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**Report to JTC 1  
Web Services Study Group  
(DRAFT)**

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**Introduction**

- The Web Services Study Group (WSSG) was established by JTC 1 at its 2003 Singapore Plenary. Its initial mandate was given in resolution 9 of the aforementioned Plenary.
- The WSSG was chaired by Dr. Donald R. Deutsch (USA). The Secretariat was fulfilled by Prof. François Coallier (Canada).
- The following countries and organizations participated in the Study Group throughout its history:
  - Countries: Canada, China, Ireland, France, Germany, Japan, Norway, Singapore, The Netherlands, UK, USA
  - JTC 1 SCs: SC6, SC24, SC27, SC37
  - Internal liaisons: ISO/TC 211, ITU-T SG17
  - External liaisons and other organizations: Ecma international, IEEE-CS, JCP, Liberty Alliance, OASIS, OMG, W3C, WS-I
- Participants in WSSG meeting are listed in ANNEX D

**Summary of activities**

- A list of all documents received and issued by the WSSG can be found in ANNEX A. These documents can be viewed on the WSSG Web site at <http://wssg.logti.etsmtl.ca/>. The JTC 1 Secretariat should be contacted for access to restricted documents.
- The first meeting was held in Paris, France on 2004-02-26,27

- 23 people representing 8 countries and 8 external organizations as well as the JTC 1 Chairman participated in the meeting.
- The WSSG revised its Terms of References. They can be found in ANNEX B. Meeting minutes and resolutions were published as J1N7401. Meeting resolutions can also be found in ANNEX C.

- The second meeting was held in Montréal, Québec, Canada on 2004-06-17,18
  - 29 people representing 7 countries and 12 external organizations participated in the meeting.

Meeting minutes and resolutions were published as J1 N7528. Meeting resolutions can also be found in ANNEX C.

- The third meeting was a teleconference on 2005-03-23
  - 13 people representing 6 countries and 3 external organisations participated.
  - Minutes were published in J1 N7401
- The fourth meeting was a teleconference on 2006-09-28
  - 18 people representing 5 countries, 2 external organisations and 1 internal organisation participated.
  - Minutes were published in J1 N7824 (WSSG N035)
- The fifth meeting was a teleconference on 2007-08-20
  - 8 people representing 4 countries participated
  - Minutes were published in J1 N8744 (WSSG N039)
- The sixth meeting was a teleconference on 2008-06-25
  - 11 people representing 5 National Bodies + SC 6 participated
  - Minutes were published in J1 Nxxx (WSSG N046)
- The seventh meeting was a teleconference on 2008-09-04
  - 13 people representing 7 National Bodies + SC 6 participated
  - Minutes were published in J1 Nxxx (WSSG N057)
- The eighth meeting was a teleconference on 2008-10-10
  - 14 people representing 6 National Bodies + SC 6 participated
  - Minutes were published in J1 Nxxx (WSSG N059)

## **Findings since the last JTC 1 Plenary**

WSSG held three teleconference meetings in June, September and October 2008 to address the following resolutions from the 2007 JTC 1 Plenary in Australia:

### **Resolution 34 - Reconstitution of the Web Services Study Group**

JTC 1 reconstitutes the Study Group on Web Services to specially focus on:

- Support maintaining and making the Web Services Registry widely available, and
- Assist JTC 1 in processing possible future Web Services PAS submissions

The Study Group will produce a report, with a summary of actions that have been initiated during its mandate and any remaining action items, for presentation at the JTC 1 2008 Plenary Meeting in Japan.

### **Resolution 35 - Web Services Study Group Registry**

JTC 1 requests its National Bodies, Subcommittees and Liaison Organizations to evaluate the Web Service Registry (<https://wssg-reg.logti.etsmtl.ca>) and to provide comments to the WSSG on the registry, including recommendations on how the registry should be maintained.

### **Web Services Registry Maintenance and Availability**

The only formal contribution received in response to JTC 1 2007 Resolution 35 was from the US (JTC001-N-9020). Since no inputs were received volunteering resources for the ongoing maintenance of the registry, WSSG directly solicited inputs from consortia that had engaged during WSSG's first three years. Inputs from W3C and Oasis indicated a willingness to provide access to listings of their specifications, but neither offered to take an active role in updating the JTC 1 registry.

