Supplier's Declaration of Conformity for ICT Regulations

David Ling
Regulatory Policy and Strategy Manager
Worldwide Technical Regulations

Shared objective for the future

Looking out 3-5 years, will we have IT product regulations (e.g., EMI, Safety, Telecom, others)

that …

- provide protection

- and promote competition of products

- and allow growth in a global economy

- and keep regulatory intervention to the minimum necessary?

Focus on the intersection of objectives …
Between industry and regulators

Likely scenario:
Small and Medium-size Enterprises (SME's) and Multinationals <u>may misconstrue</u> the regulatory intent of "certification" and how to manage for it.

Challenge:
Have regulatory requirements that <u>rightfully and clearly places responsibility and accountability</u> on the supplier for safe and legal products.

Who are the "SMEs" in the ICT sector

Oftentimes, the "SMEs" are the ODMs, OEMs and CMs to larger multinational companies.

They offer advantages including low labor rates, tax shelters, and local content for domestic marketing.

They have regional solutions:

- The Americas
  (Mexico, Puerto Rico, and Brazil)

- Asia
  (China, Thailand, Indonesia, Malaysia, Vietnam, and Philippines)

- Central Europe
  (Hungary, Czech Republic, Romania, Poland)

Examples

CM's
- Amtek Ind
- Avatar
- Avex Electronics
- Cal-Comp Electronics
- Celestica
- Compal Electronics
- Dovatron International
- EMS
- Flextronics
- Foxconn
- Hughes Electronics
- Inventec
- Jabil Circuit, Inc.
- LGE
- Lite-On
- Mack Technologies
- Medion
- Mitac
- Premier
- Quanta
- Sanmina-SCI
- SCI Systems, Inc.
- Solectron Corporation
- Tatung
- VTech
- WISTRON

Batteries
- Sony,
- Panasonic
- Sanyo
- Samsung
- LG Chemical
- BYD
- LiShin
- E-One Moli

Power Supplies
- Delta
- HiPro
- LiteOn
- Acbel
- Bestec
- Amperor

"Certification" mislead responsibility?

When conformity assessment is based on certification, SME's may wrongly believe that it is the certification body who is responsible that products comply with relevant technical regulations.

- Certification is viewed only as a administrative hurdle

- Certification offers no incentives for suppliers to manage regulations well, because it treats good actors and bad actors the same.

When conformity assessment is based on SDoC, SME's clearly understand that it is the supplier who is responsible that products comply with relevant technical regulations

- Coupled with effective surveillance, SDoC rewards and motivates suppliers to get better in program management and engineering judgment.

"Certification" misconstrue "safety"?

Certification does NOT equate to safe products.

U.S. Consumer Product Safety Commission Recalls of IT products (1994 – 2004)

- 22 recalls among 7 computer manufacturers (e.g., PCs, notebooks, monitors, power cords, batteries)

- 15 recalls among 14 consumer electronics manufacturers

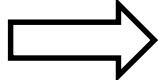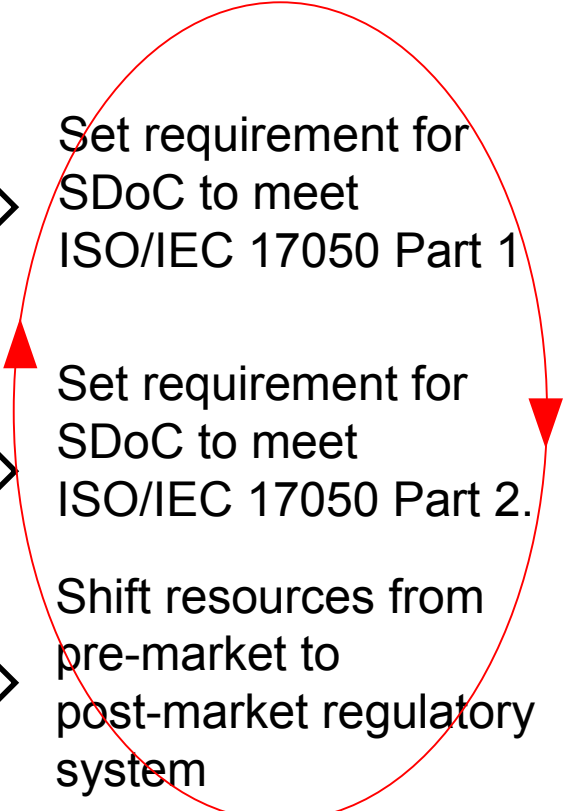- All products certified multiple times by third-party certification bodies

Certified and Approved by multiple third-parties

Recommended Actions:

Take regulatory actions that <u>matter most</u>
to make clear and raise visibility of the
supplier's accountability & responsibility
rightfully for safe and legal products.

