

ICT Standardization in China

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Corporate Standards

Sun Microsystems, China

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Standardization as National Strategy

- “Patents, Human Resource and **Standardization** are the strategic tool for national development in China.”
——Ministry of Science and Technology, 2002
- China will meet with obstruction on international market due to unsuitable standards. It is important to make Chinese standards market **relevance** and **competitive**.
——China National Standardization Strategy, 2006

Chinese Standardization System

- Centralized administrative system
 - > Combined with respective responsibility of any Official Departments
- Government Leading, Enterprise Participation
- Four levels of **Standards Categories**; Four levels of vertical **Management Architecture**

Standards Categories

- National Standards
 - > Be developed for technical requirements need to be unified national wide; About 300 TCs, 4 WGs; Secretariat distributed in different government related sectors
 - > Standardization Administration of China / Administration for Quality Supervision Inspection & Quarantine (AQSIQ)
- Industry Standards
 - > When National Standards are not available
 - > Ministries organize – Ministry of Industry and Informatization
 - > Industry standards could be delivered to SAC for approval, TC as the channel, as National Standards. But if not, still could be adopted by the industry authority

Standards Categories

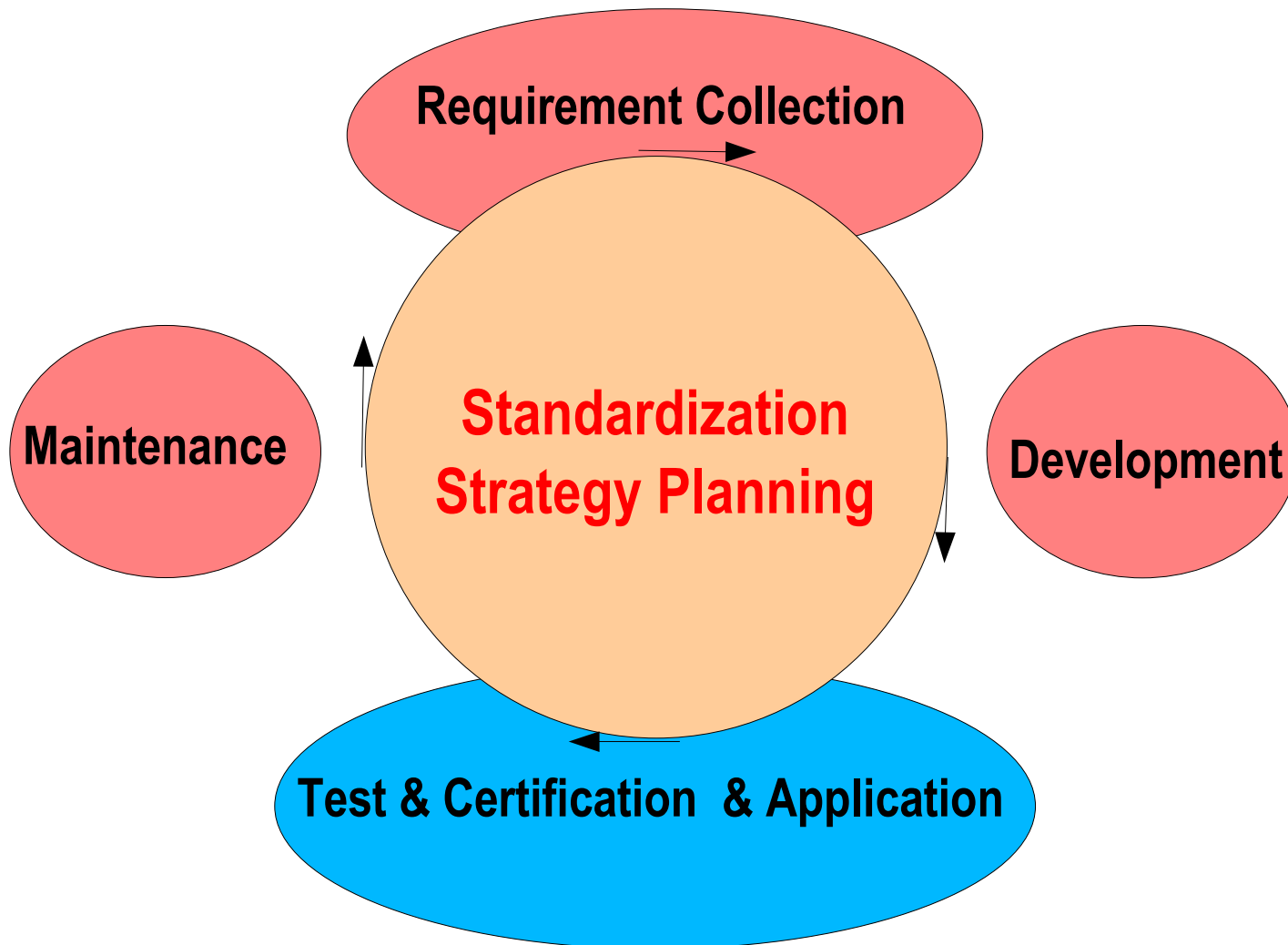
- Local Standards

- > When Neither National Standards nor Industry Standards are available
- > Unified requirements for **Safety** and **Hygiene** of industrial products are needed within a local area.
- > Administrative Bureaus of Standardization in **Province** Level

