

# **Outline of JAMP Activities and Hitachi's Approach Toward REACH**

August 18, 2008

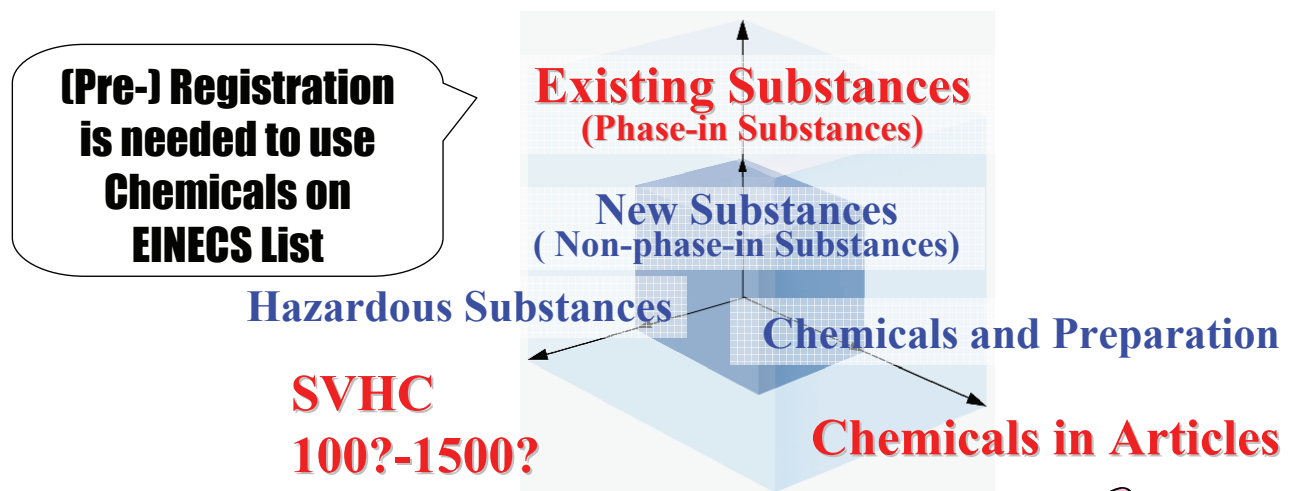
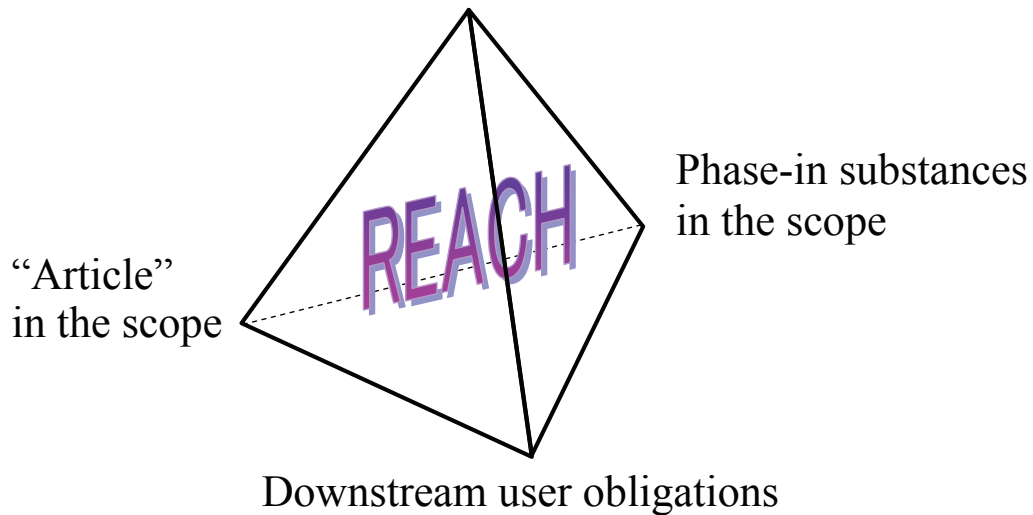
Dr. Yoshiaki Ichikawa  
Chief Engineer  
Corporate Environmental Policy Division  
Hitachi, Ltd.

## **Contents**

- 1. REACH Influence Over Businesses Outside Europe**
- 2. How JAMP Can Help**
- 3. Hitachi's Policy for REACH Compliance**

Registration, Evaluation, Authorisation, and restriction of CHemicals  
(REGULATION (EC) No 1907/2006)

## Supply-chain information sharing (even outside EU)



## SVHC ; Substances of Very High Concern

- CMR: Carcinogen, Mutagen, Repro Toxic
- PBT (Persistent, Bioaccumulative, Toxic)
- vPvB (Very Persistent, Very Bioaccumulative)
- EDs (Endocrine Disrupters)

## Articles

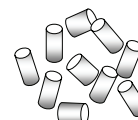




Ingots



Bulk materials



Plastic pellets



Maintenance chemicals



Refill oil



Powder



Ink in Cartridge



Ink in Ball-point Pen

Article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition:



