

Certification Final Report
GDSN Price Synchronization
Second Quarter 2007 (2Q07)

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Disclaimer

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Test Participants

 <p>1 SYNC</p> <p>POWERED BY GS1 US</p> <p>http://www.1sync.org/</p> <p>Data Pool Name: Price & Promotion Management v3.0.2</p>	 <p>AGENTRICS</p> <p>http://www.agentrics.com/</p> <p>Product Name: GenSync Price v1.0</p>
 <p>BIG HAMMER</p> <p>DATA SERVICE</p> <p>The Source of True Data™</p> <p>http://www.bighammer.com/</p> <p>Data Pool Name: Product Registry v2.1</p>	 <p>CABASnet</p> <p>http://www.gs1co.org/</p> <p>Product Name: CABASnet v3.0</p>
<p>GDSN Inc. Test Data Pool</p> <p>http://www.gs1gdsn.org/</p> <p>Data Pool Name: GDSN KATO v1.0</p>	 <p>GS1 France</p> <p>Le Parangon</p> <p>France</p> <p>http://www.gs1.fr/</p> <p>Product Name: GS1 France Le Parangon v2.1.0</p>
 <p>GXS</p> <p>http://www.gxs.com/</p> <p>Data Pool Name: Data Pool Manager v7.0</p>	

Certification Event Overview

Interoperability Test Summary

This is the first GDSN Price Synchronization Certification test. It involved seven GDSN Certified Data Pools, 1SYNC, Agentrics, Big Hammer, CABASnet, GDSN KATO, GS1 France and GXS, executing Final Run tests with each other during the three days of June 7, 8 and 11. The GS1 Global Registry was not involved in testing. Passing the certification event required full-matrix interoperability among all the data pools. All data pools executed each of the seven required Test Tasks with each other acting as both a Supplier's data pool and then again as a Retailer's data pool. The test tasks required for certification were designed by Drummond Group but similar in scope to the data pool requirements of the GDSN Price Synchronization Pilot. Also, the Price Synchronization messages exchanged were examined by Drummond Group to insure conformance to standards. Per this certification event, all data pools listed in this report are certified conformant to the Price Synchronization standard and interoperable with each in exchanging Price Synchronization messages.

About Price Synchronization

Price Synchronization is a GS1 GDSN standard for allowing user to exchange price related information and synchronize this information among trading partners. As with item synchronization, data pools are responsible for maintaining a price synchronization list for its users and communicating price synchronization messages between other data pools.

The business requirements for Price Synchronization can be found in the BRAD Align Price Synchronization document (vs. 0.0.6) dated April 30, 2007. The business messaging documentation is in BMS Align Price Synchronization 2.1 (document vs. 0.0.3) dated May 16, 2007. Other related GDSN documentation can be found at http://www.gs1.org/services/qsmp/kc/ecom/xml/gdsn_grid.html.

Test Results Caveats

During testing, lessons were learned and decisions were made which were deemed important for the GDSN users to understand when interpreting these test results and using Price Synchronization within GDSN.

- Regarding the handling of out of sequence PS documents, it is DP responsibility to manually handle this.

- When discontinuing a PS Relationship with active segments, a SDP MAY issue a single PSD containing the MODIFY actions to discontinue both the segments and the relationship and RDP MUST accept this message.
- Because of lack of clear guidance from the standards, the scenario of Discontinuing a PS Relationship with non-response segments is considered out of scope and not tested in this certification.

Test Case Summary

General Requirements

The Test Tasks below state the requirements for each Data Pool. As previously stated, the test tasks contain “Confirm” steps requiring the Data Pool to confirm the stated action was performed in order to complete the test step. However, there are some general requirements which are not explicitly stated in the test steps but are required for all or a majority of the test step actions.

- EAN.UCC response messages are required for all Price Synchronization messages. The confirmation for a EAN.UCC response message is not explicitly stated in each test step but is understood as a requirement.
- All Response messages, such as EAN.UCC Response, are required to be returned within **30 minutes** after the MDN is returned for the original GDSN message for Debug, Dry Run and Final Run phases of testing. Failure to generate and return the Response message results in a test step failure for the Response message initiator. Exception due to maintenance or other reasonable causes are to be cleared with DGI and Test Group in advance.
- Only Initial Load states for price synchronization are required for certification.
- While not explicitly stated in confirmation steps, GDSN validations are expected to be performed whenever possible given the circumstances. Initiators whose messages fail validations fail the respective test step.
- Rules for test environment and AS2 from Ops Manual vs. 2.0 are required.

Test Task 1: Supplier Adds PS Relationship with Retailer

Price Sync Use Cases Covered: UC-1

Prerequisite Condition: None

Test Step 1.1

Description: SDP User adds 2 PS Relationships with the Retailer of each RDP: PS Relationship 1 and 2. PS Relationship 1 will be used in other test tasks unless Relationship 2 is specifically stated.

