



# standICT.eu 2026

ICT Standardisation Observatory and Support Facility in Europe

## Standards Academy Webinar

# Geopolitics of ICT standardisation: focus on China



30<sup>th</sup> September 2024



Funded by  
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## Speakers and Agenda



The banner features a dark blue background on the left with the text 'standICT.eu 2026' and 'ICT Standardisation Observatory and Support Facility in Europe'. A central graphic shows a globe with a graduation cap and laurel wreath. To the right, the title 'Geopolitics of ICT standardisation' is displayed in large blue font over a light blue world map. A date box indicates '30 Sept 2024' and '11:00 - 12:30 CEST'. A red box with 'Focus on China' and a Chinese flag is positioned below the title. Logos for 'EUOS Standards Academy' and 'Academy & Capacity Building' are at the top left, and the 'Funded by the European Union' logo is at the bottom right.

standICT.eu 2026  
ICT Standardisation Observatory and Support Facility in Europe

EUOS Standards Academy & Capacity Building

30 Sept 2024 11:00 - 12:30 CEST

### Geopolitics of ICT standardisation

Focus on China

Funded by the European Union

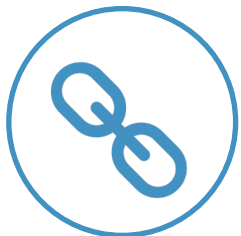
- **11:00 - Intro into standardisation and geopolitics with a focus on technological sovereignty**, Knut Blind (Fraunhofer ISI & TU Berlin)
- **11:15 - China and the new geopolitics of technical standardisation**, Tim Rühlig, Senior Analyst Global China, European Union Institute for Security Studies (EUISS)
- **11:30 - Cooperation and contestation: China's evolving role in international standardisation**, Daniel Fuchs, Assistant Professor, Humboldt University of Berlin
- **11:45 China's Ambitions in ICT-Standardisation - Lessons for the Future**, Susann Luedtke China Business and Economics, Würzburg University & Center for Advanced Security, Strategic and Integration Studies, Bonn University
- **12:00 How can we navigate the opportunities and challenges of EU-China collaboration in international ICT standardisation?**, Betty Xu (Seconded European Standardisation Expert in China) Director – Standardisation & Public Policy
- 12:15 - Q&A
- 12:30 Conclusion

# Webinar Housekeeping



The event will be recorded and will be made available on the StandICT.eu website after the event (including the presentations of each speaker)

We do encourage you though to enter any question in the dedicated Q/A box placed in the lower toolbar. The speakers will be pleased to answer back your questions real-time



You can follow the chat to be informed and receive link on the main StandICT.eu outputs and publications.

# Standardisation and Standards: Safeguards of Technological Sovereignty?

Knut Blind

Fraunhofer ISI & TU Berlin

Contribution to the StandICT2026 Webinar „The Geopolitics of ICT  
Standardisation: Focus on China“

30th of September 2024

# Agenda

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- Motivation of technological sovereignty: Why, and why now
- Standardisation and technological sovereignty
- Propositions
- Policy recommendations
- Challenges

# Motivation: Why, and why now

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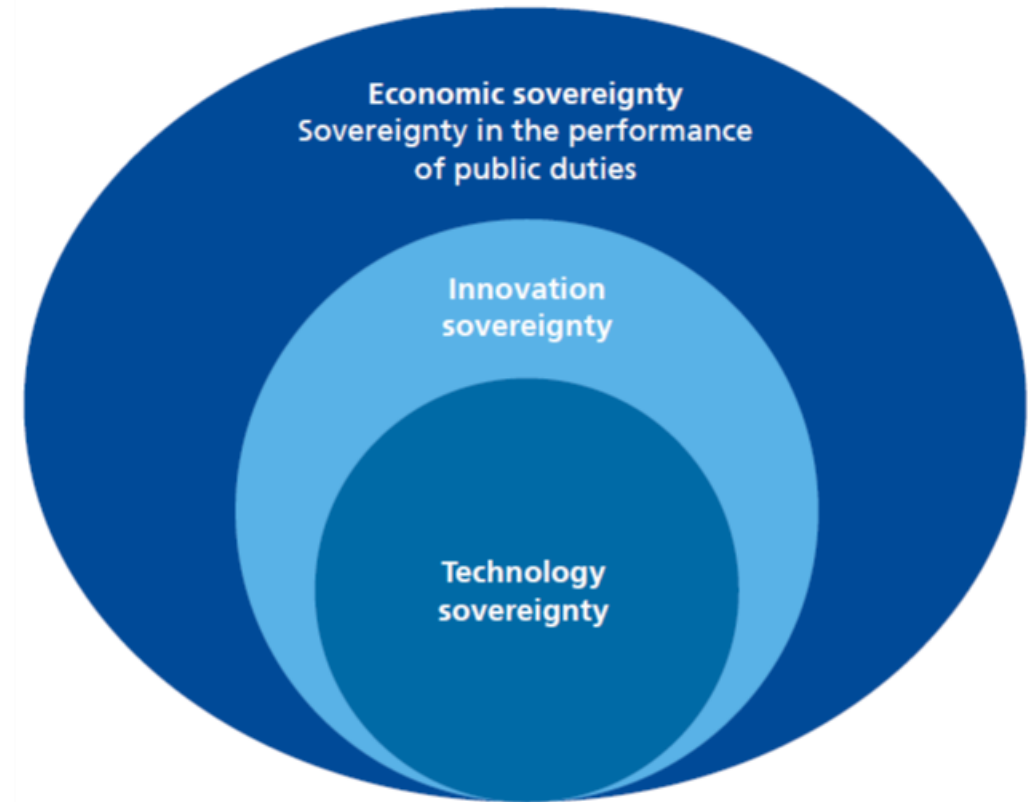
- Technological competition intensifying
  - ...with Europe fearing to fall behind in critical technologies, and this time compared to China and India
  - ...linked to systems and value competition (see EU Standardisation Strategy, 2022 and US Standardisation Strategy, 2023)
- Global interconnectedness provides great benefits, but can also create vulnerabilities further triggered by the war in the Ukraine
- Tension: A protectionist race vs legitimate ambition to determine one's own future independently
- Innovation policy rationales (competitiveness, transformation) challenged, but also industrial policy by a "new" concern (including security, defense and value discussion)
- Conceptualisation
  - Mobilising existing theories
  - Basis for analysis
  - Understanding meaning of TS for existing rationales
  - Suggesting policy consequences

# Definition of Technological Sovereignty and basic understanding

**Ability** of a state or a federation of states to develop technologies it deems critical for its welfare, competitiveness, and ability to act or source them from other economic areas without one-sided structural dependency

**Dynamic concept:** preserve future ability to determine well-being and value system

Striving for “domestic” competencies and structural interdependence rather than autarky



- Based on: Edler, J.; Blind, K.; Frietsch, R.; Kimpeler, S.; Kroll, H.; Lerch, C.; Reiss, T.; Roth, F.; Schubert, T.; Schuler, J.; Walz, R. (2020): Technology sovereignty. From demand to concept; Karlsruhe. [urn:nbn:de:0011-n-5997578](https://nbn-resolving.org/urn:nbn:de:0011-n-5997578)
- See also Edler, J.; Blind, K.; Kroll, H.; Schubert, T. (2023): Technology sovereignty as an emerging frame for innovation policy. Defining rationales, ends and means, Research Policy, Volume 52, Issue 6, 104765 <https://www.sciencedirect.com/science/article/pii/S0048733323000495>

Source: Edler et al. (2020)

# Background

- no established conceptual framework, our approach focuses on innovation, trade, and public policies, particularly the regulatory framework, as essential instruments to assure TS (e.g., Edler et al., 2020) because they can immediately be supported by standardisation and standards
- starting point: standardisation as a knowledge and technology transfer channel (Blind and Gauch, 2009, Blind et al., 2024) and its interlinkages to other channels because it has an essential role for innovation (see a review by Blind 2022)
- standards influence trade flows (Swann 2010) and therefore TS
- standards play in the context of the European Union (EU) an essential role for the specification and eventually the implementation of regulations and other public policies, in particular, to generate an innovation fostering framework (e.g., Blind 2016), in recent EU standardisation strategy (European Commission, 2022), standardisation for shaping technical regulations will play an even more critical role to secure competitiveness and values of EU

Source: Blind (2023)



# Announcement: INSTAR webinar

- **INSTAR Roadmaps: Mapping future priority topics with our European Task Forces**
- **11 October 2024 | 11:00 – 12:15 CEST**



- **Please register here: <https://instarstandards.org/events/webinar-instar-roadmaps-mapping-future-priority-topics-our-european-task-forces>**

# Contact

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# China and the new geopolitics of technical standardization

Tim Rühlig

European Union Institute for Security Studies

# Context: Geopolitical competition over high technology

- The three intertwined mega transformations
  - Digital
  - Green
  - Power shift
- Innovation = power?
  - Economic strength
  - Military capabilities
  - Political reputation
  - But: political strategy, organization, market power etc. as intervening variables

