

Material Declarations: Risky Business - Perspectives from your Supply Base



Mary Carter-Berrios
Arnold Offner



Agenda

- **Introduction**
- **Material Declaration Process**
 - **View Points**
 - **Challenges**
 - **Risks**
 - **Ethics**
- **Conclusions**

Introduction

- The **RoHS** Directive (2002/95/EC) – July 1, 2006

All component suppliers are faced with requests from their customer base, and in working towards a standard, we have many common threads in our interaction with customers.

- Our experiences, both good and bad, have so far allowed us to see the wider field of requests and also the possible risks associated with data related to RoHS
- A holistic and simple approach to the data flow is needed

Alice in Wonderland

“Give your evidence,” said the King, “and don't be nervous, or I'll have you executed on the spot.”

Chapter XI – Who Stole the Tarts?

Lewis Carroll

- Visionary
- Trendspotter
- **IPC Roadmapper ?**



Who We Are

Two global players in the electronic components market with the same customer base with different products

- **KEMET** – Manufacturer of SMD and PTH Capacitors
Greenville, SC: World Headquarters & Innovation Center
- Mexico and China: Mature Product Manufacturing
- Worldwide Direct Sales Force

- **Phoenix Contact** - Through-hole PCB and SMT Connectors used in industrial electronic applications
Harrisburg, PA: US-HQ with German parent
- Active Sales Force in over 50 countries

The Material Declaration Process

- Based on the DTI Guidance, Material Declarations are a cornerstone to build a sound due diligence case
- The process includes the following steps
 - Define Compliance
 - Determine Declaration Scope
 - Define the Declaration Format
 - Getting the Declaration
 - Manage the Declaration Response
- Challenges exist in each step
 - Some have been resolved,
 - some are getting better, and
 - some are not recognized

Define Compliance

Compliance is currently a Moving target

- Definitions & Exemptions could still be forthcoming
- Minimum Concentration Values (MCV)
 - Clarification in Amendment of August 18, 2005
- Homogenous Levels – the last word ?

An overwhelming concern - many of the early material declarations were made at the component level instead of the homogenous.

Shifting definitions render much of this early data irrelevant and even inaccurate. Any changes impact the entire Supply Chain, and all those in its wake.

Determine Declaration Scope

- How much information is required?
 - Content
 - Manufacturing
- Now?
- Later?
- Intellectual Property (IP) and the Ethics associated with Confidential and Proprietary Data