Japan, and SC 6 submitted updates for the Registry, and along with China agreed to participate in a trial of the distributed update capabilities. The Secretariat noted desired enhancements to the mechanisms that had been initially deployed by Canada. The update trial was initiated but not completed at the time of this report; we may have results to report at the 2008 Plenary. Even before the trial was completed, WSSG noted that mechanisms had to be defined to manage the update process – especially for addressing conflicting entries/changes to the contents.

The JTC 1 Secretariat agreed to put a link to the Web Services Registry on the JTC 1 home page. Canada indicated that the Université du Québec, École de technologie supérieure, where the Registry was developed, is willing to continue to host the Registry for the foreseeable future.

### **Assist JTC 1 In Processing Web Services PAS Submissions**

JTC 1 received no Web Services related PAS submissions, so WSSG's assistance was not required.

### **Consideration of Remaining WSSG Action Items & Handling of Future Web Services Related Work**

WSSG considered 5 options for recommendations to JTC 1 about how to address future Web Services work as outlined by the chair:

1. Disband WSSG and do not identify a mechanism for addressing future Web Services work within JTC 1.
2. Continue Web Services work as required in a temporary (i.e., established at each Plenary) structure as we have over the past 5 years.
3. Establish a more permanent organization such as a Special Working Group (SWG) for addressing Web Services issues and PAS submissions in a manner consistent with the position (established at the first WSSG meeting) that JTC 1 should not become yet another venue for developing Web Services specifications

but rather should serve as an integrator of the output of ongoing efforts from within and outside JTC 1.

4. Assign responsibility for future Web Services work, including the ability to develop new JTC 1 Web Services standards, to an existing JTC 1 SC. At least one National Body (France) suggested the work could be assigned to SC6, and representatives from SC 6 argue for this charter. Others have expressed concern that current SC 6 participants are experts in ASN.1 but not in Web Services. Other TCs (e.g., SC 32) may also be candidates.
5. Establish a new TC for Web Services work. Because SC's are specifically authorized to develop new JTC 1 standards, options 4 and 5 would reverse the WSSG position that JTC 1 should not become yet another venue for developing Web Services specifications...

**After extensive discussion during two teleconference meetings, WSSG unanimously agreed to recommend option (2) that JTC 1 reconstitute the Study Group for one more year to both complete its work on maintaining the Registry and the consider related work in the areas of SOA (Service Oriented Architecture) and Systems Integration.**

### **Recommendations to the Japanese JTC 1 Plenary**

The WSSG Chairman and Secretariat request that JTC 1 consider the following recommendations at its Japanese Plenary in November 2008:

#### **Recommendation WSSG-1 – Endorsement of the WSSG report**

It is recommended that JTC 1 endorse this report.

#### **Recommendation WSSG-2 – Continuation of the WSSG**

It is recommended that JTC 1 reconstitute the WSSG for an extra year to continue with its mandate, including the work on the repository. Its charter should be expanded to include the investigation of the SOA framework and systems integration.

## ANNEX A: WSSG DOCUMENTS

Note: All WSSG documents are available at the WSSG Web site at <http://wssg.logti.etsmtl.ca/>. Please contact the JTC 1 Secretariat for access to restricted documents.

WSSG Number	JTC 1 Number	Title	Source
	<a href="#">J1N7327</a>	Establishment of a Study Group on Web Services and Call for Participation	JTC 1 Secretariat
<a href="#">N001r2</a>	<a href="#">J1N7359</a>	Draft Agenda for 26-27 February meeting at AFNOR in Paris, France	WSSG Chairman
<a href="#">N002</a>		Consortia Presentations to the JTC 1 Study Group on Web Services	WSSG Chairman
<a href="#">N003</a>		Membership List	WSSG Secretariat
<a href="#">N004</a>		Source Document – Web Services – Used by the JTC 1 Special Working Group for Technology Watch.I	WSSG Secretariat
<a href="#">N005</a>		Contribution – JTC 1 SC6 - ASN1-XML-FastWebServices	JTC 1/SC6
<a href="#">N006</a>		Meeting Attendance List - JTC 1 Web Services Study Group – Paris, France, 2004-02-26,27	WSSG Secretariat
<a href="#">N007</a>		Revised Terms of Reference - JTC 1 Web Services Study Group.	WSSG Secretariat
<a href="#">N008</a>		JTC 1 Chairman Presentation	JTC 1 Chairman
<a href="#">N009</a>		W3C Presentation	W3C
<a href="#">N010</a>		OASIS Presentation	OASIS
<a href="#">N011</a>		WS-I Presentation	WS-I
<a href="#">N012</a>		OMG Presentation	OMG
<a href="#">N013</a>		Liberty Alliance Presentation	Liberty Alliance
<a href="#">N014</a>		JCP Presentation	JCP
<a href="#">N015</a>	<a href="#">J1N7401</a>	Meeting Minutes and Resolutions – Web Services Study Group meeting – Paris, France, February 26,27 2004	WSSG Secretariat
<a href="#">N016</a>	<a href="#">J1N7423</a>	Preliminary Draft Agenda and Joining Instructions – Web Services Study Group Meeting – Montréal, Québec, Canada June 17,18 2004	WSSG Chairman
<a href="#">N017</a>		Draft Agenda and Joining Instructions – Web Services Study Group Meeting – Montréal, Québec, Canada June 17,18 2004	WSSG Chairman
	<a href="#">J1N7424</a>	SC 6 Chairman's contribution on JTC 1 N7401 "Meeting Minutes and Resolutions of the Web Services Study Group, 26-27	JTC 1/SC 6 Chairman

