



# SUSTAINABLE DEVELOPMENT GOALS



## Technical Barriers to Trade and Sustainable Development

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# Self-introduction

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- ❖ Ph.D in Economics
- ❖ Associate Professor of institute of international economy, UIBE
- ❖ Director of China Research Center for Technical Barriers to Trade (CCTBT), UIBE
- ❖ Registered expert of ISO Social Responsibility Working Group for ISO26000
- ❖ Expert of CSR Think tank of China Federation of Industrial Economics
- ❖ Expert of Think-Tank of China Corporate Social Responsibility(TTCCSR), and member of academic committee
- ❖ Member of Expert Committee for Sustainable Natural Rubber
- ❖ Senior Expert of Committee for Social Responsibility of China Association of Communications Enterprises
- ❖ Member of Expert Committee for Sustainability Management System of Beijing Winter Olympics 2022
- ❖ Expert of WTO Notification Review
- ❖ Member of the VSS (Voluntary Sustainability Standards) Academic Advisory Council, the United Nations Forum on Sustainability Standards (UNFSS)



# Self-introduction

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- ❖ Research fields: Technical Barriers to Trade; Corporate Social Responsibility and Sustainable Development; Global governance and trade rules.
- ❖ Finished More than 30 research projects which are from Ministry of Commerce, Ministry of Education, etc.
- ❖ Participated the drafting of ISO260000 and the translation of ISO26000 into Chinese.
- ❖ Participated the drafting of ISO 20121 and ISO Guide 82.
- ❖ Participated the drafting of sustainability related standards or guidelines in several industries in China.



# Content

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- ❖ The targets of this course
- ❖ The main content we will talk about
- ❖ How will it be delivered?



# The targets of this course

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- ❖ Grasp the basic concepts and contents of TBT & SPS
- ❖ Know the basic theory and practices of TBT and SPS, including the impacts of TBT & SPS to international trade and domestic economy
- ❖ Learn the latest topics and issues in TBT and SPS related area



# The main contents we will talk about

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- ❖ The basic concept of TBT & SPS
- ❖ The content of TBT & SPS, esp. in TBT agreement and SPS agreement
- ❖ The basic theory and practices of TBT and SPS
- ❖ Some cases related to TBT & SPS
- ❖ Newly negotiated TBT & SPS topics in WTO and other RTAs
- ❖ Some important TBT related issues in BRI



# How to deliver?

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- ❖ Introducing and explain the basic concepts and contents
- ❖ Case study and discussing
- ❖ Debate on some topic( to be decided)



# What's TBT

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- ❖ Technical barriers to trade (TBT) usually means those technical measures necessary to ensure national security, safety, the quality of exports, or for the protection of human, animal or plant life or health, of the environment, of the consumer information, or for the prevention of deceptive practices, at the levels it considers appropriate, which may cause unnecessary obstacles to international trade.
- ❖ Those measures usually are in the form of technical regulations, standards, or conformity assessment procedures.



# What does it mean?

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- ❖ TBT are recognized as WTO members' right
- ❖ TBT can only be implemented to achieve legitimate policy objectives, such as the protection of human health and safety, or protection of the environment
- ❖ Even though they are legitimate, they can also cause obstacles to trade
- ❖ They are in different forms, some are mandatory, while others may be voluntary



# Technical regulation

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- ❖ Document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.



# Technical regulation - EU Directive RoHS

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- ❖ EU Directives, eg. RoHS(the Restriction of the use of certain hazardous substances in electrical and electronic equipment), 2002 / 95 / EC(the updated one is 2011 / 65 / EU)
- ❖ test 6 hazardous substances, 铅(Lead, Pb), 镉(Cadmium, Cd), 汞(Mercury, Hg), 六价铬(Chromium (VI), Cr6+),多溴联苯(Polybrominated biphenyls PBBs)和多溴二苯醚(-Polybrominated diphenyl ethers, PBDEs)
- ❖ All applicable products in the EU market since July 1, 2006 must pass RoHS compliance