# Technical standards – a new, unlikely candidate for geopolitical competition

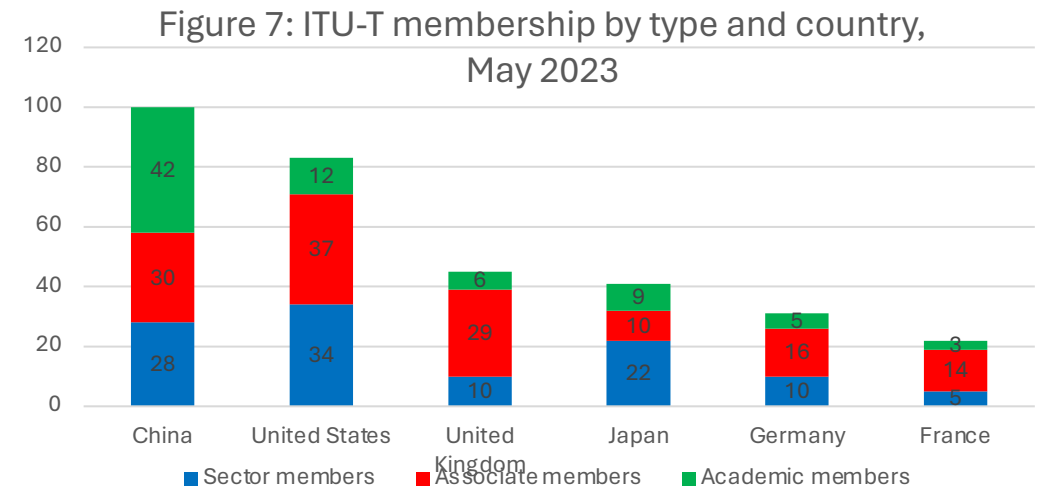
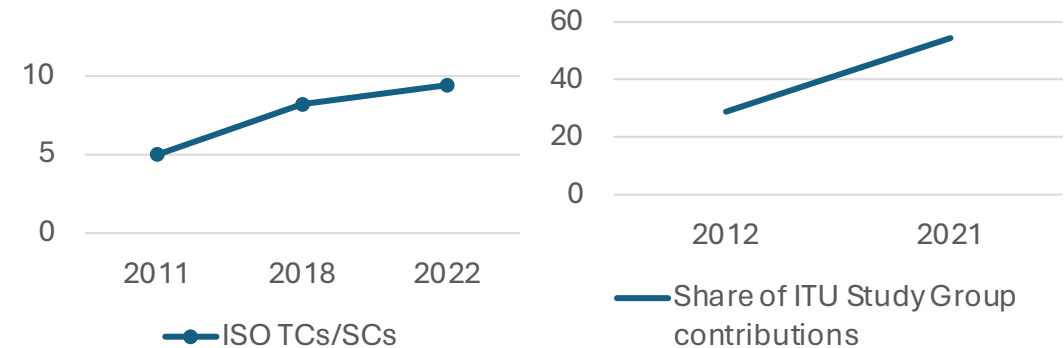
- Technical standards – safety and interoperability
- Technical standards – technical not political
- Technical standards – private, not state-driven
- Technical standards – open, inclusive and voluntary

But:

- Weaponized interdependence: lock-in dependencies
- Values enshrined in standards
- State-led standardization strategies
- Transformative potential of network effects

# China – an emerging international standardization power

- Strategic sectors in the focus
  - ISO/IEC: rare earths, foundry machinery, transaction assurance in e-commerce, smart grid user interface, brain-computer interfaces, heat supply networks, small hydropower plants...
  - ITU: AI, IoT, 5G, drones, lithium batteries, data security, smart cities...
- BRI Action Plans,
- 85 bilateral agreements (2019)
- BRI projects
- SAMR/SAC not private actor representation



# China: state-centric standardization approach

Figure 3: Employers of registered standardization experts in China

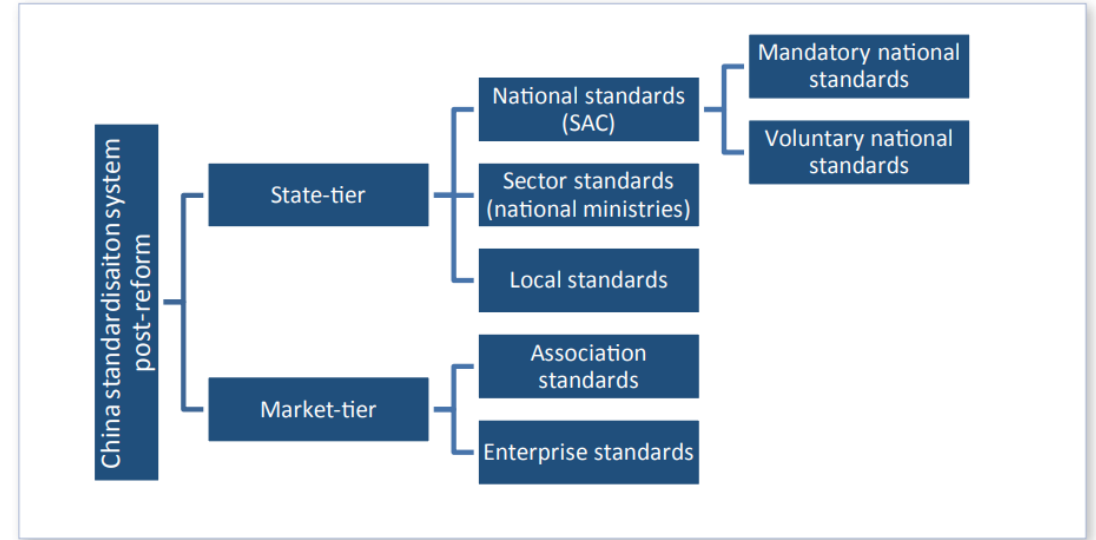
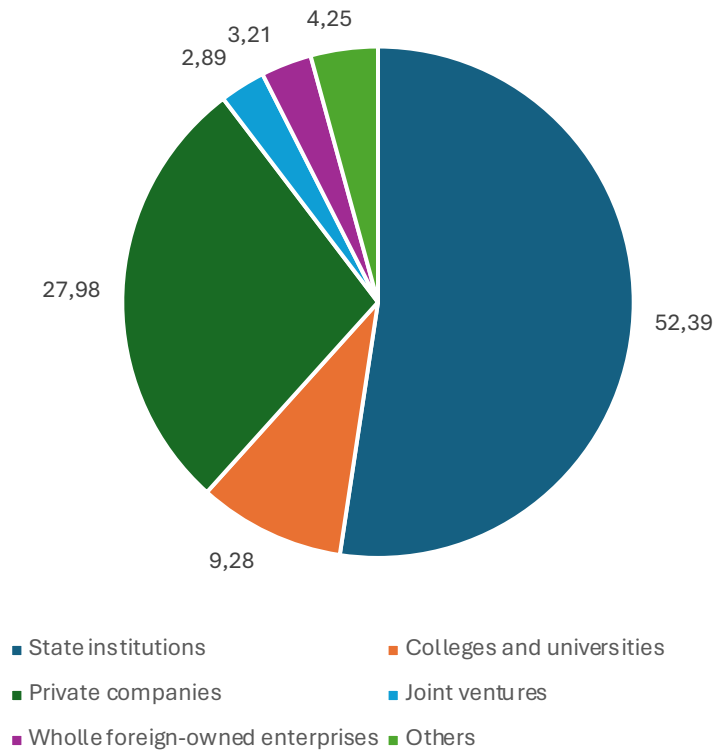
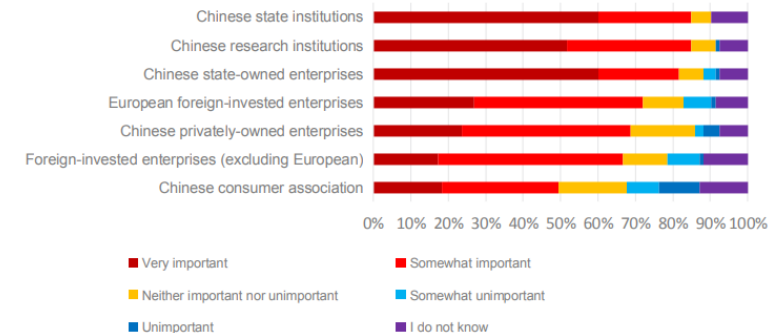


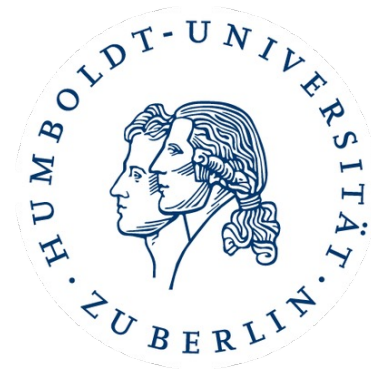
Figure 25: How important are the following types of participants for the development of technical standards in the committees that your company participates in (in %)?



# Conclusion

- Consequences of standardization power
  - Economic: distribution of SEPs and adaptation cost
  - Law: Extraterritorial effects
  - Security: Lock-in dependencies
  - Values: discreet normative power
- Risks:
  - Politicization
  - Fragmentation
  - Power shift





StandICT.eu Standards Training Academy

Geopolitics of ICT Standardisation – Focus on China

# Cooperation and Contestation: China's Evolving Role in International Standardisation

Dr. Daniel Fuchs (Humboldt-Universität zu Berlin)

[dan.fuchs@hu-berlin.de](mailto:dan.fuchs@hu-berlin.de)

30 September 2024

# Recent Publications

Daniel Fuchs, Sascha Klotzbücher,  
Andrea Riemenschnitter,  
Lena Springer, Felix Wemheuer (Hg.)

