

So once you've launched your products into the largest markets

- North America
- European Union
- Asia-Pacific economic powerhouses
 - China, India, Japan, South Korea, Australia, Taiwan

...where do you go next?

That's the focus of this presentation...

*Note: GDP PPP (purchasing power parity) compares the gross domestic product (GDP) or value of all final goods and services produced within a nation in a given year; it's one measure for evaluating possible market countries for your products



Agenda

1) Asia-Pacific: The Next 6

- 2) South America: Easy as ABC
- 3) Africa: The Top 4 Markets
- 4) Middle East: The Big 6
- 5) Non-EU Europe: The EEU and others

* All maps and demographic information are courtesy of the US CIA World Factbook online, unless otherwise noted. www.cia.gov/library/publications/the-world-factbook



Asia-Pacific: The Next 6

- Indonesia
- Malaysia
- Vietnam
- Singapore
- Philippines

Thailand

After you're already shipping to:

- Australia/NZ
- China
- India
- Japan
- South Korea
- Taiwan



SOUTHEAST ASIA









Indonesia

GDP PPP: 9th in world Mobile Cellular: 4th Internet Users: 14th







Indonesia

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The Telecom/Wireless Authority is the **Directorate General of Resources and Equipment of Post and Information (SDPPI)**

- SDPPI is under the authority of the Ministry of Communication and Information Technology (MCIT)
- This changed from the previous "DGPT" agency in 2011
- SDPPI website is available in English
 - Go to www.postel.go.id
 - Then select "Switch to English"





Inc.



Indonesia Frequency Management

- Managed by the Directorate General of SDPPI Control, & verified by the Frequency Spectrum Monitoring Unit
- Regulates frequencies from 3 KHz to 3 THz (3000 GHz)
- All Information and Communication Technologies (ICT) products within this range are regulated
- SDPPI operates under the legal authority of the Ministry of Communication and Information Technology (MCIT)
 - Download PDF copies of the MCIT Ordinances (laws) here:

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• <u>www.postel.go.id/regulasi-peraturan-menteri-40</u>







SDPPI Labeling Requirements:

- Must be legible
- Must be placed on the product
- May be in black & white (recommended)
- No material restrictions
 - but must be "permanent", i.e. very difficult to remove

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Sample:

XXXX/SDPPI/20YY

- XXXX is the certification number
- 20YY is the year the certification was granted

Note: Grandfathering for product approved under DGPT expired in 2014



Indonesia



Indonesia is an IECEE CB Scheme Member Country

- Accepts IEC 60950 product safety reports, with countryspecific deviations
- The CB Scheme allows one product safety report to be utilized for multiple IECEE CB Scheme members countries

- More information on the IECEE CB Scheme can be found on the official IECEE website:
 - www.iecee.org/about/cb-scheme







Malaysia

GDP PPP: 29th in world Mobile Cellular: 31st Internet Users: 40th











Malaysian Compliance Organizations

- If you want to sell your wireless or telecom products in Malaysia, you need to get acquainted with their four regulatory organizations:
 - **SIRIM**: Malaysian Wireless/Telecom Authority
 - MCMC: Malaysian Communications and Multimedia Commission
 - **DSM**: Department of Standards Malaysia
 - MTSFB: Malaysian Technical Standard Forum Berhad





Malaysia



SIRIM is the National Telecom Authority

- And the Malaysian standards development agency
- SIRIM promotes Malaysian technology research and development, and champions quality standards
- SIRIM website: <u>www.sirim.my</u>

SIRIM Labeling Requirements:

- Must be purchased from SIRIM
- Must be placed on the product
- Must be labeled in the factory



- The factory must be a legitimate registered factory
 - i.e. <u>not a warehouse</u>









The Malaysian Communications and Multimedia Commission (MCMC)

- MCMC is responsible for
 - Management of the frequency spectrum
 - Implementing and enforcing communications laws
 - Licensing and auditing to insure compliance to the applicable requirements

- Overseeing all communications and multimedia activities not otherwise regulated
 - MCMC website: <u>www.mcmc.gov.my</u>