		February 2004 in Paris, France."	
<a href="#">N018</a>		Web Services Standards Survey	Jerry L. Smith
<a href="#">N019</a>		French Position on WSSG February Meeting Resolution 4	French NB
<a href="#">N020</a>		UK Position on WSSG February Meeting Resolution 4	UK NB
<a href="#">N021</a>		ISO/TC 211 Geographic information/Geomatics presentation for ISO/IEC JTC 1 WSSG Montréal, 17-18 June 2004	ISO/TC 211
<a href="#">N022</a>		Web Services for Computer Telephony Experience report	Ecma International
<a href="#">N023</a>		ISO/IEC JTC1 WSSG Irish National Body Position	Irish NB
<a href="#">N024</a>		ISO/IEC JTC 1/SC 27 IT Security Techniques	JTC 1/SC27
<a href="#">N025</a>		Meeting Attendance List - JTC 1 Web Services Study Group – Montréal, Québec, Canada June 17,18 2004	WSSG Secretariat
<a href="#">N026</a>	<a href="#">J1N7528</a>	Meeting Minutes and Resolutions – Web Services Study Group meeting – Montréal, Québec, Canada June 17,18 2004	WSSG Secretariat
<a href="#">N027</a>		Draft Report – Web Services Study Group	WSSG Chairman & Secretariat
N028	J1N7588	2004 Report – Web Services Study Group	WSSG Chairman & Secretariat
N029		Preliminary Draft Agenda and Joining Instructions – Web Services Study Group Electronic Meeting – 2005-03-23 15:30 hrs EST	WSSG Chairman
N030R	J1N7824	Meeting Minutes and Resolutions – Web Services Study Group teleconference meeting – 2005-03-23	WSSG Chairman & Secretariat
N031	J1N7994	2005 Report – Web Services Study Group	WSSG Chairman & Secretariat
N032	J1N8229	Preliminary Draft Agenda and Joining Instructions – Web Services Study Group Electronic Meeting – 2006-09-28 13:00 PDT/16:00 EDT	WSSG Chairman
N033	J1N8277	Letter from the JTC 1 Chairman to the JTC 1 WSSG Convener Concerning a PAS Submission from the Web Services Interoperability Organization (WS-I)	JTC 1 Chairman
N034		Inventory of Web Service-Related Standards	Japanese National Body
N035	J1N7824	Meeting Minutes and Resolutions – Web	Secretariat