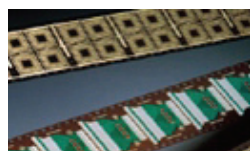
Electrical appliances



Batteries



Packaging



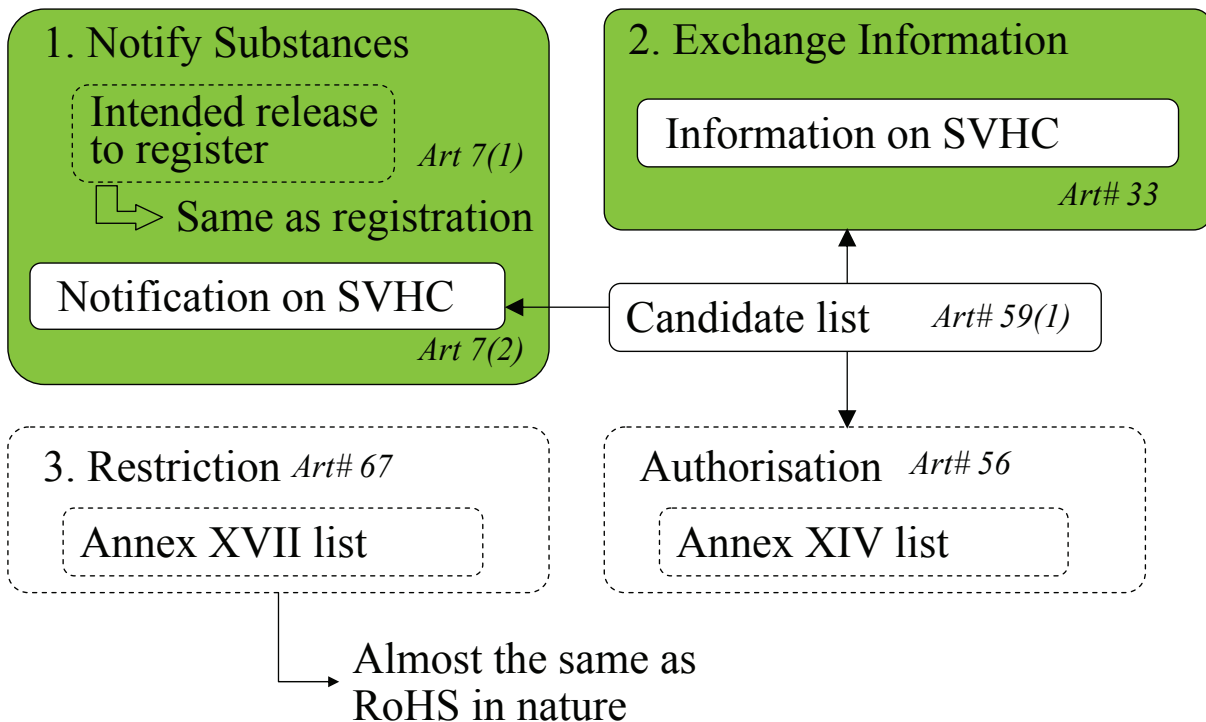
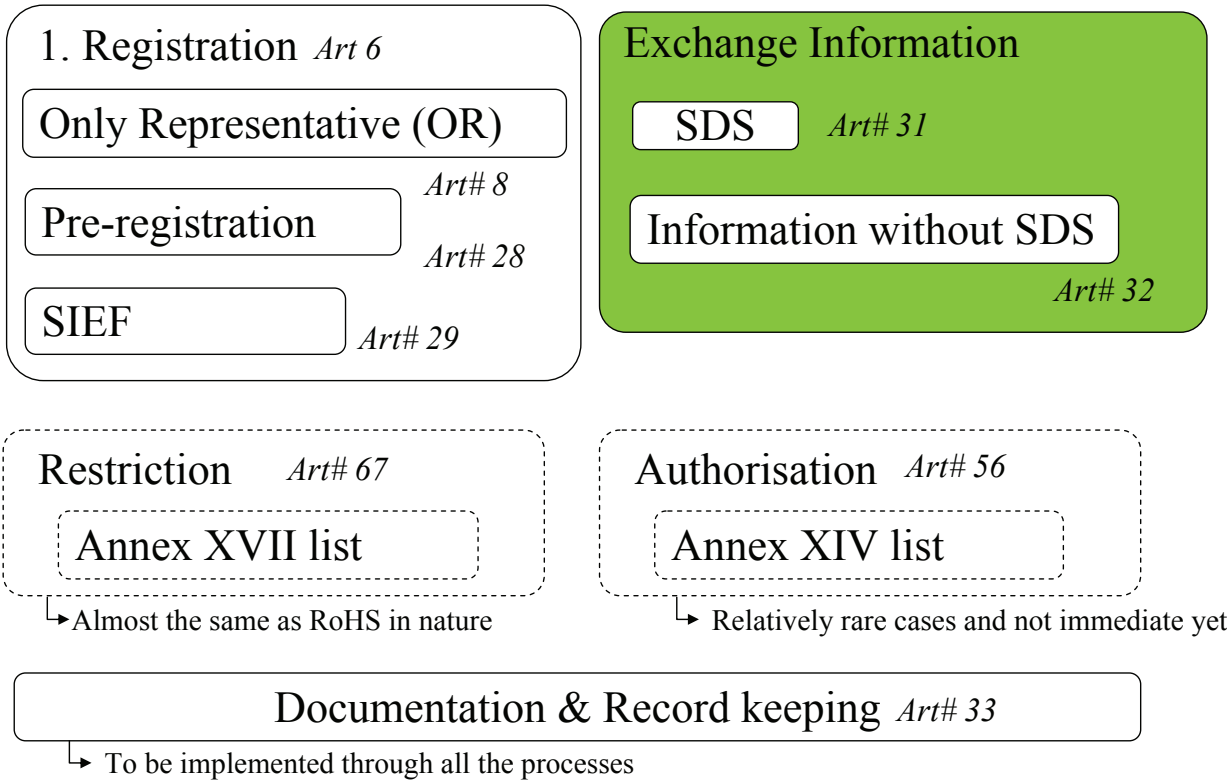
Designed surface