Confirm: RDP received messages and established Price Sync Relationships 1 and 2.

Confirm: startEffectiveDate is assigned to future date.

Verify: SDP and RDP emails Price Sync messages to **DGI-GDSN-Support**.

Test Step 1.2

Description: RDP returns confirmation response of "Accepted" for both relationships.

Confirm: SDP receives confirmation response message.

Verify: SDP and RDP email response messages to **DGI-GDSN-Support**.

Test Task 2: Supplier Adds Condition and Price Type

Price Sync Use Cases Covered: UC-5, 9

Prerequisite Condition: Test Task 1

Test Step 2.1

Description: SDP sends PS-ADDs for 5 Price Synchronizations: A, B, C, D, E. The Conditions and Price Types for each synchronisation will vary. Condition and Price Type can be in different individual messages. Each Data Pool will be assigned a different Condition and Price Type to insure all codes are used amongst the group. The startEffectiveDates will be assigned to future values and given at test time.

Confirm: SDP sent 5 Price Sync messages with proper Conditions and Price Types assigned.

Verify: SDP emails PS-ADD messages to **DGI-GDSN-Support**.

Test Step 2.2

Description: RDP receives PS-ADDs for 5 Price Synchronisations: A, B, C, D and E.

Confirm: RDP receives 5 Price Sync messages with proper Conditions and Price Types assigned.

Verify: RDP emails PS-ADD messages to **DGI-GDSN-Support**.

Test Step 2.3

Description: RDP replies with Confirmations for the 5 PS-ADDs from 2.2. The PS-ADD messages and their confirmation responses are:

- A. Synchronized
- B. Accepted
- C. Review
- D. Rejected
- E. No confirmation is sent for Message E.

Confirm: RDP returns correct confirmations.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 2.4

Description: SDP receives confirmation for the 5 PS-ADDs from 2.1. The PS-ADD messages and their confirmation responses are:

- A. Synchronized
- B. Accepted
- C. Review
- D. Rejected
- E. No confirmation is sent for Message E

Confirm: SDP receives correct confirmations.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Task 3: Supplier Modifies Condition and Price Type

Price Sync Use Cases Covered: UC-6, 10

Prerequisite Condition: Test Task 2

Test Step 3.1

Description: SDP performs a PS-MODIFY with action of MODIFY for Conditions and Price Type in the price synchronisations A, B, C, D and E from TT 2. The values to be modified will vary among Data Pools and will be assigned by DGI. Messages for PS D and E are not sent out as price synchronisation has been broken.

Confirm: SDP sends 3 Price Sync messages with assigned modified Conditions and Price Types to each RDP.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 3.2

Description: RDP receives PS-MODIFY messages for 3 Price Synchronisations: A, B and C.

Confirm: RDP receives 3 Price Sync messages with proper Conditions and Price Types assigned from each SDP

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 3.3

Description: RDP replies with Confirmations for the 3 PS-MODIFY messages from 3.2. The PS-MODIFY messages and their confirmation responses are:

- A. Accepted
- B. Accepted
- C. Accepted

Confirm: RDP returns correct confirmations.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 3.4

Description: SDP receives confirmation for the 3 PS-MODIFY messages from 3.1. The PS-MODIFY messages and their confirmation responses are:

- A. Accepted
- B. Accepted
- C. Accepted

Confirm: SDP receives correct confirmations.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 3.5

Description: RDP sends confirmations for PS-ADD messages from TT 2 overwriting the previous confirmation. The PS-MODIFY messages and their confirmation responses are:

E. Synchronized

Confirm: RDP returns correct confirmations.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 3.6

Description: SDP receives confirmation for the PS-ADD message from TT 2 overwriting the previous confirmations. The PS-MODIFY messages and their confirmation responses are:

E. Synchronized

Confirm: SDP receives correct confirmations.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 3.7

Description: After receiving the Synchronized confirmation messages in 3.6, SDP sends PS-MODIFY messages with action of MODIFY for Conditions and Price Type for the price synchronization E from 3.1. It is dependent on the Supplier-SDP relationship on whether PS-MODIFY messages are triggered automatically.

Confirm: SDP sends Price Sync message with assigned modified Conditions and Price Types to each RDP.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 3.8

Description: RDP receives PS-MODIFY messages for Price Synchronization E.

Confirm: RDP receives Price Sync message with proper Conditions and Price Types assigned from each SDP

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 3.9

Description: RDP sends confirmations for PS-MODIFY message from TT 3.7. The PS-MODIFY message and its confirmation response is:

E. Accepted

Confirm: RDP returns correct confirmation.

Verify: RDP emails confirmation message to **DGI-GDSN-Support**.