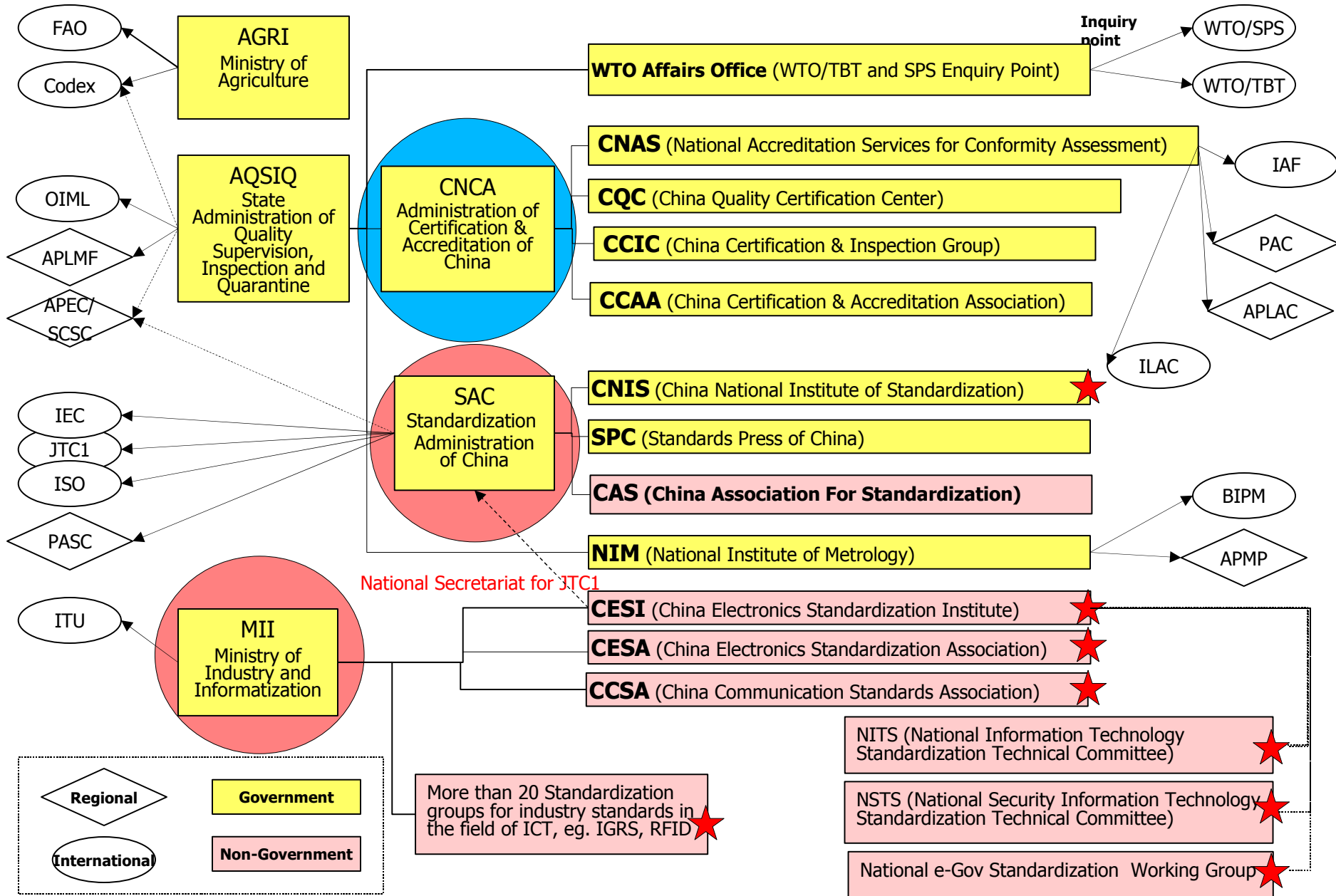
- Enterprise Standards

- > Within an enterprise when National Standards, Industry Standards and Local Standards aren't available.
- > Enterprise Standards should **Put On Records** to the local standardization administrative agency.
- > Administrative Bureaus of Standardization in **City** Level

Standardization Process



Agencies



- **Administration for Quality Supervision Inspection & Quarantine (AQSIQ)**
- 国家质量监督与检验检疫总局
 - <http://www.aqsiq.gov.cn/>
 - **law-enforcement administrative organization of the State Council in the field of quality, metrology, entry-exit commodities inspection, entry-exit health quarantine, entry-exit animal and plant quarantine, certification and accreditation and standardization.**
- **Administration of Certification & Accreditation of China (CNCA)**
- 国家认证认可监督管理委员会
 - <http://www.cnca.gov.cn/>
 - **Supervise and administer the accreditation of certification bodies**
 - **Administer the accreditation of laboratories.**
 - **Administer products subject to compulsory certification**
- **Standards Administration of China (SAC)**
- 国家标准化管理委员会
 - <http://www.sac.gov.cn/>
 - **Establishes and oversees Chinese national standards**
 - **Sets China's annual national standards agenda**
 - **Represents China at ISO, IEC, PASC(Pacific Asia Standards Congress), etc**
- **CNAS (National Accreditation Services for Conformity Assessment)**
- 中国合格评定国家认可委员会
 - <http://www.cnas.org.cn/>
 - **National accreditation body for management systems and products certifiers**
 - **National accreditation body for laboratory and inspection body**
 - **Represents China at IAF(International Accreditation Forum) , PAC(Pacific Accrediation Cooperation), ILAC(International Library Accreditation Committee), APLAC(Asia Pacific Library Accreditation Committee)**

- **China Certification & Accreditation Association (CCAA)**
 - 中国认可认证协会
 - <http://www.ccaa.org.cn/>
 - **Certification and Accreditation Service**
- **China Quality Certification Center (CQC)**
 - 中国质量认证中心
 - <http://www.cqc.com.cn/>
 - **Specialized certification body established by AQSIQ**
 - **The largest and the most authoritative certification body in China**