IPC-1752 Declaration Classes

**Manufacturing Data
- The Same for all three
classes (2, 4 & 6)**

Homogenous

Part

Yes / No

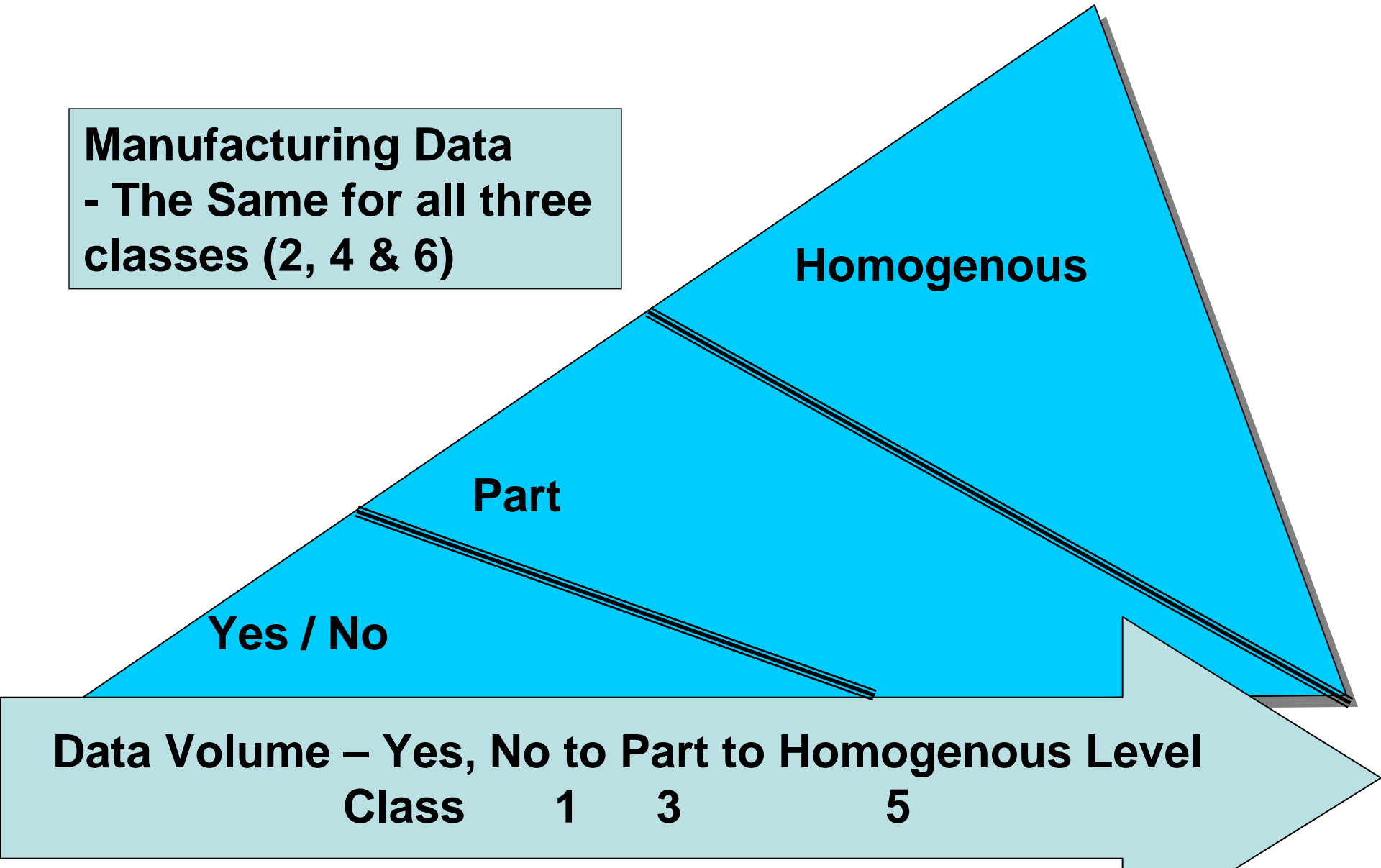
Data Volume – Yes, No to Part to Homogenous Level

Class

1

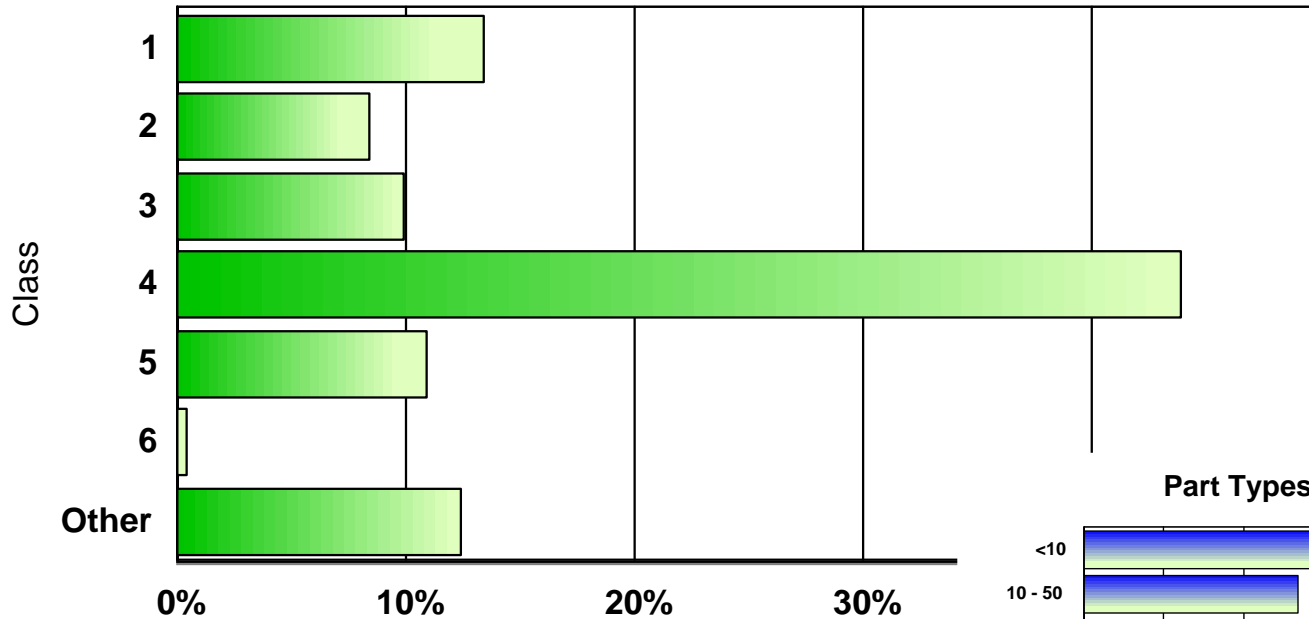
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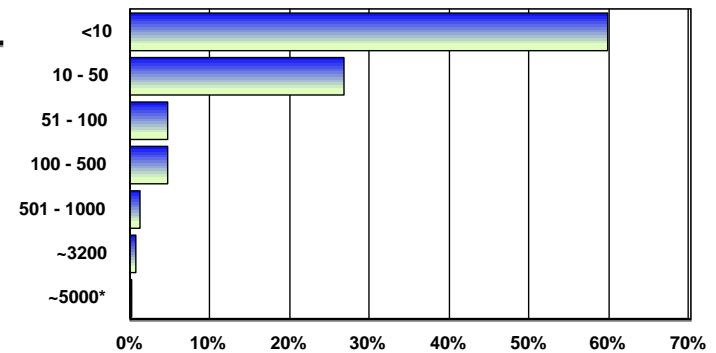