Department of Standards Malaysia (DSM)

- DSM is responsible for
 - Publishing official Malaysian compliance standards
 - Being the source for purchasing official standards
 - DSM website: <u>www.standardsmalaysia.gov.my</u>

Malaysian Technical Standard Forum Berhad (MTSFB)

- Develops, recommends, modifies and updates
 Technical Codes, Standards and Guidelines
- Obtains standards approval from SIRIM & DSM

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• MTSFB website: <u>mtsfb.org.my</u>



Your Certification Resource

Malaysia



Maylaysia is an IECEE CB Scheme Member Country

- Accepts IEC 60950 product safety reports, with countryspecific deviations
- The CB Scheme allows one product safety report to be utilized for multiple IECEE CB Scheme members countries

- More information on the IECEE CB Scheme can be found on the official IECEE website:
 - www.iecee.org/about/cb-scheme







Vietnam

GDP PPP: 37th in world GDP RGR at 18th Mobile Cellular: 10th Internet Users: 16th







Inc.

Ministry of Information & Communications (MIC) is the Info & Comms Technology (ICT) Authority

- MIC approvals are required for any device that connects to TTE, or that utilizes RF spectrum (e.g. ITE/Wireless)
- The MIC agency has an informative English-language website at <u>english.mic.gov.vn</u>
- Vietnam QVCN publishes standards for EMC & Telecom
 - Covers EMC, EMI, SAR, and Product Safety criteria
 - MIC standards can be found here:
 - <u>http://english.mic.gov.vn/mra/Pages/TinTuc/131986/Technical-</u> regulations-and-standards-for-MRA.html







MIC Labeling Requirements:

- Optional (not mandatory)
- May be in black & white
- No material restrictions



Vietnam



Vietnam is an IECEE CB Scheme Member Country

- Accepts IEC 60950 product safety reports, with countryspecific deviations
- The CB Scheme allows one product safety report to be utilized for multiple IECEE CB Scheme members countries

- More information on the IECEE CB Scheme can be found on the official IECEE website:
 - www.iecee.org/about/cb-scheme







Singapore

GDP PPP: 41st in world Mobile Cellular: 92nd Internet Users: 73rd Exports: 14th Imports 16th Unemployment is ~ 2%









Inc.

The Infocomm Media Development Authority (IMDA) is Singapore's government telecom agency

- •Their scope is defined under legislation, and the specific acts and regulations can be accessed here:
 - www.imda.gov.sg/regulations-licensing-and-consultations/acts-and-regulations
- •IMDA compliance standards for TTE & Wireless can be downloaded from their website:
 - www.imda.gov.sg/regulations-licensing-and-consultations/ict-standards-and-quality-of-service/telecommunication-standards
 - Then under the heading "Telecommunications Standards for " select from the following categories:
 - Line Terminal Equipment Standards for TTE, or

- <u>Radio-communication Equipment Standards</u>
- •IMDA Spectrum reference charts are here:
 - Frequency Allocation and Assignment







Product Label Requirements:

- IMDA requires product labeling to indicate the specific standard covering the product
 - Example:

"Complies with IMDA standard TS SRD"

- This info can be printed in the user guide, if space is not available on the label
- IDA does not require the IDA logo on the product label





Singapore



Singapore is an IECEE CB Scheme Member Country

- Accepts IEC 60950 product safety reports, with countryspecific deviations
- The CB Scheme allows one product safety report to be utilized for multiple IECEE CB Scheme members countries

- More information on the IECEE CB Scheme can be found on the official IECEE website:
 - www.iecee.org/about/cb-scheme









Philippines

GDP PPP: 30th in world Mobile Cellular: 13th Internet Users: 17th





Philippines

Inc.