- **China Certification & Inspection Group (CCIC)**
 - 中国检验认证集团
 - <http://www.ccic.com/>
 - **Reorganized from former China National Import & Export Commodities Inspection Corp.**
 - **Provide inspection, surveying, certification and testing services, with authorization from the CNCA**
- **China Association For Standardization (CAS)**
 - 中国标准化协会
 - <http://www.china-cas.com/>
 - **CAS is under the leadership of the AQSIQ, and is instructed in business by the SAC**
 - **Organize academic seminars and arrange academy exchanges for both international and domestic experts**
 - **Publish notification of national standards and concerned standardization information**
- **China National Institute of Standardization (CNIS)**
 - 中国标准化研究院
 - <http://www.cnis.gov.cn/>
 - **Perform research on standardization in various fields**

- **Standards Press of China (SPC)**
- 中国标准出版社
 - **publish national standards, professional standards and other scientific and technical books**
- **National Institute of Metrology (NIM)**
- 中国计量科学研究院
 - **<http://www.nim.ac.cn/>**
 - **The highest state-level research center for metrology and the legal metrological technical center**
 - **Establish national primary standards and national standards of measurement**
 - **Provide verification services and calibration services**
- **Ministry of Industry and Informatization (MII)**
- 工业和信息化部
 - **<http://www.mii.gov.cn/>**
 - **Ministerial level organization administrating overall laws , regulations and standards.**
- **China Electronics Standardization Institute (CESI)**
- 中国电子技术标准化研究所
 - **<http://www.cesi.ac.cn/>**
 - **Responsible for the publishing and distributing of electronic industrial standards (SJ)**
 - **Testing Body for CCC products approved by CNCA, Testing Center accredited by CNACL**
 - **Secretariat for Chinese National Mirror Committee to JTC1 and IEC TC3/SC3D**
- **China Electronic Standards Association (CCSA)**
- 中国通讯标准化协会
 - **<http://www.cesa.org.cn/>**
 - **National-level association which consists of volunteers from enterprises, institutions, standardization bodies and individuals engaged in standardization work in the field of electronic and IT technologies.**

