Appendix A: CPFR Capability Assessment

Purpose

The purpose of the *CPFR Capability Assessment* is to...

- Provide a framework for understanding any gap between a company's existing practices and scalable CPFR best practices.
- Provide support for a preliminary business case that objectively quantifies the process strengths and opportunities that exist, and how the opportunities can be improved.
- Identify the starting point for change, and enable realistic expectations for a CPFR best-practices development program.
- Provide an industry-standard process to determine if trading partners are ready to engage in CPFR relationships:
  - A company against itself, using before-and-after analysis.
  - A company's profile against an aggregated industry average.
  - Other companies' abilities to align/contribute to your specific focus areas for improvement and development.

The grid on the next page provides an overview of the progression of the activities through each CPFR process area. The grid illustrates the increasing difficulty and benefit of progressing *vertically* through the processes of **Collaboration** to **Integrated Planning and Forecasting** to **Replenishment** and finally to **Supply Chain Management**. There are core competencies identified that move each of these four processes through the **Basic** to **Developing** to **Advanced** levels.

The ultimate goal of CPFR is ***Supply Chain Optimization***, which can be achieved only when advanced levels are achieved for every process area. CPFR is not only about collaboration or computer-assisted retail replenishment. CPFR is the sum total of **all** identified processes of **Collaboration**, **Planning**, **Forecasting** and **Replenishment**. This assessment enables partners to understand the total

©1999 Voluntary Interindustry Commerce Standards Association

Appendix A
CPFR Capability Assessment

journey, and to provide a way to flexibly map the work needed to meet specific business goals.

The pages following the grid break out the elemental qualifications into 18 individually scored criteria. Each page represents one of the four process areas of **Collaboration**, **Integrated Planning and Forecasting**, **Replenishment** and **Supply Chain Management**. The scoring levels and many definitions were taken directly from the Global ECR Scorecard in development at the time this assessment was created. Some definitions were refined to better reflect the CPFR-focused effort and results. Each criterion is scored based on the ability to meet *all* criteria at a certain level. If all criteria are not met for a given level, then the next lowest score is assigned (provided all criteria at that level are met).

The scoring grid on the last page allows input of the score for each element within each process area. There is space to include comments and opportunities for each score given.

Recommended Assessment Process

In actual CPFR pilot studies, the deployment method found most productive was to have the selling team members reach consensus on the scores separately from the buying team members. Once each company reached its consensus on the individual scores, the two companies went through each CPFR assessment element together to agree on the score.

Primary differences were documented along with the rationale for the score in each area. The additional scoring rationale provided critical input to the actions identified to improve the process for each element. When averaged and viewed in the overall context of the scoring grid, the raw scores helped identify the relative strength of the partners in each of the four CPFR process areas. At the highest level, this information enabled the partners to set priorities on the CPFR processes to be improved. At the detailed level, individual scores and comments identified specific actions needed to improve the score on the particular element.

This assessment process identifies areas that need immediate attention or that may be sequenced later in the CPFR process improvement. The key to this process is understanding two critical aspects of CPFR:

1. All four process areas identified in the assessment must be maximized to fully realize the benefits of CPFR.
2. Partnering companies have the flexibility to decide the priority in which key CPFR processes will be worked and improved.

CPFR Stages of Progression

Process Area	Basic	Developing	Advanced
D **Supply Chain Management**	No Supply Chain Focus/Plan	Internal Enterprise Optimization	Supply Chain Optimization
C **Replenishment Processes**	Pre-DC Limited/No Retail Visibility	DC Replenishment Focus	Computer Assisted Retail Ordering Flow-Through
B **Integrated Planning & Forecasting Processes**	Manual Non-Standard Forecasting Planning	Standardized Demand Data Creation & Input	Integrated Planning, Forecasting & Collaboration
A **Collaborative Processes**	Limited One-Way Communication	Standardized & Integrated Collaboration	