- The National Telecommunications Commission (NTC) is the Philippines telecom authority
- The NTC has a website with a wealth of info
 - http://ntcncr.com/
- NTC memos and forms can be downloaded:
 <u>http://ntcncr.com/index.php/downloadable-forms</u>
- NTC accepts FCC reports and grants as proof of compliance
- Normal NTC agency processing time is one week, but can be longer at peak periods



Philippines



Labeling Requirements

- NTC requires product labeling to show compliance
 - Must include the NTC logo
 - "Type Accepted" plus certification number for radio/wireless devices
 - "Type Approved" for modems
 - Example:









Thailand

GDP PPP: 21st in world Mobile Cellular: 16th Internet Users: 30th









Thailand

Inc.

The National Broadcasting and Telecoms Commission (NBTC) is the telecom agency

- NBTC accepts FCC reports and grants as proof of compliance
- NBTC English-language NBTC website is available at: <u>http://house.nbtc.go.th/wps/portal/Eng</u>
- NBTC regulatory authority is through Thai legislation, which can be accessed here: http://house.nbtc.go.th/wps/portal/Eng/Home/ActsandRegulations/THTelcoActsOfLegis

American Certification Body

- The NBTC Frequency Allocation and Spectrum Utilization Charts can be accessed here: http://house.nbtc.go.th/wps/portal/Eng/Home/FrequencyManagements
- NBTC does not require product labeling



Thailand

Inc.



- The Thai Industrial Standards Institute (TISI) is the safety agency for Thailand
- Specified types of electrical and electronic products are required to be certified to TISI standards
 - An English-language TISI website is available:
 - http://www.tisi.go.th/?lang=en&id
 - Downloads of compulsory standards are here:
 - <u>http://app.tisi.go.th/standard/comp_eng.html</u>

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• Thailand is a member of the IEEE CB Scheme



South America: ABC

- Argentina
- Brazil
- Chile

*The 3 largest market countries in South America, based on GDP PPP









Argentina

GDP PPP: 27th in world Mobile Cellular: 23rd Internet Users: 23rd









- "Ente Nacional de Comunicaciones" (ENACOM) is the government telecom authority
 - Previous was "CNC"
 - ENACOM website (in Spanish): <u>www.enacom.gob.ar</u>
- ENECOM approvals are mandatory for any device that connects to telephone lines (wired), or that utilize radio frequency spectrum (wireless) for the transmission of information
 - This includes ITE & smart phones, and any other electronic devices with wireless technolog
- ENACOM publishes standards ("Normativa") for regulated product, as Resolutions (in Spanish) on their website:

www.enacom.gob.ar/normativasrtification Bod





Inc.

Certification Requirements

- The applicant must be the local importer, and only Argentine importers can homologate the product
- Equipment must be tested under the applicable ENACOM regulations
- Argentina doesn't accept foreign test reports, except FCC or CE test report for GSM technology.
- Product testing must be done at an ENACOMauthorized in-country test laboratories







ENACOM MARKING REQUIREMENTS

The product label must be legible and indelible with the following information:

- Trademark
- Model number
- ENACOM registration number
- Serial number

The certificate is valid for 3 years

LEAD TIME

Overall lead time is 6 to 8 weeks after receipt of samples and all required submittal documents





Instituto Argentino de Normalización v Certificación



Argentina

Inc.

Product Safety Requirements

- According to Resolution 92/1998, electric and electronic products are required to be safety certified, under IRAM or IEC standards
- Resolution 92/98 was published in February 1998 and it establishes the requirements for all electric and electronic products operating up to 1000 AC or 1500 DC, with power consumption rated up to 5 KVA, and installations materials rated up to 63 A
- Resolution 76/2002 indicates which product categories are exempted from the requirements of Resolution 92/98







GDP PPP: 8th in world Mobile Cellular: 6th Internet Users: 6th








ANATEL: The National Telecom Authority

 To obtain ANATEL certification, you must use a Brazilian OCD ("Designated Certification Body") accredited by ANATEL

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 Product certification testing must be performed by an INMETRO laboratory that is accredited by SBAC





Category I: Terminal equipment intended for use by the general public for purposes of accessing telecommunications service; requires product testing & evaluation of factory quality system

• e.g. AC/DC adapters used with cellphones, cordless phones, wired phones, fax-modem machine, etc.