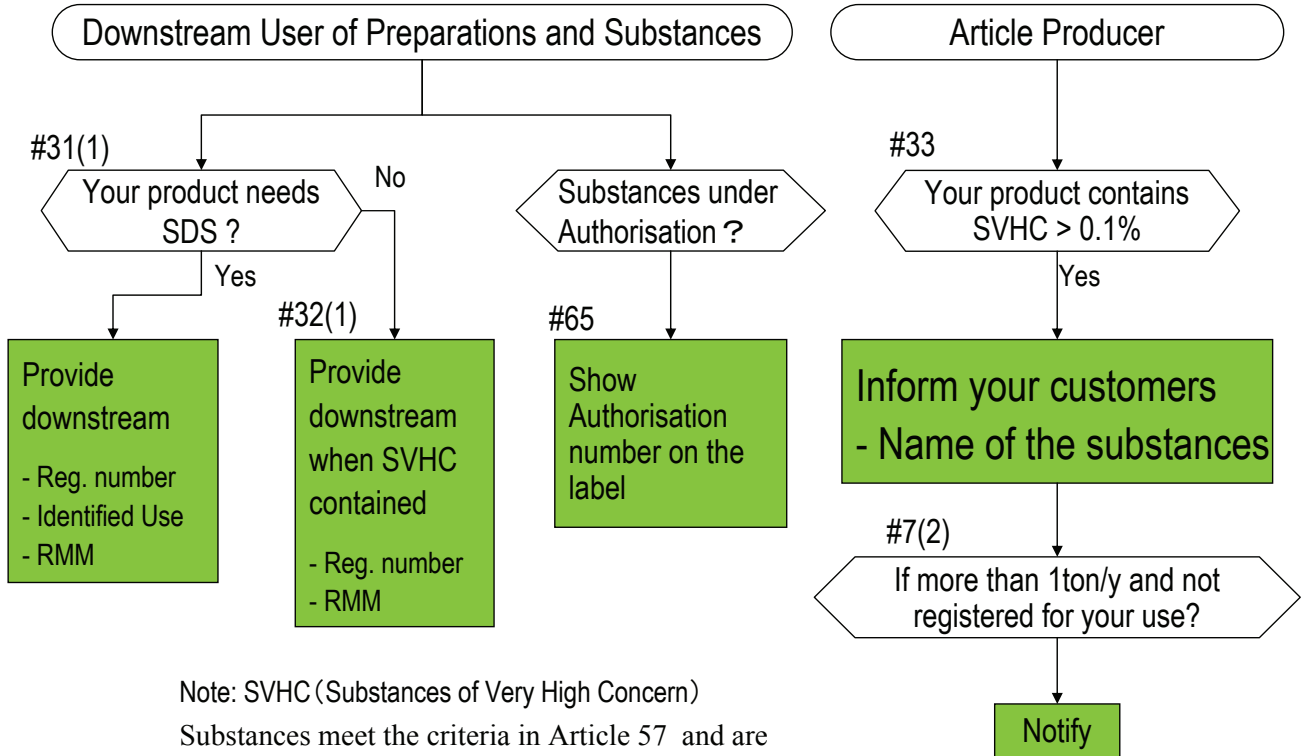


Sheet

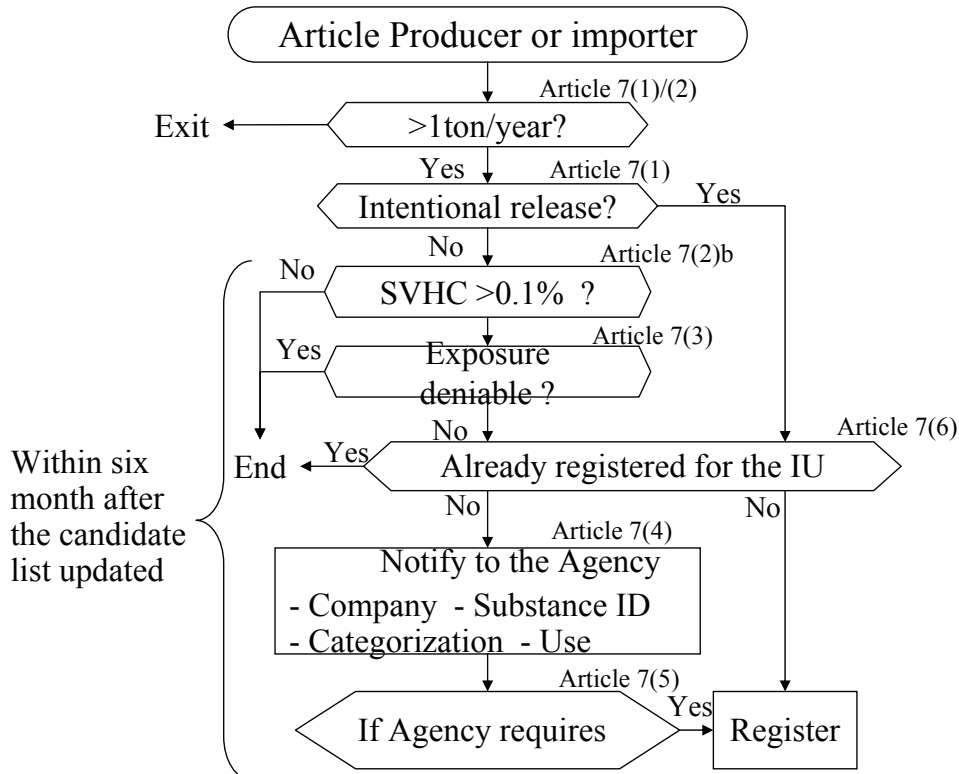


Brake lining



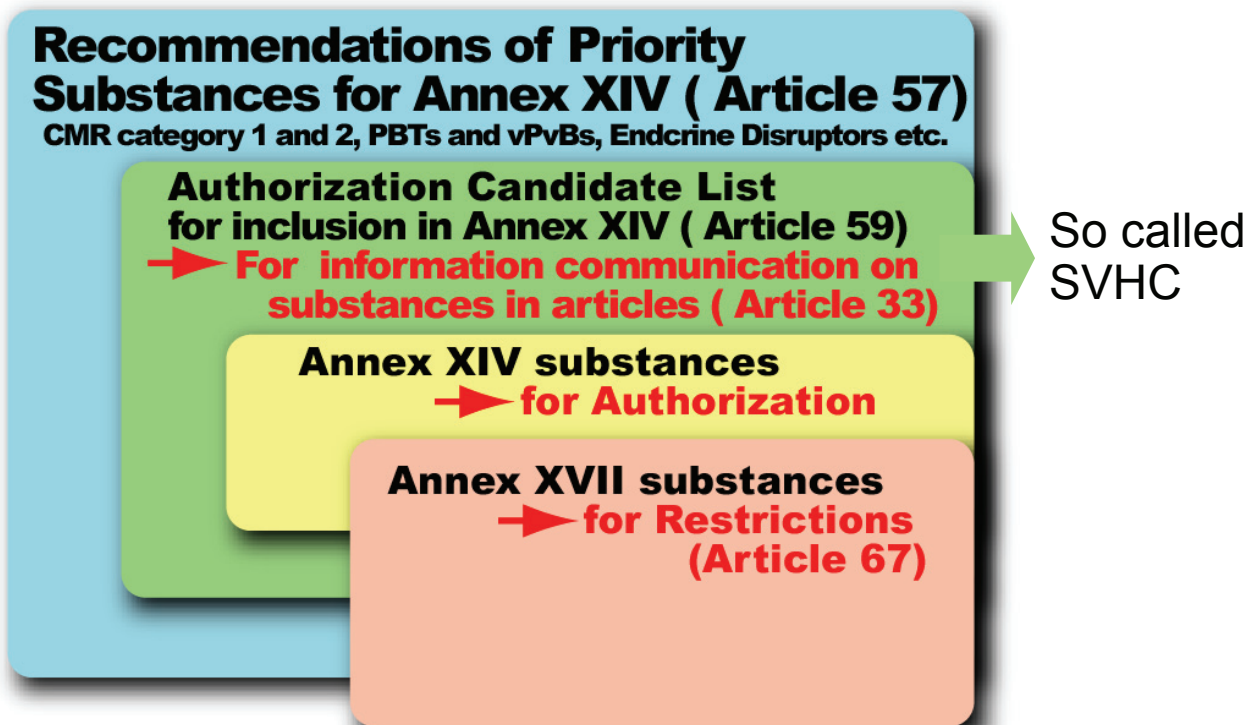


Note: SVHC (Substances of Very High Concern) Substances meet the criteria in Article 57 and are identified in accordance with Article 59(1), which are also called substances in the “candidate list”



	Registration		Notification	Information
	Article 6	Article 7(1)	Article 7(2)	Article 31-33
<b>Chem. /Preparation</b>	<b>&gt;=1 ton/y</b>	---	---	<b>SDS</b> ✓ <b>Dangerous substances 67/548/EEC 1999/45/EC</b> ✓ <b>59(1) SVHC</b> ✓ <b>ANNEX XIII PBT, vPvB</b>
<b>Polymer Monomer (Component of Polymer)</b>	---	---	---	
<b>&gt;=2% &amp; &gt;=1 ton/y</b>	---	---	---	
<b>Chem. in Article</b>	<b>Intended Release</b>	---	<b>&gt; 1 ton/y</b>	---
	<b>SVHC</b>	---	---	<b>&gt;0.1% * &amp; &gt; 1 ton/y</b>
				<b>&gt;0.1%*</b>

\* Note: 0,1% SVHC applicable to the article



# First Consultation for SVHC (candidate list)

Substance identification			Authority	Reason for proposing
Substance name	CAS number	EC number		
Anthracene	120-12-7	204-371-1	Germany	PBT
4,4'- Diaminodiphenylmethane	101-77-9	202-974-4	Germany	CMR
Dibutyl phthalate	84-74-2	201-557-4	Austria	CMR
Cyclododecane	294-62-2	206-33-9	France	PBT
Cobalt dichloride	7646-79-9	231-589-4	France	CMR
Diarsenic pentaoxide	1303-28-2	215-116-9	France	CMR
Diarsenic trioxide	1327-53-3	215-481-4	France	CMR
Sodium dichromate, dihydrate	7789-12-0		France	CMR
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	Netherlands	vPvB
Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	Sweden	CMR
Hexabromocyclododecane (HBCDD)	25637-99-4	247-148-4	Sweden	PBT
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	United Kingdom	PBT
Bis(tributyltin)oxide	56-35-9	200-268-0	Norway	PBT
Lead hydrogen arsenate	7784-40-9	232-064-2	Norway	CMR
Triethyl arsenate	15606-95-8	427-700-2	Norway	CMR
Benzyl butyl phthalate	85-68-7	201-622-7	Austria	CMR

