

# ISO/IEC JTC 1/SC 32 N 00826

Date: 2002-05-16

REPLACES: --

<p style="text-align: center;"><b>ISO/IEC JTC 1/SC 32</b></p> <p style="text-align: center;"><b>Data Management and Interchange</b></p> <p style="text-align: center;"><b>Secretariat: United States of America (ANSI)</b></p> <p style="text-align: center;"><b>Administered by Pacific Northwest National Laboratory on behalf of ANSI</b></p>
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## MINUTES OF DCOR EDITING MEETING

### ISO/IEC DCOR 9075:Cor.2

#### ISO/IEC JTC 1/SC 32

29<sup>th</sup> April – 10<sup>th</sup> May 2002

Seoul, Korea

Last Updated: 2002-05-09

### Legend:

Sections are keyed to the meeting agenda (WG 3: N0059Rev).

The meeting day number, *n*, on which a recorded action took place is indicated by a tag of the form \**n*.

The phrase "accepted ... without objection", applied to a motion, indicates that nobody responded to the convenor's question of the form "does anybody object to adopting [this proposal]?"

The phrase "accepted ... unanimously", applied to a motion, indicates that every national body present gave an explicit vote in favour of the motion.

## 1 Introduction Of Participants

\*1 The TC Editor, Steve Cannan, opened the meeting at 09:53am. The following delegates were either present or joined later on the day indicated.

Australia:	Don Bartley	
Canada:	Mark Ashworth	
*6	Baba Piprani	
*3 China:	Wu Zhi Gang	吴志刚
Germany:	Jutta Kreyss	
Japan:	Takashi Kotera	小寺 孝
	Takaaki Shiratori	白鳥 孝明
	Masashi Tsuchida	土田 正士
*7 Korea	Eun-Sook Ryu	류 은 숙
	Min-Young Ra	나 민 영
The Netherlands:	Stephen Cannan (convenor)	
Sweden	Åke Persson could not attend but was available for consultation.	
United Kingdom:	Phil Brown	
	Hugh Darwen	

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United States: Krishna Kulkarni  
Jim Melton (editor)  
Fred Zemke

## 2 Distribution Of Documents

\*1 All documents up to ICN-040 (apart from 022, 023, 029, 030, 031, 032, 036, which were reported to be coming later) were made available electronically on Jim Melton's server on the meeting's LAN, to which all participants were able to connect. New standing document SD-011 was a great help.

Other papers were submitted during the meeting, on the day indicated by the day number shown in the relevant agenda item.

## 3 Selection Of Secretary And Resolution Recorder

\*1 *Hugh Darwen* was appointed secretary. *Krishna Kulkarni* was appointed Resolution Recorder.

## 4 Approval Of Agenda

\*1 New agenda items 8.45 and 8.46 were created, for papers ICN-037 and -038, respectively.

The updated agenda was approved without objection.

Item 8.47, 8.48 and 8.49 were added later during the meeting.

## 5 Administrative Matters

### 5.1 Calling notice for DCOR Editing Meeting (SC32 N00767) (ICN-013)

\*1 ICN-013 was noted.

### 5.2 ISO 9075 TC#5 DCOR text (SC32 N00739) (ICN-002)

\*1 ICN-002 was noted.

### 5.3 ISO 9075 TC WD text (ICN-012R1)

\*1 ICN-012r1 was noted.

### 5.4 Results of SC32 Ballot on DCOR 9075 Cor2 (SC32 N00763, ICN-017)

\*1 ICN-017 was noted.

### 5.5 DCOR 9075 Consolidated Ballot Comments (ICN-014r2)

\*1 ICN-014r2 was noted.

### 5.6 Convenor's Definition of Consensus

\*1 The Convenor informed the meeting that a simple majority vote would be sufficient to carry any motion. The normal rule requiring stronger agreement than that for introduction of new functionality is not applicable because new functionality cannot be introduced in a Technical Corrigendum.

## 6 National Body Opening Comments

### 6.1 Australia

### 6.2 Belgium

### 6.3 Brazil

### 6.4 Canada

\*1 See DRS-001

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- 6.5 China
- 6.6 Czech Republic
- 6.7 Denmark
- 6.8 Egypt
- 6.9 Finland
- 6.10 France
- 6.11 Germany

\*1 See DRS-001

- 6.12 Italy
- 6.13 Japan (ICN-020)
- 6.14 Korea
- 6.15 Netherlands

\*1 The Netherlands is encouraged at the number of comments with solutions endorsed by WG3 and looks forward to successful completion of the Editing Meeting given that only 26 comments still require solutions.

- 6.16 Norway
- 6.17 Sweden (ICN-018)
- 6.18 United Kingdom (ICN-016R1)

\*1 See DRS-001

- 6.19 United States (ICN-019)

\*1 See DRS-001

- 6.20 Austria
- 6.21 Russian Federation

## 7 Ballot Comments endorsed by WG3

\*1 USA proposed a motion to accept all the proposals already endorsed by WG3 in Vienna. UK seconded the motion. The proposal was accepted unanimously.

