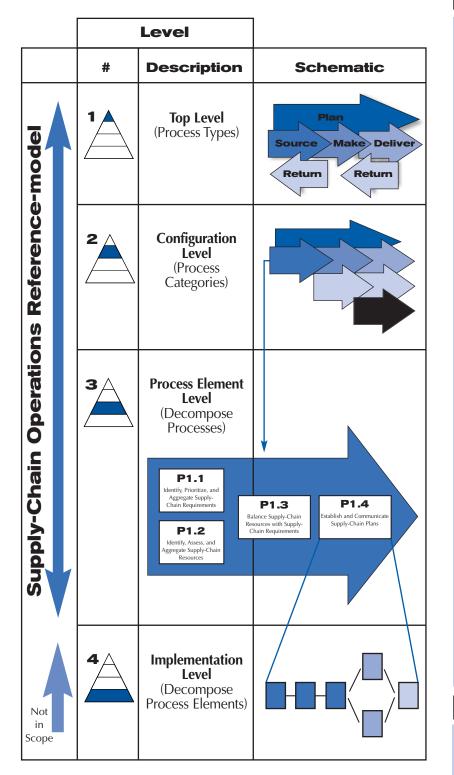
### **SCOR Quick Reference**

# Supply-Chain Operations Reference-model



PLAN SOURCE MAKE DELIVER RETURN

# SCOR Contains Three Levels of Process Detail



## PLAN

<b>P 1</b> Plan Supply Chain	<b>P2</b> Plan Source	<b>P3</b> Plan Make	<b>P4</b> Plan Deliver	<b>P5</b> Plan Return
P1.1: Identify, Prioritize, & Aggregate Supply-Chain Requirements P1.2: Identify, Assess, & Aggregate Supply-Chain Resources P1.3: Balance Supply-Chain Resources with Supply-Chain Requirements P1.4: Establish & Communicate Supply-Chain Plans	P2.1: Identify, Prioritize, & Aggregate Product Requirements P2.2: Identify, Assess, & Aggregate Product Resources P2.3: Balance Product Resources with Product Requirements P2.4 Establish Sourcing Plans	P3.1: Identify, Prioritize, & Aggregate Production Requirements P3.2: Identify, Assess, & Aggregate Production Resources P3.3: Balance Production Resources with Production Requirements P3.4: Establish Production Plans	P4.1: Identify, Prioritize, & Aggregate Delivery Requirements P4.2: Identify, Assess, & Aggregate Delivery Resources P4.3: Balance Delivery Resources with Delivery Requirements P4.4: Establish Delivery Plans	P5.1: Identify, Prioritize, & Aggregate Return Requirements P5.2: Identify, Assess, & Aggregate Return Resources P5.3: Balance Return Resources with Return Requirements P5.4: Establish & Communicate Return Plans

Y	Enable Plan								
	<b>EP.1:</b> Manage Business Rules for Plan Processes	<b>EP.2:</b> Manage Performance of Supply Chain	<b>EP.3:</b> Manage Plan Data Collection	<b>EP.4:</b> Manage Integrated Supply Chain Inventory	<b>EP.5:</b> Manage Integrated Supply Chain Capital Assets				
	<b>EP.6:</b> Manage	<b>EP.7:</b> Manage	<b>EP.8:</b> Manage Plan	<b>EP.9:</b> Manage Supply	EP.10: Align Supply				

Regulatory

Requirements

& Compliance

Integrated

Supply Chain

Transportation

Planning

Configuration

Chain Risk

**Chain Unit** 

**Financial Plan** 

Plan with



Version 9.0

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## SOURCE

<b>S1</b> Source Stocked Product	S2 Source Make-to-Order Product	S3 Source Engineer-to-Order Product
 S1.1: Schedule Product Deliveries S1.2: Receive Product S1.3: Verify Product S1.4: Transfer Product S1.5: Authorize Supplier Payment	S2.1: Schedule Product Deliveries S2.2: Receive Product S2.3: Verify Product S2.4: Transfer Product S2.5: Authorize Supplier Payment	S3.1: Identify Sources of SupplyS3.2: Select Final Supplier(s) and NegotiateS3.3: Schedule Product DeliveriesS3.4: Receive ProductS3.5: Verify ProductS3.6: Transfer ProductS3.7: Authorize Supplier Payment

der	M1 Make-to-Stock

	M1.1:
1	Schedule Production
	Activities
	M1.2:
- i	Issue Product
	M1.3:
	Produce and Test