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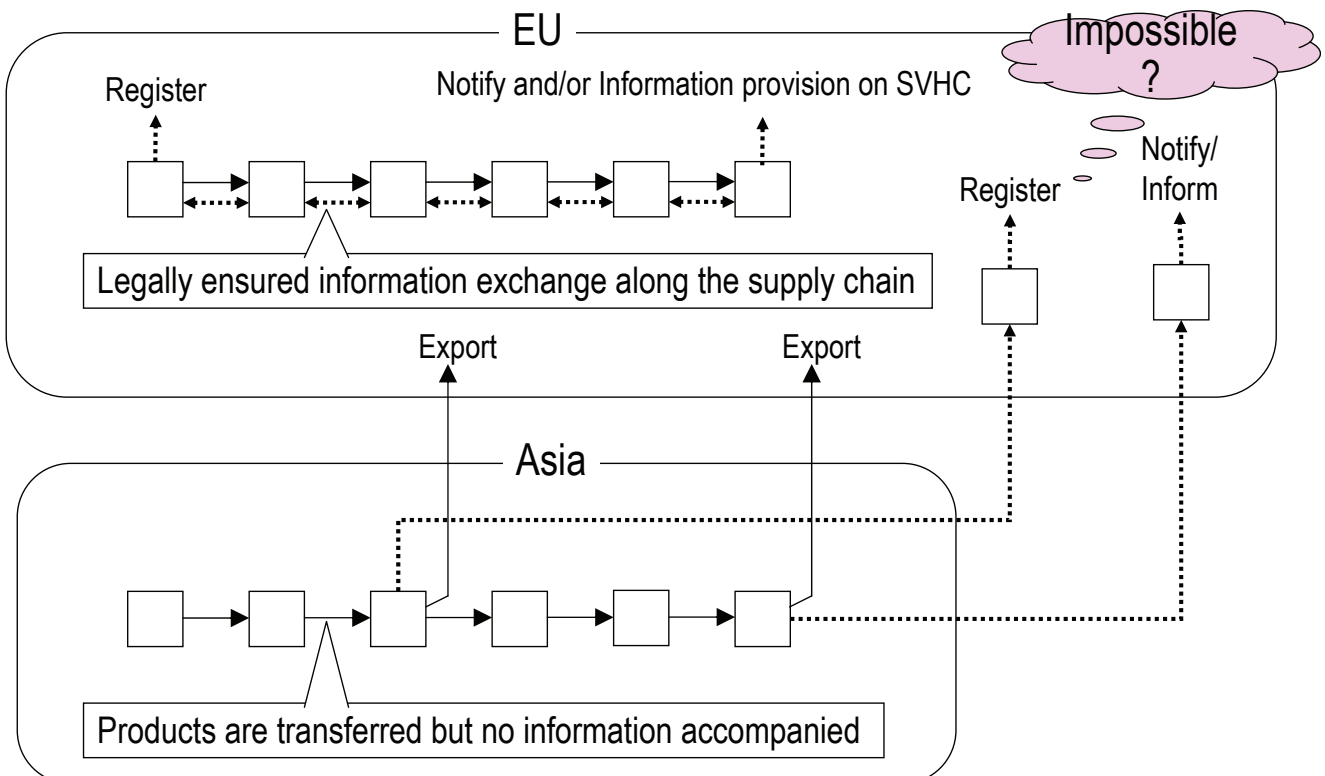
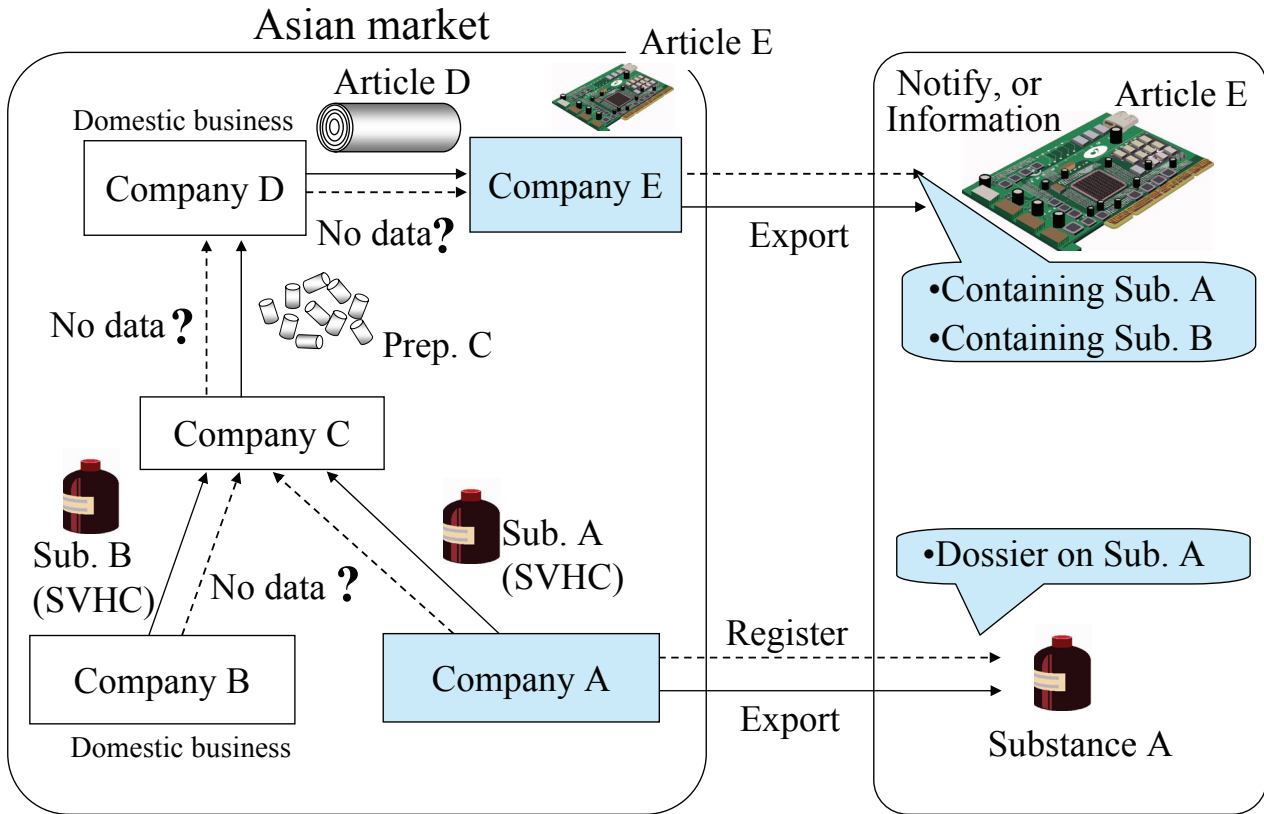
# Inquiries from Customers Have Already Come

Substances Of Very High Concern Data Reporting Format				
		Supplier Code		
Part Name	Contained substance (%wt/wt)			
	Substance name	CAS Number	EC number	
	Anthracene	120-12-7	204-371-3	
	4,4'- Diaminodiphenylmethane	101-77-9	202-974-6	
	Dibutyl phthalate	84-74-2	201-557-6	
	Cyclododecane	294-62-2	206-33-6	
	Cobalt dichloride	7646-79-9	231-589-4	
	Diarsenic pentaoxide	1303-28-2	215-116-9	
	Diarsenic trioxide	1327-53-3	215-481-4	
	Sodium dichromate, dihydrate	7789-12-0		
	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-6	
	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-2	
	Hexabromocyclododecane (HBCDD)	25637-99-4	247-148-6	
	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-7	
	Bis(tributyltin)oxide	56-35-9	200-268-2	