- 7.1 JPN-STC-003 (Withdrawn)
- 7.2 JPN-STC-004 (Withdrawn)
- 7.3 JPN-STC-006 (Withdrawn)
- 7.4 Seq#001(USA-STC-001) (see comment)
- 7.5 Seq#002a(JPN-STC-001) (see comment)
- 7.6 Seq#003(SWE-STC-003) (VIE-042)
- 7.7 Seq#004(SWE-STC-002) (VIE-042)
- 7.8 Seq#007(USA-STC-004) (see comment)
- 7.9 Seq#008(USA-STC-006) (VIE-056)
- 7.10 Seq#009(USA-STC-005) (VIE-034)
- 7.11 Seq#010(USA-STC-007) (VIE-023)
- 7.12 Seq#011(USA-STC-008) (VIE-047)
- 7.13 Seq#012(USA-STC-009) (VIE-020)
- 7.14 Seq#013(USA-STC-010) (VIE-021)
- 7.15 Seq#014(SWE-STC-004) (see comment)

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- 7.16 Seq#017(USA-STC-011) (VIE-046)
- 7.17 Seq#024(SWE-STC-001) (Catch-all) (VIE-049R2)
- 7.18 Seq#025(USA-STC-012) (Catch-all)  
(VIE-028)  
(VIE-037R1)
- 7.19 Seq#026(USA-STC-013) (Catch-all)  
(VIE-045R1)  
(VIE-059)  
(VIE-064R1)
- 7.20 Seq#027(GBR-STC-010) (see comment)  
Seq#111(GBR-STC-160) (VIE-049R2)
- 7.21 Seq#031(JPN-STC-007) (see comment)
- 7.22 Seq#032(JPN-STC-002) (see comment)
- 7.23 Seq#033(JPN-STC-005) (see comment)
- 7.24 Seq#034(JPN-STC-009) (see comment)
- 7.25 Seq#035(USA-STC-015) (see comment)
- 7.26 Seq#037(USA-STC-016) (see comment)
- 7.27 Seq#038(USA-STC-017) (VIE-075)
- 7.28 Seq#039(USA-STC-018) (VIE-074R2)
- 7.29 Seq#040(USA-STC-019) (VIE-060)
- 7.30 Seq#041(USA-STC-020) (see comment)
- 7.31 Seq#042(USA-STC-021) (VIE-057R1)
- 7.32 Seq#043(USA-STC-022) (see comment)
- 7.33 Seq#044(GBR-STC-030) (VIE-058R1)
- 7.34 Seq#045(GBR-STC-050) (see comment)
- 7.35 Seq#046(GBR-STC-040) (see comment)
- 7.36 Seq#048(USA-STC-023) (see comment)
- 7.37 Seq#049(GBR-STC-060) (see comment)
- 7.38 Seq#052(USA-STC-024) (see comment)
- 7.39 Seq#053(USA-STC-025) (VIE-061)
- 7.40 Seq#054(USA-STC-026) (VIE-069R1)
- 7.41 Seq#055(USA-STC-027) (VIE-070)
- 7.42 Seq#056(USA-STC-028) (VIE-071)
- 7.43 Seq#060(GBR-STC-090) (VIE-049R2)
- 7.44 Seq#061(USA-STC-032) (see comment)
- 7.45 Seq#062(USA-STC-033) (VIE-073)
- 7.46 Seq#063(USA-STC-034) (see comment)
- 7.47 Seq#064(JPN-STC-008) (see comment)
- 7.48 Seq#065(USA-STC-035) (see comment)
- 7.49 Seq#068(USA-STC-037) (VIE-073)
- 7.50 Seq#070(USA-STC-038) (VIE-041)
- 7.51 Seq#071(USA-STC-039) (see comment)
- 7.52 Seq#072(SWE-STC-005) (see comment)

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- 7.53 Seq#073(USA-STC-040) (VIE-024)
- 7.54 Seq#074(USA-STC-041) (VIE-048)
- 7.55 Seq#079(USA-STC-044) (VIE-062)
- 7.56 Seq#082(GBR-STC-140) (VIE-065)
- 7.57 Seq#084(USA-STC-047) (see comment)
- 7.58 Seq#085(SWE-STC-006) (VIE-052)
- 7.59 Seq#087(USA-STC-049) (VIE-063R1)
- 7.60 Seq#089(USA-STC-051) (see comment)
- 7.61 Seq#090(USA-STC-052) (see comment)
- 7.62 Seq#091(USA-STC-053) (VIE-039)
- 7.63 Seq#092(USA-STC-054) (VIE-072)
- 7.64 Seq#093(USA-STC-055) (see comment)
- 7.65 Seq#094(USA-STC-056) (see comment)
- 7.66 Seq#098(USA-STC-060) (VIE-044)
- 7.67 Seq#099(GBR-STC-150) (see comment)
- 7.68 Seq#100(USA-STC-061) (VIE-066)
- 7.69 Seq#101(USA-STC-062) (VIE-066)
- 7.70 Seq#102(SWE-STC-007) (see comment)
- 7.71 Seq#103(SWE-STC-008) (see comment)
- 7.72 Seq#105(SWE-STC-009) (see comment)
- 7.73 Seq#106(USA-STC-064) (see comment)
- 7.74 Seq#110(USA-STC-067) (VIE-054)
- 7.75 Seq#112(GBR-STC-170) (VIE-049R2)
- 7.76 Seq#113(JPN-STC-011) (see comment)
- 7.77 Seq#114(JPN-STC-010) (see comment)
- 7.78 Seq#115(USA-STC-068) (see comment)
- 7.79 Seq#116(USA-STC-069) (see comment)
- 7.80 Seq#117(USA-STC-070) (VIE-054)
- 7.81 Seq#118(USA-STC-071) (VIE-036R2)
- 7.82 Seq#120(USA-STC-072) (see comment)
- 7.83 Seq#121(USA-STC-073) (see comment)
- 7.84 Seq#123(USA-STC-075) (VIE-068R1)
- 7.85 Seq#124(USA-STC-076) (VIE-068R1)
- 7.86 Seq#125(USA-STC-077) (see comment)
- 7.87 Seq#126(USA-STC-078) (VIE-035)
- 7.88 Seq#127(USA-STC-079) (see comment)
- 7.89 Seq#128(USA-STC-080) (VIE-035)
- 7.90 Seq#129(USA-STC-081) (VIE-022)
- 7.91 Seq#130(JPN-STC-012) (see comment)
- 7.92 Seq#131(SWE-STC-010) (VIE-043)
- 7.93 Seq#132(JPN-STC-013) (see comment)
- 7.94 Seq#133(JPN-STC-014) (see comment)