		Services Study Group teleconference meeting – 2006-09-28	
N036	J1N8359	2006 Report – Web Services Study Group	WSSG Chairman & Secretariat
N037		Inventory of Web Service-Related Standards as of 2007-1-24	Japanese National Body
N038		Preliminary Draft Agenda and Joining Instructions ñ Web Services Study Group Electronic Meeting ñ 2007-08-20 13:00 PDT/16:00 EDT	Chair, JTC 1 Study Group on Web Services
N039	J1N8744	Meeting Minutes and Resolutions – Web Services Study Group teleconference meeting – 2007-08-20	Secretariat
N040	J1N8745	2007 Report – Web Services Study Group	WSSG Chairman & Secretariat
	J1N8916	Request for Input on the Web Services Study Group Registry	JTC 1 Secretariat
N041		Inventory of Web Service Related Standards as of 2008	Japanese National Body
N042	J1N9020	US National Body Contribution in Response to JTC 1 N 8916 - Request for Input on the Web Services Study Group Registry	US National Body
N043R	J1N9043	Draft Agenda and Joining Instructions – Web Services Study Group Electronic Meeting – 2008-06-25 13:00 PDT/16:00 EDT	Chairman and Secretariat
N044		Chinese Expert Participating JTC1 Web Service Studying Group.	Chinese National Body
N045		SOA Standard Framework V0.8	Chinese National Body
N046	J1N9201	Draft Meeting Minutes – Web Services Study Group Electronic Meeting – 2008-06-25 13:00 PDT/16:00 EDT	Chinese National Body
N047	J1N9243	Draft Agenda and Joining Instructions – Web Services Study Group Electronic Meeting – 2008-09-04 13:00 PDT/16:00 EDT	Chairman and Secretariat
N048		The 2008 SOA Standardization International Forum, Beijing, China, November 5 to 6	Chinese National Body
N049		SOA Standard Framework V1.0	Chinese National Body
N050		Document Register - N001 to N050	Secretariat
N051		DIN Statement on Repository Maintenance	DIN
N052		Inventory of Web Service-Related Standards as of 2008-07-25 - Update from N037	Japanese National Body
N053		Inventory of Web Service-Related Standards	Japanese National

		as of 2008-07-25 - Update from N041	Body
N054		SC6 Contribution to Web Service-Related Standards Inventory	JTC 1/SC6
N055		W3C Statement on Repository Maintenance	W3C
N056		JTC 1 Web Services Study Group Options for Handling Future Web Services Work Within JTC 1	WSSG Chairman
N057		(Draft) Meeting Minutes and Resolutions – Web Services Study Group teleconference meeting – 2008-09-04	Chairman and Secretariat
N058		Draft Agenda and Joining Instructions – Web Services Study Group Electronic Meeting – 2008-10-10 07:00 PDT/10:00 EDT	Chairman and Secretariat
N059		(Draft) Meeting Minutes and Resolutions – Web Services Study Group teleconference meeting – 2008-10-10	Chairman and Secretariat
N060	J1Nxxx	2008 Report – Web Services Study Group	WSSG Chairman & Secretariat

## **ANNEX B: Revised terms of reference**

### **CHARTER**

#### **ISO/IEC JTC 1 STUDY GROUP ON WEB SERVICES Revised from Resolution 9, JTC 1 Singapore Plenary**

JTC 1 establishes a Study Group on Web services to elaborate a strategy for JTC 1 contributions to Web services standardization. For the purpose of this Study Group, and without prejudice to other definitions, we will use the following working definition from W3C of Web Services:

A Web service is a software system designed to support interoperable machine-to-machine interaction over a network. It has an interface described in a machine-processable format (specifically WSDL). Other systems interact with the Web service in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialization in conjunction with other Web-related standards.

<sup>1</sup> Definition taken from <http://www.w3.org/TR/2004/NOTE-ws-arch-20040211/#whatis>

The terms of reference for the group are:

- Assess how JTC 1 activities are relevant to Web services standardization;
- Assess how the Web services activities of organizations external to JTC 1 may benefit from JTC 1 involvement. This should include initially the following consortia and fora:
  - JCP
  - OASIS
  - OMG
  - RosettaNet
  - W3C
  - WS-I

JTC 1 involvement may include:

- Publication in cooperation with developing organizations - through fast-tracks, PAS submissions or other means - of open Web services specifications as formal international standards.
- Contributing to ensure Web services interoperability.
- Harmonization and adaptation of existing JTC 1 work.
- Initiate any relevant activities within existing JTC 1 Subcommittees that would increase JTC 1 contribution to Web services standardization

activities. These activities may be initiated as soon as their need is identified.

- Assistance to consortia and fora in establishing the appropriate liaison with or within JTC 1.

If the Study Group identifies specific new work in this area that does not fit in existing JTC 1 SCs, the Study Group should recommend to JTC 1 the creation of a new SC or other alternatives designed to move this work forward cooperatively.

The Study Group will finalize its report, with a summary of actions that have been initiated during its mandate and any remaining action items, for presentation at the JTC 1 2004 Plenary meeting in Berlin.

## **ANNEX C: Meeting resolutions**

### ***A. Paris***

#### **Resolution 1 – WSSG Terms of References**

The JTC 1 WSSG approves its revised terms of references in document WSSG N007 and mandates its Secretariat to forward them to the JTC 1 Secretariat.

**Unanimous**

#### **Resolution 2 – JTC 1 contribution to Web services standardization**

The JTC 1 WSSG believes that JTC 1 can contribute to Web services standardization by formally recognizing open specifications from consortia and other outside organizations.

