

# **Dictionaries are a REAL Problem!**

## **“Can You Move a Dinosaur Onto the Internet”?**

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## Topics

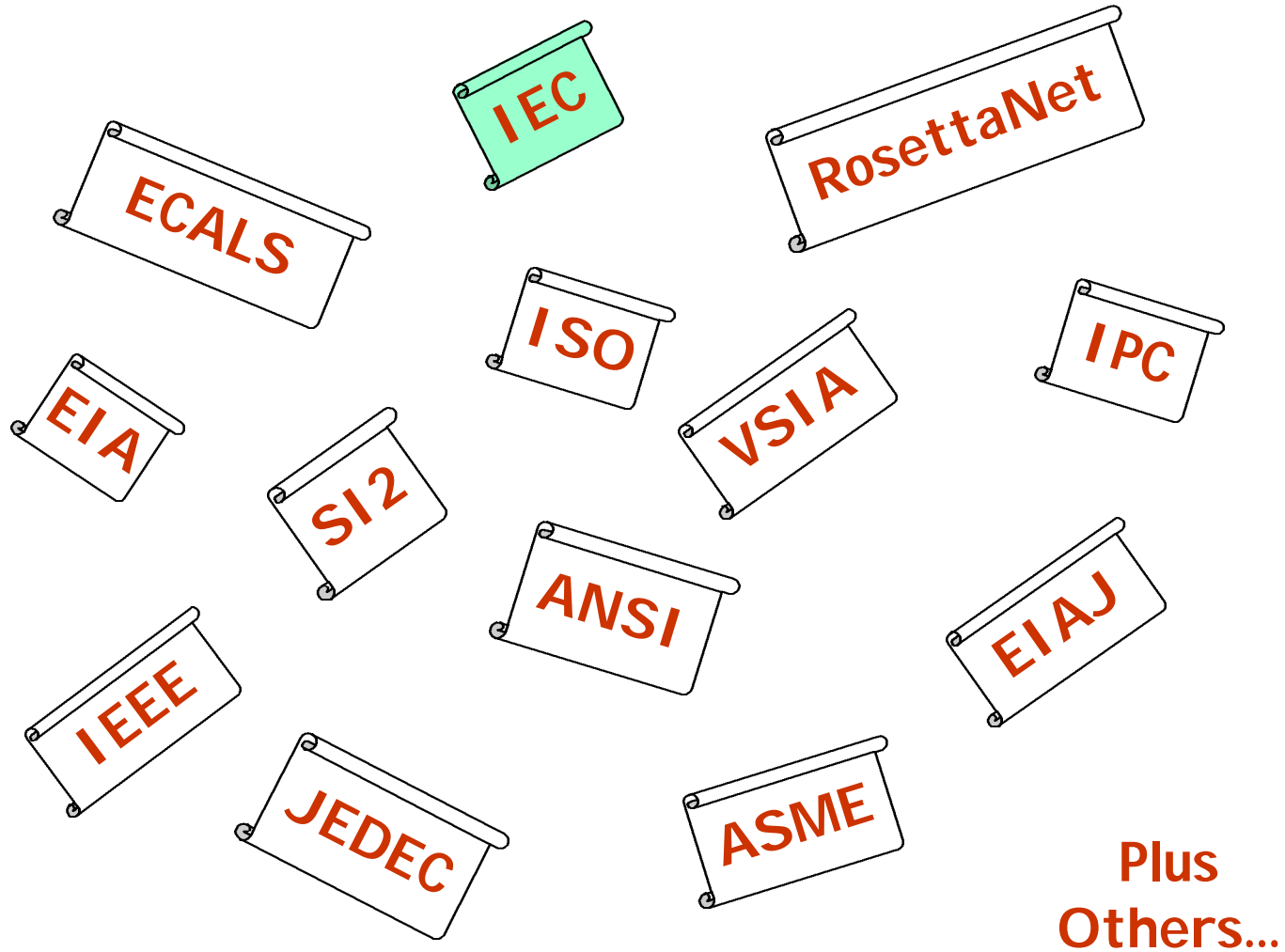
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- **Relevant Standards for EC Domain**
- **Standards Today -- Observations**
- **Standards Copyrights in the Internet Age**
- **What's the Problem?**
- **Summary of Key Issues**
- **The B2B Requirement**
- **What Options Are There?**
- **The Solution?**