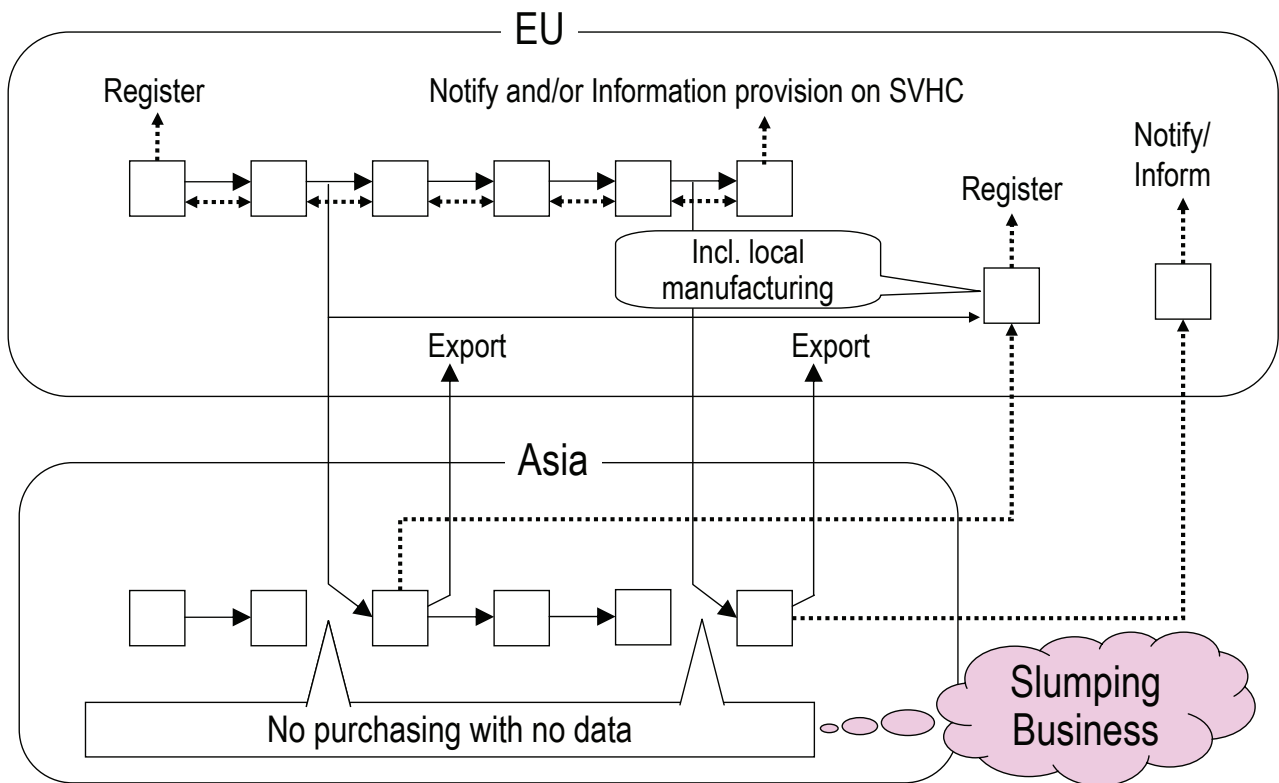
Report Substance Information Below			
	CAS # * (where available)	Weight (g) * (up to 3 decimal places)	Description of Use (max field length=65)
	101-77-9		
musk xylene)	81-15-2		
Chlorinated	85535-84-8		
Anthracene	120-12-7		
Benzyl butyl phthalate (BBP)	85-68-7		
Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7		
Bis(tributyltin)oxide (TBTO)	56-35-9		
Cobalt dichloride	7546-79-9		
Cyclododecane	294-62-2		
Diarsenic pentaoxide	1303-28-2		
Diarsenic trioxide	1327-53-3		
Dibutyl phthalate (DBP)	84-74-2		
Hexabromocyclododecane	25637-99-4		
Lead hydrogen arsenate	7784-40-9		
Sodium dichromate, dihydrate	7789-12-0		
Triethyl arsenate	15606-95-8		

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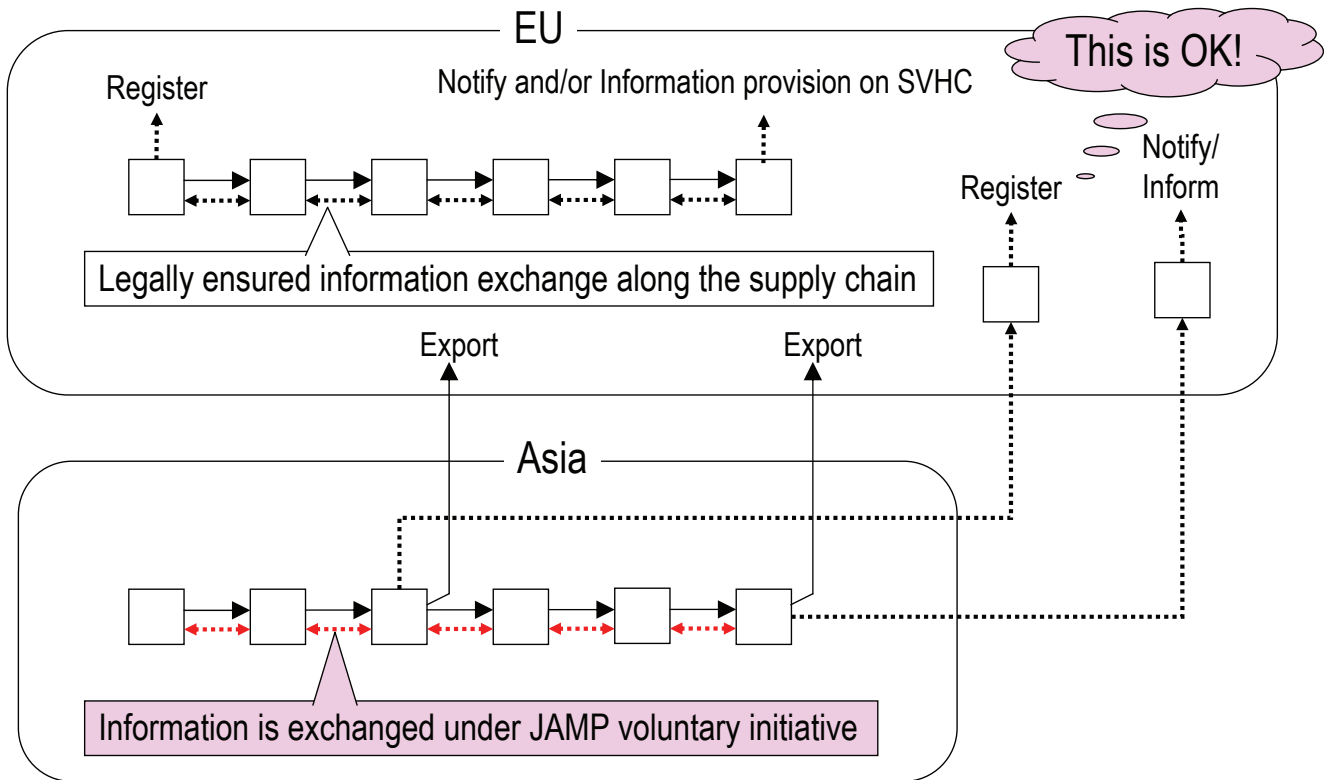