## DIE ZUKUNFT MIT CHINA DENKEN

mandelbaum *verlag*

## China Information

### Special issue on Chinese standards and standardization

Guest editors: Ruiyi Zhu and Miriam Driessen

#### Articles

- Chinese standards from the ground up 135  
*Miriam Driessen and Ruiyi Zhu*
- Practice diffusion in China's two-pronged engagement in global technical standardization 157  
*Daniel Fuchs and Sarah Eaton*
- Confronting standards-making in food safety: Standards recalibration and regulatory reforms in China's dairy industry 180  
*Megan Tracy*
- Internationalizing Chinese standards through infrastructure experimentation: Engineering a pumped storage hydropower project in Israel 202  
*Zhuo Chen, Bryan Tilt, and Shaozeng Zhang*
- Credibility Standards: A new social credit mode of regulation? 223  
*Marianne von Blomberg*
- Shaping corporate social responsibility standards in the global economy: Chinese industry guidelines for responsible mineral supply chains 244  
*Si Chen*
- Negotiating standards in Sino-Mongolian industrial relations 267  
*Ruiyi Zhu*

Alex Veit, Daniel Fuchs (Hg.)

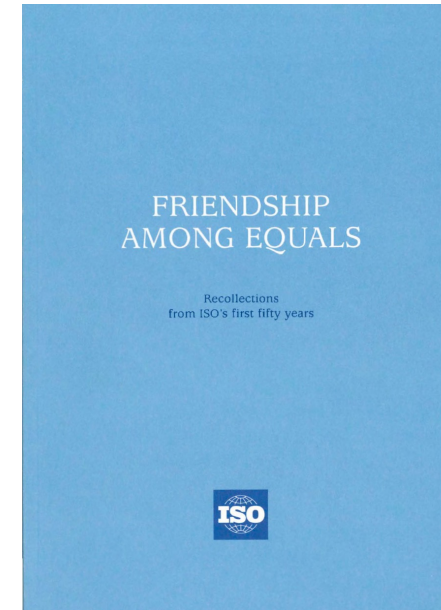
## EINE GERECHTE WELTWIRTSCHAFTS- ORDNUNG?

Die »New International Economic Order«  
und die Zukunft der Süd-Nord-Beziehungen

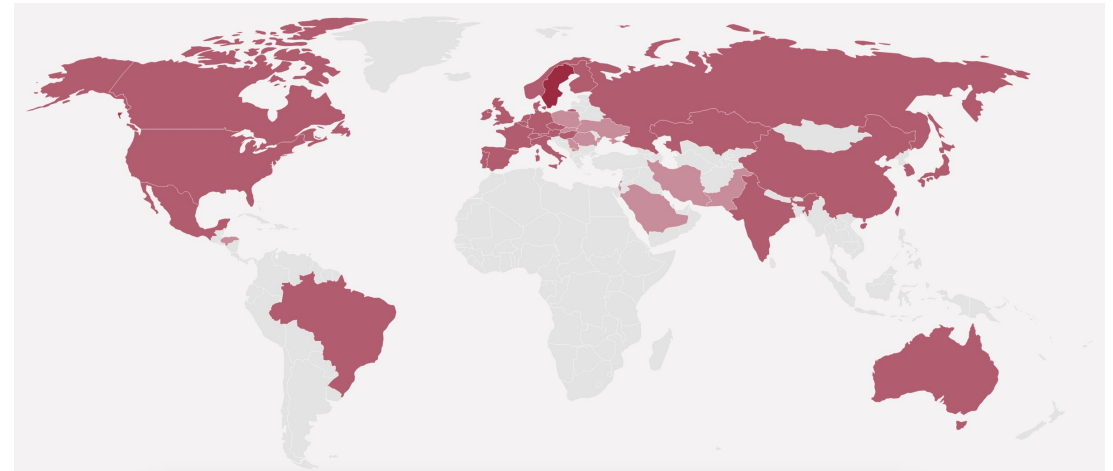
[transcript] Neue Ökonomie

# Putting the “China challenge” into perspective

- Stakeholders from the Global North have an outsize influence in international standardisation
  - Holding the most leadership positions in TCs, SCs and working groups within the ISO and IEC
- Aspiration vs. Reality
  - Principles of „openness“ and „inclusivity“ vs. reality of an „exclusive club“
- “Powerful economic interests based in the advanced industrialized economies use international standardization to consolidate and enhance global advantage, and to regulate the terms on which countries and their firms are inserted into the global economy” (Wood 2012: 83)



**Map of Participant Countries in ISO/TC 299: Robotics**



Source: <https://www.iso.org/committee/5915511.html?view=participation>

# China's transition from rule-taker to rule-maker

- Aims: In 2015, the central government set the goal of becoming a “world standards power“ (世界标准强国) by 2020 (State Council 2015)
- The focus on moving from rule-taker to rule-maker in standardisation is closely linked to industrial policy
  - Strategic efforts to capture first-mover advantages in high-tech sectors
  - Release of MiC 2025 and Internet Plus policies led to substantial increase of state funding for research on technical standards linked to smart manufacturing and digital technologies more broadly
  - View that „first tier companies make standards; second-tier companies make technology; third-tier companies make products“ (一流企业做标准, 二流企业做技术, 三流企业做产品)



Zhao Houlin, first Chinese Secretary General of the ITU (2015-2022)



Zhang Xiaogang, First Chinese president of the ISO (2015-2018)



Shu Yinbiao, first Chinese president of the IEC (2019-2022)

# China's standardisation strategy: Domestic dimensions

- Ongoing reform of domestic standard-setting system (2015-)
- Efforts to make standard-setting more market-driven
- Standardisation Law 2018: Reduce share of top-down, “mandatory” standards developed by the SAC, expand bottom-up, voluntary standards from industry associations
- Formalisation of „Association Standards“ (团标)
- Oct. 2021: “National Standardisation Development Outline” with a strong focus on domestic capacity-building
  - 50 national technical standards innovation bases planned



中华人民共和国中央人民政府  
www.gov.cn

首页 > 政策 > 中央有关文件

## 中共中央 国务院印发《国家标准化发展纲要》

2021-10-10 19:42 来源: 新华社

【字体: 大 中 小】 打印 分享

中共中央 国务院  
印发《国家标准化发展纲要》

新华社北京10月10日电 近日, 中共中央、国务院印发了《国家标准化发展纲要》, 并发出通知, 要求各地区各部门结合实际认真贯彻落实。

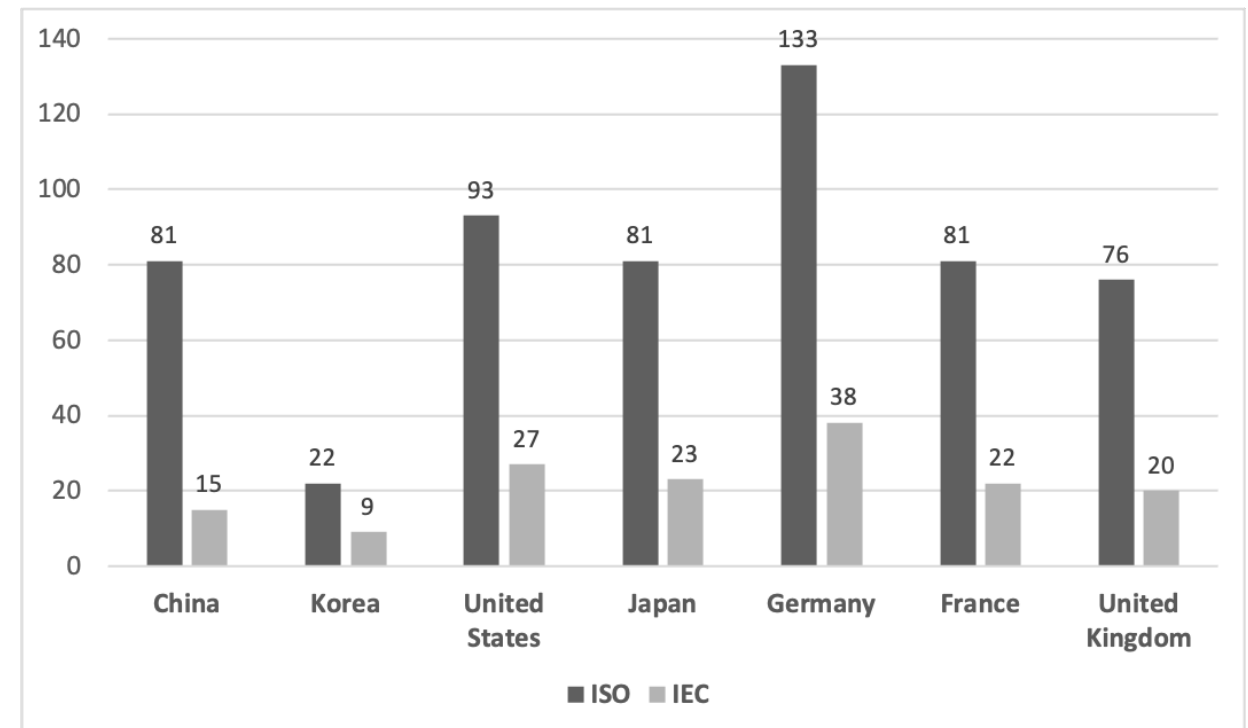
《国家标准化发展纲要》主要内容如下。

标准是经济活动和社会发展的技术支撑, 是国家基础性制度的重要方面。标准化在推进国家治理体系和治理能力现代化中

# China's standardisation strategy: International dimensions

- On the one hand: Focus on expanding influence in established international SDOs
  - Significantly increasing participation in ISO TCs & SCs
  - Placing Chinese officials in key leadership positions
  - Providing state subsidies and quantitative benchmarks for the submission of standards proposals
- Increasingly focusing on the area of „critical and emerging“ technologies