# Standards in EC Domain

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## **Standards Today - Observations**

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- **Standards may be purchased via www site (from the appropriate Standards Organization, or proxy)**
  - **All those web sites have unique/confusing GUI**
  - **Must purchase Standards before knowing content**
  - **Standards overlap, and compete**
  - **Standards form available (at best):**
    - Hardcopy only
    - CD sometimes
    - Scanned images of pages
    - PDF
  - **Copyright statements severely limit use**
- 



# Standards in EC Domain

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The EC Technical Dictionary has several CharacteristicDefinitions and PropertyDefinitionSets that reference other standards. What standards do I need in order to be able to get the complete semantics for these entries and their value codes?

Currently they are available only in hard copy. The current copyright and redistribution terms prohibit our inclusion of them in the ECTD.

As of 7/1/00, the complete list of these other standards is:

| Name          | Cost<br>(US \$) | Available From      | Note | Used For                           |
|---------------|-----------------|---------------------|------|------------------------------------|
| JESD 22C-101  | 30.00           | Global 800 854-7179 |      | ESD CDM                            |
| JESD-22A-114A | 33.00           | "                   |      | ESD HBM                            |
| EIA 724       | 36.00           | "                   |      | Lifecycle                          |
| J-STD-020A    | 42.00           | "                   |      | Moisture Sensitivity               |
| ISO 8601      | 53.00           | "                   |      | Date/time formats                  |
| JESD30-B      |                 | "                   |      | Package                            |
| JEP 95        | 395.00          | "                   |      | Footprint                          |
| ISO 843       | 37.55           | "                   | 1    | Latin name conversion rules        |
| IEC 61360-4   | 139.12          | www.iec.ch          |      | CharacteristicDefinition semantics |
| IEC 61360-1   | 94.36           | "                   |      | Value Formats, SI Units            |
| SIU           |                 | physics.nist.gov    |      | International System of Units      |
| ASME Y14.5M   | 95.00           | ASME 800-THE-ASME   | 2    | Footprint                          |
| ASME Y14.5.1M | 30.00           | "                   | 2,3  | Footprint                          |



# Standards Copyrights in the Internet Age !

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# What's the Problem?

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- **The Internet Age -- Observations**

- The \$\$\$ Market Opportunity is HUGE (Multi-Giga-buck)
- Demand for B2B Solutions is HUGE (Multi-Giga-buck)

- **Characteristics of B2B Solutions**

- Global (may have language support implications)
- Require unambiguous, computer-sensible terms definition
- Users: "Give me what I want, when I want it"