Establish SDoC regulatory regimes

- <u>Set requirements for SDoC</u> so that
accountability & responsibility is rightfully place
on the supplier (and make certification
optional).

- <u>Set requirements for Supporting
Documentation of SDoC</u>, so that it's clear that
suppliers are responsible to manage on-going
compliance.

- <u>Conduct post market surveillance of SDoC and
Supporting Documentation,</u> instead of
government's reliance on certification artifacts.

Set requirement for
SDoC to meet
ISO/IEC 17050 Part 1

Set requirement for
SDoC to meet
ISO/IEC 17050 Part 2.

Shift resources from
pre-market to
post-market regulatory
system

Likely scenario:
"Over-built" conformity assessment requirements will continue to exist, and perhaps increase from country-to-country

Challenge:
"… conformity assessment procedures shall not be applied more strictly than is necessary to give adequate confidence that products conform with the applicable product requirements …"

– Article 5.1.2, TBT Agreement

"Overbuilt" conformity assessment requirements for some countries

ICT Product Safety & EMI Regulatory (as of March 05)

Legend:
- 🟩 Ref. Int'l Standards OR post-market CA
- 🟥 Ref. unique standards, OR pre-mkt CA
- ⬜ No requirements
- ▨ Pending requirements

	Safety		EMC	
	Std	CA	Std	CA
Australia	🟩	🟩	🟩	🟩
Brunei Darussalam				
Canada	🟩	🟥	🟩	🟩
Chile				
PRC	🟩	🟥	🟩	🟥
HK, China	🟩	🟩		
Indonesia				
Japan	🟩	🟥	🟩	🟩
Russia	🟩	🟥	🟩	🟥
Rep of Korea	🟩	🟥	🟩	🟥
Malaysia				
Mexico	🟥	🟥	🟩	▨
New Zealand	🟩	🟩	🟩	🟩
Papua New Guinea				
Philippines				
Singapore	🟩	🟥		
Peru				
Chinese Taipei	▨	▨	🟩	🟥
Thailand			▨	▨
US	🟩	🟥	🟩	🟩
Viet Nam				

	Safety		EMC	
	Std	CA	Std	CA
Argentina	🟩	🟥		
Austria	🟩	🟩	🟩	🟩
Belarus	🟩	🟥	🟩	🟥
Belgium	🟩	🟩	🟩	🟩
Bosnia-Herzegovina	▨	▨	▨	▨
Bulgaria	🟩	🟩	🟩	🟩
Croatia	🟩	🟥	🟩	🟥
Cyprus	🟩	🟩	🟩	🟩
Czech Republic	🟩	🟩	🟩	🟩
Denmark	🟩	🟩	🟩	🟩
Egypt	🟩	🟩	🟩	🟩
Estonia	🟩	🟩	🟩	🟩
Finland	🟩	🟩	🟩	🟩
France	🟩	🟩	🟩	🟩
Germany	🟩	🟩	🟩	🟩
Greece	🟩	🟩	🟩	🟩
Hungary	🟩	🟩	🟩	🟩
Iceland	🟩	🟩	🟩	🟩
Ireland	🟩	🟩	🟩	🟩
Israel	🟩	🟩	🟩	🟩
Italy	🟩	🟩	🟩	🟩
Jordan	🟩	🟥		
Kazakhstan	🟩	🟥	🟩	🟥
Latvia	🟩	🟩	🟩	🟩
Liechtenstein	🟩	🟩	🟩	🟩
Lithuania	🟩	🟩	🟩	🟩
Luxemburg	🟩	🟩	🟩	🟩
Macedonia	▨	▨	▨	▨