- **China Communication Standards Association (CCSA)**
- 中国通信标准化协会
 - <http://www.ccsa.org.cn/>
 - **Carry out research and survey activities on communications standardization system**
 - **Organize technical seminars and research communications standards and related information**

China and Formal Standardization

- China joined IEC in 1957, as P members; joined ISO in 1978, as P members as well.
- Adopt international standard
 - > 20906 national standards, 9250 of which are adopted from international and advanced overseas standards, with a rate of 44.2% ;
 - > 6683 national standards are adopted from ISO/IEC standards;
 - > Adopt 2567 standards from other international organizations.
- Among 20000 ISO/IEC standards, only 28 of them are based on Chinese proposals.

China and Consortia

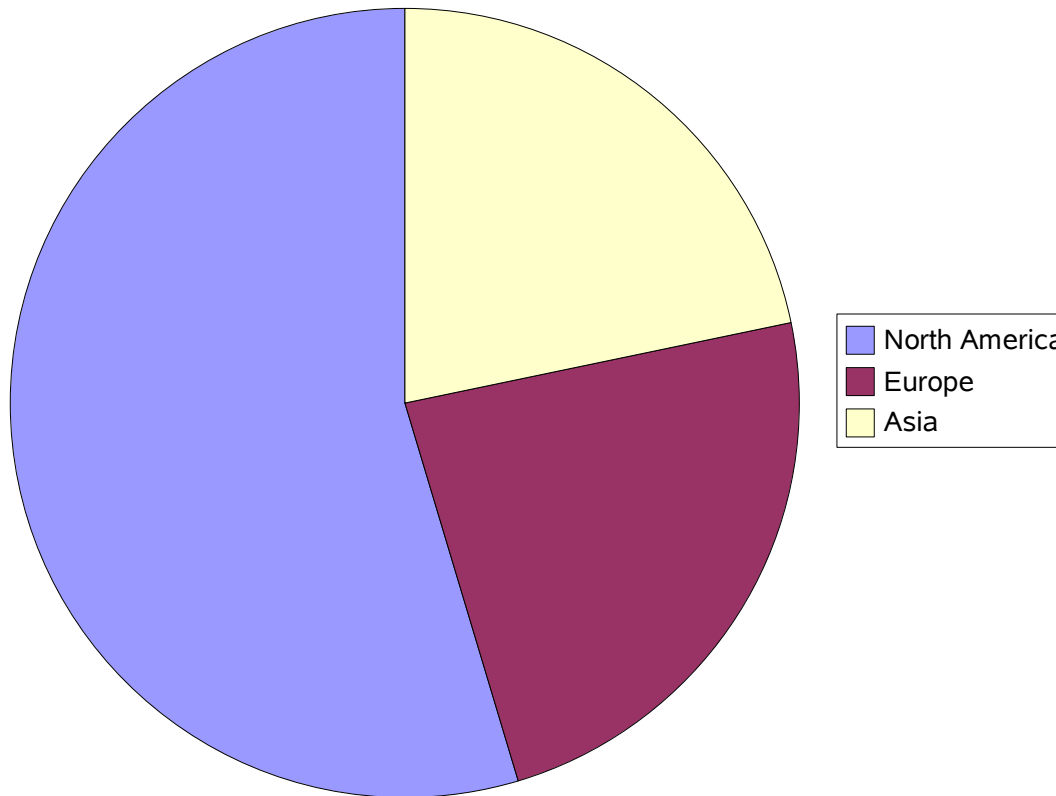
- Consortia Standardization Organization is popular in ICT field
 - > W3C China Office
 - > BeiHang University, 2008 Annual Meeting
 - > OASIS China Office
 - > Apr., 2006
 - > ChangFeng Open Standards Platform Software Alliance
 - > IEEE China Office
 - >