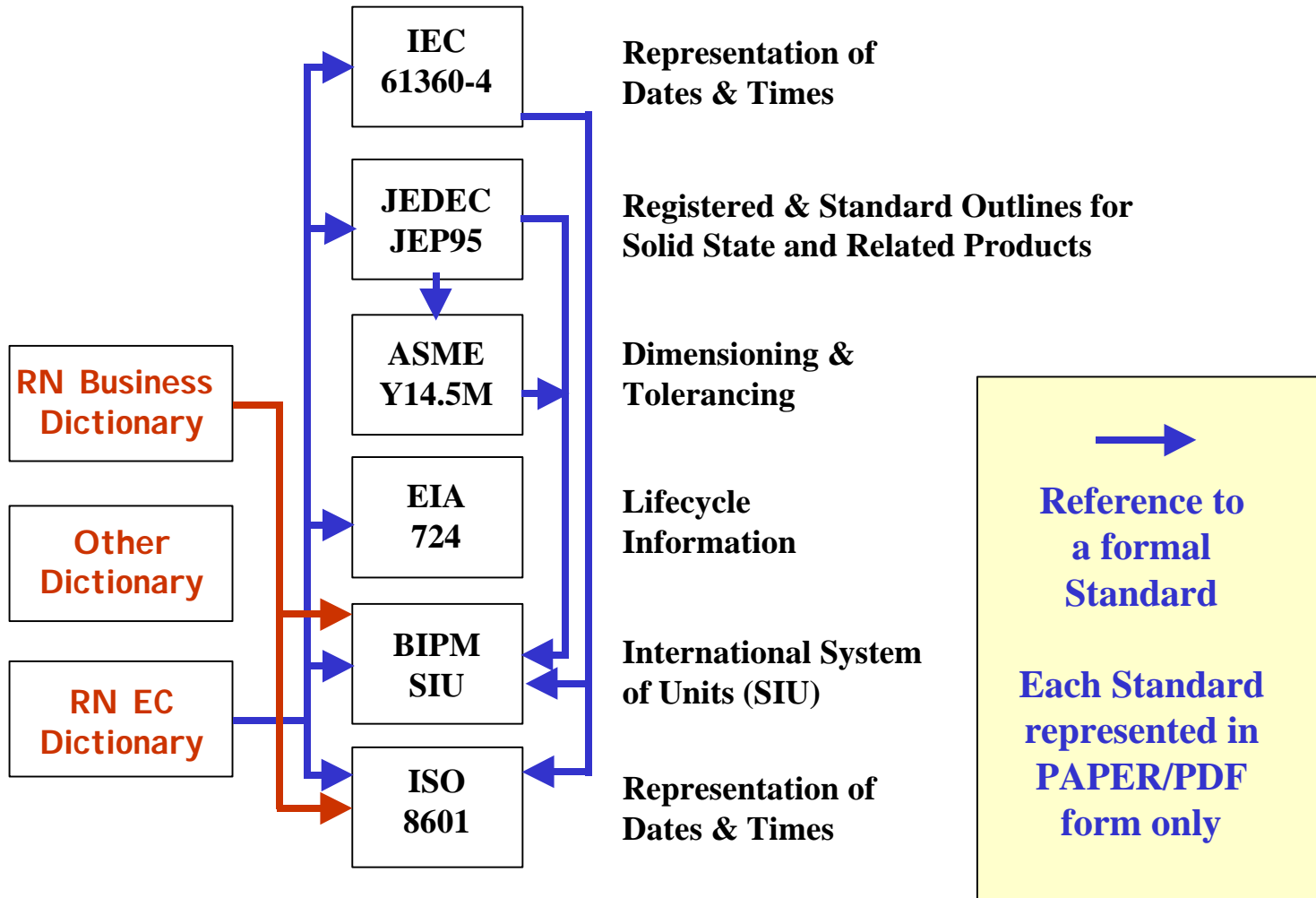
- **Standards Organizations are Dinosaurs!**

- Only PAPER/PDF available, at best
- B2B applications require computer-sensible semantics!
- B2B use of current dictionaries impossible!

A graphic of a scroll with the text 'Dead sea scrolls' written on it in red. The scroll is depicted with a white background and a black border, with the text centered in a bold, red, sans-serif font.