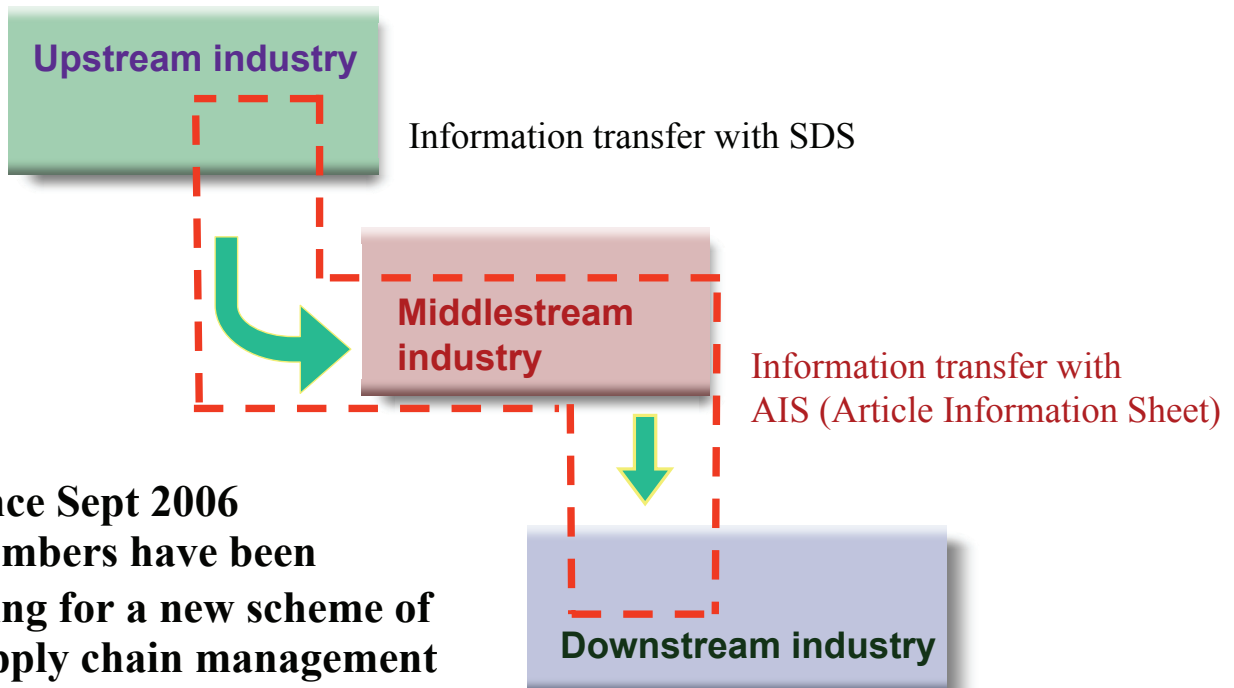


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## JAMP: Joint Article Management Promotion-consortium



## JAMP

(Joint Article Management Promotion-consortium)



Seamless Data Transfer along The Supply Chains

# JAMP Growing Membership

Asahi Kasei Corporation  
 Kao COPORATION.  
 Sumitomo Chemical Co., Ltd  
 Mitsubishi Chemical Corporation  
 Lion Corporation  
 FUJIFILM Corporation  
 Murata Manufacturing Company, Ltd.  
 DAINIPPON INK AND CHEMICALS, INCORPORATED  
 TDK Corporation  
 TOSHIBA Corporation  
 Hitachi, Ltd.  
 FUJITSU LIMITED  
 Ricoh Co., Ltd.  
 Matsushita Electric Industrial Co., Ltd.  
 Mitsubishi Electric Corporation  
 SEIKO EPSON COPORATION  
 Mizuho Information & Research Institute, Inc.

MITSUBISHI RAYON CO., LTD.  
 Nippon Chemi-Con Corporation  
 Hitachi Chemical Company, Ltd.  
 NIPPON CHEMICAL INDUSTRIAL Co., LTD.  
 Nihon Unisys, Ltd.  
 ALPS ELECTRIC CO., LTD.  
 Nippon Chemi-Con Corporation  
 Asahi Glass Co., Ltd.  
 Towa Kagaku Co., Ltd.  
 TOKUSHU DENSO CO.,LTD  
 NITTO DENKO COPORATION  
 Fujikura Ltd.  
 Mitsui Chemicals, Inc.  
 The JAPAN REFRIGERATION AND AIR CONDITIONING INDUSTRY ASSOCIATION  
 Naitoh Environmental Science Co.,Ltd.  
 Fuji Xerox Co., Ltd.  
 Expert for Management Solution Japan Co.,Ltd.  
 Kurita Analysis Services Co.,Ltd.  
 BROTHER INDUSTRIES, LTD.  
 Japan Chemical Database Ltd.  
 KONICA MINOLTA HOLDINGS,INC.  
 Chienet LLP  
 EDS Japan LLC.  
 Environmental Communication Co.,Ltd.  
 Nihon Parkerizing Co.,Ltd  
 DIKYO CHEMICAL CO.LTD.  
 E&E Solutions Inc.  
 Fuji Electric Holdings Co.,Ltd  
 Chemicals Evaluation and Research Institute, Japan  
 Japan Automobile Manufacturers Association, Inc.  
 BSEF Japan

Upstream/  
 middle-stream/  
 downstream  
 well balanced

Currently over 280  
 members  
 and still growing

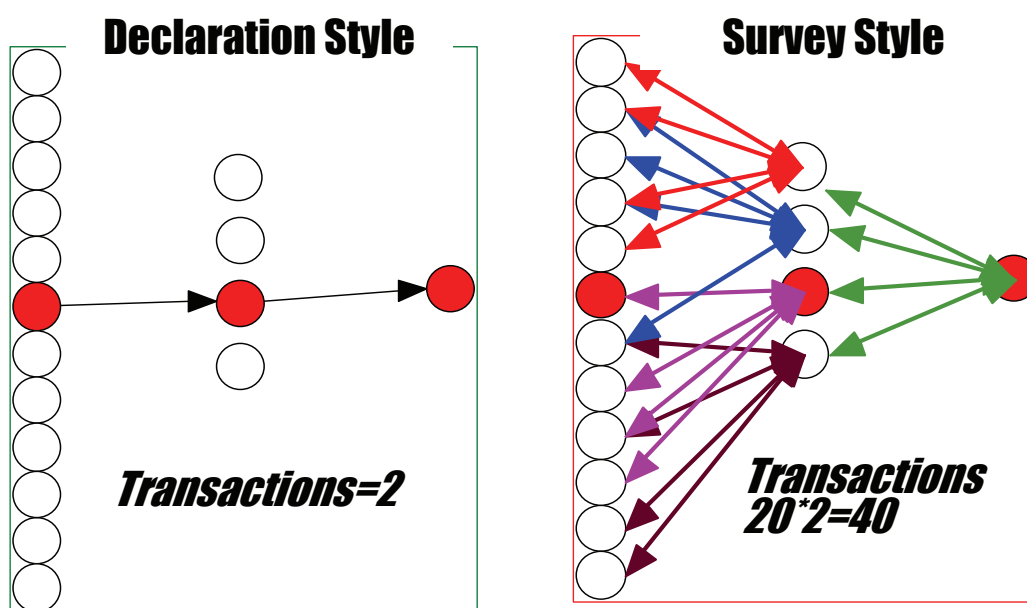
Inabata & Co., Ltd.  
 SANYO Electric Co., Ltd.  
 ROHM CO., LTD.  
 IRIE SYSTEM Co.Inc.  
 Canon Inc.  
 Sony Corporation  
 YAZAKI CORPORATION  
 SMK Co.,Ltd.  
 PIONEER CORPORATION  
 Sharp Corporation  
 NEC Corporation  
 TEIJIN LIMITED  
 JEOL Ltd.

