

ISO/IEC JTC 1/SC 32 N 1996

Date: 2010-05-12

REPLACES: —

ISO/IEC JTC 1/SC 32

Data Management and Interchange

Secretariat: United States of America (ANSI)
Administered by Farance Inc. on behalf of ANSI

DOCUMENT TYPE	Summary of Voting/Table of Replies
TITLE	Summary of Voting on 32N1944 FCD 13249-3 Information technology - Database languages - SQL Multimedia and Application Packages Part 3: Spatial 4th Edition
SOURCE	SC32 Secretariat
PROJECT NUMBER	1.32.04.04.03.00
STATUS	WG4 is requested to resolve the comments. The document obtained substantial support.
REFERENCES	
ACTION ID.	ACT
REQUESTED ACTION	
DUE DATE	
Number of Pages	8
LANGUAGE USED	English
DISTRIBUTION	P & L Members SC Chair WG Conveners and Secretaries

Dr. Timothy Schoechle, Secretary, ISO/IEC JTC 1/SC 32
Farance Inc *, 3066 Sixth Street, Boulder, CO, United States of America
Telephone: +1 303-443-5490; E-mail: Timothy@Schoechle.org
available from the JTC 1/SC 32 WebSite <http://www.jtc1sc32.org/>
*Farance Inc. administers the ISO/IEC JTC 1/SC 32 Secretariat on behalf of ANSI

ISO/IEC JTC 1/SC 32 N1996

Summary of Voting on Document SC 32 N 1944

Title: FCD 13249-3 Information technology - Database languages - SQL Multimedia and Application Packages Part 3: Spatial 4th Edition

Project: 1.32.04.04.03.00

“P” Member	Approval	Approval with Comments	Disapproval with Comments	Abstention with Comments
Canada			1	
China	1			
Czech Republic	1			
Egypt				
Finland				1
Germany	1			
India				
Japan	1			
Korea, Republic of	1			
Sweden				
Russian Federation				
Portugal				
United Kingdom	1			
United States		1		
Total “P”	6	1	1	1
“O” Member				
Austria				
Belgium				
France				
Ghana				
Hungary				
Indonesia				
Italy				
Kazakhstan				
Netherlands, The				
Norway				
Romania				
Switzerland				
Total “O”				

Dr. Timothy Schoechle, Secretary, ISO/IEC JTC 1/SC 32
Farance Inc *, 3066 Sixth Street, Boulder, CO, United States of America
Telephone: +1 303-443-5490; E-mail: Timothy@Schoechle.org
available from the JTC 1/SC 32 WebSite <http://www.jtc1sc32.org/>
*Farance Inc. administers the ISO/IEC JTC 1/SC 32 Secretariat on behalf of ANSI

COMMENTS:

Canada

NO. See comments below:

Finland

ABSTAIN. No information available.

United States

YES. See comments below:

National Body CAN Comments — 2010-03-24 for SQL/MM Part 3: Spatial

Canada votes NO with Comment on the FCD of SQL/MM Part 3: Spatial.

SEQ #	Cmnt ID	See Also	Severity	Reference	Description	Addressed By
<i>SQL/MM Spatial</i>						
1	CAN-P03-001		1-Major Technical	<i>P03-03.01.02.36, mod 2 union rule</i>	<p>PP 3-418: Applying the mod 2 union rule to determine the boundary of a geometry collection gives erroneous results. An alternative approach is required.</p> <p style="text-align: center;">Solution</p> <p>None provided with comment.</p>	
2	CAN-P03-002		1-Major Technical	<i>P03-05.01-58, <well-known binary representation></i>	<p>PP 3-406: WKB for Triangles, PolyhedralSurfaces and TINs needs to be specified.</p> <p style="text-align: center;">Solution</p> <p>None provided with comment.</p>	
3	CAN-P03-003		1-Major Technical	<i>P03-08.04.02, ST_Triangle Methods</i>	<p>PP 3-409: ST_Triangle does not have an overriding method ST_ExteriorRing. As such, the ST_ExteriorRing method from the ST_Polygon (superclass) is executed and it sets the ST_PrivateInteriorRings of its superclass ST_CurvePolygon. The coordinate dimensions of ST_CurvePolygon and ST_Polygon are set properly with the support routines used by these types.</p> <p style="text-align: center;">Solution</p> <p>None provided with comment.</p>	