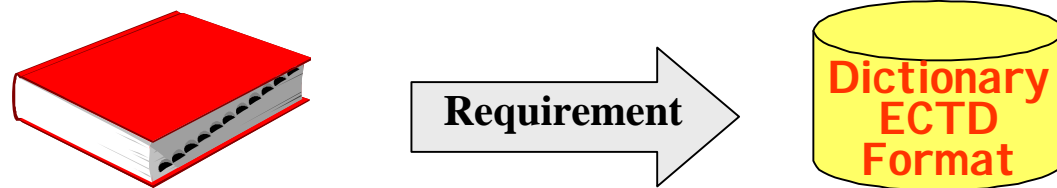
Dead  
sea  
scrolls

# “Spider-web” of PAPER Standards

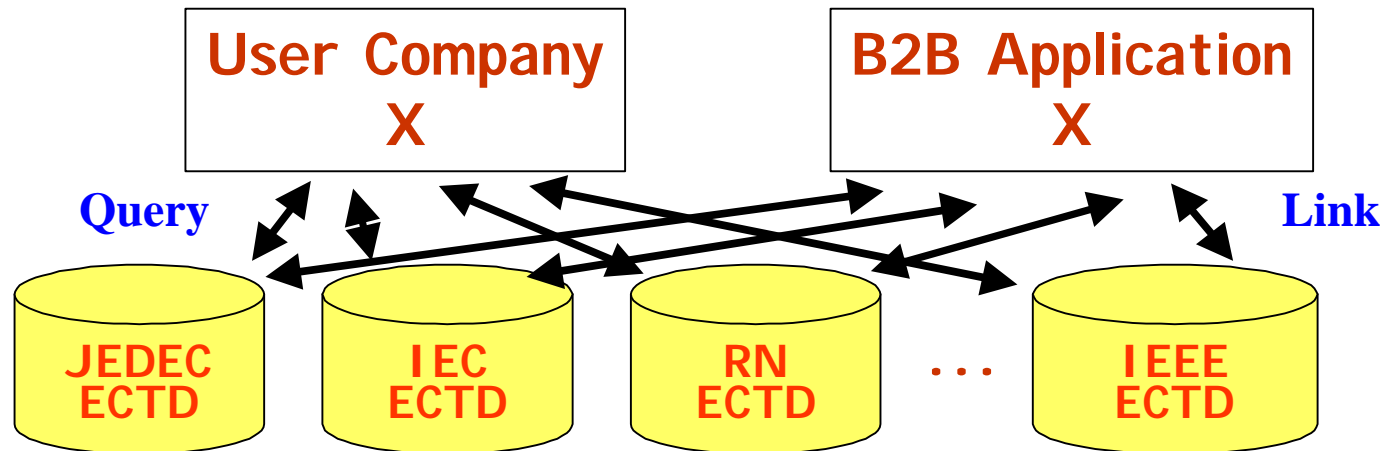


## The Key Issues

- Today's Standards are NOT Computer-Sensible !



- Standards Business Model Needs "Internet-Update"



# What's the B2B Application Requirement?

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- **Computer-Sensible Dictionaries**
  - Contents to accommodate B2B applications (terms definitions)
  - Standards accessible over the Internet (link/query)
  - Distributed dictionaries and owners
  - Can be “linked-to” or delivered in response to “query”
  
- **Internet-based, Internet speed lifecycle management**
  - Timely industry input on Standards
  - Improved Process Management
  - Change, with SPEED (no dinosaurs permitted)
  
- **Reasonable Standards Business Model**
  - Not necessarily entirely free
  - New Business Models may Generate MORE \$



# Typical Supply Chain B2B Applications

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- **RosettaNet for EC Domain (Si2 QuickData)**