MAKE

M1.4: Package M1.5:

Stage Product M1.6: Release Product to Deliver

M1.7: Waste Disposal

4

<b>M2.1:</b> Schedule Production Activities
M2.2: Issue Product
M2.3: Produce and Test

Make-to-Order

MЗ

**M3.1:** Finalize Engineering

M3.2: Schedule Production Activities M3.3:

**Issue Product** 

Produce & Test

M3.4:

M3.5:

Package

M3.6:

M3.7:

to Deliver

M3.8:

Stage Product

**Release Product** 

Waste Disposal

Engineer-to-Order

**M2.4:** Package

M2

M2.5: Stage Product

M2.6: Release Finished Product to Deliver

**M2.7:** Waste Disposal

## DELIVER

D 1 Deliver Stocked Product	D2 Deliver Make-to- Order	D3 Deliver Engineer-to- Order Product	D4 Deliver Retail Product
<b>D1.1:</b> Process Inquiry & Quote	<b>D2.1:</b> Process Inquiry & Quote	<b>D3.1:</b> Obtain & Respond to RFP/RFQ	<b>D4.1:</b> Generate Stocking Schedule
<b>D1.2:</b> Receive, Enter & Validate Order	<b>D2.2:</b> Receive, Configure, Enter & Validate Order	<b>D3.2:</b> Negotiate & Receive Contract	<b>D4.2:</b> Receive Product at the Store
D1.3: Reserve Inventory & Determine Delivery Date	D2.3: Reserve Resources &	<b>D3.3:</b> Enter Order, Commit Resources & Launch	<b>D4.3:</b> Pick Product from Backroom
D1.4: Consolidate Orders	Determine Delivery Date <b>D2.4:</b>	Program <b>D3.4:</b> Schedule Installation	D4.4: Stock Shelf
D1.5: Build Loads D1.6:	Consolidate Orders <b>D2.5:</b> Build Loads	<b>D3.5:</b> Build Loads	<b>D4.5:</b> Fill Shopping Cart
Route Shipments D1.7:	<b>D2.6:</b> Route Shipments	D3.6: Route Shipments	D4.6: Checkout
Select Carriers & Rate Shipments D1.8:	<b>D2.7:</b> Select Carriers & Rate Shipments	Select Carriers & Rate Shipments	Deliver and/or install
Receive Product from Source or Make	<b>D2.8:</b> Receive Product from Source or Make	<b>D3.8:</b> Receive Product from Source or Make	
Pick Product D1.10:	D2.9: Pick Product	<b>D3.9:</b> Pick Product	
Pack Product D1.11: Load Product	<b>D2.10:</b> Pack Product	D3.10: Pack Product	
& Generate Shipping Docs D1.12:	<b>D2.11:</b> Load Product & Generate Shipping	Load Product & Generate Shipping Docs	
Ship Product <b>D1.13:</b>	Docs D2.12: Ship Product	<b>D3.12:</b> Ship Product	
Receive & Verify Product by Customer D1.14:	<b>D2.13:</b> Receive & Verify Product by Customer	<b>D3.13:</b> Receive & Verify Product by Customer	
Install Product I I I D1.15: Invoice	<b>D2.14:</b> Install Product	D3.14: Install Product	
•	D2.15: Invoice	D3.15: Invoice	

### **Enable Source**

<b>ES.1:</b> Manage Sourcing Business Rules	<b>ES.2:</b> Assess Supplier Performance	<b>ES.3:</b> Maintain Source Data	<b>ES.4:</b> Manage Product Inventory	<b>ES.5:</b> Manage Capital Assets
<b>ES.6:</b>	<b>ES.7:</b>	<b>ES.8:</b>	<b>ES.9:</b>	<b>ES.10:</b>
Manage	Manage	Manage	Manage	Manage
Incoming	Supplier	Import/Export	Supply Chain	Supplier
Product	Network	Requirements	Source Risk	Agreements