Table 5

©1999 Voluntary Interindustry Commerce Standards Association

A. Collaborative Processes

		BASIC		DEVELOPING		ADVANCED	
Criteria	**Definition**	0 **Little to Nothing Done**	1 **Plans Developed Nothing Done**	2 **Partially Implemented**	3 **Implemented but Results Incomplete**	4 **Fully Implemented/ Effective**	5 **Advanced Concepts**
Joint Business Planning Process	The partnership process to create mutual plans for promotion and new item events which are measured against commonly understood corporate strategies.	Strategies exist on a corporate level only. There is no sharing of annual plans or evaluation of current activities against strategic direction.	Annual plans & strategies exist and are shared, but no specific plans are created jointly with the information provided.	An overall joint partnership strategy is defined. Joint plans are created on limited items only.	Annual plans are in place and quarterly/6-month plans are linked to specific category strategies.	Promotions and new item events are jointly planned and joint sales forecasts are created and measured for accuracy. Results of the events contribute to the success of the annual plan. Reward structures perpetuate the JBP process.	Business-to-business electronic connections exist to update and evaluate progress of promotions against annual business plans. Results are captured and communicated instantly based on exception criteria and alert functionality. Results are archived for future use.
Promotion/New Product Initiative Process	The process to translate the promotional plan into efficient/effective implementation.	No consistent process exists, with frequent changes and little consideration of lead times.	Systems are being developed to formalize the promotion execution program and there are some efforts to coordinate promotion execution.	There are some efforts to implement an effective promotion process with inconsistent results for forecast accuracy, in-stocks and inventories.	A promotion process has been implemented and is usually followed. Out-of-stocks and inventories have decreased consistently with tested promotional events.	A highly effective promotion process is routinely used. Forecasts are accurate and clearly communicated throughout the supply chain. Inventories and in-stocks are within acceptable range.	A collaborative promotion process driven by a store-based POS data forecast optimizes the total supply chain delivering minimal disruptions within the supply chain.
Results Assessment	The degree to which promotions and new item initiatives are evaluated jointly against a common set of objectives.	There are minimal efforts to evaluate promotion results or promotion costs.	There is an understanding of the need to measure promotions and their costs, and some basic level analysis.	Promotions are evaluated based on traditional costs and volume basis. Reviews with sellers are conducted.	A broader set of results and process measures are evaluated related to category objectives. Reviews with sellers include consumer data.	Measures are evaluated jointly with partners and related to the JBP category/corporate objectives.	Promotions are evaluated against a common set of measures. Results are used to influence future promotion programs, co-marketing, frequent shopper programs, etc.

Table 6

B. Integrated Planning & Forecasting Processes

		BASIC		DEVELOPING		ADVANCED	
Criteria	**Definition**	0 **Little to Nothing Done**	1 **Plans Developed Nothing Done**	2 **Partially Implemented**	3 **Implemented but Results Incomplete**	4 **Fully Implemented/ Effective**	5 **Advanced Concepts**
Information Technology Utilization	The degree to which information technology has been developed to support category management work and measurement systems.	There are basic transactional systems and limited access to data.	Limited internal customer POS data is available and a plan is in place to utilize data from outside the organization, such as from third-party data providers.	An integrated decision support system is being developed to provide consumer, customer, and market data. Some pilots are being executed.	Integrated decision support systems exist, providing data electronically between trading partners. Rules-based models are used that allow for common interpretation of data between trading partners.	Integrated decision-support systems are used to provide information to all trading partners as a basis for joint evaluation of results, facilitation of work and execution of plans.	Advanced technologies (such as the Internet) provide information seamlessly between trading partners to enable collaborative planning, evaluation, and execution. Full access to and use of individual trading partner information (e.g., POS data and shopper research) drives joint business planning and measures.
Demand Signal Development	The degree to which the demand signal matches true consumer demand.	Demand signals are not used. Orders are based on buying cycles and deals.	Inventory information is shared and used to guide the demand signal.	The demand signal is based on warehouse withdrawals and inventories. Forecasts of changes in the demand (promotions) are applied manually.	Some consumer forecast information is incorporated automatically into the demand signal based on historical data.	Visibility of consumer forecasts, warehouse withdrawals and POS data is used to adjust the short-term demand signal.	A collaborative, integrated and automated communication process exists, and actual POS consumer data is used to generate the short-term demand signal and long-term forecast.
Internal Integration Of Demand Forecasts Score Twice: 1. Seller Integration to Demand Planning 2. Customer Integration: Buyer Replenishment	The degree to which accurate forecasts are integrated into existing production and replenishment processes.	No forecasts are either created or communicated across partnerships.	Sales event forecasts are created independently between partners and not shared.	Weekly sales forecasts are created jointly with limited internal communication to drive processes.	Joint weekly sales and order forecasts are manually communicated internally and feed production and replenishment processes with limited or varying degrees of accuracy.	Joint sales and order forecasts are created and internally integrated into production and replenishment planning systems. Accuracy measurements are an consistently within acceptable range.	Joint sales and order forecasts in daily and weekly increments are captured and communicated, with exception-management processes in place to respond to changes as they occur. Forecasts become "frozen" at a point that eliminates the need for purchase order creation.