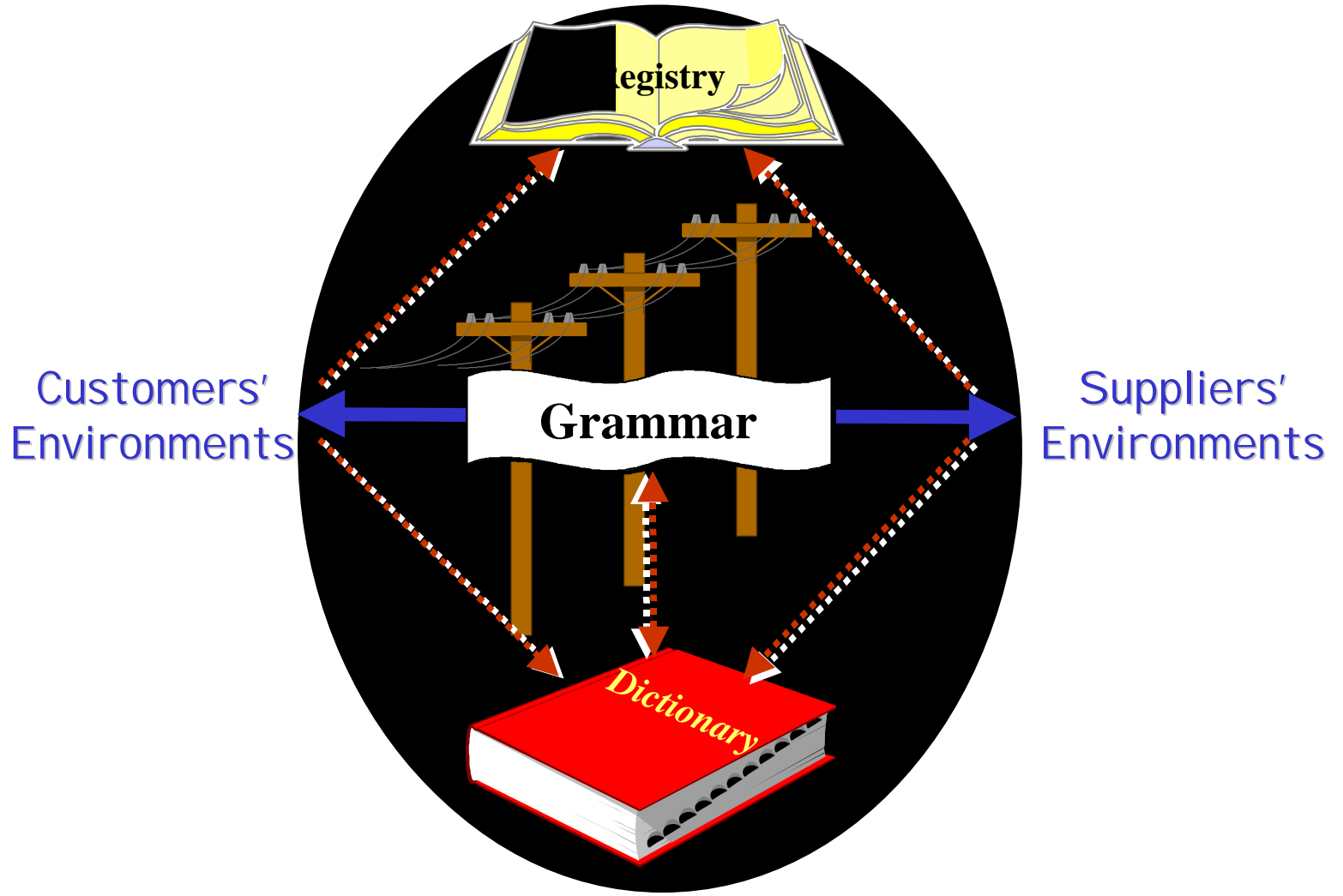
- PIP™ 2A9 “Query EC Technical Information”
- Customers
  - Distributors
  - Manufacturers
  - Information Providers
  - Solution Providers
- 30 Companies on EC BoD, world-wide