Test Step 3.10

Description: SDP receives confirmations for PS-MODIFY message from TT 3.9. The PS-MODIFY message and its confirmation response is:

E. Accepted

Confirm: SDP receives correct confirmation.

Verify: SDP emails confirmation message to **DGI-GDSN-Support**.

Test Task 4: Supplier Withdraws Condition and Price Type

Price Sync Use Cases Covered: UC-7, 11

Prerequisite Condition: Test Task 2

Test Step 4.1

Description: SDP sends PS-MODIFY with action of DELETE for both Condition and Price Type in PS B from TT 2.

Confirm: SDP sends PS-MODIFY messages with action of DELETE for assigned Conditions and Price Types to each RDP.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 4.2

Description: RDP receives PS-MODIFY with action of DELETE for both Condition and Price Type in PS B from TT 2.

Confirm: RDP receives and processes PS-MODIFY messages with action of DELETE for assigned Conditions and Price Types from each SDP.

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 4.3

Description: RDP responds with Confirmation message of ACCEPTED.

Confirm: RDP returns confirmation message of ACCEPTED.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 4.4

Description: SDP receives with Confirmation message of ACCEPTED.

Confirm: SDP receives confirmation message of ACCEPTED.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Task 5: Supplier Discontinues Condition and Price Type

Price Sync Use Cases Covered: UC-8, 12

Prerequisite Condition: Test Task 2

Test Step 5.1

Description: SDP sends PS-MODIFY with action of MODIFY for both Condition and Price Type in PS A from TT 2 by changing endEffectiveDate to the current date.

Confirm: SDP sends PS-MODIFY messages with action of MODIFY for assigned Conditions and Price Types with changed endEffectiveDate to each RDP.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 5.2

Description: RDP receives PS-MODIFY with action of MODIFY for both Condition and Price Type in PS A from TT 2 with endEffectiveDate changed to the current date.

Confirm: RDP receives and processes PS-MODIFY messages with action of MODIFY for assigned Conditions and Price Types with changed endEffectiveDate from each SDP.

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 5.3

Description: RDP responds with Confirmation message of ACCEPTED.

Confirm: RDP returns confirmation message of ACCEPTED.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 5.4

Description: SDP receives with Confirmation message of ACCEPTED.

Confirm: SDP receives confirmation message of ACCEPTED.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Task 6: Supplier Cancels Price Sync Relationship

Price Sync Use Cases Covered: UC-3

Prerequisite Condition: Test Task 1

Test Step 6.1

Description: SDP sends PS-MODIFY with action of DELETE for Price Sync Relationship 2 from TT 1.

Confirm: SDP deletes Price Sync Relationship 2.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 6.2

Description: RDP receives PS-MODIFY with action of DELETE for Price Sync Relationship 2.

Confirm: RDP deletes Price Sync Relationship 2.

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 6.3

Description: RDP responds with Confirmation message of ACCEPTED.

Confirm: RDP returns confirmation message of ACCEPTED.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 6.4

Description: SDP receives with Confirmation message of ACCEPTED.

Confirm: SDP receives confirmation message of ACCEPTED.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

Test Task 7: Supplier Discontinues Price Sync Relationship

Price Sync Use Cases Covered: UC-4

Prerequisite Condition: Test Task 5

Test Step 7.1

Description: SDP sends PS-MODIFY with action of MODIFY for Price Sync Relationship 1 by changing endEffectiveDate to the current date. If any conditions or price types for the relationship have not been end dated to the current date, then those conditions and price types must be modified by using a MODIFY to set their endEffectiveDates to the current date.

Confirm: SDP deletes Price Sync Relationship 1.

Verify: SDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 7.2

Description: RDP receives PS-MODIFY with action of MODIFY for Price Sync Relationship 1 by changing endEffectiveDate to the current date.

Confirm: RDP deletes Price Sync Relationship 2.

Verify: RDP emails PS-MODIFY messages to **DGI-GDSN-Support**.

Test Step 7.3

Description: RDP responds with Confirmation message of ACCEPTED.

Confirm: RDP returns confirmation message of ACCEPTED.

Verify: RDP emails confirmation messages to **DGI-GDSN-Support**.

Test Step 7.4

Description: SDP receives with Confirmation message of ACCEPTED.

Confirm: SDP receives confirmation message of ACCEPTED.

Verify: SDP emails confirmation messages to **DGI-GDSN-Support**.

About Drummond Group Inc.

Drummond Group Inc. (DGI) is an independent, privately held company that works with software vendors, vertical industries and the standards community to drive adoption for standards by conducting interoperability and conformance testing, publishing related strategic research and developing vertical industry strategies. Founded in 1999, DGI represents best-of-breed in the industry on linking horizontal infrastructure technologies, standards and interoperability issues with the needs of vertical industries such as retail, grocery, health care, transportation, government and automotive. For more information, please visit www.drummondgroup.com or email: info@drummondgroup.com.