Table 7

©1999 Voluntary Interindustry Commerce Standards Association

C. Replenishment Processes

		BASIC		DEVELOPING		ADVANCED	
Criteria	**Definition**	**0 Little to Nothing Done**	**1 Plans Developed Nothing Done**	**2 Partially Implemented**	**3 Implemented but Results Incomplete**	**4 Fully Implemented/ Effective**	**5 Advanced Concepts**
Delivery Reliability Score Twice: 1. Seller to Buyer. 2. DC to retail Store Shelf	The extent to which the reliability of deliveries is measured to ensure that orders are delivered on time, in full, and in the right quantity and quality.	There are no measures in place, and no plans to measure.	Measures are identified and responsibilities are assigned.	There is regular monitoring of delivery performance. Major problems are regularly analyzed. There is no close cooperation between trading partners to address problems.	There is close cooperation between trading partners to ensure consistent delivery performance. Delivery performance is regularly measured and analyzed.	Achieved delivery standards are recognized as being world-class, that is, greater than 95% of all orders are delivered on time in full.	Delivery results are consistently maintained by solid, integrated work processes. Performance is being measured at order-line level and Line Fill Rate is maintained at greater than 99.5%. A formal emergency order process is in place.
Efficient Receiving	The extent to which efficient receiving practices are used at the warehouse.	There is no use of technology (e.g., bar codes, ASNs, unit loads) or scheduling practices. There are high unloading times.	Plans are being developed to improve the receiving process using technology (such as bar codes and unit loads) and improve scheduling. Alternatives (such as drop and hook) to maximize dock resources utilization are being considered.	Use of technology (such as bar codes), handling of unit loads via third-party pallet pools and dock scheduling systems are being tested. Drop and hook capability exists and is used to maximize carrier turn-around and dock resources use.	Bar codes (such as UCC 128), unit loads using third-party pallet pools, and dock scheduling are being used to receive and ship product. Unloading times, dock utilization and carrier turn around have been improved significantly.	There is joint planning of shipments using mutually efficient loading configurations & receiving techniques. There is full use of advanced techniques (such as bar codes, ASNs, and unit loads/pallets) throughout the DC to receive, sort, and ship product.	An understanding of the full costs/ benefits of working with efficient sellers is reflected in warehouse handling and is used to influence corporate decisions.
Retail Process Reliability & Compliance to Standard	The extent to which standards are in place to manage data integrity, promotional ordering, performance compliance, shelving and display schematics, and replenishment from backroom.	No standards are in place to manage processes uniformly throughout all stores.	Standards exist but are not fully enforced or measured.	Standards are set and targets are in place to begin measuring. Alignment to change in direction of growth.	Standards are set and targets are fully aligned by all being measured. Tests are underway to improve key lead sites (stores) as examples of successful deployment.	100% compliance is achieved for all identified key retail process standards. Predictability of promotional sell–through is not impacted by issues of retail compliance.	Rigorous and regular reviews of the standards occur to accommodate specific market or store sales results. Store inventory and in-stock data drives changes and input into standards for shelf–turn and promotional replenishment.
Automated Store Ordering	The extent of automation within the store stock and order systems.	There is a wholly manual system to track inventory and re-order product.	There is partial use of handheld devices to record shelf inventory needs, combined with manual inventory to calculate stock re-order.	Hand-held devices are routinely used to record shelf inventory needs, combined with manual inventory measures to calculate stock re-order.	Scanning and perpetual inventory systems replace manual counting for store re-stocking. Adjustments are anticipated and applied to order calculation.	Scanning and perpetual inventory systems are used. Re-order cycles can be adjusted based on category requirements.	Store-level systems have been developed to use POS data to drive store-level forecasting, which drives the supply chain.
Replenishment Process	The extent to which the process used to replenish stock is driven by true consumer demand and managed all the way to the retail shelf.	Changes in inventory are primarily driven by deals and price fluctuation. Performance measures are not identified.	There is an agreement between trading partners to begin developing a system to drive replenishment based on some measure of demand. Some performance measures have been identified.	Piloting some form of demand-driven replenishment (RMI or VMI–CRP) and utilizing EDI standards is being done. An agreed-to set of performance measures is being tracked.	The demand-driven replenishment system is being rolled out with some improvements in inventories and performance measures. Focus is on retail results as well as DC/warehouse.	A fully implemented demand-driven replenishment system resulting in high service levels at DC and retail stores is in place. Out-of-stock and inventory levels are consistently within acceptable levels.	The replenishment system is automated to use true consumer POS data. Store shelf replenishment is the primary focus. Promotions and new items are fully integrated into the replenishment process.
Product Flow Score Twice: 1. D.C. flow 2. Retail Flow to Store Shelf	The degree that physical product flow techniques (such as cross-dock, flow-through, DSD, customer pick-up, third-party consolidator) have been implemented within the distribution network.	No strategic choices have been made to manage product flow. Shelves are not designed to support efficient operation. There is no labor cost data.	Strategic plans have been developed to implement product flow techniques. Benefits are understood at conceptual level. There are fundamental back-room-to-shelf processes in place.	Simple pilot evaluation of the different product flow alternatives have been completed with only a few partners. Plans are in place to improve.	Clear criteria on when/how to use the different product flows has been established. Implications of cross-dock or flow-through systems are understood and broader application is occurring with strategic partners primarily for promotional surges.	Costs/benefits of the different product flow alternatives are understood and reflected in distribution costs. DC layout and distribution capabilities support systemic implementation. Cross-docking, flow-through is standard. Process for suitable SKUs.	Decisions on how to flow product are based on retail needs to support category initiatives and drive consumer value. All products suited for cross-dock or flow-through are handled this way. Partnership programs are in place to evaluate supply chain optimization, and partnerships delivering optimization are valued.