Requests to KEMET – 2005 YTD

Declaration Requests by Draft IPC 1752 Class



Part Types per MCD Request



*Excludes Distributors who have acquired completed NEDA spreadsheet for the full catalog

Requests to Phoenix Contact

October 2005

99% simple Yes / No questions (Distributors & Customers)

 Full Material Declarations come from
3rd Party Consultants

300 to 400 SKU requests a week

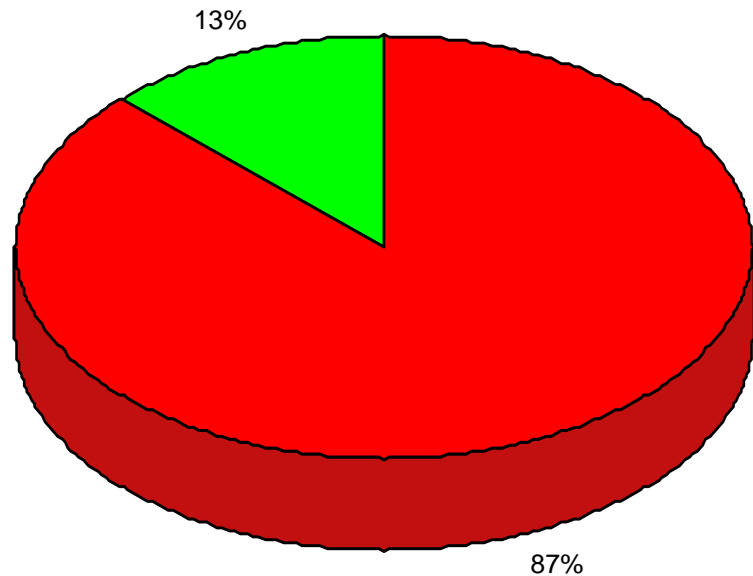
And a few weeks later;


60% returns for Manufacturing Data

Is More Better?

- A “significant disconnect” between what some customers are asking for and their suppliers are willing to deliver.
- Many suppliers concur with DCA’s call for a compromise on adequate declaration to support all forms of due diligence while protecting intellectual property.