TC Secretariats in the ISO & IEC, January 2024



Source: ISO & IEC Websites

# China's standardisation strategy: International dimensions

- On the other hand: Attempts to promote Chinese national standards in the Global South
  - 中国标准走出去
- Key role of the “Belt and Road Initiative” (BRI)
  - „Action Plans“ in 2015 and 2017
  - 44 bilateral cooperation agreements with 36 states (end of 2021)
  - Multilateral initiatives
  - Standard Information Platform
  - Training Bases
  - Idea of a “BRI Regional Standards Forum“ put on halt
- 坚定不移推进共建“一带一路”高质量发展  
走深走实的愿景与行动——共建“一带一路”  
未来十年发展展望 (November 2023)
  - Focus on cooperation with international SDOs
  - Participation of foreign firms in the development of Chinese standards



# The case of the *Sino-German Industrie 4.0 Cooperation*

- Since 2015: Bilateral cooperation based on the SWG Industrie 4.0/Intelligent Manufacturing of the Sino-German Standardisation Cooperation Committee
- Aims: Development and submission of mutually supported standard proposals to international SDOs
- Technical expert groups on topics such as IT security, AI & predictive maintenance
- Experts on both sides highlight the successes:
  - “Compared to all other international collaborations ... it is the most successful, and it is already quite transparent when measured against the usual standards and Chinese conditions. They [Chinese participants] have definitely started to put concepts on the table that they would not otherwise share in order to get the opinion of the German experts” (Interview, German standardisation expert, July 2020).





# Containment through cooperation?

- Motives for the Sino-German I4.0 cooperation? (see Fuchs/Eaton 2022; and Fuchs/Eaton forthcoming)
- Chinese aims: The diffusion of standardisation practice
  - Learning the „rules of the game“ in international standardisation “
  - Overcoming language/discursive barriers
  - Improving technical knowledge
  - Acquiring knowledge about the existing standards canon
- Motives of German participants
  - Integrating & “socialising” China into global SDOs
  - Securing market access for German firms in China

“There was a time when people used to say: *Oh my god, the Chinese are coming, now we must quickly close all the doors and the windows too. That way we keep [them] out.* Then people saw the Chinese doing their own thing. Then they said, *For God’s sake, now they are doing their own thing!* But what are the Chinese supposed to do when we close all the doors and windows?  
(Interview, German SDO representative)

“We want China to stay in the system, but not go their own way...China wants to establish their own Belt and Road Standards Forum...but we don’t see that happening yet. So we want to keep the international system attractive for them, so [they] don’t need to go to another way”  
(Interview, European SDO representative).

# The Case of the *US-EU Trade and Technology Council*

- Prospects of transatlantic cooperation on technical standards? (see Eaton/Fuchs/Triolo 2022; and Eaton/Fuchs/Triolo forthcoming)
- Working Group 1 of the TTC, established in 2021: Technology Standards
- Results so far: Establishment of a Strategic Standardisation Information System; definition of priority areas for transatlantic cooperation; development of metrics for AI trustworthiness and risks
- The TTC as part of US-led efforts to establish an alliance of “like-minded partners” in order to contain China’s growing standards power
- Broader US context
  - United States Government National Standards Strategy for Critical and Emerging Technology (May 2023)
  - Backlash against Chinese stakeholders within ISO/IEC as well as within consortia



# Containment through transatlantic alliance building?

- Stakeholders generally welcome governments' new attention to the "China Challenge" in international standardisation
- However...
  - European business and SDO representatives are worried about the possibility of fragmentation of the international standardization system
  - European business and SDO representatives highlight their concerns about the possibility of undermining the European/German "bottom-up" approach to standardisation

"The main issue is not to break the whole system. Europe is lucky here – lucky that standardisation is strong in Europe. If conditions deteriorate, then the importance of Europe in this context will diminish" (Interview, European business representative)

"We don't want to create parallel worlds where resources are wasted unnecessarily. So it's much better to engage with everybody in the same platform... Of course, they [China] are the second-largest economy, they're entitled to influence in the community" (Interview, European SDO representative).

Thank you for your attention!



# CHINA'S AMBITIONS IN ICT- STANDARDISATION LESSONS FOR THE FUTURE

DR. SUSANN LÜDTKE  
STANDICT.EU – GEOPOLITICS OF ICT STANDARDISATION  
SEPTEMBER, 30 2024  
ASSOCIATE FELLOW CASSIS  
ASSOCIATE RESEARCHER CCCUW

# Standardization Policy – Mission & Vision

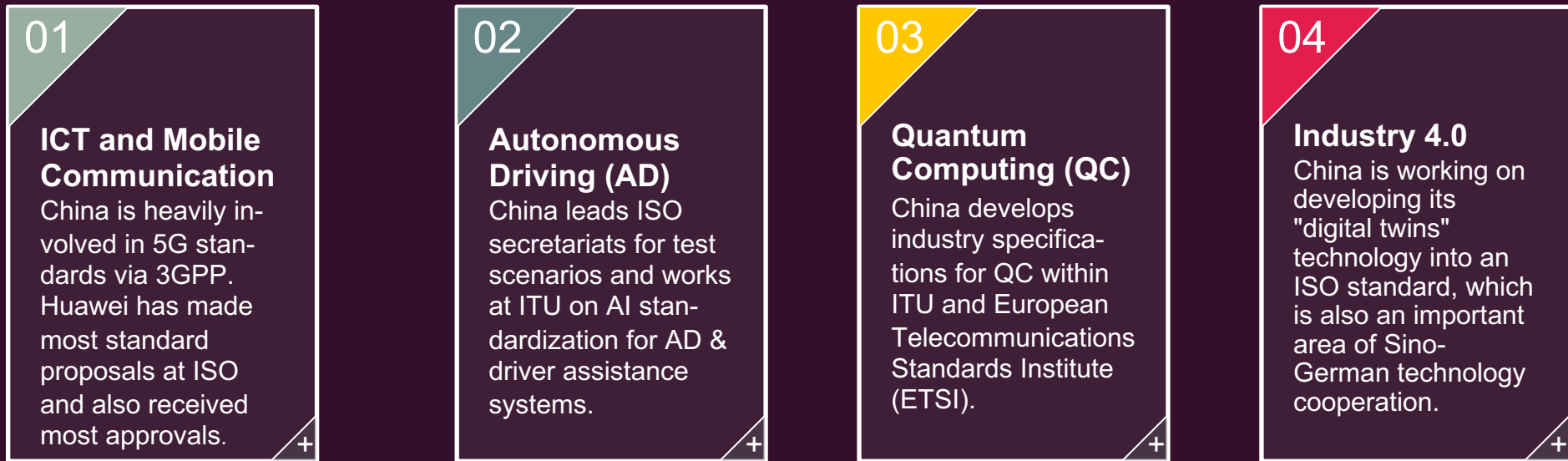
By 2025, national and international standards will be closely developed together (协同发展). This is intended to bring about a shift from a nationally oriented system to a "national-international mutual transformation" (国内国际相互促进转变). The conversion rate of international standards should be at least 85%. Foreign companies will be able to participate in standard setting.

By 2035, the standardization system should become internationally compatible, while integrating into a "standardization management system with Chinese characteristics" (具有中国特色的标准化管理体制) (State Council, 2021).

**三流企业做产品；  
二流企业做技术；  
一流企业做标准**

Third tier companies make products;  
second tier companies make technology;  
first tier companies make standards.  
(cf. Lüdtke, 2020)