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7.95 **Seq#134(JPN-STC-015) (see comment)**

## 8 Resolution of other Ballot Comments

8.1 **Seq#002(SWE-STC-011) (see comment)**

\*1 Steve Cannan proposed an alternative solution, to add text to the rationale explaining that Unicode version 3.0 includes the new white space character in question. Jim Melton expressed support and so did UK. The alternative solution was accepted without objection.

8.2 **Seq#005(USA-STC-002) (\*3 ICN-053)**

\*4 Krishna Kulkarni presented ICN-053, proposing to close the comment with no action. ICN-053 was accepted without objection and the comment was closed.

8.3 **Seq#006(USA-STC-003) (VIE-053R2)**

\*1 After some discussion it was realized that VIE-053r2 had been endorsed even though the Vienna minutes have no reference specifically to r2 of that paper. See agenda item 9.27 in ICN-001r1.

8.4 **Seq#015(SWE-STC-012) (see comment)**

\*1 Jim Melton said 00F was free to replace the duplicate code 008. There was no objection, so that was the agreed action and the comment was closed.

8.5 **Seq#016(SWE-STC-013) (see comment)**

\*1 The editor reported that the typo had already been corrected in ICN-012r1.

8.6 **Seq#018(SWE-STC-014) (see comment)**

\*1 Accepted as editorial.

8.7 **Seq#019(SWE-STC-015) (see comment)**

\*1 Accepted as editorial.

8.8 **Seq#020(SWE-STC-016) (see comment)**

\*1 Accepted as editorial (after careful checking).

8.9 **Seq#028(SWE-STC-017) (\*4 ICN-055)**

\*4 Jim Melton presented ICN-055, of which Section 2.1 proposes changes to the DCOR. Section 2.1 of ICN-048 was accepted without objection and the comment was closed.

8.10 **Seq#029(USA-STC-014) (\*9 ICN-054r2, ICN-085)**

\*9 Steve Cannan presented ICN-054r2, proposing to incorporate its proposed changes to the FCD into the DCOR, *mutatis mutandis*.

It was agreed to remove the proposal at the end of Section 2.2.9 stating that character set names are registered with IANA.

It was agreed to remove from Section 2.2.17 the proposal to raise a Possible Problem.

Remaining ambiguity was noted in the amended rules specified in sections 2.2.16 and 2.2.17. Steve Cannan suggested that these could be resolved by making it implementation-dependent which qualifying character set is chosen when the choice is multiple.

It was agreed that the proposed changes to the Information Schema in Section 2.7.1 fix no bug and should not be reflected in the DCOR.

Shiratori-san noted that in Section 2.6.1 there is a second occurrence of "UCS2" that needs to be changed to "UTF32".

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Shiratori-san noted that the precedence list is the wrong way round in Section 2.2.9, just before the second 4.2.2b.

Shiratori-san noted in Section 4.2.2a the extraneous text "is the character repertoire" at the beginning of the definition of UCS.

Hugh Darwen presented ICN-085. Some of the proposed editorial amendments to ICN-054r2 were accepted. Jim Melton expressed opposition to the suggested introduction of character maps.

ICN-054r2 as amended was accepted with 5 for (USA, Netherlands, Germany, Canada, Japan), 1 against (UK) and 1 abstention (Australia). Comments #029, #030 and #067 were closed.

**8.11 Seq#030(GBR-STC-020) (\*9 ICN-054r2, ICN-085)**

See Agenda item 8.10.

**8.12 Seq#030a(JPN-STC-017) (\*2 ICN-041)**

\*3 Kotera-san presented ICN-041, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-041 was accepted without objection and comment 030a was closed.

**8.13 Seq#031a(JPN-STC-016) (see comment)**

\*1 In fact there are at least two occurrences of "<match option>" in the cited Subclause. The editor agreed to track down all occurrences and update the TC appropriately.

**8.14 Seq#033a(JPN-STC-018) (see comment) (\*7 ICN-070)**

\*1 Deferred pending some research by Steve to determine whether assertion descriptors are distinct from constraint descriptors in general.

\*8 Steve Cannan presented ICN-070. Hugh Darwen asked what "of *T*" means in the proposed text in Section 2.1.2 and an amendment was accepted to replace "of *T*" by "included the base table descriptor of *T*." It was proposed to instruct the TC editor to accept the proposals, as amended, of ICN-070, *mutatis mutandis*, as an addition to the DCOR, so as to resolve comment #033a.

**8.15 Seq#033b(JPN-STC-019) (see comment)**

\*1 The solution given with the comment was accepted without objection.

**8.16 Seq#033c(JPN-STC-020) (see comment)**

\*1 The solution given with the comment was accepted without objection.

**8.17 Seq#036(SWE-STC-018) (see comment)**

\*1 USA expressed opposition to the comment and its solution. In any case the solution was rejected on the grounds that it is not addressing a technical error and acceptance could make an existing conforming implementation nonconforming. There was some inconclusive discussion of the merits of applying the proposed change to the FCD.