Prediction of Draft IPC Use



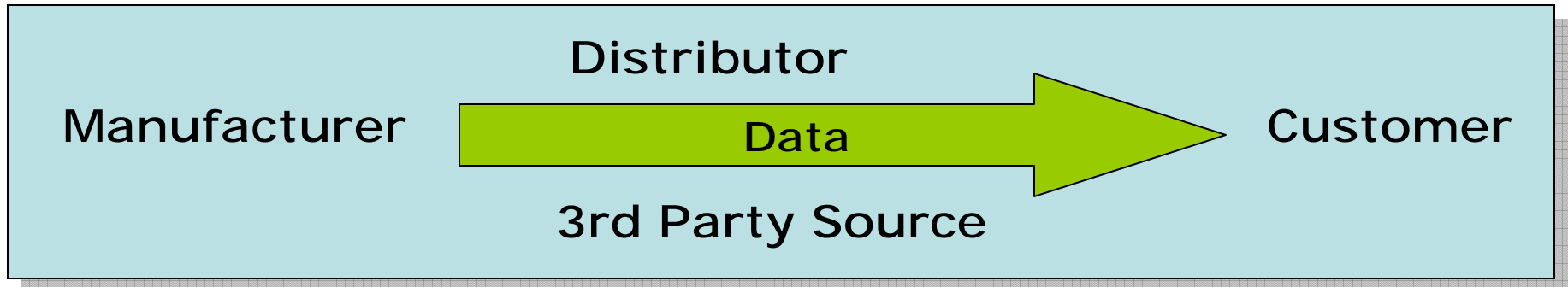
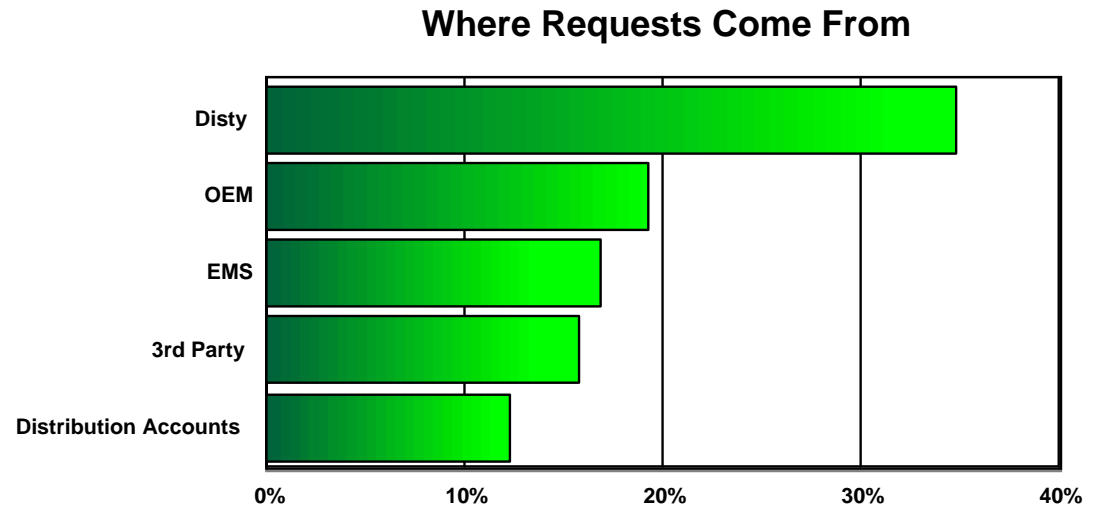
■ 1752-1 ■ 1752-2

Define the Format

- Numerous formats used
 - NEDA
 - JIG 101
 - JGPSSI
 - Umbrella (ZVEI)
 - IMDS / Compliance Connect
 - Customer Specific – Exponential
- Resource Swamp
 - Manual resources to
 - manage sending & receiving, follow-up
 - re-key or transform data from different format
 - System to manage and store data, provide audit trail