# Focus Areas of Standardization Activities



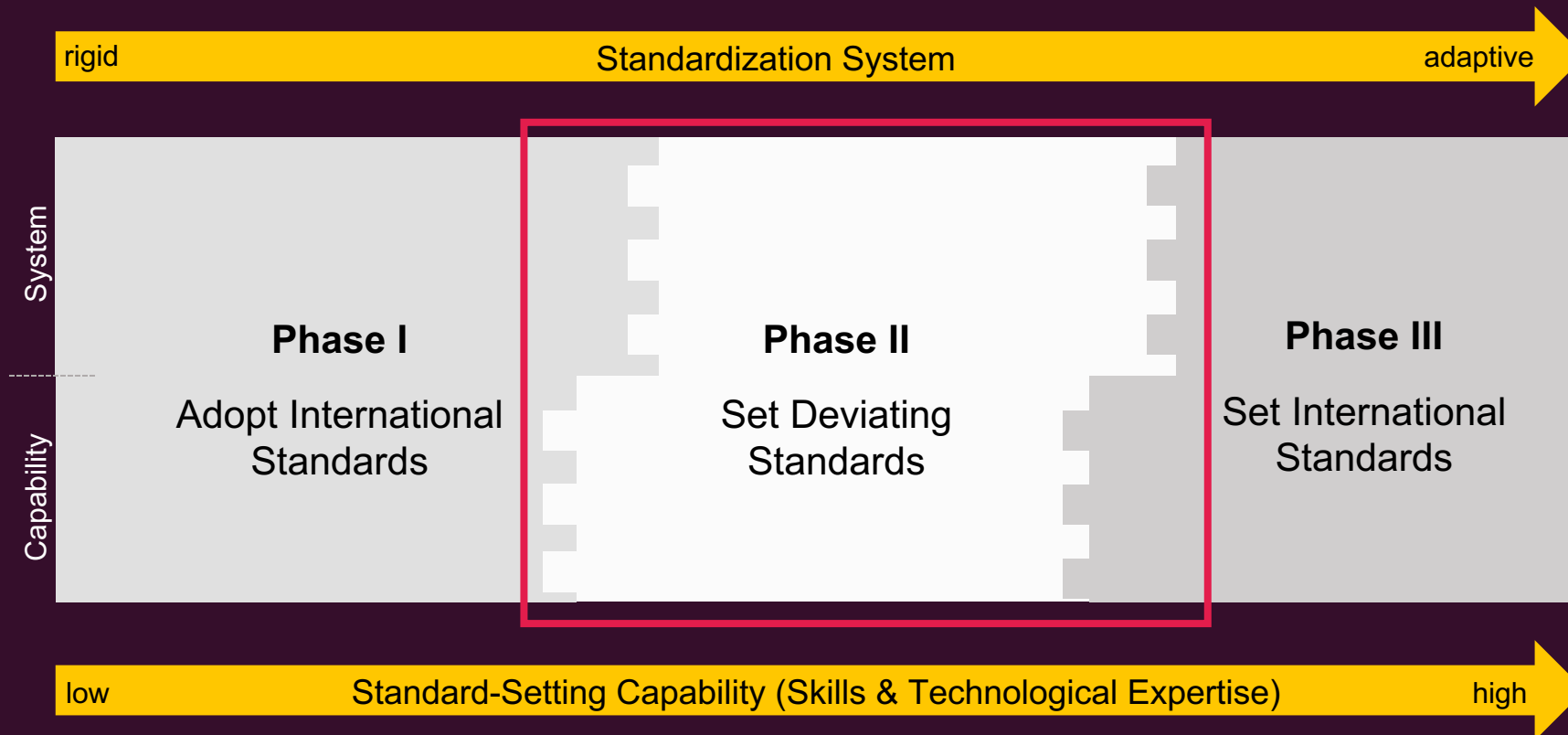
1<sup>st</sup> contestation field until 2010 and beyond

2<sup>nd</sup> contestation field since ~ 2016

New contestation fields since ~ 2020



# Deviation Phenomenon & Standards Development Concept



Source: Weithmann, 2018; cf. Weithmann/Lüdtke, 2023: 7.



# ICT Standards and Deviation Phenomenon

## Selected Initiatives of China between 1993-2011

Technology (ICT)	Chinese Standard(s)	International Standards	Initiator (e.g., state, industry, SDO etc.)
Audio-Visual Encoding/Decoding	AVS	MPEG2, MPEG4-3 (AAC), MPEG 4-10 (H.264), VC-1	<b>AVS</b> : AVS Workgroup (China); <b>MPEG Standards</b> : MPEG (ISO/IEC)
Digital Video Players	VCD 3.0, CVD, EVD, HDV, HVD, CBHD	SVCD, DVD, Blu-Ray, HD-DVD	<b>Chinese Standards</b> : Chinese electronics companies; <b>International</b> : DVD Forum, BDA
Digital Trunking	GoTa, GT800	TETRA, iDEN	<b>GoTa/GT800</b> : China Telecom Authorities; <b>TETRA</b> : ETSI; <b>iDEN</b> : Motorola
Document Formatting	UOF	ODF, OOXML	<b>UOF</b> : CESI (China); <b>ODF</b> : OASIS; <b>OOXML</b> : Microsoft
Home Networking	IGRS, ITopHome	DLNA, UPnP, KNX, ECHONET	<b>IGRS/ITopHome</b> : Chinese consortia and MIIT; <b>DLNA</b> : DLNA; <b>UPnP</b> : UPnP Forum
Mobile Phone Charger	YD/T 1591-2009	IEC 62684	<b>YD/T 1591</b> : CCSA (China); <b>IEC 62684</b> : IEC
Mobile Telephony	TD-SCDMA, TD-LTE	WCDMA, CDMA2000, LTE	<b>TD-SCDMA/TD-LTE</b> : China Mobile; <b>WCDMA/LTE</b> : 3GPP; <b>CDMA2000</b> : Qualcomm
Mobile TV	CMMB, T-MMB, CDMB, DMB-T, CMB	DVB-H, T-DMB, MediaFLO	<b>CMMB</b> : SARFT (China); <b>DVB-H</b> : DVB Project; <b>T-DMB</b> : Korea; <b>MediaFLO</b> : Qualcomm
Radio Frequency Identification	NPC	ISO 18000 and others, EPC/GS1, Uid	<b>NPC</b> : China Government; <b>ISO 18000</b> : ISO; <b>EPC/GS1</b> : GS1
Security Computer Chip	TCM	TPM	<b>TCM</b> : China Encryption Bureau; <b>TPM</b> : Trusted Computing Group (TCG)
Wireless Local Area Network Encryption	WAPI	IEEE 802.11i	<b>WAPI</b> : SAC (China); <b>IEEE 802.11i</b> : IEEE
Wireless Metro Area Network	McWill	WiMAX	<b>McWill</b> : Xinwei Telecom (China); <b>WiMAX</b> : IEEE, WiMAX Forum

Source: Own compilation based on Breznitz/Murphee, 2013.

# WAPI Case Snapshot

## Background & Development: WLAN Authentication and Privacy Infrastructure Standard

- **WAPI standard** as competitor to the widely adopted **Wi-Fi (IEEE 802.11)** standard
- WAPI was a **mandatory** domestic standard enforced by the Chinese government & licensed to a limited number of **domestic Chinese companies** > Foreign companies seeking market access needed to collaborate with these licensed firms
- **United States:** complaints at the **WTO** > claiming China violated **TBT obligations**
- **China:** WAPI as a **national security measure** to address vulnerabilities in the **Wi-Fi** standard
- **WAPI was not accepted internationally (Wi-Fi standard was chosen over WAPI in 2006)**
- Little local success due to **preferential government treatment of domestic firms**
- Most foreign companies (except **Texas Instruments**) resisted adopting the WAPI standard

### Takeaway(s)

WAPI case was **unsuccessful** at the international level, but it showcased the **conflict between national security concerns and free trade principles**.

WAPI was seen as a **learning experience** for China, emphasizing the need for more **collaborative approaches** to global standardization efforts.

# TD-SCDMA Case Snapshot

## Background & Development: Time Division-Synchronous Code Division Multiple Access Standard

- TD-SCDMA as a **homegrown Chinese 3G mobile telecommunications standard** (reduce foreign technology reliance)
- Rapid growth in mobile subscribers and fears that foreign firms would dominate the mobile market
- Mandate by the Chinese government via Ministry of Post and Telecommunications (MPT) > China Academy of Telecommunications Technology (CATT) and Datang Group were tasked with this project
- **CATT partnered with Siemens** to develop the TD-SCDMA technology (unique approach using Time Division Duplexing (TDD), distinct from other 3G standards like WCDMA and CDMA2000)
- **ITU accepted TD-SCDMA in 1999** (as one of three official 3G standards alongside WCDMA and CDMA2000)
- **State-led project initiative** > Gov as the financial sponsor, risk-taker, and regulator
- **Technological lock-in effect:** TD-SCDMA became outdated > More investments were required to develop 4G technology
- **Lack of widespread adoption**, and competition from established international standards

### Takeaway(s)

TD-SCDMA highlighted the **difficulties of creating a proprietary national standard** in a globalized industry. Despite the large **domestic market** and **government support**, the technology failed to gain significant traction. **The case showed the role of international cooperation and compatibility with global standards** for China's approach to future standards development.

# “4G & 5G Huawei” Case Snapshot

## Background & Development: Huawei’s growing involvement in 4G and 5G standardization

- **Member of the CCSA:** 3GPP org partner and actively contributing to the 5G standardization process
- March 2023: Huawei led in both the total number of contributions (43,753) and approved contributions (15,266) within 3GPP (surpassed Ericsson!)
- Huawei’s proactive approach and influence (beyond others ZTE) eventually laid the path for 6G as well
  - **Significant contributions to the ITU “IMT-2030 Global 6G Vision”** by putting forward 5 types of 6G usage scenarios and 14 capabilities, which have been incorporated into ITU’s framework
  - Dec 5, 2023, **China hosted the Global 6G Development Conference**, a joint effort of the Chinese IMT-2030 (6G) Promotion Group, the China Institute of Communications, and the Liangjiang New Area Administrative Committee of Chongqing Province

### Takeaway(s)

Whether or not Huawei’s contributions were ultimately approved, this is likely a “Preemption Strategy”. Huawei’s proactive standardization strategy is coupled with large R&D investments and improved technical standard-setting capacities.