Therefore, the JTC 1 WSSG shall continue with its work as per its terms of references in WSSG N007.

**Unanimous**

#### **Resolution 3 - Consortia**

Whereas the JTC 1 WSSG believes that JTC 1 can contribute to Web services standardization by working cooperatively with consortia and other external organizations.

The JTC 1 WSSG encourages the consortia present at this meeting as well as other organizations working in the area of Web services to consider establishing or strengthening their relationship with JTC 1 by assessing the options listed in the JTC 1 Chairman presentation in WSSG N008 and initiating action if required.

**Unanimous**

#### **Resolution 4 – Additional Venue**

The WSSG does not see value in JTC 1 becoming another venue for the development of Web services infrastructure standards.

**Against: SC6**

### **Resolution 5 – Activity Mapping**

The WSSG encourages its members and participating organizations to assist in identifying ongoing Web services specifications development activities and publicize these findings.

**Unanimous**

### **Resolution 6 – Next Meeting**

The JTC 1 WSSG shall meet in Montréal, Canada, on Thursday and Friday June 17 and 18.

**Unanimous**

## ***B. Montréal***

### **Resolution 1 – Ongoing JTC 1 Web Services Work**

WSSG recognizes ongoing web services work in existing JTC 1 SCs and that related follow-on web services New Work Item proposals may be made in the future. In accordance with existing JTC 1 rules, these proposals shall consider whether and how the proposed new work overlaps or complements web services work outside JTC 1.

**Unanimous**

### **Resolution 2 – Continuation of the WSSG**

The WSSG recommends to JTC 1 that it be reconstituted to:

- Continue work assigned in its charter
- Implement recommendations from its Paris and Montréal meetings
- Advise JTC 1 on appropriate mechanisms to receive and process submissions in the area of Web Services.

**Unanimous**

### **Resolution 3 - Montréal Contributions**

The WSSG notes the contributions to this meeting from the Irish NB, Ecma International and ISO/TC 211. If reconstituted by JTC 1, the WSSG will consider proposals to address these contributions at subsequent meetings.

**Unanimous**

**Resolution 4 – Consortia**

The WSSG notes the OASIS application to JTC 1 for PAS submitter status. The WSSG restates its invitation from resolution 3 of its Paris meeting.

**Unanimous**

**Resolution 5 – Registry/Inventory**

The WSSG welcomes Canada's offer to initiate the work on Resolution 5 of its Paris meeting (WSSG N015). The WSSG invites contributions in any form to assist in the performance of this work.

**Unanimous**

**Resolution 6 – WSSG Report**

The WSSG mandates its chairman and secretariat to produce a first draft of its report to JTC 1. This draft shall be distributed to the WSSG members and participants no later than 2004-08-15 for e-mail discussions. A teleconference meeting shall be held on 2004-09-09 at 10:00 hrs EDT (14:00 hrs GMT) for up to 2 hrs to approve the final submission.

**Unanimous**

***C. 2006-09-28 Electronic Meeting***

- After discussion, the following resolution was accepted:

*WSSG recommends that JTC 1 retain responsibility for processing WS-I submissions and for projects related to these submissions. Furthermore, WSSG offers its services to assist JTC 1 and its Secretariat in carrying out these responsibilities.*

- The majority of participants in the teleconference supported this position. SC 6 and France proposed assigning the responsibility to SC 6; ITU-T SG 17 also preferred SC 6 but stated that leaving the responsibility with JTC 1 would be acceptable.

#### ***D. 2007-08-20 Electronic Meeting***

- After discussion, the following recommendations to JTC 1 were accepted:
  - Web Services Inventory
    - That the WSSG request comments from JTC 1 on the registry – including ways to maintain it.
    - That the WSSG recommend to JTC 1 that the registry be made widely available to the ICT community.
  - Future of WSSG
    - That the WSSG inform JTC 1 that it is willing to continue for another year in its current form to:
      - Support making the Web Services Inventory widely available, and
      - Assist JTC 1 in processing possible future Web Services PAS submissions.

#### ***E. 2008-10-10 Electronic Meeting***

- After discussion, the following recommendation to JTC 1 was accepted:

The WSSG should be reconstituted for an extra year to continue with its mandate, including the work on the repository. Its charter should be expanded to include the investigation of the SOA framework and systems integration.