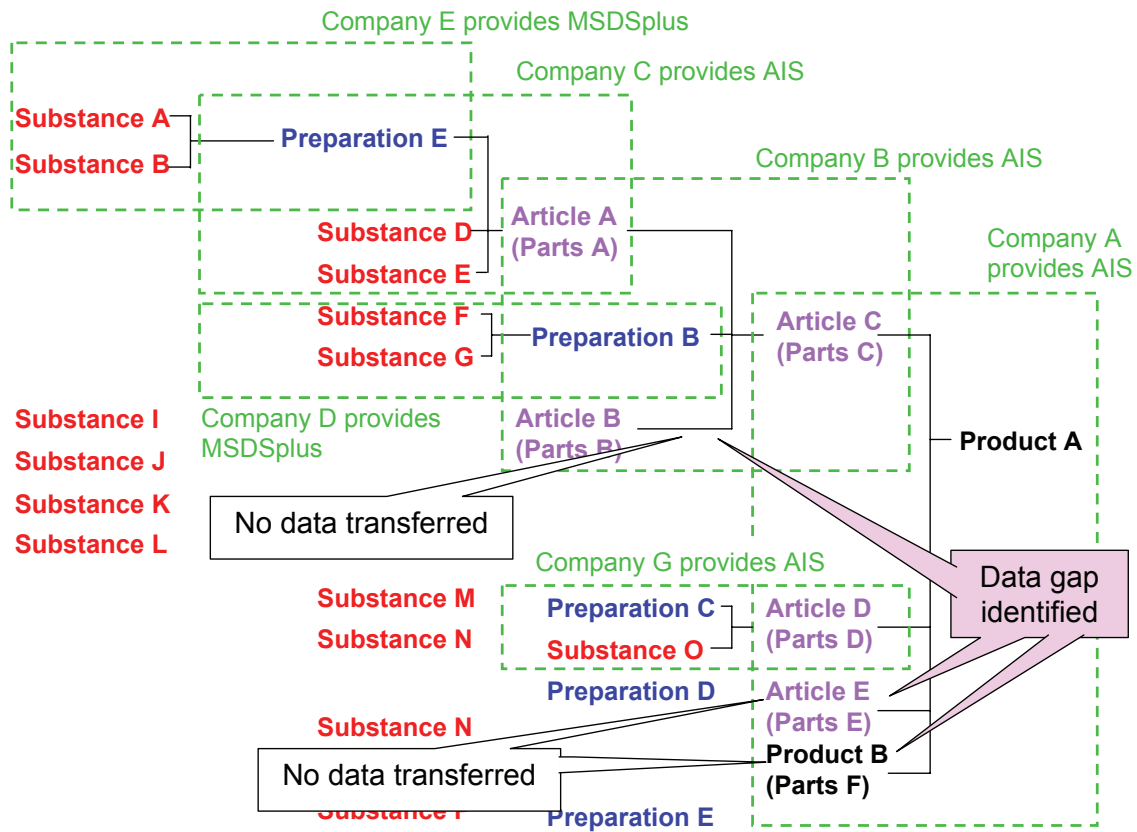
- 1) Development and promotion of the "JAMP Guidelines for the Information Management of Chemical Substances Contained in the Products"
- 2) Development and promotion of two types of format sheets for the transfer of chemical substance information
  - (1) JAMP MSDSplus (Material Safety Data Sheet Plus)
  - (2) JAMP AIS (Article Information Sheet)
- 3) Promoting the international standardization regarding on information management of chemical substances contained in the articles (e.g. JAMP Guidelines, JAMP MSDSplus and JAMP AIS)
- 4) Promoting the development of an information infrastructure for the smooth communication of chemical substance information

etc...

## The Mechanism of Information Exchange (1)

Declaration style is much simpler



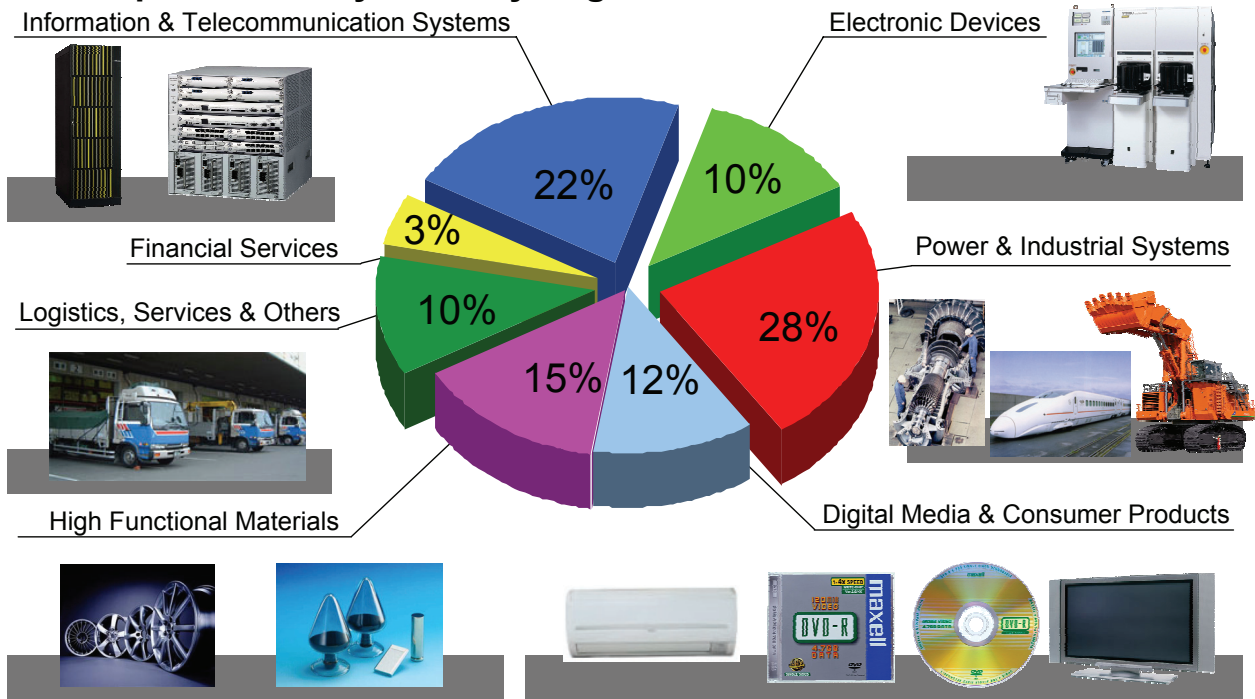


## Contents

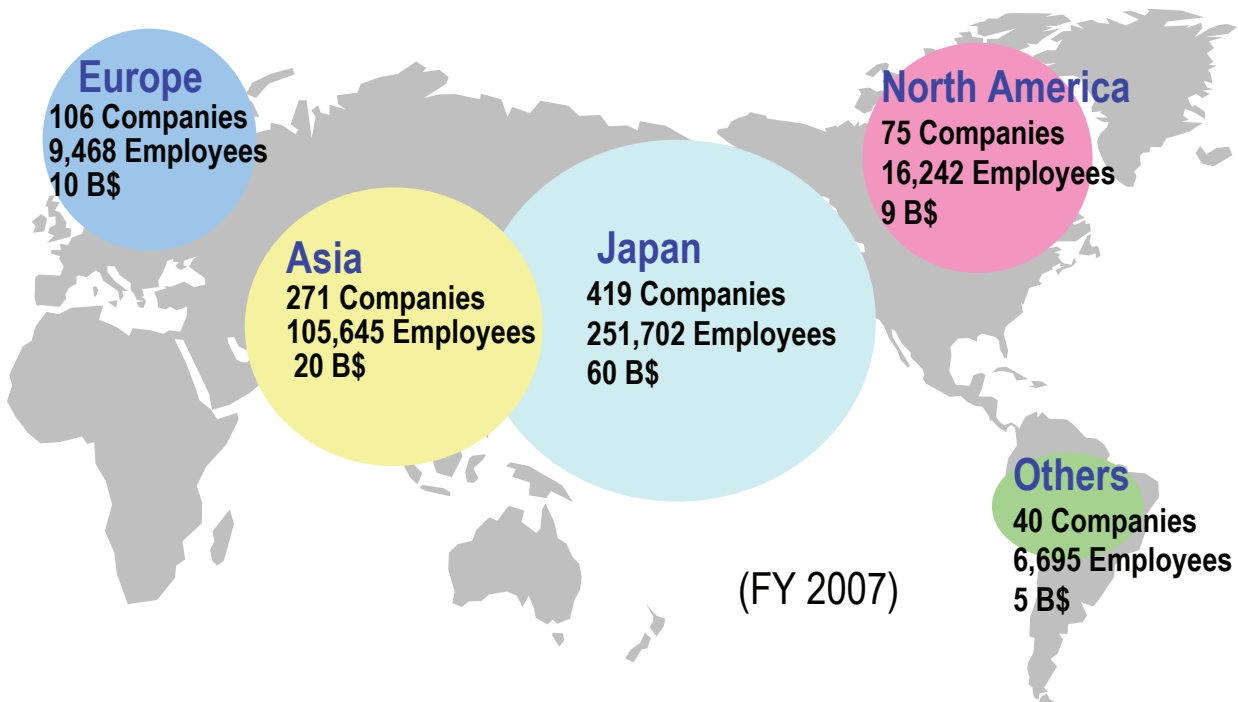
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## Group Revenue by Industry Segment