\*2 The meeting received confirmation that Sweden did not object to rejection of this comment.

**8.18 Seq#047(GBR-STC-070) (\*2 ICN-031)**

\*4 Hugh Darwen presented ICN-031, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-031 was accepted without objection and the comment was closed. The author of ICN-031, **Rodolphe Michel**, was acclaimed for a maiden change proposal. It was noted that the change proposal of this paper is repeated in ICN-032, for the editors' possible convenience.

**8.19 Seq#050(GBR-STC-080) (\*2 ICN-032)**

\*4 Hugh Darwen presented ICN-032, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-032 was accepted without objection and the comment was closed. It was noted that

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ICN-032 subsumes ICN-031 by repeating the change proposal of that paper, for the editors' possible convenience.

**8.20 Seq#051(GBR-STC-085) (see comment)**

- \*1 Hugh Darwen presented the solution given with the comment and alerted the editor to the several unitalicised subscripts resulting from copy-and-paste from PDF. Steve Cannan noted that the reference should be to SR1), not SR2) (though the corresponding rule in the FCD is indeed SR2)). It was also noted that a ≠ sign had become "/=" in the copy-and-paste process. The solution, amended in the obvious way to address these problems, was accepted without objection.

**8.21 Seq#057(USA-STC-029) (\*2 ICN-048)**

- \*4 Mark Ashworth presented ICN-048, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-048 was accepted without objection and the comment was closed.

**8.22 Seq#058(USA-STC-030) (\*3 ICN-049)**

- \*8 Jutta Kreys presented ICN-049, of which Section 3.3 proposes changes to the DCOR. Hugh Darwen asked if "<column reference> that is a new transition variable column reference" could be safely reduced to "transition variable column reference". The answer was "yes", but the amendment agreed upon was to reduce it to just "<column reference>" and to add an informative note to the effect that such a <column reference> can only be a new transition variable column reference. Steve Cannan asked if in 3.3.2 it was really intended to delete the original Rationale. The answer was "no", so an amendment was agreed not to delete it. Section 3.3 of ICN-049, as amended, was accepted without objection and comment #058 was closed.

It was noted that acceptance of Sections 3.1 and 3.2 would resolve USA FCD ballot comments USA-P02-071, -072 and -073.

**8.23 Seq#059(USA-STC-031) (\*3 ICN-052)**

- \*3 Fred Zemke presented ICN-052 for discussion only. The paper is intended to address DCOR ballot comment #059 but is developing into something that is doing rather more than just that. Fred sought direction as to whether the whole paper might eventually be acceptable for the TC.

It was agreed to convert Comment #059 to a Possible Problem against SQL:2003.

**8.24 Seq#066(GBR-STC-100) (\*2 ICN-046)**

- \*3 Hugh Darwen presented ICN-046, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-046 was accepted without objection and the comment was closed.

**8.25 Seq#067(USA-STC-036) (\*9 ICN-054r2, ICN-085)**

See Agenda item 8.10.

**8.26 Seq#069(GBR-STC-105)**

**Seq#010a(GBR-STC-177) (ICN-035)**

- \*1 Hugh Darwen presented ICN-035, of which Section 3 proposes changes to the DCOR. Steve Cannan expressed concern that anybody who had already implemented cast functions as methods would suddenly become nonconforming. USA expressed support for the proposal and nobody objected. Section 3 of ICN-035 was accepted without objection and the comments were closed.

- \*2 It was later confirmed that Sweden also supports ICN-035.

**8.27 Seq#075(USA-STC-042) (\*6 ICN-067)**

- \*8 Jim Melton presented ICN-067, of which Section 2.1 proposes changes to the DCOR. Hugh Darwen asked how the SQL truth value Unknown would be supported and the answer lay in

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the use of indicator variables. The proposals in Section 2.1 were accepted without objection and the comment was closed.

**8.28 Seq#076(GBR-STC-110) (\*2 ICN-044)**

- \*3 Hugh Darwen presented ICN-044, of which Section 4 proposes changes to the DCOR. Section 4 of ICN-044 was accepted without objection and comment #076 was closed.

**8.29 Seq#077(GBR-STC-120) (\*2 ICN-047)**

- \*3 Hugh Darwen presented ICN-047, of which Section 3 proposes changes to the DCOR. Several delegates expressed concern that the effect of DELETE WHERE CURRENT cannot be pinned down a little further. This led to considerable discussion as to the possibilities of drafting such an alternative specification.

Phil Brown proposed that the paper be amended to specify a replacement of "shall be" by "is" in GR2)a). This proposal was accepted as editorial.

Section 3 of ICN-047 was accepted with significant discomfort but no objection and comment #077 was closed.

**8.30 Seq#078(USA-STC-043) (ICN-034)**

- \*1 Hugh Darwen presented ICN-034, of which Section 3 proposes changes to the DCOR. Krishna Kulkarni discovered another error in the same syntax rule, namely that the undefined symbol *UDT* is referred to. He proposed an additional amendment to the rule, that being to insert "identified by *UDTN*" immediately after the first occurrence of *UDT*. The amended proposal of Section 3 was accepted without objection and the comment was closed.

**8.31 Seq#080(GBR-STC-130) (ICN-033)**

- \*1 Hugh Darwen presented ICN-033, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-033 was accepted without objection, resolving comment #080.