### **Enable Make**

<b>EM.1:</b> Manage Production Rules	<b>EM.2:</b> Manage Production Performance	<b>EM.3:</b> Manage Make Information	<b>EM.4:</b> Manage In-Process Products (WIP)	<b>EM.5:</b> Manage Equipment and Facilities
<b>EM.6:</b> Manage Transportation	<b>EM.7:</b> Manage Production Network	<b>EM.8:</b> Manage Production Regulatory Compliance	<b>EM.9:</b> Manage Supply Chain Make Risk	

### **Enable Deliver**

<b>ED.1:</b> Manage Deliver Business Rules	ED.2: Assess Delivery Performance	<b>ED.3:</b> Manage Deliver Information	<b>ED.4:</b> Manage Finished Product Inventories	<b>ED.5:</b> Manage Deliver Capital Assets
<b>ED.6:</b> Manage Transportation	<b>ED.7:</b> Manage Product Life Cycle	<b>ED.8:</b> Manage Import/Export Requirements	<b>ED.9:</b> Manage Supply Chain Deliver Risk	

## RETURN

	SR1 Source Return Defective Product	DR1 Deliver Return Defective Product	SR2 Source Return MRO Product	DR2 Deliver Return MRO Product	SR3 Source Return Excess Product	DR3 Deliver Return Excess Product
	SR1.1:	DR1.1:	SR2.1:	DR2.1:	SR3.1:	DR3.1: Authorize
1	Identify Defective	Authorize Defective	Identify MRO	Authorize MRO	Identify Excess	Authorize
	Product	Product	Product	Product	Product	Product
j	Condition	Return	Condition	Return	Condition	Return
ł	SR1.2:	DR1.2:	SR2.2:	DR2.2:	SR3.2:	DR3.2:
1	Disposition	Schedule	Disposition	Schedule	Disposition	Schedule
	Defective	Defective	MRO	MRO	Excess	Excess Return
- i	Product	Return Receipt	Product	Return	Product	Receipt
	SR1.3:	DR1.3:	SR2.3:	Receipt	SR3.3:	DR3.3:
-i	Request	Receive	Request	DR2.3:	Request	Receive
1	Defective	Defective	MRO Return	Receive	Excess	Excess
	Product	Product	Authorization	MRO	Product	Product
-i	Return	(includes	000 4	Product	Return	(includes
1	Authorization	verify)	SR2.4: Schedule	(includes	Authorization	verify)
	SR1.4:	DR1.4:	MRO	verify)	SR3.4:	DR3.4:
j	Schedule	Transfer	Shipment	DR2.4:	Schedule	Transfer
1	Defective	Defective		Transfer	Excess	Excess
	Product	Product	SR2.5:	MRO	Product	Product
j	Shipment		Return MRO	Product	Shipment	
	SR1.5:		Product		SR3.5:	
i	Return				Return Excess	
1	Defective				Product	
d	Product					



#### For more information:

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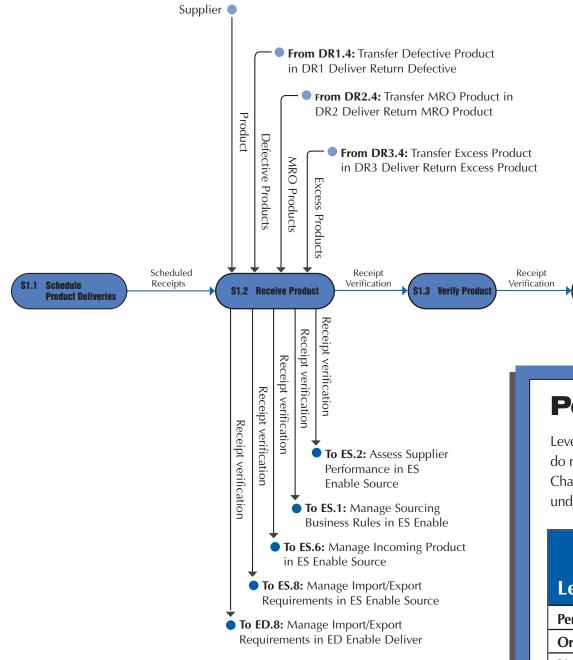
www.supply-chain.org

**The Supply-Chain Operations Reference-model (SCOR) is the** product of the Supply-Chain Council (SCC), an independent, not-for-profit, global corporation with membership open to all companies and organizations interested in applying and advancing the state-of-the-art in supply-chain management systems and practices. The SCOR-model captures the Council's consensus view of supply chain management. While much of the underlying content of the Model has been used by practitioners for many years, the SCOR-model provides a unique framework that links business process, metrics, best practices and technology features into a unified structure to support communication among supply chain partners and to improve the effectiveness of supply chain management and related supply chain improvement activities.