China and Consortia - Analysis

- Commissioned a study by a neutral third party
 - > 79 Brinkburn (<http://www.79brinkburn.co.uk>)
- Examined participation in the 50 dominant ICT consortia
- Identified those that participate in the most consortia
 - > 55 companies
 - > 3 continents
 - > 11 countries
 - > *Download the Executive Summary of the report: from:
[http://blogs.sun.com/dennising/resource/3%20The%20Current%20State%20of%20ICT%20Standardization%20Consortia\(English\).pdf](http://blogs.sun.com/dennising/resource/3%20The%20Current%20State%20of%20ICT%20Standardization%20Consortia(English).pdf)*

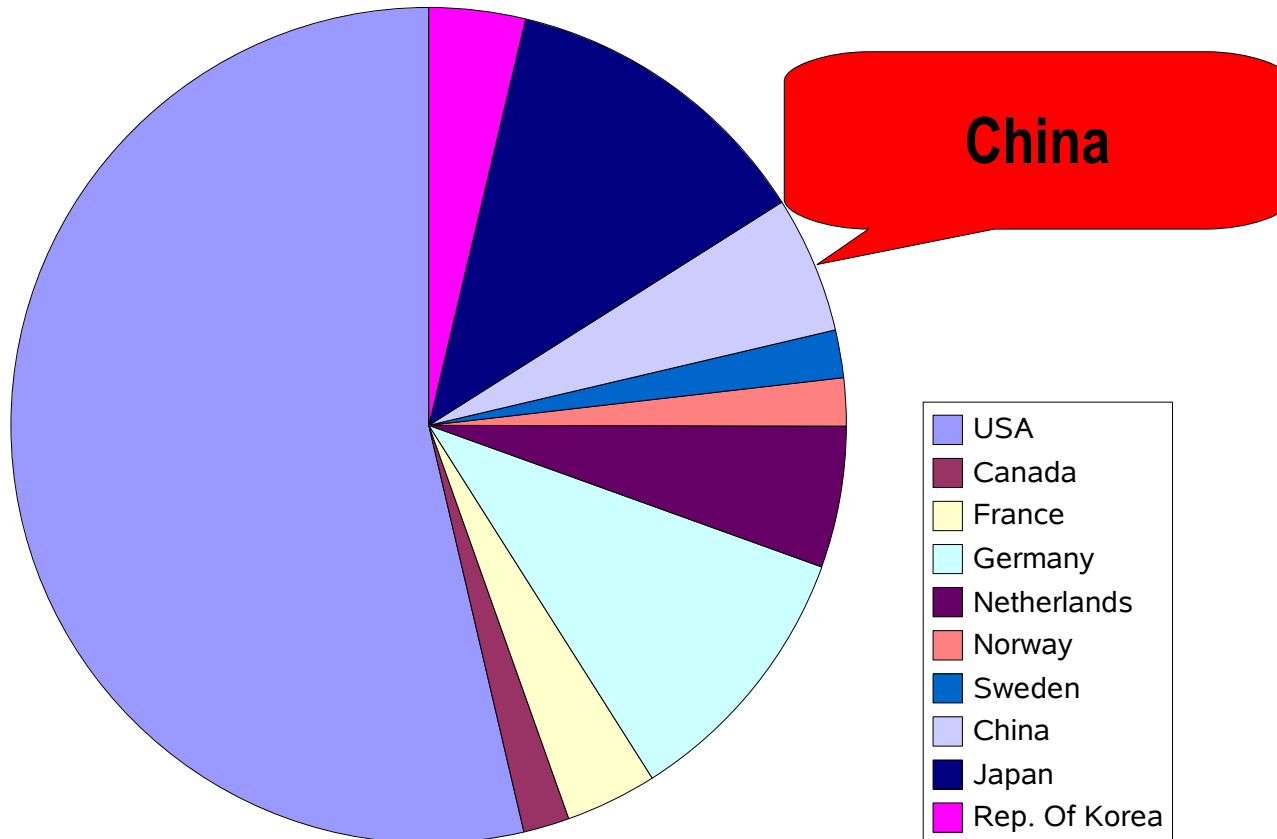
China and Consortia - Analysis

Consortia Participation-by Continent



China and Consortia - Analysis

Consortia Participation-by Country



Consortia and China - Conclusion

- Promote Awareness – The value.
- Education & Training – What is and how to participate?
- Government Support – Procurement Leading.
- Legal Basis – Good environment.
- Open Process – Sharing the power.
- Open IPR Policy – Collaboration for Competition.
- SMEs Touch – Find the ones who benefit.
- Inclusive – Decrease threshold.

Thanks!

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