Getting the Declaration

- Manufacturer
 - Request
 - Website

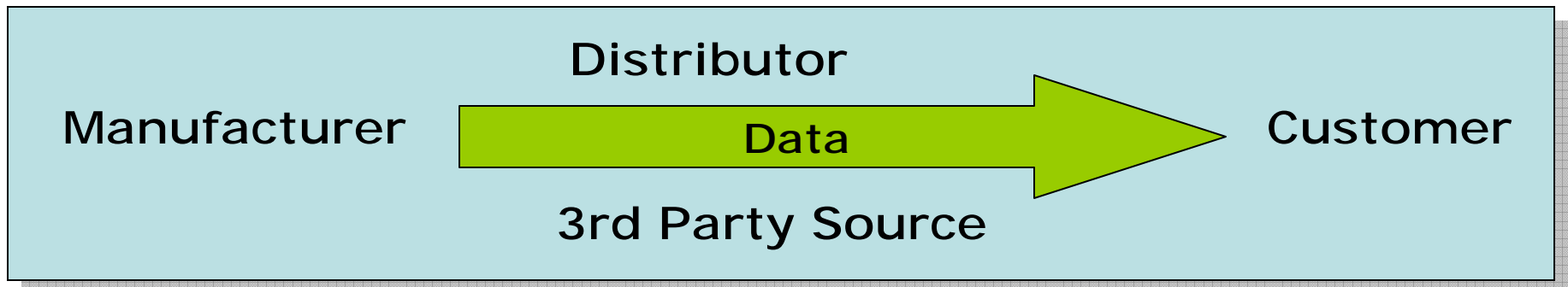
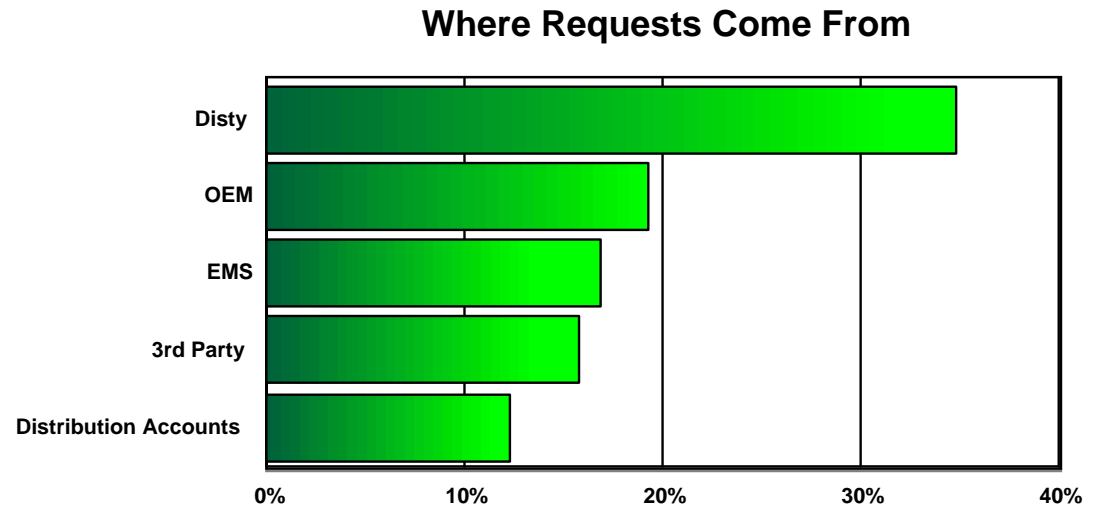


Transition to Web-accessible Data

Request Type	2003	2004	2005
General Inquiries	Manual	Web-accessible	Web-accessible
Product Roadmap	Manual	Web-accessible	Web-accessible
RoHS Compliance Status by Family	Manual	Web-accessible	Web-accessible
Compliance Status by Part Type	Manual	Manual	Web-accessible
Shipment C of C	Manual	Manual	Automatic
Product Family C of C	Manual	Manual	Web-accessible
Material Content Declaration (MCD)	Manual	Manual	Web-accessible (Oct'05 – Jan'06)
Individual Request (Various Formats)	Manual	Manual	Manual

Getting the Declaration

- Manufacturer
 - Request
 - Website
- Distributor
- 3rd Party



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A very close solution?

- IPC-1752
 - Has advantages
 - Common format
 - Automated response system
 - Supports B2B communication
 - Tamper proof
 - BUT.....
 - Industry Acceptance must follow
 - B2B data transfer is still in its infancy
- At the end of the day,
 - Standardization is good thing for all of us!

Ethics and Good Business Practice

- This data is not for sale ! – That is a contractual obligation between us
- NDAs need to become enforceable
- Should be treated just like pricing quotations and other transactions
- Please don't share our information with our competitors.

Manage the Declaration Response

- Validity of the response – exemptions correctly interpreted, HL correct, do you dialog at all with your supplier?
- Storage of all e-data
- Regular annual updates
- Product Change Notification (PCN)
- Verifying Up to date ?
- Unlike Y2K, RoHS impacts every process / every department and it won't go away

Conclusion

- With just 8 months remaining, a lot of work remains all throughout the supply chain
- A very mature approach, with common sense is needed to get the results needed in complying with RoHS
- Trust and respect of intellectual property (IP) are crucial in the Marketplace

Past Successful History

- **TQRD-CE**
 - Technology
 - Quality
 - Responsiveness
 - Delivery
 - Cost
 - Environmental, Health & Safety