Category II: Equipment not covered by the definition of Category I products and that make use of the frequency spectrum for the transmission of signals; requires product testing

• e.g. antennas, amplifiers, transceivers, RF devices (Wi-Fi, BT, RFID), etc.

Category III: Equipment not contained in the definitions of Category I and II and that will have interoperability with telecommunication network; requires product testing

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• e.g. cables (coaxial, hybrid, fiber optic), multiplexers, data network equipment (switches, hubs, gateways), etc.





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ANATEL Homologation Certificate

- Issued by ANATEL
- No expiration date
- Issued to the designated local representative

OCD Technical Certificate

- Issued by OCD
- May have expiration date depending on product
- Typically issued to the manufacturer (owner of design)

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Product label must contain:

- ANATEL homologation number
- **ANATEL** logo -
- EAN bar code
- Trademark
- Model Number
- **Compliance Warning statements**





Note:

- EAN bar code must meet GS1-128
- ANATEL homologation number breakdown HHHH: number of ANATEL approval
- AA: yearFFFF: identification of local representative

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American Certification Body, Inc.



INMETRO - National Institute of Metrology, Standardization and Industrial Quality

- Responsible for accrediting certification bodies and test labs
- To obtain INMETRO product certification, you must use a Brazilian OCP ("Product Certification Body") accredited by INMETRO
- Product certification testing must be performed by a RBLE test laboratory, which has been accredited by INMETRO
- INMETRO website (English): www.inmetro.gov.br/english





INMETRO Mandatory Certification List (80+ products)

• e.g. medical equipment, hazardous location equipment, electrical cords and cables, etc.

INMETRO Voluntary Certification List (~ 90 products)

• e.g. electrical appliances, consumer electronics, IT equipment, etc.











Chile

Subsecretaria de Telecomunicaciones (SUBTEL) is the telecommunications regulatory agency for Chile, mandating approval requirements for wireless and telecom devices

- FCC/CE test reports accepted as proof of compliance
 - Except for hard-wired devices that connect to the telecommunications network, e.g. analogue telephones or faxes, which must be tested in-country
- Local representatives and factory inspections are not required
- Product labels are not required, except for SAR-test-required products, analogue telephones, and printers
 - For those exceptions, the SUBTEL certification number must be on the label, preceded by the acronym "SUBTEL"; no logo required

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SUBTEL website (Spanish): <u>www.subtel.gob.cl</u>







<u>Superintendency of Electricity and Combustibles -</u> <u>SEC</u>

SEC MANDATORY PRODUCT LISTS

- Electrical products: Fluorescent lamp, Household electrical appliances, Hand-Held Motor-Operated Electric Tools, Rotating Electrical Machine
 - www.sec.cl/portal/page?_pageid=33,3397595,33_3401553&_d ad=portal&_schema=PORTAL

SEC Accredited Certification Bodies - Weblisting:

<u>www.sec.cl/portal/page?_pageid=33,3397598&_dad=portal&_s</u>
 <u>chema=PORTAL</u>

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- A label marking is required on approved products, with certificate number & applicable technical standard
- User manual must be in Spanish



Africa: Top 4

- Algeria
- Egypt
- Nigeria
- South Africa
- The 4 largest market countries in Africa, based on GDP PPP









GDP PPP is 35th in world Mobile phones at 33rd Internet users at 55th





Authority for the Regulation of Posts & Telecommunications (ARPT)

- Agency website: <u>www.arpt.dz</u> (in French & Arabic)
- A local representative is required in-country
- o Test samples and product labeling are required
- Standards Accepted for Proof of Conformity: FCC, EU (CE)
- Required application submittal documents: FCC grant & test reports or CE Declaration of Conformity (DoC) & EU R&TTE (ETSI) test reports, LOA for local rep
- Products in Scope: wireless and telecom devices and products, e.g.
 Bluetooth, Wi-Fi, cell & satellite phones, Telephone Terminal Equipment (TTE)







GDP PPP is 23rd in world Mobile phones at 17th Internet users at 15th



National Telecommunication Regulatory Authority

- Agency website: <u>www.tra.gov.eg/en</u>
- A local rep and product labels are not required
- o In-country testing is only required for <u>telecom</u> products
- Standards Accepted for Proof of Conformity: EU (CE)
- Required application submittal documents: CE Declaration of Conformity (DoC) & EU test reports (RED/EMC/Safety)
- Products in Scope: wireless, telecom, and ITE devices and products, e.g. ITE with Bluetooth or Wi-Fi, cell & satellite phones, Telephone Terminal Equipment (TTE)
- Notes: Frequent delays have been experienced during times of political unrest.