**8.32 Seq#081(USA-STC-045) (\*2 ICN-045)**

- \*9 Phil Brown presented ICN-045, of which Section 3 proposes changes to the DCOR. It was pointed out that Section 3.3 is in conflict with what was agreed in Vienna (see ICN-001r1, Agenda item ...). After some discussion it was agreed that comment #081 could be closed with no action and that Section 3.3 should not be accepted. As a consequence, items 2 of Section 3.8 should not be accepted either. An amendment was accepted to Section 3.6, to additionally propose that "implementation-defined" be changed to "implementation-dependent" to be consistent with other proposed changes. Section 3 of ICN-033, as amended, was accepted without objection.

It was agreed to convert Comment #081 to a Possible Problem against SQL:2003.

**8.33 Seq#083(USA-STC-046) (\*3 ICN-042)**

- \*3 Fred Zemke presented ICN-042, of which Section 3 proposes changes to the DCOR.

Hugh Darwen proposed a friendly amendment to replace the word "data" by "declared" in the proposed subrule a), and an amendment to subrule b) to replace "of the domain" by "identified in the domain descriptor included". These amendments were accepted without demur.

Section 3 of ICN-042 as amended was accepted without objection, resolving comment #083.

**8.34 Seq#086(USA-STC-048)**

- \*9 It was agreed to convert Comment #086 to a Possible Problem against SQL:2003.

**8.35 Seq#088(USA-STC-050) (\*9 ICN-084)**

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- \*9 Fred Zemke presented ICN-084 for discussion. After some discussion it was agreed that the Possible Problem mentioned in the paper is not a problem at all and also that the problem mentioned in the comment is not a problem. It was agreed to mark comment #088 as resolved with no action and also to take no further action on ICN-084.
- 8.36 Seq#095(USA-STC-057) (\*9 ICN-071, ICN-072r1)**
- \*9 Fred Zemke presented ICN-071 and ICN-072r1 in parallel. The following amendments were agreed upon after discussion:
- From Steve Cannan: In ICN-072r1, Section 3.2, in the proposed <select list>, change the qualifiers for columns RC.MATCH\_OPTION, RC.UPDATE\_RULE and RC.DELETE\_RULE to TC2.
- From Hugh Darwen: In ICN-072r1, Section 3.2, for psychological reasons only, insert DISTINCT immediately after the first SELECT.
- From Steve Cannan: In ICN-071, Section 3.3, in the first innermost WHERE clause, insert "TP.PRIVILEGE\_TYPE <> 'SELECT' AND " between WHERE and "(" and in the second innermost WHERE clause insert "CP.PRIVILEGE\_TYPE <> 'SELECT' AND " between WHERE and "(".
- From Steve Cannan: In ICN-071, Section 3.1, insert after "AS KCU1" insert "JOIN INFORMATION\_SCHEMA.TABLE\_CONSTRAINTS AS TC ON ( TC.CONSTRAINT\_CATALOG = KCU1.CONSTRAINT\_CATALOG AND TC.CONSTRAINT\_SCHEMA = KCU1.CONSTRAINT\_SCHEMA AND TC.CONSTRAINT\_NAME = KCU1.CONSTRAINT\_NAME )"
- From Steve Cannan: In ICN-071, Section 3.4, in the innermost WHERE clause, insert "CP.PRIVILEGE\_TYPE <> 'SELECT' AND " between WHERE and "(".
- From Krishna Kulkarni: In ICN-071, Section 3.5, in the first innermost WHERE clause, insert "TP.PRIVILEGE\_TYPE <> 'SELECT' AND " between WHERE and "(" and in the second innermost WHERE clause insert "CP.PRIVILEGE\_TYPE <> 'SELECT' AND " between WHERE and "(".
- From Mark Ashworth: In ICN-071, Section 3.5, insert "S." qualifiers for column names in the SELECT list and WHERE clause of the outermost <query expression>
- ICN-071 as amended by ICN-072r1 and the agreed amendments shown here, was accepted without objection. Comment #095 was closed.
- 8.37 Seq#096(USA-STC-058) (\*2 ICN-039)**
- \*2 Krishna Kulkarni presented ICN-039, "Cleaning up the Information Schema - once more", for discussion and possible action. ICN-039 includes change proposals against current working drafts but none affecting the Technical Corrigendum. The USA sought other participants' views on whether the changes might be acceptable, in which case they should perhaps be applied retroactively to SQL:1999 as well.
- The TC editor said he would be willing to do the work of deriving the required TC changes himself.
- USA proposed to accept the TC editor's offer and there were no objections. Comment #096 was therefore closed.
- 8.38 Seq#097(USA-STC-059)**
- \*9 It was agreed to convert Comment #097 to a Possible Problem against SQL:2003.
- 8.39 Seq#104(USA-STC-063) (\*5 ICN-057)**