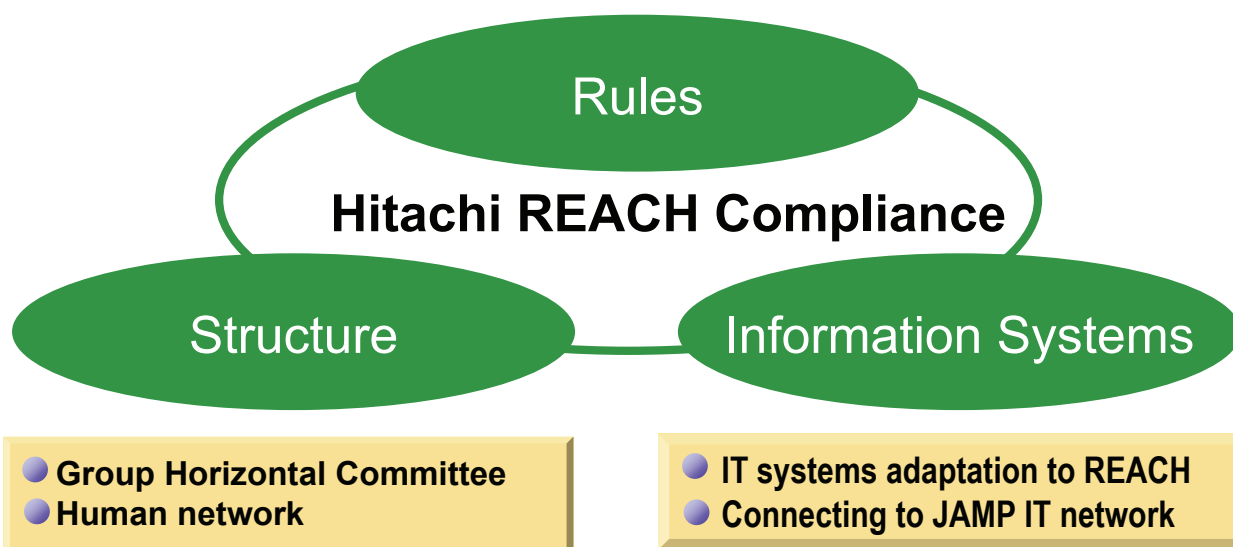
Total Revenue: 100 Billion US\$



All figures are included Eliminations and Corporate items, FY2007/Consolidated basis



- Revise company's standard, Green Procurement Guideline, and related documents  
(Continual update of substance list, Rules for information provision, etc.)
- Compile REACH Compliance Manual for EU operation



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1. Policy for Information Exchange
  - A) Collect information from suppliers which is available at the moment and provide information to customers available to us.
  - B) Update the information timely when any important change or additional data obtained.
2. Information Exchange Format
  - A) Hitachi's standard format is JAMP AIS / MSDSplus  
(Upon customer's request or other exceptional situations we may report or receive other formats).
3. Timeline
  - A) 2008/11 Start accepting JAMP formats through Hitachi Unified Chemical Management System.
  - B) 2009/01 Workability Evaluation Testing using EDI Infrastructure (TWX 21).
  - C) 2009/07 Connect to JAMP IT network (Global Portal) and increase flexibility for reporting and collecting.

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1. Any **supplier** of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 % weight by weight (w/w) **shall provide the recipient of the article with sufficient information, available to the supplier**, to allow safe use of the article including, as a minimum, the name of that substance.

### Establish Internal Structure for REACH Compliance



Any legal entity within Hitachi Group selling goods in EU

This team may be integrated within an existing compliance team for other regulations

#### REACH Compliance Team



REACH Manager



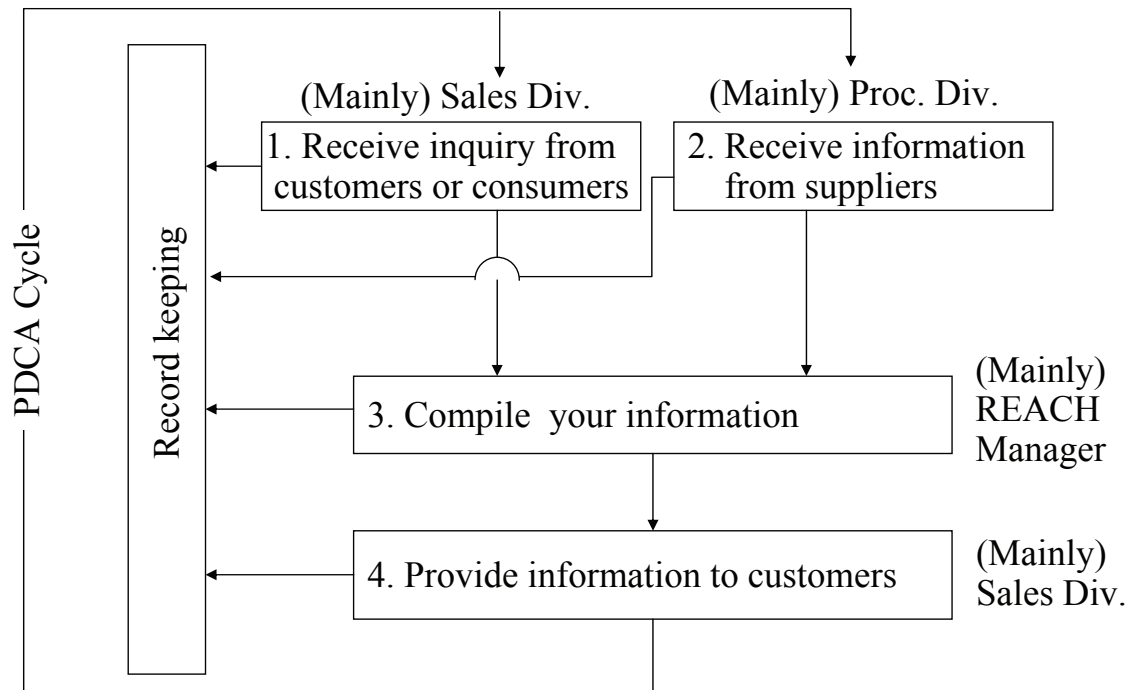
Sales Div.



Procurement Div.

## B. Compliance Process for Articles (finished products) Businesses

### 2. Exchange Information



**END**

Thank you very much for your attention