## **ANNEX D: Participants – WSSG Meetings**

The following individuals participated to one or both of the 2004 WSSG meetings.

### Chairman

Deutsch, Donald

### Secretariat

Coallier, François

### Members and Participants

Badawy, Wael – Canada  
Best, Karl – OASIS  
Breidhardt, Michael – Germany  
Brodeur, Jean – ISO/TC 211  
Buaey Qui, Ho – Singapore  
Champagne, Roger – Canada  
Chapman, Martin – Ireland  
Chen, Catherine – France  
Cotton, Paul – US  
Dubuisson, Olivier – JTC 1/SC6,  
ITU-T SG17  
Elzinga, Onno – Ecma international  
Fletcher, Tony – UK  
Fumy, Walter – JTC 1/SC27  
Glover, Tom – Canada, WS-I Haas,  
Hugo – W3C  
Haritos-Shea, Katie – US  
Hittema, Tony – France  
Holbrook, Steve - US  
Jameson, Scott – JTC 1 Chairman  
Kluyt, Onno - JCP  
Le Hegaret, Philippe – W3C  
Linderlien, Knut – Norway  
Mischkinsky, Jeff - US  
Mondello, Carman - US  
Moore, Laura – JTC 1/SC24  
Narita, Hirokazu – Japan  
Nochimowski, Alain – Liberty Alliance  
Østensen, Olaf – ISO/TC 211  
Rioux, Laurent – OMG

Silletti, Ron – US  
Suzuki, Toshihiro – Japan  
Thorpe, Paul – JTC 1/SC6  
Visser, Louis – NL  
Waggett, Peter – UK, JTC 1/SC37  
Wright, Don – US  
Zhang, Liang-Jie (LJ) – IEEE-C

The following individuals participated to the 2005-06-16 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Breidthardt, Michael – Germany  
Chapman, Martin – Ireland  
Chen, Catherine – France  
Clark, James B. - OASIS  
Holbrook, Steve - US  
Mischkinsky, Jeff - US  
Narita, Hirokazu – Japan  
Rutt, Tom - US, SC27  
Silletti, Ronald F. - US  
Suzuki, Toshihiro – Japan  
Thorpe, Paul – US, JTC 1/SC6

The following individuals participated to the 2006-09-28 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Breidthardt, Michael - Germany  
Chen, Catherine - France  
Dubuisson, Olivier - JTC 1/SC6, ITU-T SG17  
Gutentag, Eduardo - US  
Holbrook, Steve - US  
Hughes, Jim - US  
Jameson, Scott - JTC 1 Chairman  
Le Hegaret, Philippe - W3C  
Mischkinsky, Jeff - US  
Narita, Hirokazu - Japan  
Silletti, Ron - US  
Smith, Jerry - US  
Sunday, Bob - Canada  
Suzuki, Toshihiro - Japan  
Thelin, Jorgen - US  
Thorpe, Paul - JTC 1/SC6

The following individuals participated to the 2007-08-20 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Breidthardt, Michael - Germany

Holbrook, Steve - US

Hughes, Jim - US

Narita, Hirokazu - Japan

Silletti, Ron - US

Suzuki, Toshihiro - Japan

The following individuals participated to the 2008-06-25 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Barnole, Valérie – SC6  
Chapman, Martin – Ireland  
Chen, Catherine - France  
Holbrook, Steve - US  
Hughes, Jim - US  
Mischkinsky, Jeff - US  
Silletti, Ron - US  
Suzuki, Toshihiro - Japan  
Thorpe, Paul – SC6

The following individuals participated to the 2008-09-04 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Barnole, Valérie – SC6  
Chapman, Martin – Ireland  
Chen, Catherine - France  
Holbrook, Steve - US  
Lina, Zhong - China  
Mischkinsky, Jeff – US  
Breidhardt, Michael - Germany  
Silletti, Ron - US  
Suzuki, Toshihiro - Japan  
Thorpe, Paul – SC6  
Yuan, Yuan - China

The following individuals participated to the 2008-10-10 teleconference meeting.

Chairman

Deutsch, Donald

Secretariat

Coallier, François

Members and Participants

Barnole, Valérie – SC6  
Champion, Michael - US  
Chen, Catherine - France  
Farance, Frank - US  
Hughes, Jim - US  
Mischkinsky, Jeff – US  
Breidhardt, Michael - Germany  
Silletti, Ron - US  
Song, Huiju - China  
Suzuki, Toshihiro – Japan  
Yuan, Yuan – China  
Zhong, Linda - China