7, 2 & 19 NWI-3: WG4, 7

Action items for the plenary

ITEM	ACTIONNEE(S)
Study Group on Non-Developed Components: recommends that WG7 assess need for guidance on ND components in 12207 and 15288	WG7

Action items for the plenary

ITEM	ACTIONNEE(S)
Study Group on Architecture Description (N3508): recommends that a NWI on the revision of IEEE 1471 / ISO/IEC DIS 25961 be assigned to a new WG	SWG5 to consult WG19 and NBs and come with results to AG

Action items for the plenary

ITEM	ACTIONNEE(S)
Study Group on Review of TR 14143-3 – Functional Size Measurement – Validation and Verification (<u>N3443</u>): recommends that the Std be keep as is.	Drafting Committee to draft resolution endorsing recommendation.

Action items for the plenary

ITEM	ACTIONNEE(S)
Study Group on Service Delivery and Management, ITC Governance (<u>N3486, N3508</u>)	WG25
Study Group on Review of TR 14143-4 – Functional Size Measurement – Reference Models (<u>N3487, N3504</u>): recommends that the Std be keep as is	Drafting Committee to draft resolution endorsing recommendation.

Action items for the plenary

ITEM	ACTIONNEE(S)
SWG5 Report <u>N3509</u>	SWG5
IEEE-CS Liaison Report <u>N3466</u>, <u>N3510</u>: note very significant progress of harmonization between SC7 and IEEE stds.	None

Action items for the plenary

ITEM	ACTIONNEE(S)
Futures Plenary: 2007: St-Petersburg <u>N3494</u> 2008: Berlin	Chairman Drafting Committee
Futures Plenary: 2009	Chairman NBs
Future Interim Meetings: 2006: Seoul 2007: Montréal	Drafting Committee

Action items for the plenary

ITEM	ACTIONNEE(S)
Future Interim Meetings: 2008, 2009	WG7 & 10 Conveners Chairman NBs

Action items for the plenary

ITEM	ACTIONNEE(S)