	Safety		EMC	
	Std	CA	Std	CA
Malta	🟩	🟩	🟩	🟩
Moldova	🟩	🟥	🟩	🟥
Morocco	🟩	🟩	🟩	🟩
Netherlands	🟩	🟩	🟩	🟩
Norway	🟩	🟩	🟩	🟩
Poland	🟩	🟩	🟩	🟩
Portugal	🟩	🟩	🟩	🟩
Romania	🟩	🟩	🟩	🟩
Saudi Arabia	🟩	🟥	🟩	🟥
Serbia & Montenegro	▨	▨	▨	▨
Slovakia	🟩	🟩	🟩	🟩
Slovenia	🟩	🟩	🟩	🟩
Spain	🟩	🟩	🟩	🟩
South Africa	🟩	🟥	🟩	🟥
Sweden	🟩	🟩	🟩	🟩
Switzerland	🟩	🟩	🟩	🟩
Tunisia	🟩	🟩	🟩	🟩
Turkey	🟩	🟩	🟩	🟩
Ukraine	🟩	🟥	🟩	🟥
United Kingdom	🟩	🟩	🟩	🟩
Uzbekistan	🟩	🟥	🟩	🟥

Examples of <u>Overbuilt</u> CA requirements

Requirements for ICT Manufacturer

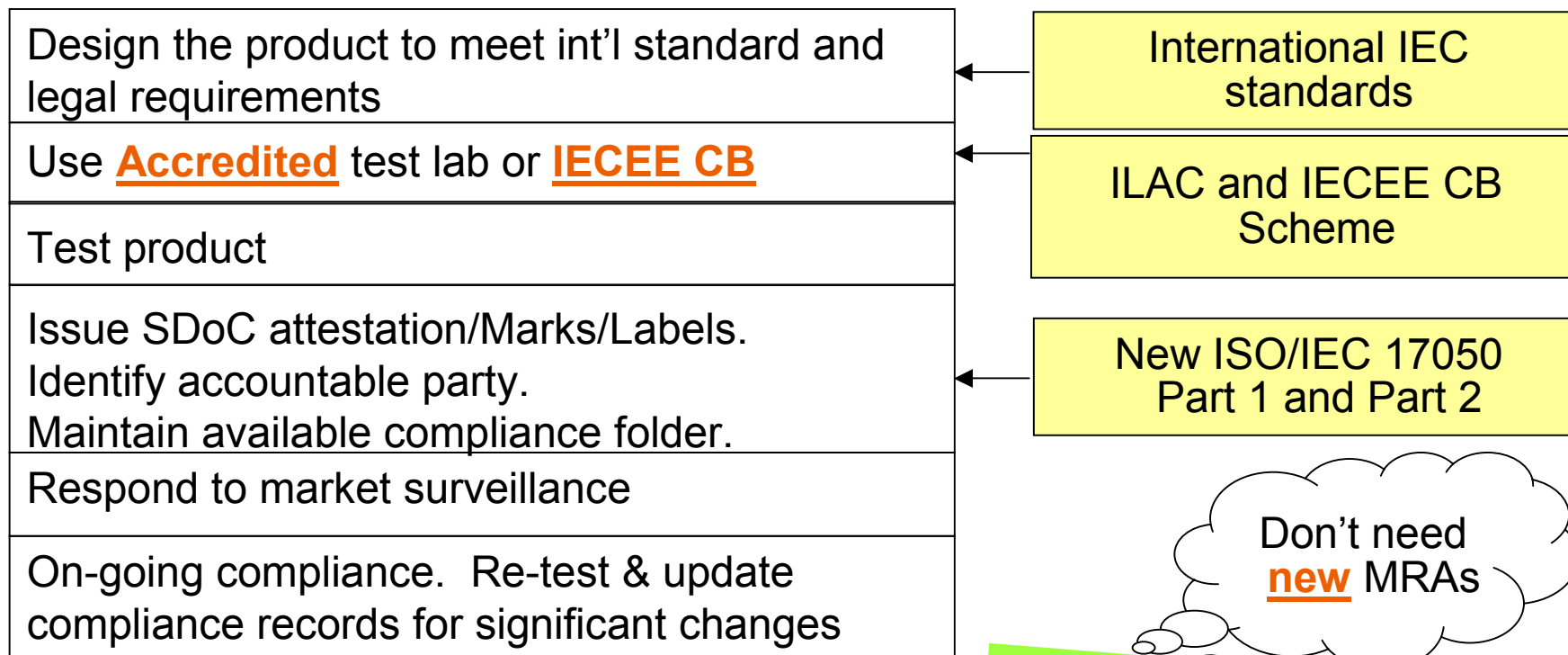| |
|---|
| Design the product to meet int'l standard and legal requirements |
| Use <u>accredited</u> test lab or <u>IECEE CB</u> |
| Test product |
| Submit samples, conduct audits |
| Use gov't designated test lab |
| Issue SDoC attestation/Marks/Labels. Identify accountable party. Maintain available compliance folder. |
| Obtain required pre-mkt certificates |
| Respond to market surveillance |
| On-going compliance. Re-test & update compliance records for significant changes |
| Conduct quality system audits, etc. |