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- \*8 Jim Melton presented ICN-057, Section 2.1 of which proposes changes to the DCOR. After some discussion it was agreed to defer processing of this paper.
- \*9 Mark Ashworth proposed the following amendment:
  - In Section 2.1.1, to strike the text from "Within the applicable columns for this area" to the end of the description, thus keeping the first sentence and deleting the rest. Make the same change to the corresponding text in Section 2.2.1.
  - The amendment was accepted and Section 2.1 of ICN-057, as amended, was accepted without objection. Comment #104 was closed.
- 8.40 Seq#107(GBR-STC-159) (\*8 ICN-029)**
  - \*8 Hugh Darwen presented ICN-029 for information and possible discussion. Jim Melton said he looked forward to studying it eventually and providing his feedback to UK. Comment #107 was closed with no action and the hope that a change proposal will appear in Dresden so that the next edition of the standard has fewer loose ends than the 1999 edition. **Action: Jim Melton** to study ICN-029 and provide feedback to UK.
- 8.41 Seq#108(USA-STC-066) (\*4 ICN-043)**
  - \*4 Krishna Kulkarni presented ICN-043, of which Section 3 proposes changes to the DCOR. Section 3 of ICN-043 was accepted without objection, resolving comment #108.
- 8.42 Seq#109(USA-STC-065) (\*5 ICN-057)**
- 8.43 Seq#119(GBR-STC-175) (see comment)**
  - \*1 The solution given with the comment was accepted without objection.
- 8.44 Seq#122(USA-STC-074) (see comment) (reconsider)**
  - \*1 Krishna Kulkarni said the USA believed the solution adopted in Vienna (see ICN-001r1) had been incorrect.
- 8.45 Cleanup of built-in functions (\*1 ICN-037, \*6 ICN-065, \*9 ICN-065r1)**
  - \*2 Krishna Kulkarni presented ICN-037, of which Section 8 proposes changes to the DCOR, addressing a problem discovered since the ballot closed. The effect of this proposal is to remove the facility, originally specified in PSM:1996, whereby certain SQL built-in functions can be overloaded by user-defined functions.
    - The Convenor deferred processing of the proposal pending consultation with Sweden.
  - \*8 ICN-065 was noted. Krishna Kulkarni informed the meeting that discussion between him and Åke Persson (Sweden) had concluded in an agreement that the countersuggestion in ICN-065 did not address the problems addressed by ICN-037. After some discussion it was agreed that only acceptance of ICN-037 would solve the problem in SQL:1999. ICN-037 was accepted with out objection, closing no comment but addressing a catch-all.
- 8.46 Fixing CAST ( NULL AS UDT ) (\*1 ICN-038)**
  - \*2 Krishna Kulkarni presented ICN-038, of which Section 5 proposes changes to the DCOR. The proposals in Section 5 were accepted without objection, closing no comment.
- 8.47 Miscellaneous bug fix for SQL/MED (\*6 ICN-066)**
  - \*9 Krishna Kulkarni presented ICN-066, which was accepted without objection, closing no comment.
- 8.48 \*9 Applying USA FCD comment solutions (ICN-080)**

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\*9 Krishna Kulkarni presented ICN-080, section by section. In Section 3.1, an amendment was accepted to change the comma following "follows" to a colon. Some discussion questioning the felicity of "understood" failed to reach a conclusion. Section 31. as amended was accepted without objection. Sections 3.2, 3.3, and 3.4 were accepted without objection. No comments were closed.

**8.49 \*9 Prohibiting assignments to new transition variables in AFTER triggers (ICN-081)**

\*9 Krishna Kulkarni presented ICN-081, which was accepted without objection, closing no comment.

**8.50 \*9 Definition Schema Fix – SQL\_IMPLEMENTATION\_INFO base table (ICN-086)**

\*9 Baba Piprani presented ICN-086. An amendment was accepted to change the proposed condition to "INTEGER\_VALUE IS NULL OR CHARACTER\_VALUE IS NULL". ICN-086, as amended, was accepted without objection, closing no comment.

**8.51 \*9 Fixing bugs in <input using clause> and <output using clause> (ICN-078)**

\*9 Takaaki Shiratori presented ICN-078, whose Section 4 proposes changes to the DCOR. Krishna Kulkarni suggested an amendment to strike out the word "already" in Section 4.3. Hugh Darwen suggested an amendment to Sections 4.5 and 4.6, to replace the first two words of each rule, "If a" by just "If". These amendments were accepted and ICN-078 as amended was accepted without objection, closing no comment.

## **9 Resolution of “Catch-All” Ballot Comments**

**9.1 Seq#023(GBR-STC-180)**

\*9 All other comments having been addressed to UK's satisfaction, this comment was closed.

**9.2 Seq#024(SWE-STC-001)**

\*9 All other comments having been addressed, this comment was closed.

**9.3 Seq#025(USA-STC-012)**

\*9 All other comments having been addressed to USA's satisfaction, this comment was closed.

**9.4 Seq#026(USA-STC-013)**

\*9 All other comments having been addressed to USA's satisfaction, this comment was closed.

## **10 National Body Closing Comments**

**10.1 Australia**

**10.2 Belgium**

**10.3 Brazil**

**10.4 Canada**

Canada is very pleased with the successful completion of the DCOR Editing meeting and its progression to COR.

Canada is also pleased with the progress made on closing FCD ballot comments at this meeting but we do recognize that we have still a huge effort ahead.

Canada thanks the Korean National Body for hosting the SC32 Plenary, working group and editing meetings.

Canada thanks our Convenor, Stephen Cannan, editor, Jim Melton, secretary, Hugh Darwen and Drafting committee, Phil Brown for their hard work on behalf of WG3.

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**10.5 China**

**10.6 Czech Republic**

**10.7 Denmark**

**10.8 Finland**

**10.9 France**

**10.10 Germany**

Germany is pleased with the progress, which was made during the DCOR Editing Meeting.

We appreciate that 7 National Bodies submitted their draft or final FCD Ballot comments before the ballot deadline was over.

Germany pushes to go to FDIS out of Dresden with all parts. The probability to reach that goal is high, if all or most of the FCD-comments with a solution can be addressed during the next e-meeting. If Canada can improve the infrastructure for that e-meeting as discussed, it is going to increase the efficiency of E3C significantly.

Germany supported the position regarding the progression of SQL/XML FCD state in Vienna. We emphasize that this support was given on the base of the assumption, that this part is going to be enhanced by additional functionality by at least parsing and serialization capabilities before Germany is going to agree to publish SQL/XML as a new standard.