Table 8

D. SUPPLY CHAIN MANAGEMENT

		BASIC		DEVELOPING		ADVANCED	
Criteria	**Definition**	0 **Little to Nothing Done**	1 **Plans Developed Nothing Done**	2 **Partially Implemented**	3 **Implemented but Results Incomplete**	4 **Fully Implemented/ Effective**	5 **Advanced Concepts**
Partnering and Trust Relationships	The synergy of strategic relationships between buyers/ sellers including alignment to a set of measures.	There is no strategic relationship, only a traditional buyer/ seller relationship.	The need to work closer together and to establish common measures is recognized.	A commitment is made to work together, piloting programs on "event-focused" plans. Internal and external measures are . reviewed.	Commitment is demonstrated, with widespread efforts to focus on joint efforts between trading partners, including a common set of measures.	There is routine joint multi-functional efforts focused on the total system using a standard set of joint measures.	Corporate organizations are aligned with key trading partners to maximize mutual regional/local objectives aligned to corporate strategies.
Business Process Re-Engineering	The ability to jointly understand, communicate and document existing CPFR related business processes ultimately leading to mutually beneficial process change.	There is no focus on improvement. Business results are maximized within current system and process constraints.	Re-engineering plans are in place for internal process enhancements. There is no external consulting or understanding of impact.	Internal re-engineering is being deployed. There are no measures of external partner impact. There is initial influence on other departments within the enterprise to maximize impact.	The need for external partner involvement to achieve desired results is recognized. Internal optimization of business process results is achieved across multiple departments within the enterprise.	Re-engineering plans are in place resulting from joint business process mapping with external enterprises. Tests are underway to establish best practices for internal and external partnerships.	Systemic improvement involving policy changes are underway to improve the costs or efficiencies across enterprises. Measurements to evaluate the effectiveness of the supply chain are in place. Ongoing re-inventing process is scheduled.
Operating Strategy: – Service Level – Inventory	Definition of an operating strategy that maximizes service level, and balances total supply chain capabilities, cost, and inventory levels.	Inventory levels are managed based on experience, with no communication with suppliers on results. No targets are set. There is no link to service level (product availability).	Inventory levels are managed based on experience with no communication with seller on results. Targets are set (no relationship exists with supply chain capability and desired service levels).	Inventory targets are statistically set based on product segmentation (ABC items). They are linked to the desired service level. Internal improvements are being made to lower inventory costs.	There are shared targets, statistically set based at SKU level, demand variability at DC, optimum service levels among stores, and total supply chain capability and cost. Safety, cycle, and anticipation components (and accountability) are recognized.	There are frequent joint reviews of service levels and targets, based on SKU level supply and demand variability at the store level; systemic joint efforts are underway to maximize service level, lower inventory and total supply chain cost.	Service and inventory targets are totally aligned with category management roles at the SKU level. Efficient assortment, promotions and new product introduction plans are properly integrated into the inventory strategy and plan.