- **RosettaNet for IT Domain**

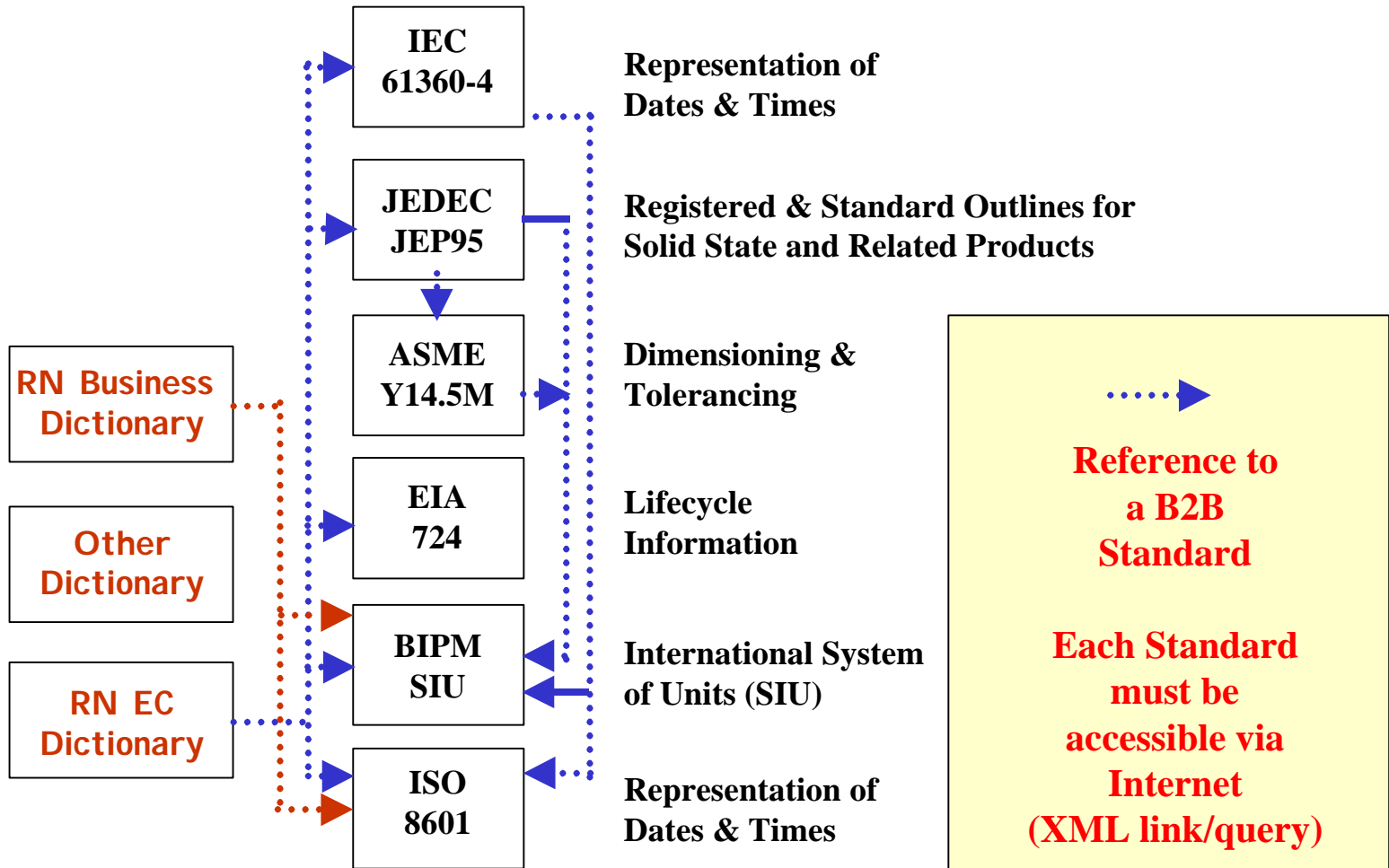
- Approximately 20 PIPs™
- 31 Companies on IT BoD, world-wide



# QuickData/ PIP™2A9



# “WWW-Web” of Standards Is Required



## QuickData Key Architectural Elements

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- **Dictionary: Ensures Conformance to a Particular Domain of Use**