Use gov't designated test lab ➜ Need Gov-to-Gov MRA

Obtain required pre-mkt certificates ➜ Need Gov-to-Gov MRA

Conduct quality system audits, etc. ➜ Need Gov-to-Gov MRA

CA for <u>adequate</u> confidence

Requirements for ICT Manufacturer

Design the product to meet int'l standard and legal requirements
Use **Accredited** test lab or **IECEE CB**
Test product
Issue SDoC attestation/Marks/Labels. Identify accountable party. Maintain available compliance folder.
Respond to market surveillance
On-going compliance. Re-test & update compliance records for significant changes

International IEC standards

ILAC and IECEE CB Scheme

New ISO/IEC 17050 Part 1 and Part 2

Don't need **new** MRAs

Overbuilt CA requirements burden suppliers, citizens and economy

ICT Product lifecycle (3-15 months)

Obsolete

Design the product to meet int'l standard and legal requirements

Test & maintain compliance folder

SDoC attestation/Marks/Labels. Identify accountable party. Compliance folder available.

Ship, based on SDoC

Submit samples, audits

Use gov't designated test lab

Obtain pre-mkt certificates

Ship
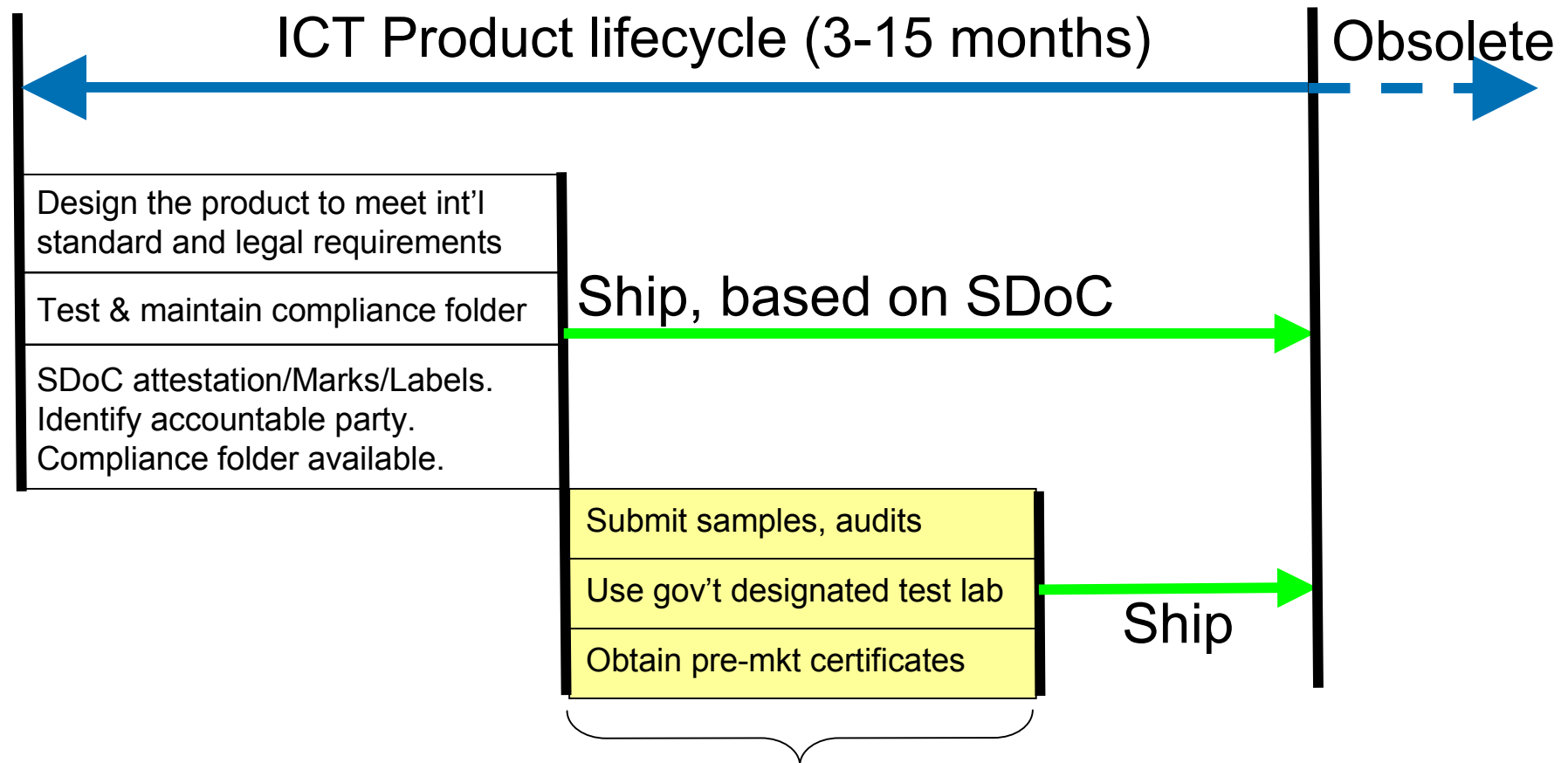
- **For suppliers**: Delay 4-12 weeks, avg. result in (1) delay in revenue or (2) unrecoverable revenue
- **For citizens**:   Less choice, higher cost products
- **For economy**: Impact trade, hurt e-commerce and e-government objectives