Measurement/ Reward	Measurements & reward systems consistent with supply chain efficiency objectives, goals, strategies that optimize the entire supply chain without suboptimization of individual enterprises.	Measurement is internally focused. Managers are measured and rewarded on traditional measures (gross margin, sales, efficiency, etc.).	Measurement is internally focused. Plans are developed to enhance measures, along with a beginning look at broader measures on an *ad hoc* basis.	Measurement is internally focused. Broader measures are being developed. There is routine use of some limited broader measures (such as market share).	Measurement is externally focused. Managers are partially measured/ rewarded on a "balanced" scorecard (consumer, customer, and market measures).	Measurement is externally focused. Managers are measured and rewarded on their ability to meet category objectives that are driven by a balanced scorecard. Supply chain effectiveness measures are in place.	Measurement is externally focused. Managers are measured and rewarded based on their ability to meet corporate and category objectives. Supply chain efficiencies have been achieved and documented.
Activity Costing Process	The use of activity costing techniques to analyze business processes and results between trading partners.	No activity costs are collected. Gross margin is used between trading partners.	Plans are in place to begin using activity costing concepts. Joint planning is still based on traditional measures.	Activity costs are measured on part of the company's cost structure and are used for a limited amount of joint planning. Activity costs are beginning to influence joint planning.	All business activity costs are measured on an ad *hoc* basis and are used for management planning as the need arises. An activity cost modeling approach is occasionally used with consumer, customer, and manufacturer data as the basis for joint planning.	All business costs are reported on an activity basis. Activity costs are measured and updated as necessary. Activity-based costing information is reported as part of standard management accounts. ABC modeling is routinely used with consumer, customer, and manufacturer data for planning.	All information systems have incorporated activity measurement techniques as the standard. All joint planning leverages the use of activity costs.
On-Shelf Product Availability to Consumers	The extent to which the on-shelf availability of product is measured and managed in the retail stores.	On-shelf availability is not measured and there are no plans to measure it.	Plans are developed to measure on-shelf availability, but are not implemented yet.	On-shelf availability is measured from time to time with *ad hoc* actions to improve it.	On-shelf availability is routinely measured. Performance is analyzed to identify root causes, with actions taken to systemically improve.	On-shelf availability is tracked continuously. Actions are taken immediately to correct out-of-stocks. Products are never missing from the shelf if available in back room of store. Back room & shelf on-hand quantity are distinguished and managed.	Product availability results are consistently maintained by solid, integrated work processes. An early warning system is in place to prevent out-of-stocks.

Table 9

©1999 Voluntary Interindustry Commerce Standards Association

Appendix A
CPFR Capability Assessment

CPFR Capability Assessment Scoring Grid

A **Collaborative Processes**	**Score**	Comments/Opportunity Identified
Joint Business Plan Process		
Promotion/New Item Initiative		
Results Assessment Process		
Total Score for Section		
Average Score for Section		

B **Integrated Planning & Forecasting**	**Score**	Comments/Opportunity Identified
Information Technology Utilization		
Demand Signal Development		
Internal Integration Of Demand Forecasts (Seller)		
Internal Integration Of Demand Forecasts (Buyer)		
Total Score for Section		
Average Score for Section		

C **Replenishment Processes**	**Score**	Comments/Opportunity Identified
Delivery Reliability Process (Manufacturer to Customer)		
Delivery Reliability Process (DC to Retail Store)		
Efficient Receiving Process		
Retail Process Reliability and Compliance		
Automated Store Ordering		
Replenishment Processes		
Product Flow (DC/Warehouse)		
Product Flow (Retail Backroom to Shelf)		
Total Score for Section		
Average Score for Section		

D **Supple Chain Management**	**Score**	Comments/Opportunity Identified
Partnering and Trust Relationships		
Business Process Re-Engineering		
Operating Strategy: Service Level and Inventory		
Measurement/Reward		
Activity Costing Process		
On-Shelf Availability To Consumers		
Total Score for Section		
Average Score for Section		

Total Assessment Score		
Average		

Table 10