Nigeria

Telecom authority: Nigerian Communications Commission (NCC)

Website: <u>www.ncc.gov.ng</u> (English)

Standards agency: Standards Organization of Nigeria-Conformity Assessment Program (SONCAP)

- Agency website: <u>www.son.gov.ng</u> (English)
- A local rep and labels are required
- o Test samples are not required
- Standards Accepted for Proof of Conformity: EU (CE)
- Required application submittal documents: CE Declaration of Conformity (DoC) & EU RED (ETSI) test reports, LOA for local rep
- Products in Scope: wireless and telecom devices and products, e.g.
 Bluetooth, Wi-Fi, cell & satellite phones, Telephone Terminal Equipment
- Note: Both NCC and SONCAP certifications must be obtained





GDP PPP is 24th in world Mobile phones at 9th Internet users at 9th



Ο



South Africa

Telecom authority: Independent Communications Authority of South Africa (ICASA)

- Agency website: <u>www.icasa.org.za</u> (English)
- A local rep and labels are required
- o Test samples are <u>not</u> required
 - Standards Accepted for Proof of Conformity: FCC, EU (CE)
- Required application submittal documents: FCC grant & test reports or CE Declaration of Conformity (DoC) & EU RED (ETSI) test reports, LOA for local rep
- Products in Scope: wireless and telecom devices and products, e.g.
 Bluetooth, Wi-Fi, cell & satellite phones, Telephone Terminal Equipment
- Notes: ICASA application forms and account setup are required





GDP PPP is 31st in world Mobile phones at 19th Internet users at 24th







EMC & Product Safety authority: South African Bureau of Standards (SABS)

- Agency website: <u>www.sabs.co.za</u> (English)
- o A local rep and labels are required
- Test samples can be required
- Standards Accepted for Proof of Conformity: EU EMC (CE), CB Scheme
- Required application submittal documents: FCC grant & test reports or CE Declaration of Conformity (DoC) & EU EMC test reports, LOA for local rep
- Products in Scope: Electronic and electrical products, including ITE, Audio/Video, and consumer electronics





Middle East: The Big 6

- Saudi Arabia
- United Arab Emirates – UAE
- Iraq
- Qatar
- Kuwait
- Israel

The 6 largest market countries in the Middle East, based on GDP PPP











GDP PPP is 15th in world Mobile phones at 29th Internet users at 35th



Saudi Arabia





Saudi Arabia

Telecom Authority: Communications & Information Technology Commission (CITC)

- o CITC website: <u>www.citc.gov.sa/en/Pages/default.aspx</u>
- Products in Scope: Wireless and Telecom, covering both EMC & R&TTE criteria
- A local representative is <u>not</u> required in-country
- Test samples can be requested; but aren't normally
- Standards Accepted for Proof of Conformity: FCC or EU
- Required application submittal documents: FCC grant & test reports, or CE Declaration of Conformity (DoC) & EU R&TTE (ETSI) test reports

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Saudi Arabia

Inc.



Product Safety Authority: Saudi Standards, Metrology and Quality Organization (SASO)

- o SASO website: <u>www.saso.gov.sa/en</u>
- Products in Scope: Electronics and Electrical products
- o A local representative is not required in-country
- o Test samples are not required
- Standards Accepted for Proof of Conformity: IEC or as specified for CB report
- Required application submittal documents: CB Report, or CE Declaration of Conformity (DoC) & EU test reports

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United Arab Emirates

GDP PPP is 33rd in world Mobile phones at 64th Internet users at 63rd













United Arab Emirates

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Inc.