Recommended Actions:

Take regulatory actions that <u>matter most</u>
<u>for customers and suppliers</u>

- By applying conformity assessment procedures necessary to give <u>adequate confidence</u> that products conform with the applicable product requirements
- By <u>removing "overbuilt" CA requirements</u>

For Users/Customers …

- Can enjoy products of most recent technology earlier at lower price

For Domestic and Global suppliers …

- Reduce re-testing and certification related costs
- Expect earlier revenue flow
- Reduce barriers to foreign markets
- Target government resources on bad actors.

Set requirement for SDoC to meet ISO/IEC 17050 Part 1

Set requirement for SDoC to meet ISO/IEC 17050 Part 2.

Shift resources from pre-market to post-market regulatory system

Likely scenario:
Non-tariff trade obstacles related to CA will continue to exist, and perhaps increase from country-to-country

Challenge:
- "conformity assessment procedures are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade" … Article 5, TBT Agreement

- "whenever possible, that results of conformity assessment procedures in other Members are accepted, even when those procedures differ from their own" … Article 6, TBT Agreement
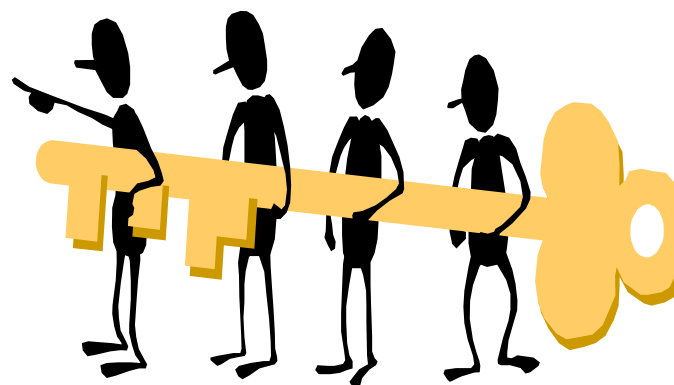
Bilateral Agreement Model - MRA
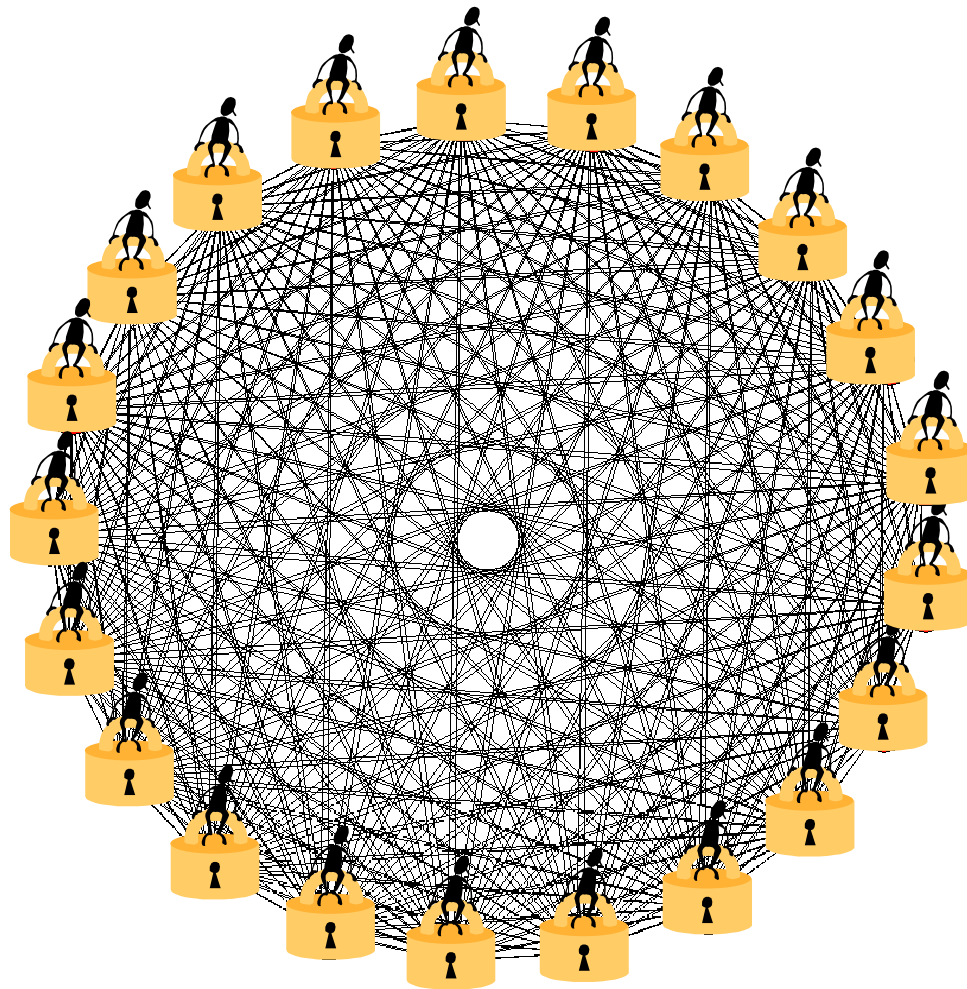
- Years and years to realize … if ever.

- High-cost model

- Complex and redundant

- Mistrust, Lock-in

- Burdens domestic and foreign manufacturers

# bilateral agreements n (n-1)/2
n = # countries with unique regulatory systems