# Technical regulation- EU Directive RoHS

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- ❖ Cat 1. Large household appliances: refrigerators, washers, stoves, air conditioners
- ❖ Cat 2. Small household appliances: vacuum cleaners, hair dryers, coffee makers, irons
- ❖ Cat 3. Computing & communications equipment: computers, printers, copiers, phones
- ❖ Cat 4. Consumer electronics: TVs, DVD players, stereos, video cameras
- ❖ Cat 5. Lighting: lamps, lighting fixtures, light bulbs
- ❖ Cat 6. Power tools: drills, saws, nail guns, sprayers, lathes, trimmers, blowers
- ❖ Cat 7. Toys and sports equipment: videogames, electric trains, treadmills
- ❖ Category 8. Medical devices and equipment \* (also impacted by GMP regulations - 21 CFR 820)
- ❖ Category 9. Control and monitoring equipment \*
- ❖ Cat 10. Automatic dispensers: vending machines, ATM machines
- ❖ Cat 11. Catch-all: all other electronic and electrical equipment (EEE) not covered under the other categories \*\*



# Standard

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- ❖ Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.
- ❖ eg. ISO standards, European Standard (EN), UL standards



# ISO Standard

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- ❖ ISO 9000 family - quality management
- ❖ The ISO 9000 family addresses various aspects of quality management
- ❖ The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved



# ISO Standard

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- ❖ ISO 14000 family - Environmental management
- ❖ The ISO 14000 family of standards provides practical tools for companies and organizations of all kinds looking to manage their environmental responsibilities



# European Standard (EN)

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- ❖ All of the products and services have to meet certain standards of safety and quality. In Europe, these standards are developed and agreed by the three officially recognized European Standardization Organizations:
- ❖ the European Committee for Standardization (CEN),
- ❖ the European Committee for Electrotechnical Standardization (CENELEC)
- ❖ the European Telecommunications Standards Institute (ETSI)



# European Standard (EN)

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- ❖ Documents that have been ratified by one of the three European Standardization Organizations (ESOs), CEN, CENELEC or ETSI;
- ❖ Recognized as competent in the area of voluntary technical standardization as for the EU Regulation 1025 / 2012;
- ❖ Automatically becomes a national standard in each of the 34 CEN-CENELEC member countries
- ❖ No automatic legal obligation to apply them. However, laws and regulations may refer to standards and even make compliance with them compulsory



# European Standard (EN)

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- ❖ Specific CEN activities cover:  
Accessibility, air and Space, bio-based products, chemistry, construction, consumer products, energy and utilities, environment, food, health and safety, healthcare, heating, ventilation and air conditioning (HVAC), ICTs, innovation, machinery safety, materials, measurement, nanotechnologies, pressure equipment, security and defence, services, transport and packaging.
- ❖ Specific CENELEC activities cover electrotechnical standardization in sectors such as:  
Electric vehicles, smart grids, smart metering, household appliances, information and communication technologies (ICTs), electromagnetic compatibility (EMC), electrical engineering, fibre optic communications, fuel cells, medical equipment, railways, smart grids, smart metering, solar (photovoltaic) electricity systems, etc.



# UL Standards

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- ❖ UL is a global company with more than 120 years of expertise
- ❖ In the US, UL is accredited by the American National Standards Institute (ANSI) as an audited designator.
- ❖ In 2013, UL was accredited by the Standards Council of Canada (SCC) as a nationally recognized Standards Development Organization (SDO) able to develop National Standards of Canada (NSCs).



# UL Standards

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- ❖ Assess products;
- ❖ Test components, materials, systems and performance;
- ❖ Evaluate environmentally sustainable products, renewable energies, food and water products, recycling systems and other innovative technologies.