- Simple Characteristic and Characteristic Sets (Properties)
  - Names and symbols
  - Characteristic definitions
  - Characteristic value format, type, and units specifications
  - Conditions
  - Reference standard
  - Version
- Product Information Objects
  - EDA Symbol (PinMap), Footprint, ...
- Taxonomy
  - Component class (e.g., memory, has property “access time”)

- **Registry: Identifies Compliant Participants**

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## **Desired Dictionary Copyright for B2B**

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this copyright notice and disclaimer of warranty.**



## The Only Apparent Option...

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- **B2B industry combines efforts to create their *own* EC Terms Dictionary standard**
- **B2B industry provides a maintenance agency that works at *Internet Speed***
- ***NOT* the preferred solution...**
- **But the Internet world won't wait for the Dinosaur to catch up!**



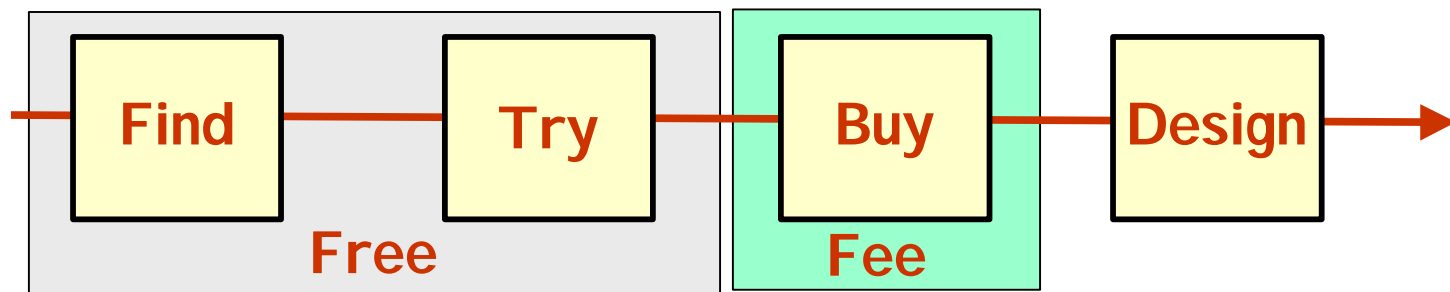
## Hold On !! Some Great NEW NEWS !!

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- **IEC has granted permission to use IEC dictionary content in XML dictionaries!**
  - “We are happy to grant you permission on the basis of your statement as long as the credits are given as indicated and that the IEC receives a copy of the XML dictionary for its reference in this matter”.  
[Jonathan Buck, IEC Central Office]
  - General Credit:(used when referencing the “whole body of work”):  
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  - Shorter credit: (e.g., used when referencing a term in a popup window):  
“IEC 61360-4 (1997)”



# Proposal: Standards should be B2B Also !!



**Identify candidate Standards matching the query**

Standards Bodies are unknown

Search multiple organizations

**Evaluate and Compare candidate Standards**

Technical Data, e.g. problem coverage

Business Data, e.g. Cost and Copyrights

Product Options (XML Dictionary, hardcopy, scanned image PDF, text PDF, editable,..)

**Use the selected Standard**

The "book"  
**Fee**

or

the ECTD XML-format Dictionary Instance!  
**Free**



# Summary: Things to Think About

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## ■ Observation

- No Standard for Standards (Form, Pricing, Copyright, ...)
- Standards are a VERY Competitive Business
- But not YET a B2B Industry !!

## ■ Requirements

- Dictionary Instances to Support B2B Applications
  - Based on “use model...”
- Common B2B Online Interface
  - FIND/TRY/BUY/USE for Standards
  - Maintenance support (“Change this term in that Standard...”)
  - Automatic cross-reference to related standards
- “Registry of Standards” (NIST?)



Book: MetaCapitalism  
Grady Means, David Schneider

Article: James W. Michaels  
Forbes.com 7/17/2000  
B2B: Best of the Web

# “MetaCapitalism: An Economy on Steroids”