Unfortunately, the community spent a lot of meeting time on discussion papers without a worked out proposal. Germany asks for that papers submitted for e.g. a DCOR editing meeting focus on worked out proposals.

Germany thanks the Korean National Body for hosting the SC32 Plenary and working group meetings and especially for the impressive reception.

**10.11 Italy**

**10.12 Japan**

Japan is pleased with the progress to solve all DCOR ballot comments. Japan is thankful to solve the comments to cooperate with other national bodies. Japan also continues to develop JIS standards of SQL/MED, SQL/JRT, and OLAP features, but do not hope that there are any problems left.

Even though one thousand unresolved FCD ballot comments are left, Japan is going to continue to check FCD documents and prepares papers resolving these comments at cyberspace and Dresden meeting. We would like to thank Korean delegates for organizing this meeting at Seoul.

**10.13 Korea**

**10.14 Netherlands**

The Netherlands is pleased that the DCOR completed with only 4 PP's.

The Netherlands is very please with the co-operative and friendly atmosphere in which the discussions have been conducted.

The Netherlands is grateful so many national Bodies have made their ballot comments available early.

The Netherlands thanks the Korean National Body for hosting this meeting

**10.15 Norway**

**10.16 Sweden**

**10.17 United Kingdom**

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UK echoes Canada's sentiments, especially those concerning the secretary.

**10.18 United States**

USA is pleased with the successful completion of the SQL-99 DCOR editing meeting and the progress made at this meeting in discussing a few of the SQL-200n FCD ballot comments. USA thanks the Korean National body for hosting the meetings in pleasant surroundings and the Convenor, Stephen Cannan, for helping to make the meetings run smoothly as always.

**10.19 Austria**

**10.20 Russian Federation**

## **11 Recommendations**

**11.1 Preparation of Revised Texts (SD-005)**

\*9 The editor expects to deliver the revised document for a fortnight's sneak-peek review at the end of May, 2002.

**11.2 Disposition of Comments Report**

\*9 Jim Melton expects to deliver DRS-024 before the secretary has finished the minutes.

**11.3 Recommendation Regarding Progression**

\*9 The Convenor will forward the recommendation to the secretariat, attaching the minutes and the Consolidated Comments document as our record of the disposition of the comments.

## **12 Action Items**

**Agenda item 8.40:**

\*8 **Action: Jim Melton** to study ICN-029 and provide feedback to UK.

**Agenda items 11.1 and 11.3:**

\*9 **Action: Steve Cannan** to prepare indicated documents.

**Agenda item 11.2:**

\*9 **Action: Jim Melton** to prepare the indicated document. **Done** (before the secretary finished the minutes)

## **13 Adjourn**

\*9 The meeting was adjourned at 18:54 on Thursday, 9 May, 2002.

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DOCUMENT REGISTER

ISO/IEC JTC1/SC32/WG3  
DOCUMENT REGISTER  
29th April – 10th May 2002  
Seoul, Korea

Prefix: WG3 ICN

No.	Source	Title	Agenda	Avail.?
001R1	Darwen	Minutes from Vienna, Austria WG Meeting	WG 5.1	Y
002	Cannan	ISO 9075/Dcor2:1999 Text (32N00 739)	WG 6.14, EM 5.2	Y
003p	Melton	ISO 9075-1 SQL/Framework WD Text	WG 6.15	Y
004p	Melton	ISO 9075-2 SQL/Foundation WD Text	WG 6.16	Y
005p	Melton	ISO 9075-3 SQL/CLI WD Text	WG 6.17	Y
006p	Melton	ISO 9075-4 SQL/PSM WD Text	WG 6.18	Y
007p	Melton	ISO 9075-9 SQL/MED WD Text	WG 6.19	Y
008p	Melton	ISO 9075-10 SQL/OLB WD Text	WG 6.20	Y
009p	Melton	ISO 9075-11 SQL/Schemata WD Text	WG 6.21	Y
010p	Melton	ISO 9075-13 SQL/JRT FCD Text	WG 6.22	Y
011p	Melton	ISO 9075-14 SQL/XML FCD Text	WG 6.23	Y
012R1	Cannan	Technical Corrigendum #5 WD Text	WG 6.14, EM 5.2	Y
013	Cannan	Calling notice for the DCOR Editing Meeting (32N00767)	EM 5.1	Y
014R2	Melton	Consolidated DCOR Ballot Comments	EM 5.5	Y
015	Cannan	Calling notice for the WG Meeting (3N0058, 32N00768)	WG 6.1	Y
016R1	Darwen	UK DCOR Ballot Comments	EM 6.18	Y
017	SC32	Results of SC32 Ballot on DCOR 9075 Cor2 (32N00763)	EM 6.18	Y
018	SWE	Swedish DCOR Ballot Comments	EM 6.17	Y
019	USA	USA DCOR Ballot Comments	EM 6.19	Y
020	JPN	Japan Ballot Comments on DCOR 9075:1999	EM 6.13	Y
021	SC32	Summary of Voting on Document SC 32 N 0735, Letter Ballot on SC 32 Restructure and reassignment of projects (32N0764)	WG 6.2	Y
022	JTC1	Reflections and recommendations on the future of ISO/IEC JTC 1 (J1N6728)	WG 8.1	Y
023	USA	Consolidated USA FCD 9075-1, -2, -3, -4, -9, -10, and -11 comments (H2-2002-180R1)	WG 10.1	
024	USA	XMLParse, XMLValidate and XMLSerialize - Discussion Paper (H2-2002-064)	WG 19.1	Y
025	USA	SQL/XML Name Encoding (H2-2002-167)	WG 19.2	Y
026	GBR	UK Ballot Comments on SQL:200n FCD (Draft)	WG 10.2	
027R1	Sykes / Darwen	Tidying "Type conversions and mixing of data types"	WG 12.2	
028	Sykes / Darwen	Editorial cleanup of Named character sets	WG 12.3	
029	Darwen / Sykes	Review of Modules and Module Definitions	EM 8.40	
030	NLD	Netherlands Draft FCD Ballot Comments	WG 10.3	
031	Michel	Tautologous condition of syntax rule in <query expression>	EM 8.18	
032	Michel	Inconsistent use of articles in syntax rules of <query expression>	EM 8.19	
033	Darwen	Allowing RETURN to Raise A Visible Warning	EM 8.31	Y
034	Darwen	Undefined Symbol in INSERT	EM 8.30	Y
035	Darwen	Implicitly Defined Functions for Distinct Types Should Not Be Methods	EM 8.26	Y
036R1	JPN	Japan Ballot Comments on FCD:SQL200n	WG 10.4	
037	Kulkarni	Cleanup of built-in functions	EM 8.45	
038	Michels	Fixing CAST ( NULL AS UDT )	EM 8.46	
039	Michels	Cleaning up the Information Schema - once more	EM 8.37	

