



National Standardization Structure: Moving Forward

Carl Cargill
Chief Standards Officer, Sun Microsystems
16 January 2008, Beijing, China



Overview

- **Standardization: Basic assumptions**
- **Limitations and Dangers**
- **Opportunities**
- **Using Open Source as Policy Tool**
- **Participation Patterns as an Example of Informal Industrial Policy**

BASIC ASSUMPTIONS

- ◆ **Standards Are Social Policy Tools**
 - ◆ They are “Impure Public Goods”
 - ◆ They can Balance or Manage Social Growth

- ◆ **Standards Have Multiple Economic Roles**
 - ◆ They can be used to Create, Develop, and Regulate Markets
 - ◆ They can set Industry Policy

- ◆ **Standards are also Management Tools**
 - ◆ They aid in change management
 - ◆ They allow structured market development

ICT STANDARDIZATION ISSUES

- **China is faced with a dilemma**
 - **ISO/IEC JTC 1 is basically a G7 preserve**
 - **The formal bodies are controlled by Multinational Corporations**
 - **Consortia are basically US controlled – legally, technically, politically**
 - **China's activities are regarded with suspicion**
- **China has two options:**
 - **Play in the current arena**
 - **Create a new arena**

THE CURRENT ARENA

- ◆ Current system based on ISO's principles of:
 - ◆ (i) Openness.
 - ◆ (ii) Balance of interest.
 - ◆ (iii) Due process.
 - ◆ (vi) An appeals process.
 - ◆ (v) Consensus, which is defined as general agreement...
- ◆ IPR must be RAND
 - ◆ No definition of RAND
 - ◆ No guarantee that RAND will exist

THE CURRENT ARENA

- **China – in WAPI:**
 - 8 -17 for WAPI, 24-3 for 802.11i
- **China – In consortium**
 - 3% of membership
- **RAND royalties are a problem**
- **Allies in ISO/IEC JTC1?**
 - In the OOXML battle, 11 countries joined as “ P members” to vote; 25 joined as “O members”
- **China has almost always had the rules changed as it tried to participate**

THE PROPOSED ARENA

- **Create your own consortia for standardization**
 - **Consortium are a legitimate standardization method**
 - **They are not constrained by WTO rules**
 - **They are legitimate procurement vehicles for governmental procurements**
- **DO NOT draw clear legal distinctions between consortium, SDOs, and alliances**
 - **Allow organizations to be fluid in their approaches**
 - **Change as the situation warrants**

THE PROPOSED ARENA

- ◆ Create a standards model that:
 - ◆ Uses regulation lightly but consistently
 - ◆ Controls the SSO
 - ◆ By controlling source, process is managed
 - ◆ By managing process, output is managed
- ◆ Mandate a set of rules for consortia and other standards organizations
 - ◆ Create only basic rules for SSOs
 - ◆ Legitimize output of these organizations

THE PROPOSED RULES

1. The SSO must develop technical specifications.
2. The SSO must be recognized by the government.
3. The SSO must have a well-defined, legally acceptable set of procedures and processes.
4. The SSO must have a clear and legitimate IPR policy that requires, at a minimum, ex-ante RAND licensing of all IPR included in its specifications.
5. The technical specifications created by the organization must be implemented by two or more competing entities prior to specification release, following widespread public review of the specification.
6. There should be reference implementations, competing implementations, and test methods to validate conformance as appropriate.

THE PROPOSED RULES

- ◆ Require that ALL Standards Organizations created in China are certified in China
 - ◆ Currently common practice in US among SDOs
- ◆ Make participation valuable
 - ◆ Give participants “preferred provider” status in governmental procurement
 - ◆ Provide incentives for users to use and providers to provide
- ◆ Hold the buyers and sellers to Commitments
 - ◆ (Users) If you specified it in procurements, you will follow through and buy it.
 - ◆ (Providers) If you sell it as “standard”, it will meet standard.

THE PROPOSED RULES

- ◆ Allow market dynamics to occur
 - ◆ Organizations can compete for resources and programs
 - ◆ Market will reward those that meet government and market needs and requirements
- ◆ Control points are social good
 - ◆ Allows all aspects of society be helped
 - ◆ Counters the current problems
- ◆ Can Act as model to other nations

THE PROPOSED RULES

- ◆ Require certification of products to standards produced
 - ◆ Organizations must produce tests and reference implementations
 - ◆ Companies building products must certify compliance to specification
 - ◆ Use the tests to encourage interoperability
- ◆ Create National Certification and Testing Laboratories
 - ◆ License test houses to handle all ICT products – worldwide
 - ◆ Develop testing and certification expertise
 - ◆ Expand to all products and sectors

THE TEST CASE

- ◆ Use ODF-UOF-OOXML as a test case
- ◆ Begin by requiring that all implementations (both proprietary and Open Source) offered to the government certify conformance to originating specifications
 - ◆ Require originating groups to provide reference implementations and test suites
 - ◆ Require that all implementations pass tests and certify compliance
- ◆ Create a program that enforces procurement requirements

THE WAY FORWARD

- ◆ If the test case is successful, formalize the standards regime.
- ◆ Find allies in South America, Africa, the Middle East, the EU Accession Countries, and South Asia
- ◆ Encourage these countries to adopt China's Standardization model
- ◆ Take the model to ISO and IEC
 - ◆ Call for a revitalization of these organizations
 - ◆ Vote in your new regime
- ◆ Assume leadership

CONCLUSION

- China has the opportunity to redefine:
 - What a legitimate standardization organization is and how it should act
 - What standardization means or can mean to developing and developed nations
 - What is the role of IPR in standards?
 - How the “massively connected world” will view and use standards and standardization
- **China has the opportunity to lead and determine these answers both for China and the world.**

Thank You

Carl Cargill
Carl.Cargill@sun.com