# Thank you

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# SESEC V

## Opportunities and Challenges of EU-China Collaboration in International ICT Standardisation

Dr. Betty Xu 24 | 09 | 2024

# SESEC INTRODUCTION

A Project co-funded by EC, EFTA, CEN CENELEC & ETSI

- ❖ **Promote** European and International standards in China
- ❖ **Improve** contacts between Project Partners and different levels of the Chinese administration, industry and standardization bodies
- ❖ **Enhance** visibility and understanding of the European Standardization System (ESS) in China.
- ❖ **Gather** regulatory and standardization intelligence
- ❖ **Undertake** technical lobbying



## Goals

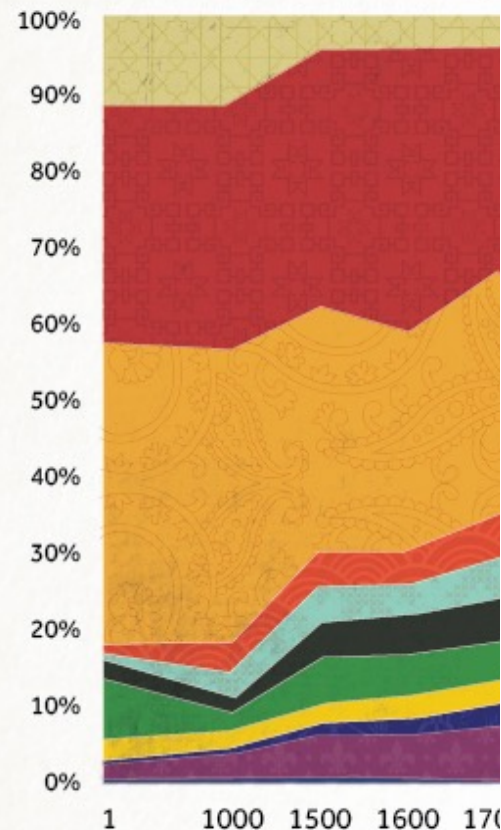
- The SESEC initiative supports **EC policy** and **ESOs strategic objectives** in China.
- Our ultimate goal is the enhancement of **EU-China dialogue and cooperation** in the field of standardization.
- It is notably expected to support the Framework Cooperation Agreement in place **between the ESOs and SAC.**

# China's Growing Influence - Challenge and Opportunity?

## 2,000 YEARS OF ECO

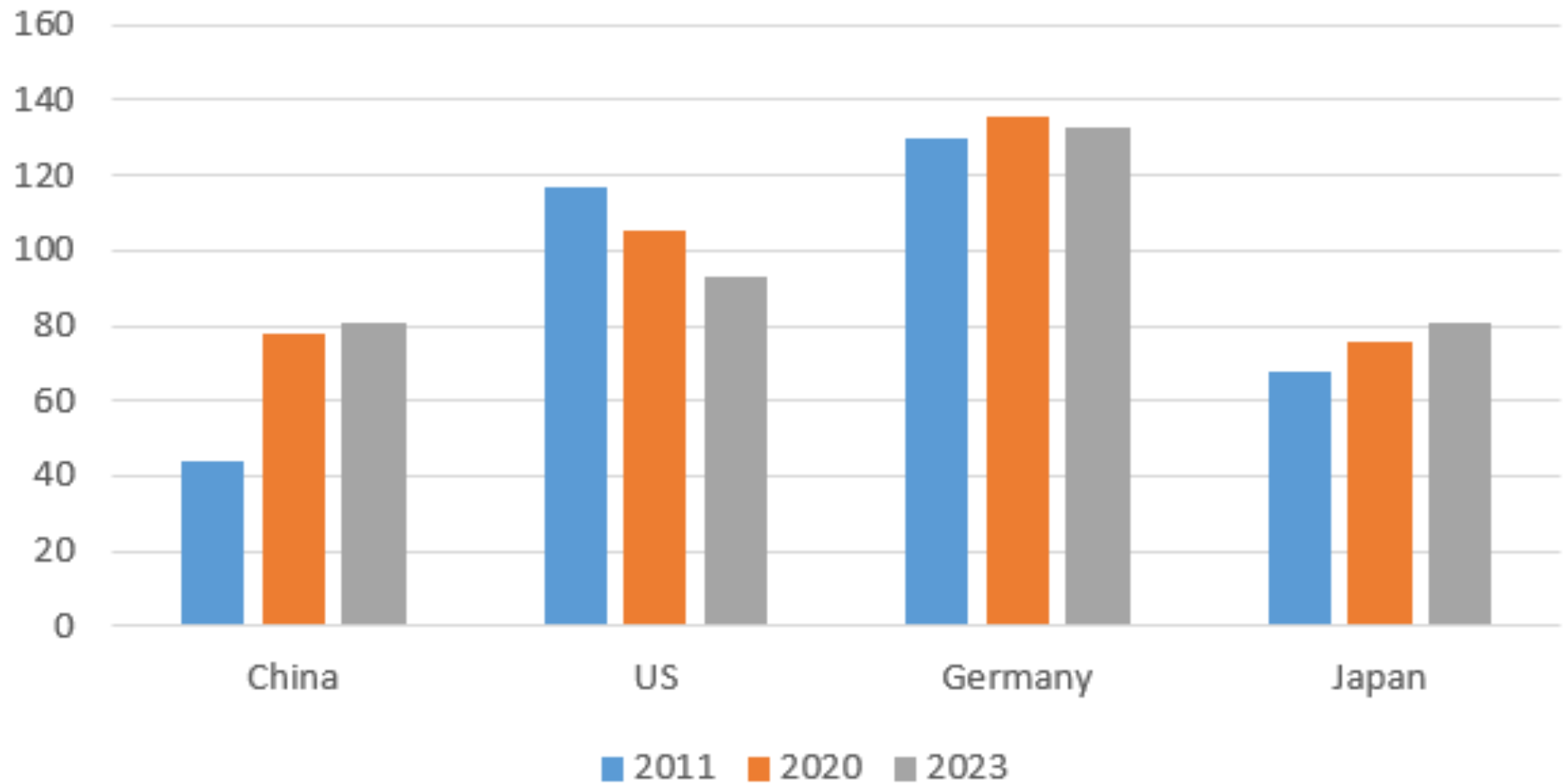
All major powers compared

SHARE OF GDP (WORLD POWERS)



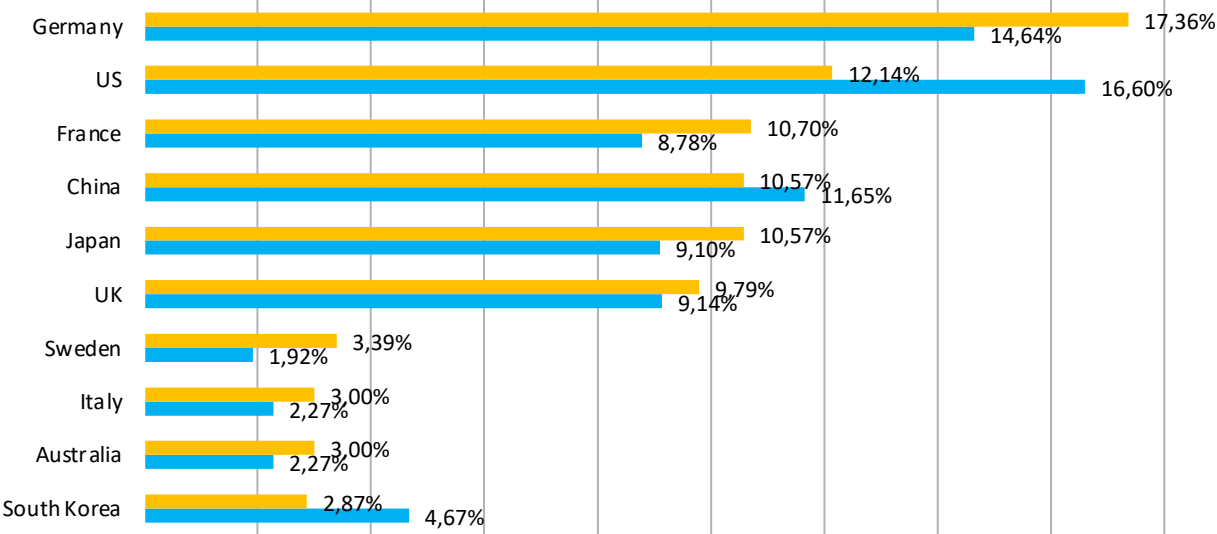
Source: "Statistics on World Population

## ISO TC/SC Secretariat Positions



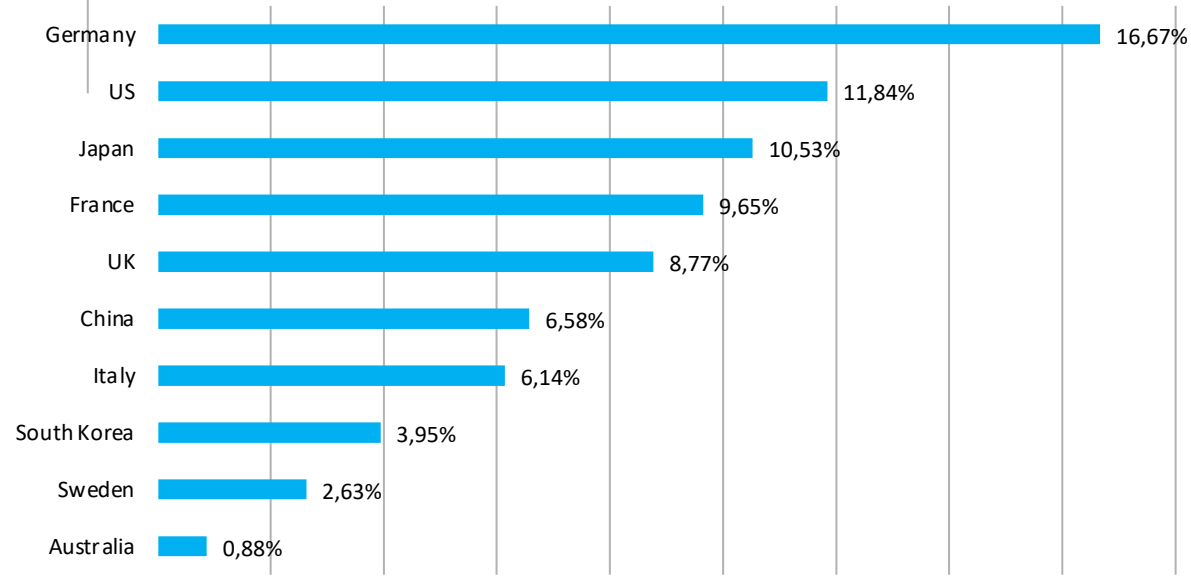


# China in ISO/IEC



■ Secretariats at TC and SC level    ■ Convenorships at WG/JWG level  
**ISO members' contribution (2023)**