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No.	Source	Title	Agenda	Avail.?
040	Kreyss & Lingenfelder	Dresden Meeting Arrangements	WG 6.25	
041	Kotera	Resolving Seq #030 of ballot comments on DCOR	EM 8.12	
042	Zemke	Domains, declared types and the info schema	EM 8.33	
043	Kulkarni	Fixing Columns routine in CLI	EM 8.41	
044	Darwen	Erase re-raise	EM 8.28	
045	Brown	Diagnostics Area Size Limit	EM 8.32	
046	Darwen	Insist on A Collation Being Applicable	EM 8.24	
047	Darwen	Effect of DELETE on A Cursor	EM 8.29	
048	Ashworth	Fix <routine invocation> to handle missing return type cases	EM 8.21	
049	Kreyss	Completing handling of output parameters in routine invocation	EM 8.22	
050	Darwen	Closing Some Possible Problems	WG 12.5	
051	Kotera	Resolving JPN-P02-012 of draft ballot comments on FCD SQL:200n	WG 12.4	
052	Zemke	Passing LOBs and BOOLEANs to external routines	EM 8.23	
053	Kulkarni	Closing USA-STC-002 with no action	EM 8.2	
054R2	Cannan	Character sets vs. repertoires	EM 8.10, 8.11, 8.25	
055	Melton	DCOR:2002 SWE-STC-017 Zero-width space	EM 8.9	
056	Darwen	ICN-028: Supplementary Information	WG 12.3	
057	Melton	DCOR:2002 USA-STC-063 and USA-STC-065 — SQL_IMPLEMENTATION_INFO problems	EM 8.39, 8.42	
058	Ashworth	Resolve undefined use of "SQL character data type"	WG 10.5	
059	Ashworth	Use defined term "SQL-invoked regular function"	WG 10.6	
060	Germany	Draft German FCD ballot comments	WG 10.7	
061	Canada	SQL: 200n FCD ballot comments	WG 10.8	
062	Ashworth	Remove unnecessary implied feature entries	WG 12.6	
063	Ashworth	Refine RFC reference	WG 10.9	
064	IETF	Uniform Resource Identifiers (URI): Generic Syntax	WG 10.9	
065R1	Persson	Re: ICN-037	EM 8.45	
066	Michels	Miscellaneous bug fixes for SQL/MED	EM 8.47	
067	Melton	The Truth about Ada and SQL	EM 8.27	
068	WG3	Draft Terms of Reference for WG3 Database Languages	WG 6.24	
069	WG5	ISO/IEC JTC1 SC32 WG5 Terms of Reference	WG 6.24	
070	Cannan	Filling out the solution to DCOR ballot comment JPN-STC-018	EM 8.14	
071	Michels	Fixing the Information Schema	EM 8.36	
072R1	Zemke	Amendment to ICN-071	EM 8.36	
073	WG 3	Liaison updates	WG 24.2	
074R1	WG 3	Project changes	WG 24.3	
075R1	WG 3	WG 3 resolutions	WG 24.4	
076	WG 3	WG 3 Terms of Reference	WG 6.24, 24.4	
077	USA	Rationale for Subproject split of 9075	WG 24.4	
078	Shiratori	Fixing bugs in <input using clause> and <output using clause>	EM 8.51	
079R1	Cannan	WG 3 Convenor's report to SC 32 plenary	WG 24.5	
080	Michels	Applying some USA FCD comment solutions to the TC	EM 8.48	
081	Kulkarni	Prohibiting assignments to new transition variables in AFTER triggers	EM 8.49	
082	Piprani	Fixing JRT and XM references in Framework	WG 11.2	
083	Piprani	Definition Schema fix – TABLES base table	WG 17.2	
084	Zemke	Discussion of DATA_TYPE_PRIVILEGES	WG 8.35	
085	Sykes	Comments on ICN-054r2	EM 8.10, 8.11, 8.25	
086	Piprani	Definition Schema Fix – SQL_IMPLEMENTATION_INFO base table	EM 8.50	
087	Bartley	Possible WG3 Interim Meeting – October/November 2003, Hobart & Melbourne, Australia	WG 24.4	

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