Telecommunications Regulatory Authority (TRA)

- TRA website: <u>http://tra.gov.ae/index.php</u>
- Products in Scope: Wireless and Telecom
- o A local representative is required in-country
- In-country testing is required for certain types, such as Tablet Computers and GSM devices
- Standards Accepted for Proof of Conformity: EU (CE)
- Required application submittal documents: CE
 Declaration of Conformity (DoC) & EU R&TTE (ETSI)
 test reports covering EMC/RF/Safety, LOA for local rep



GDP PPP is 36th in world Mobile phones at 36th Internet users at 87th













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U.S. Embargoed "Targeted Parties" in country

- US Department of the Treasury, Office of Foreign Assets Control (OFAC) – Sanctions Programs
- Prohibitions and asset freezes against <u>specific people</u> and entities (not a "total" embargo)
 - Identified on OFAC's list of Specially Designated Nationals and Blocked Persons ("SDN List")
 - OFAC administers these programs, in order to accomplish foreign policy & national security goals

o <u>www.treasury.gov/resource-</u> <u>center/sanctions/Programs/Pages/Programs.aspx</u>

 It is important to have reliable & knowledgeable counsel to avoid unpleasant visits from US Federal Agents!

American Certification Body



Iraq



Communications & Media Commission (CMC)

- o CMC website: www.cmc.iq/en
- Products in Scope: Wireless and Telecom
- o A local representative is required in-country
- o Test samples are not required
- Standards Accepted for Proof of Conformity: EU RED
- Required submittal documents: CE Declaration of Conformity (DoC) & EU R&TTE test reports, local rep LOA

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GDP PPP is 52nd in world Mobile phones at 134th Internet users at 95th











Communications Regulatory Authority (CRA)

- CRA website: <u>www.cra.gov.qa/en</u>
- Products in Scope: Wireless and Telecom
- A local representative is not required in-country
- Test samples are <u>not</u> required
- Standards Accepted for Proof of Conformity: EU (CE)
- Required application submittal documents: CE
 Declaration of Conformity (DoC) & EU RED (ETSI) test reports







GDP PPP is 55th in world Mobile phones at 100th Internet users at 93rd

















Inc.

Telecom Authority: Ministry of Communications (MOC)

MOC website: <u>http://moc.kw/English/index.html</u>

Safety Agency: Public Authority for Industry (PAI)

- PAI website: <u>www.pai.gov.kw/en</u>
- Products in Scope: Wireless and Telecom
- o A local representative is not required
- o Test samples are not required
- Standards Accepted for Proof of Conformity: EU (CE)
- Required application submittal documents: CE Declaration of Conformity (DoC) & EU ETSI test reports

American Certification Body,







Israel

GDP PPP is 57th in world Mobile phones at 88th Internet users at 58th





Your Certification Resource





Israel

EMC & Safety Authority:

Standards Institute of Israel (SII)

- o SII website: <u>www.sii.org.il/20-en/SII_EN.aspx</u>
- Products in Scope: Electronics & Electrical, some ITE products have energy conservation criteria
- A local representative is required in-country
- In-country testing and samples are required
- Standards Accepted for Proof of Conformity: SII
- Required application submittal documents:, SII reports, construction files, user docs, LOA for local representative
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American Certification Body,

Israel

Inc.

Telecom authority: **Ministry of Communication** (MOC)

- o MOC website: <u>www.moc.gov.il/130-en/MOC.aspx</u>
- Products in Scope: Wireless and Telecom
 - $_{\odot}$ Wireless that transmits and receives will require 2 certs
- A local representative is required in-country
- Test samples are <u>not</u> required (in most cases)
- Standards Accepted for Proof of Conformity: EU RED (ETSI)
- Required submittal documents:, CE DoC & EU RED test reports, LOA for local representative



Non-EU Europe

- The Eurasian Economic Union
- Other Non-EU European Countries











Eurasian Economic Union/Customs Union Member Countries: Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia







Eurasian Economic Union

- Also called the Eurasian Customs Union (ECU)
 - Abbreviated as "Customs Union" or CU
- Started in 2010, with the 3 countries of Belarus, Kazakhstan and Russia
 - Armenia and Kyrgyzstan joined later
- Initiated as a counter/competitor to the EU
 - A Single Economic Market with a population approaching 200 Million
 - Gross Domestic Product of ~ \$3 Trillion USD

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- Covers 15% of the Earth's Land Mass
- Website: <u>www.eaeunion.org/?lang=en</u>



EEU/CU



Technical Regulations/Customs Union (TR/CU)

- Access of products to the single territory of the Customs Union is granted after products have proved to be compliant with the TR/CU compliance standard requirements that are applicable to the specified product
- More than 50 Customs Union Technical Regulations had been developed covering different types of products
- While EMC and Product Safety criteria is in place for all EEU member countries, wireless/telecom programs are still being developed

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• As an example, we first look at Russia's regulatory compliance structure...





CU Member: Russia

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- World's leading oil producer, 8th-largest oil reserves
- 2nd-largest natural gas producer
- GDP PPP is the 7th largest in the world
- Mobile phones and Internet users are both ranked at 7th








CU Member: Russia

TR/CU Mark of Conformity

American Certification Body,



Inc.

Submittals for TR-CU Approvals:

- Must comply with all TR-CU EMC/PS requirements
 - TR-CU Certificate or Declaration is needed for border customs clearance, just like previous GOST certs
- The applicant for certification must be a local company
- Factory audits are mandatory for certification
 - The factory auditors must be TR-CU certified
 - Prior to factory audits, QMS documents samples must be submitted, e.g. audit reports, list of procedures, questionnaires
- TR-CU Product Categories:
 - Information Technology (ITE), Audio/Video, Household Appliances, TTE, Scientific Instrument/Measurement Equipment, Medical Equipment



Your Certification Resource



CU Member: Russia *Hygienic Certification*

Hygienic Certification

•This is also called the <u>Sanitary-Epidemiological</u> <u>Conclusion Certificate</u>

•The hygienic certificate confirms conformity of products and services to the sanitary norms and strict observance of the established rules in the process of manufacture, storage, transportation and the sale of products and services.







CU Member: Russia *Hygienic Certification*

Some Product Categories (there are many more)

- Products that produce noise / vibration
 - Copy Machines
 - Printers

Products emitting X-radiation

- Video Monitors
- Television Receivers

Products emitting microwave radiation

- Cellular Phones
- Wireless Telephones
- Computer Components
- Laptop Computers









CU Member: Russia *Hygienic Certification*

American Certification Body,

Inc.

- Issued only by the Russian Federal Service for Supervision in the Area of Consumer Rights and Welfare Protection or Rospotrebnadzor
- Two independent organizations, both part of Rospotrebnadzor, are involved in hygienic certification
 - Center of Hygienic and Epidemiology
 - Test protocol analysis and other documentation
 - Territorial Office of Rospotrebnador
 - Issues final certificate based on expert conclusions drawn by Center of Hygiene and Epidemiology, provided that the product conforms to the Russian Hygienic Standard.





CU Member: Russia TR-CU Developments

American Certification Body

TR-CU Hygienic Program is expected soon someday (and a TR-CU R&TTE program)

- The Customs Union began preparing a new Single Sanitary Certification program in 2010
 - "CU Sanitary Expert Conclusion"
- Originally set implementation date of 1/1/2012, but has been delayed repeatedly
- New Implementation date is unknown
- Watch for new information and developments





CU Member: Russia *Svyaz Certificate*

American Certification Body, Inc.