#### **Enable Return**

for I		<b>ER.2:</b> Manage Performance of Return Processes	<b>ER.3:</b> Manage Return Data Collection	<b>ER.4:</b> Manage Return Inventory	<b>ER.5:</b> Manage Return Capital Assets
ER Mar Retu Tran	nage	<b>ER.7:</b> Manage Return Network Configuration	<b>ER.8:</b> Manage Return Regulatory Requirements & Compliance	<b>ER.9:</b> Manage Supply Chain Return Risk	

## **S1 Source Stocked Product** S1.2 Detail



### **SCOR Model Structure**

Transferred

Product

S1.4 Transfer Produc

S1.5 Authorize

Supplier Payme

A set of standard notation is used throughout the Model. P depicts Plan elements, S depicts Source elements, M depicts Make elements, D depicts Deliver elements, and R depicts Return elements. SR = Source Return and DR = Deliver Return. An E preceding any of the others (e.g., EP) indicates that the process element is an Enable element associated with the Planning or Execution element (in this case, EP would be an Enable Plan element). Every Level 1 Process has Enable Processes associated with it.

As indicated in the chart showing the Three Levels of Process Detail, the Model is hierarchical with three levels. Here is a sample of the detailed workflow for S1.2. S1.2 is a notation that indicates a third level process element. In this case, it is a Source (S = Level 1 Source) element that is concerned with sourcing stocked product (S1 = Level 2 Source Stocked Product) and is specific to receiving product (S1.2 = Level 3 Source Stocked Product). Though the other S1 processes are shown here to Level 2, the Level 3 detail is only included for S1.2.

## **Performance Attributes and Level 1 Metrics**

Level 1 Strategic Metrics are primary, high level measures that may cross multiple SCOR processes. Level 1 Metrics do not necessarily relate to a SCOR Level 1 process (PLAN, SOURCE, MAKE, DELIVER, RETURN). The Metrics Chapter also now includes a unique code for every metric based on its attribute, level and alphabetical sequence under each level. This is especially useful for benchmarking. For coding, see the SCOR Model.

	Performance Attributes				
Level 1 Metrics	Customer-Facing			Internal-Facing	
	Reliabilty	Responsiveness	Agility	Cost	Assets
Perfect Order Fulfillment	<ul> <li>✓</li> </ul>				
Order Fulfillment Cycle Time		<ul> <li>✓</li> </ul>			
Upside Supply Chain Flexibility			<b>v</b>		
Upside Supply Chain Adaptability			<ul> <li>✓</li> </ul>		
Downside Supply Chain Adaptability			<ul> <li>✓</li> </ul>		
Supply Chain Management Cost				<ul> <li>✓</li> </ul>	
Cost of Goods Sold				<ul> <li>✓</li> </ul>	
Cash-to-Cash Cycle Time					~
Return on Supply Chain Fixed Assets					~
Return on Working Capital					~

#### **Level 1 Strategic Metrics**

The Level 1 Metrics are the calculations by which an implementing organization can measure how successful they are in achieving their desired positioning within the competitive market space. Most metrics in the Model are hierarchical – just as the process elements are hierarchical. Level 1 Strategic Metrics are created from lower level calculations and are primary, high level measures that may cross multiple SCOR processes. Lower level calculations

(Level 2 and 3 metrics) are generally associated with a narrower subset of processes. Level 2 and 3 metrics associated with Level 1 metrics are included in the SCOR 9.0 Metrics Hierarchy in the Metrics Chapter. Additional metrics that do not "roll up" to Level 1 are needed as diagnostics (used to diagnose variations in performance against plan) and are included in the Metrics chapter with definitions and process locations listed.