SDoC Model

Lowest-cost model for safe, legal products to market

Recommended Actions:

Take regulatory actions <u>that matter most</u> to not have (CA-related) unnecessary obstacles to international trade

- By establishing a trade-friendly approach to conformity assessment for better "portability" of results. The need to negotiate political agreements on mutual recognition becomes moot under an SDoC regulatory regime.

- Do not discriminate on the basis of the geographic location of a testing lab or certification body. This issue becomes moot under an SDoC regulatory regime.

- Conduct surveillance audits of SDoC and supporting documentation, whether they be domestic manufacturers and importers equally. Note that conducting <u>only</u> customs inspection for certification marks is a bias against importers, and misses surveillance of domestic products.

Set requirement for SDoC to meet ISO/IEC 17050 Part 1

Set requirement for SDoC to meet ISO/IEC 17050 Part 2.

Shift resources from pre-market to post-market regulatory system

4 Types of SDoC

From the ITA's recently adopted "Guidelines for EMC/EMI Conformity Assessment Procedures",

The four types of SDoC are summarized below in descending order of complexity:

- Supplier's Declaration of Conformity (SDoC) type 1 – the supplier or manufacturer of the equipment declares the equipment meets the technical and administrative requirement. A testing laboratory recognized by the regulator tests the equipment and the supplier registers this equipment with the regulator.