SEQ #	Cmnt ID	See Also	Severity	Reference	Description	Addressed By
4	CAN-P03-004		2-Minor Technical	P03-08.06.05 ST_TINTable Methods through to P03-15.01.06, ST_ElementGeometry Methods	<p>The method ST_ElementGeometry() and the variable elementgeometry are of type ST_Geometry. As an ST_Geometry, it may hold a value of one of its subtypes but you may not execute a method defined on the subtype using the ST_ElementGeometry() method or ageometry variable. The following usages were found throughout the new TIN methods:</p> <p>ST_ElementGeometry().ST_NumPoints ST_ElementGeometry().ST_PointN ST_ElementGeometry().ST_ExteriorRing ST_ElementGeometry().ST_NumInteriorRing ST_ElementGeometry().ST_InteriorRingN ST_ElementGeometry().ST_InteriorRings elementgeometry.ST_PointN elementgeometry.ST_NumPoints</p> <p>The SQL TREAT AS syntax should be used: ie change elementgeometry.ST_PointN to TREAT(elementgeometry AS ST_Point).ST_PointN</p> <p>Solution</p> <p>None provided with comment.</p>	
5	CAN-P03-005		1-Major Technical	P06-09.01.01, ST_MultiPolygon Type	<p>PP 3-416: CJU-014R1 removes the following rule:</p> <p>4) The boundaries of any two ST_Polygon values that are coplanar elements of the ST_PrivateGeometries attribute may only intersect at a finite number of points.</p> $\forall m \in ST_MultiPolygon, \forall p_i, p_j \in m.ST_Geometries() \quad p_i, p_j \text{ coplanar, } \forall c_i \in \text{Boundary}(p_i), c_j \in \text{Boundary}(p_j) \quad c_i \cap c_j = \{ p_1, \dots, p_k \mid p_i \in ST_Point, 1 \leq i \leq k \}$ <p>By removing this rule, current implementations of SQL/MM Spatial are no longer compatible, ie a breaking change. It was done to supposedly align with ISO 19107. However, ISO 19107 does not define a type called MultiPolygon. This change should be reversed and if there is some need to have a type that does not have this restriction, then another subtype of ST_MultiSurface should be defined.</p> <p>Solution</p> <p>Reinstate the deleted rule.</p>	

SEQ #	Cmnt ID	See Also	Severity	Reference	Description	Addressed By
6	CAN-P03-006		1-Major Technical	P06-09.01.01, ST_MultiPolygon Type	<p>PP 3-417: The definition of the boundary of an ST_MultiPolygon needs to be reworded as a result of this paper and the paper entitled mod 2 [CJU-015R1].</p> <p>Solution None provided with comment.</p>	
7	CAN-P03-007		1-Major Technical	P03-No specific location	<p>Ballot comments on the previous CD from the Canadian National Body were not resolved.</p> <p>Previous CD Ballot: CAN-P03-043:</p> <p>In a similar manner as OGC GML, Add support for OGC KML</p> <p>Solution None provided with comment.</p>	
8	CAN-P03-008		1-Major Technical	P03-No specific location	<p>Ballot comments on the previous CD from other National Bodies were not resolved.</p> <p>All NB comments not resolved during processing of the previous FCD should be carried forward for processing including at least:</p> <p>Previous CD Ballot: DEU-P03-002 SQL functions e.g. Euclid distance or mean value for spatial objects are especially expected to reduce spatial data uncertainty problem.</p> <p>Solution None provided with comment.</p>	
9	CAN-P03-009		1-Major Technical	P03-No specific location	<p>All Possible Problems and Editor's Notes must be satisfactorily resolved and all problems discovered during the course of the ballot resolution process must be satisfactorily resolved.</p> <p>Solution None provided with comment.</p>	(Catch All)

USA Comments on ISO/IEC FCD 13249-3 (SQL/MM Part 3: Spatial) - 2010

SEQ #	Cmnt ID	See Also	Severity	Reference	Description	Addressed By
FCD SQL/MM Part 3: Spatial						
	USA-P03-001		1-Major Technical	<i>P03-No specific location</i>	All Possible Problems and Editor’s Notes must be satisfactorily resolved and all problems discovered during the course of the ballot resolution process must be satisfactorily resolved. Solution None provided with comment.	
	USA-P03-002		2-Minor Technical	<i>P03-PP 3-416</i>	Paper WG4 cju014r1_Multi removed a constraint on ST_MultiPolygon to harmonize with a proposed similar action in ISO TC211. However, the proposed revision to ISO 19125 in TC211 has now expired and work is reverting back to OGC to update and correct the Simple Features standard. This provides an opportunity for WG4, OGC and TC211 to work together on finding an agreeable solution. SQL/MM Part3 Spatial should therefore be returned to its prior state of consistency with the current (1.2) version of OGC Simple Features and ISO 19125 until this matter can be jointly resolved. Solution Undo the changes from paper cju014r1_Multi, Clause 2.1.	See comment
	USA-P03-003		2-Minor Technical	<i>P03-08.06.05</i>	In DS 5) c) xi) 8) “break void elements” should be “drape void elements” Solution Change “break void elements” to “drape void elements”	See comment
	USA-P03-004		2-Minor Technical	<i>P03-08.06.05</i>	In DS 5) c) xiii) 8) “break void elements” should be “void elements” Solution Change “break void elements” to “void elements”	See comment
	USA-P03-005		2-Minor Technical	<i>P03-08.06.05</i>	In DS 5) c) xv) 8) “break void elements” should be “hole elements” Solution	See comment

SEQ #	Cmnt ID	See Also	Severity	Reference	Description	Addressed By
					Change “break void elements” to “hole elements”	
	USA-P03-006		4-Minor Editorial	<i>P03-various locations</i>	Minor editorial corrections contained in “DM32.2-2010-00078_FCD-Minor-Editorials” need to be made. <p style="text-align: center;">Solution</p> Make the documented corrections.	See comment

End of Paper