Source: ISO IN FIGURES 2023



**IEC members' contribution, Secretaires (Sept, 2024)**

Source: IEC Website (as of Sep 2024)

# China in ITU

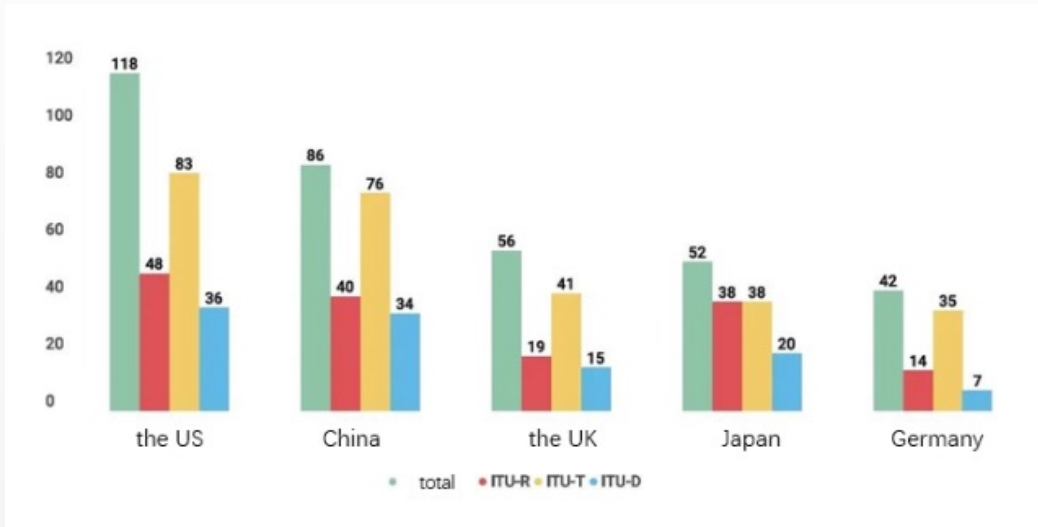


Figure.1 Top 5 countries with the largest number of ITU members (as of October 2021)

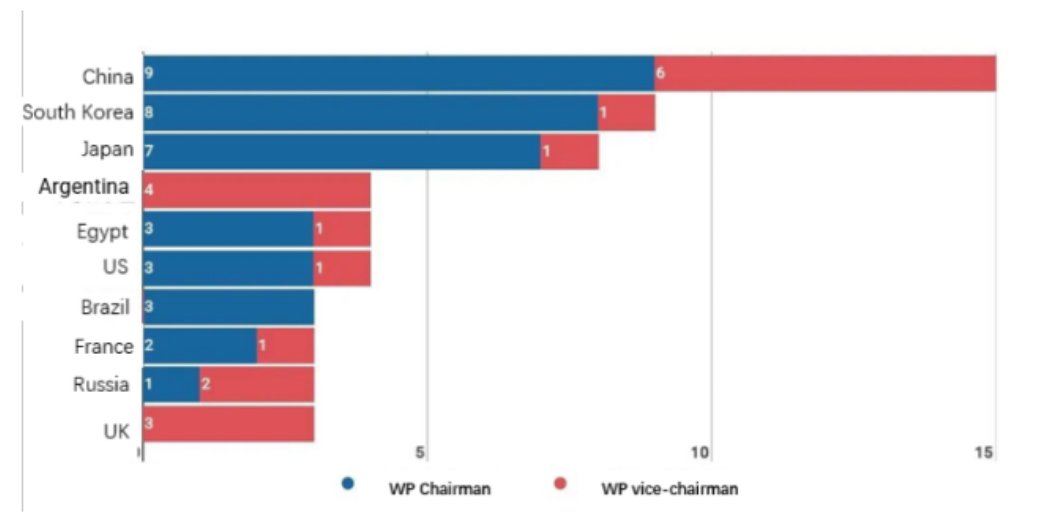


Figure 3 Distribution of ITU-T WP chair and vice chair positions by country of registration (top 10)