- Supplier's Declaration of Conformity (SDoC) type 2 - the supplier or manufacturer of the equipment declares the equipment meets the technical and administrative requirements on the basis of test reports by a testing laboratory recognized by the regulator. No registration of the equipment with the regulator is required.

- Supplier's Declaration of Conformity (SDoC) type 3 – the supplier or manufacturer of the equipment declares the equipment meets the technical and administrative requirement. The supplier registers the equipment with the regulator. Testing of the equipment by recognized testing laboratory is not mandatory. If testing is undertaken, the choice of the testing laboratory rests with supplier or manufacturer.

- Supplier's Declaration of Conformity (SDoC) type 4 – the supplier or manufacturer of the equipment declares the equipment meets the technical and administrative requirement. Registration of the equipment with the regulator is not required and testing of the equipment by recognized testing laboratory is not mandatory. If testing is undertaken, the choice of the testing laboratory rests with supplier or manufacturer.

Recommendation for regulators

From the ITA's recently adopted "Guidelines for EMC/EMI Conformity Assessment Procedures",

- Supplier's Declaration of Conformity (SDoC) type 1
- Supplier's Declaration of Conformity (SDoC) type 2
- Supplier's Declaration of Conformity (SDoC) type 3
- Supplier's Declaration of Conformity (SDoC) type 4

We believe:
- The 4 types of SDoC is sufficient.
- Do not create new types of SDoC, at the detriment to clarity, unnecessary burden, and portability of results.

Recommendation for regulators

From the ITA's recently adopted "Guidelines for EMC/EMI Conformity Assessment Procedures",

- Certification by a regulator or delegated entity
- Certification by 3rd party

- Supplier's Declaration of Conformity (SDoC) type 1
- Supplier's Declaration of Conformity (SDoC) type 2
- Supplier's Declaration of Conformity (SDoC) type 3
- Supplier's Declaration of Conformity (SDoC) type 4

If currently …	… then …
No regulation	No regulation okay, or move to one of the 4 SDoC types
SDoC	Continue with SDoC
Certification	Move to one of the 4 SDoC types

Sense of urgency

- The necessary standards, private-sector accredited and/or CB test labs, and good regulatory practice know-how exist, and SDoC is shown to be effective for IT regulations. There is no reason for incurring cost and lost opportunities for countries, manufacturers and citizens.

- Doing so would improve an economy's competitiveness by opening the way for ICT-enabling technology.

- Now is the time to garner the political will and momentum to move to SDoC, especially when new IT regulations are emerging. Or over time, the IT market will be fragmented and locked in by unique conformity assessment requirements.

We need regulators on the right "track" …

... with a global vision to provide protection, promote competition, allow growth, and keep regulatory intervention to the minimum necessary.
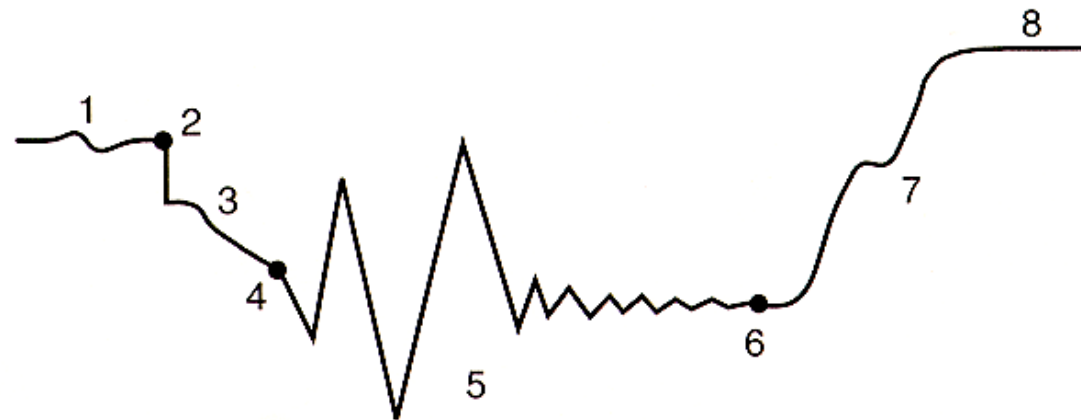
To do so with a sense of urgency.