# Conformity assessment procedures

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- ❖ Any procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled.
- ❖ include, inter alia, procedures for sampling, testing and inspection; evaluation, verification and assurance of conformity; registration, accreditation and approval as well as their combinations



# Conformity assessment procedures

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- ❖ CE marking (Toys, Electrical equipment, Machinery, Medical devices, Lifts, Personal Protective Equipment)
- ❖ Product must meet all the EU legal requirements
- ❖ You can choose harmonised European standards if exist (your product will be presumed to be in conformity with the requirements laid down in the relevant EU directives)
- ❖ The use of standards is voluntary - you are not obliged to use them. You can also opt for other technical solutions to fulfil the essential requirements set out in the relevant EU directive



# Conformity assessment procedures

- ❖ the result of conformity assessment procedures may be a certificate, a declaration, a report, etc. to show that the product and production comply with the technical regulations or the standards

**NPS**  
Test Inspection

**HPS TESTING INSPECTION COMPANY**  
**HPS LABORATORY COMPANY LIMITED**  
Http://www.npslab.com Email:npslab@npslab.com

## Declaration Of Conformity

Applicant : DongGuan City Electronics factory  
Address : Xiao Bian Development Zone, District, No. 1 Factory  
ChangAn Town, DongGuan City, Guangdong Province, China

Manufacturer : DongGuan City Electronics factory  
Address : Xiao Bian Development Zone, District, No. 1 Factory  
ChangAn Town, DongGuan City, Guangdong Province, China

**DECLARE ON OUR SOLE RESPONSIBILITY THAT THE PRODUCT**


Trade Name : N/A  
Product : Safety Capacitor  
Model : 334  
Serial No. : 104、224

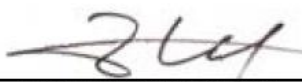
This EC-Declaration of conformity is following the provisions of EU RoHS Directive 2011/65/EU It is confirmed that a sample of the product has been tested and found in conformity with below

Test Standard : EN 50581:2012  
Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Date of issue : May 4, 2015

**Detailed Specification of the tested product shown in the following test Certificate** : NPS015050017-CE



  
Laboratory Manager

The statement is based on a single evaluation of the sample of above mentioned products.  
It does not imply an assessment of the whole production.



# What's SPS — — Sanitary and phytosanitary measure

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- ❖ Any measure applied:
- ❖ (a) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of **pests, diseases, disease-carrying organisms or disease-causing organisms**;
- ❖ (b) to protect human or animal life or health within the territory of the Member from **risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs**;
- ❖ (c) to protect human life or health within the territory of the Member from **risks arising from diseases** carried by animals, plants or products thereof, or from the entry, establishment or spread of **pests**; or
- ❖ (d) to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of **pests**.



# What does it mean?

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- ❖ Only measures that protect human, animal or plant life or health
- ❖ Pests, diseases, disease-carrying organisms or disease-causing organisms
- ❖ Additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs
- ❖ Diseases
- ❖ Pests



# SPS

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- ❖ All relevant laws, decrees, regulations, requirements and procedures including:
- ❖ End product criteria;
- ❖ Processes and production methods;
- ❖ Testing, inspection, certification and approval procedures;
- ❖ Quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during transport;
- ❖ Provisions on relevant statistical methods, sampling procedures and methods of risk assessment;
- ❖ And packaging and labelling requirements directly related to food safety.



# SPS

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- ❖ Food safety law of Japan
- ❖ In 2002, Japan refused the import of Chinese spinach because of the pesticide residue——Chlorpyrifos(毒死蜱) exceeds 0.01ppm
- ❖ The residue requirement for rice is 0.1ppm, for soybean is 0.5ppm
- ❖ China(0.1ppm); EU (0.05ppm) ;Codex Alimentarius Commission(1ppm)



# Homework

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- ❖ Find an example of technical regulation, standard and conformity assessment procedures that implemented in your country, and show to the class next time.
- ❖ Give a brief introduction, including the name, the scope, etc.



# References

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- ❖ The WTO Agreements Series-----Technical Barriers to Trade
- ❖ [https://www.wto.org/english/res\\_e/publications\\_e/tbttotrade\\_e.pdf](https://www.wto.org/english/res_e/publications_e/tbttotrade_e.pdf)
- ❖ WTO TBT committee:  
[https://www.wto.org/english/tratop\\_e/tbt\\_e/tbt\\_e.htm](https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm)
- ❖ WTO SPS committee:  
[https://www.wto.org/english/tratop\\_e/sps\\_e/sps\\_e.htm](https://www.wto.org/english/tratop_e/sps_e/sps_e.htm)



# Thank you!

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