- Applies to Telecommunications Equipment, wired & wireless
- All technical methods of integrated communications networks are subject to mandatory certification

 Article 16 of the Russian Federation Law "On Communications"
- Radio equipment sellers must obtain an additional permit from GKRCh to use the radio spectrum and specific equipment on a specific frequency band in a specific area of Russia prior to the certification process.
 - Gossvyaznadzor : The Russian Federation State Telecommunications Control
 - GKRCh : Gossvyaznadzor of the State Commission on Radio Frequencies





CU Member: Armenia

National Telecom Authority: PSRC Public Services Regulatory Commission English-language website:

- - http://psrc.am/en







- GDP Real Growth Rate at 88th
- GDP PPP at 137
- Mobile phones at 130
- Internet users at 117







CU Member: Belarus

GDP PPP is 73rd in world Mobile phones at 80th Internet users at 66th

National Telecom Authority: MCI Ministry of Communications and Informatization English-language website: <u>www.mpt.gov.by/en</u>













CU Member: Kazakhstan



National Telecom Authority: MID •Ministry for Investment & Development

•Ministry website: <u>http://mid.gov.kz/</u>





GDP PPP is 43rd in world Mobile phones at 45th Internet users at 45th

1st former Soviet country to receive investmentgrade credit rating (in 2002)





CU Member: Kyrgyzstan



GDP PPP is 145th in world Mobile phones at 101st Internet users at 113th



National Telecom Authority: MTC

- **Ministry of Transports & Communications**
- MTC website: http://piumotc.kg





Non-EU European Countries that accept CE

- Some formally accept the CE mark
 e.g. Turkey
- Other non-EU countries "informally" accept the CE mark
 - e.g. Serbia
- Or may accept CE test reports as proof of compliance, but still require agency submittals

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– e.g. Ukraine



GDP PPP is 18th in world Mobile phones at 21st Internet users at 19th



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A non-EU European country that formally accepts CE mark and reports as proof of compliance

- Has a formal Mutual Recognition Agreement (MRA) in place with the EU
- Accepts all CE reports and declarations
- Is an EU Member Candidate Country





Turkey







- TECHNOLOGIES AUTHORITY
- National Telecom Agency:
 - Information & Communication Technologies Authority (ICTA)
 - Regulates Frequency Spectrum & Information Technologies
 - English-language website: <u>http://eng.btk.gov.tr</u>







Bosnia & Herzegovina

A non-EU European country that "informally" accepts CE reports, DOCs, and marks as proof of compliance for importation

 Bosnia and Herzegovina's top economic priority is the acceleration of integration into the EU

- But they are not an official EU candidate country
 - i.e. no MRA







GDP PPP is 113th in world Mobile phones at 129th Internet users at 89th

Bosnia & Herzegovina

Bosnia & Herzegovina (cont.)

- National Telecom Authority:
 - Communications Regulatory Agency (CRA)
 - English-language website: <u>http://rak.ba/eng/</u>







Ukraine

GDP PPP is 51st in world Mobile phones at 25th Internet users at 32nd











 Ukraine has their own unique product compliance scheme, but in most cases they will accepts CE reports as proof of compliance

Ukraine

- Ukraine test and certification organizations:
 - "Ukrainian Scientific and Technical Institute for Certification and Testing of Electrical Equipment" = UkrTest
 - UkrTest is under the authority of the "State Enterprise All-Ukrainian State Research and Production Center for Standardization, Metrology, Certification and Consumers Rights Protection" = SE UkrMetrTestStandart

American Certification Boo



Your Certification Resource





- Compliance testing and certification:
 - EMC
 - Product Safety
 - Wireless/Telecom
 - Energy Efficiency
 - English-language website: www.ukrtest.kiev.ua/en/45







Ukraine

- National Telecom Authority: UCRF
 - Ukraine State Center of Radio Frequencies
 - English-language website: <u>www.ucrf.gov.ua/en/</u>





Conclusions and Recommendations

Make sure your selected market countries make sense

- Perform cost/benefit analysis (pros/cons)
- Join industry affinity groups to learn about new & updated regulatory requirements
- TCBC; IEEE Societies such as the EMC Society & the Product Safety Engineering Society
- Linked In groups; e.g. IoT International Compliance Industry publications
 - In Compliance: www.incompliancemag.com
 - Interference Technology: www.interferencetechnology.com
 - Evaluation Engineering (EE): www.evaluationengineering.com

Building your own knowledgeable & experienced compliance network is important to be successful

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Inc.



Questions?

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