With input from the private sector.

No one said it's going to be easy

to move from

Certification to SDoC.

1. Daily Routine
2. Change Event
3. Decline
4. Letting Go

5. Confusion/Creativity
6. Insight/Vision
7. Renewal
8. New Routine

Davis & Dean, *Guiding Organizational Change &*
ESI *Change Readiness Checklist*

If you can't take a "GIANT" leap,

start small …
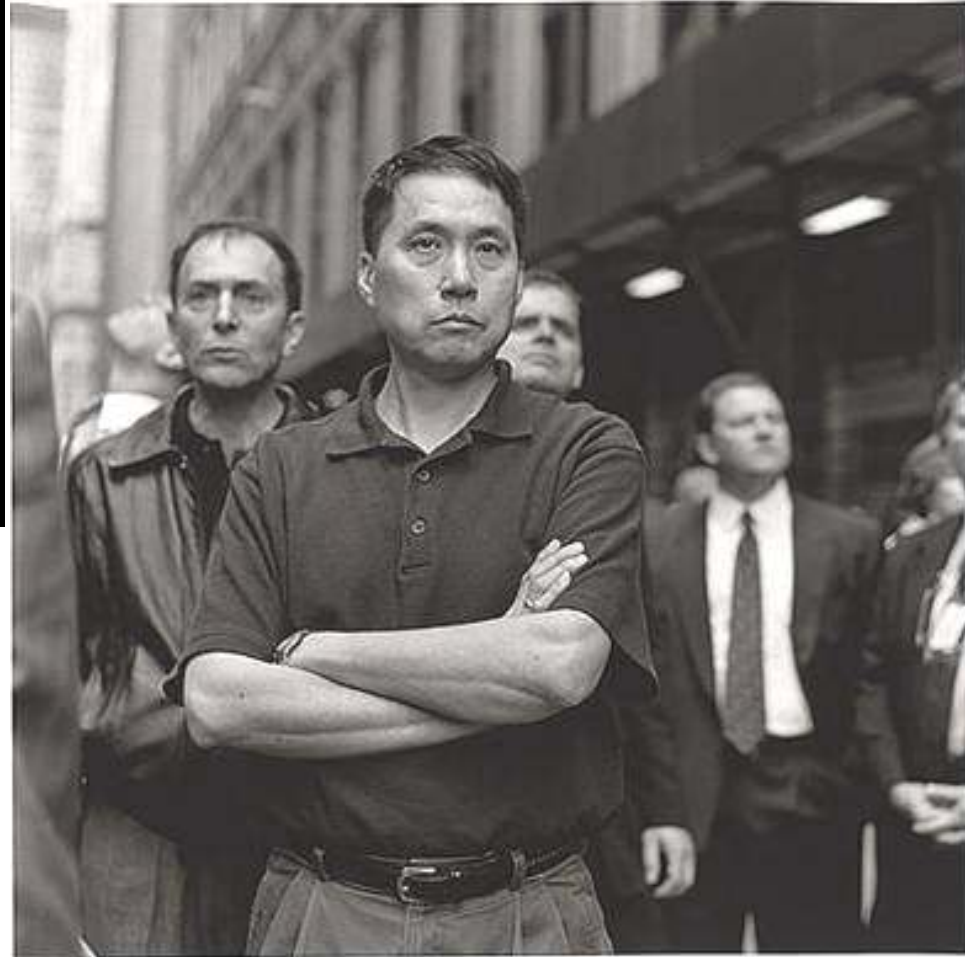
… with a small step.

… and reduce your risk.

Remember, you have to take a step if you want to keep up.

It's all about you.

Because if you don't, who will?

So that together, we can succeed.

Backup

- Backup Slides

ISO/IEC 17050 SDoC standard

For IT EMI and Product Safety regulations, regulations should **require conformance to ISO/IEC 17050 Part 1 and Part 2**

Part 1: SDoC

- General requirements
- Contents of the declaration of conformity
- Form of declaration of conformity
- Accessibility
- Product marking
- Continuing validity of the declaration of conformity

Part 2: Supporting documentation

- General requirements
- Traceability
- Availability
- Retention period
  - **"in accordance with applicable laws and regulations." Regulations should specify retention period.**
- Contents of the supporting documentation
  - **Regulations should specify necessary content elements**