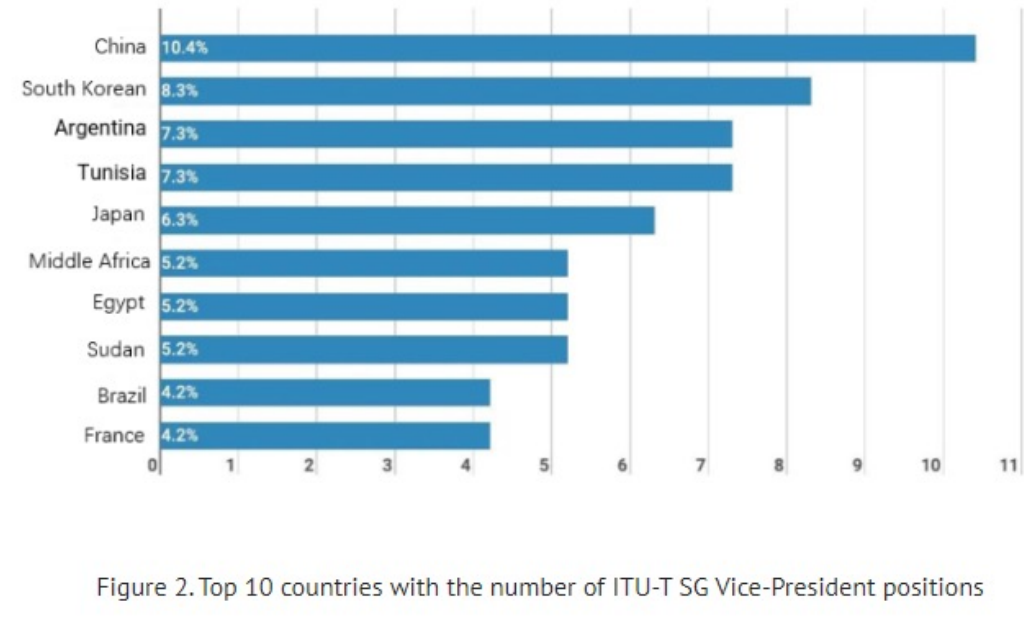


Figure 2. Top 10 countries with the number of ITU-T SG Vice-President positions

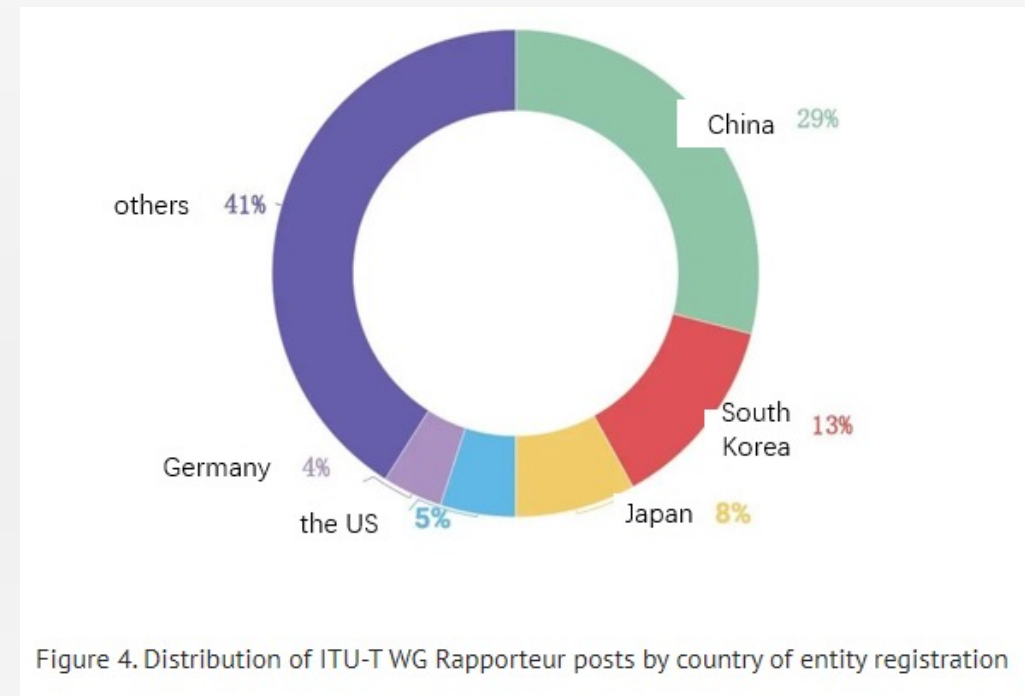
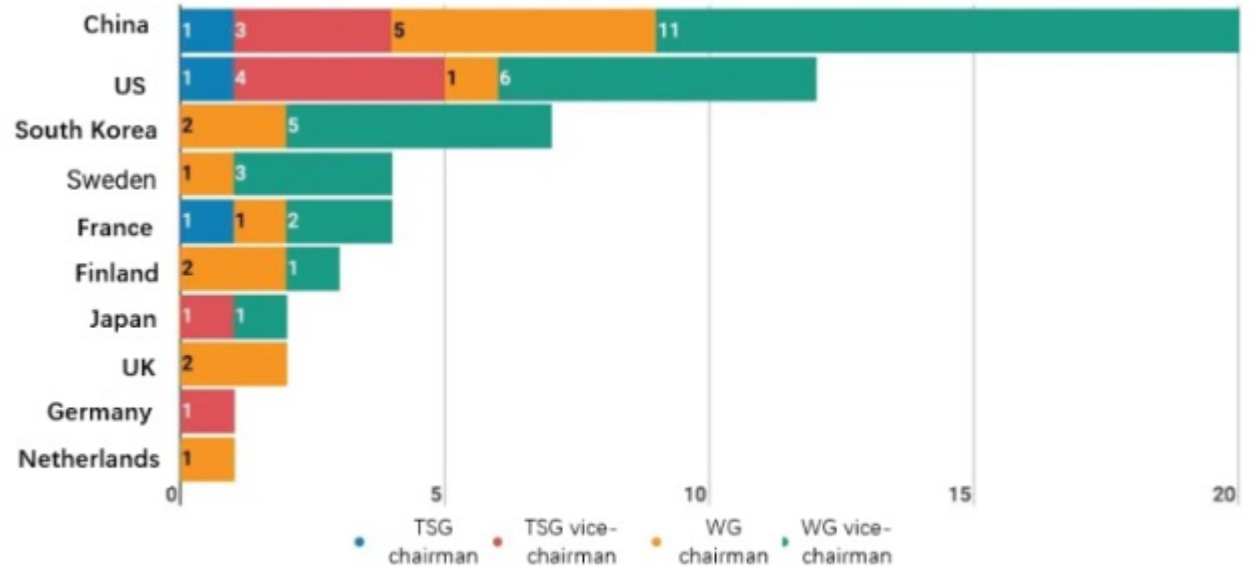
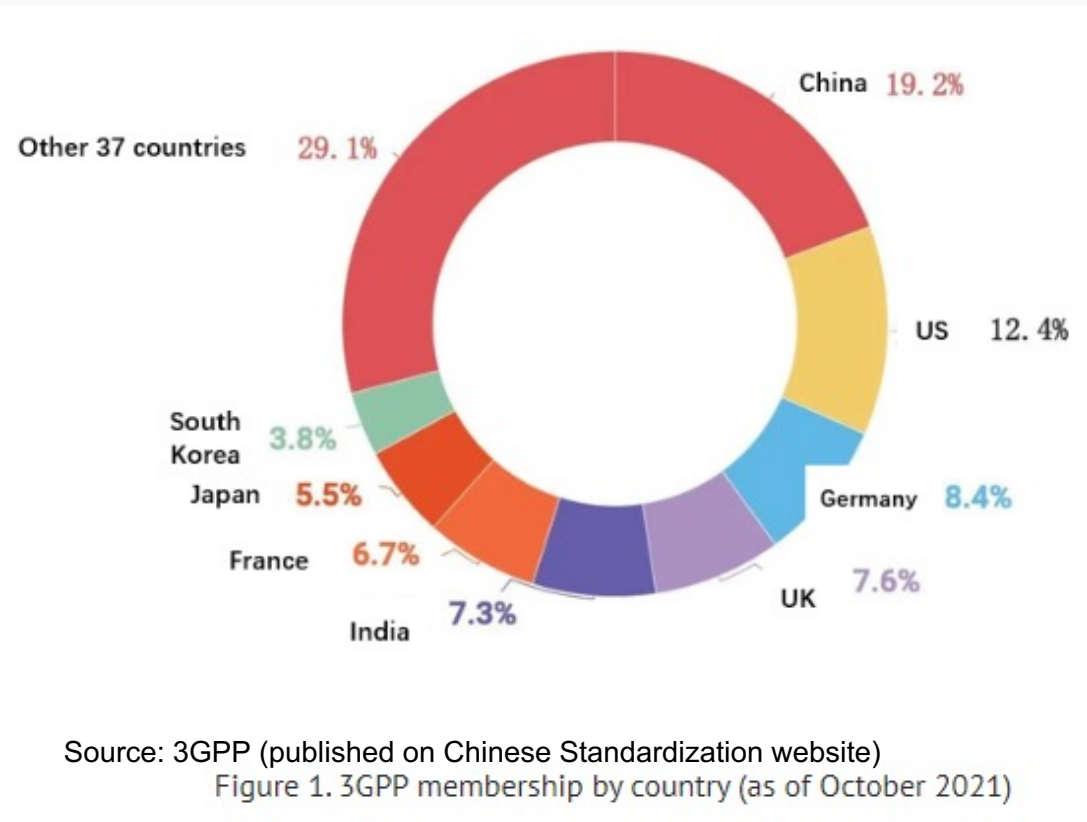


Figure 4. Distribution of ITU-T WG Rapporteur posts by country of entity registration

# China in 3GPP



Source: 3GPP (published on Chinese Standardization website)

Figure 2. 3GPP TSG and WG chair and vice chair positions (as of October 2021)

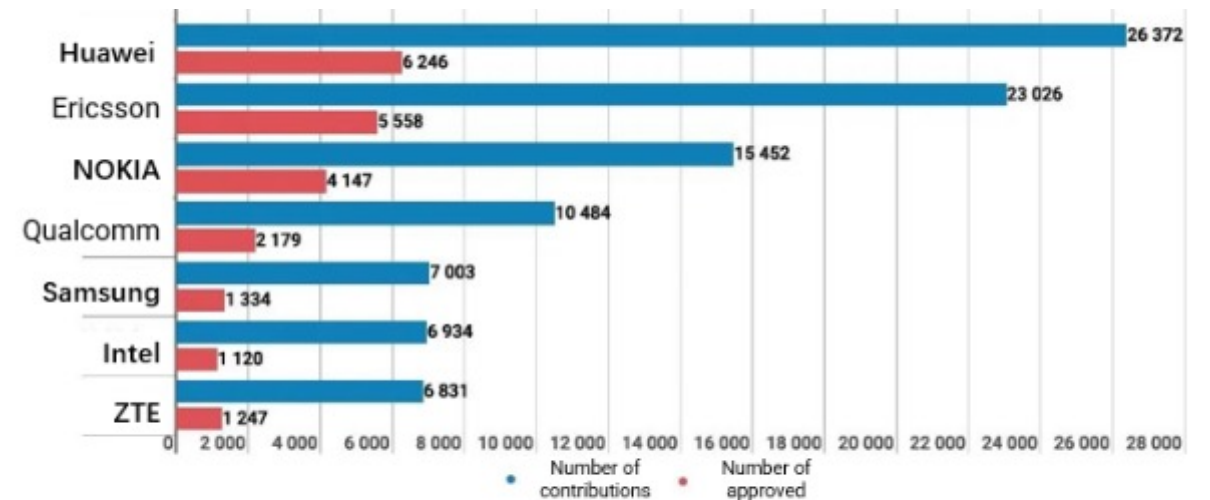


Figure 3 Contribution of individual members to 3GPP 5G standards (as of October 2021)

\* Note: Source From Chinese Standardization website without reference to the original source

# Conclusions

- China's Influences in International Standardization grew dramatically in last 2 decades
- Compared to the traditional technological standards sectors, like those in ISO and IEC, China plays an even more influential role on International/Global Digital Standards.
- Even with such dramatic growth, China still believes it did not get the proper positions in some of the areas that it deserves.

## **Impacts of China's growing influence in international technical standards**

- Is China a breaker of the current international standardization system/rules? Is China playing fairly?
- How to deal with such growth? Opportunities or Challenges?

# Opportunities of EU-China Collaboration in International ICT Standardisation

- China is still in favour of globalization and international trade, therefore China still wants to make standards in the international level, like ISO, IEC, ITU and 3GPP.
- China still tends to collaborate with EU, while US is comparatively difficult and sometimes even impossible
- Harmonized ICT standards between China and EU will facilitate trade and foster the ICT products/services exporting to China.

## Challenges

- Geopolitical uncertainty
- Fairness of the collaboration
- Unbalanced benefits for one party in the bilateral trade
- How to get reciprocity from the collaboration

# How to Collaborate with China on International ICT Standardisation

## **UNDERSTAND**

Deeply and accurately understand China's ICT standardization strategies and activities

## **BALANCE**

Balance the trade benefits and EU and member states political agenda and strategy; Balance the unharmonized standards if not collaborate...

## **IDENTIFY**

Identify where the cooperation is possible and beneficial

## **RECIPROCITY**

Cooperate with reciprocity



## Seconded European Standardization Expert in China

### **Dr.. Betty Xu**

Seconded European Standardization Expert in China  
(SESEC)

A project co-funded by CEN, CENELEC, ETSI, EC and  
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