PTCRB CERTIFICATION
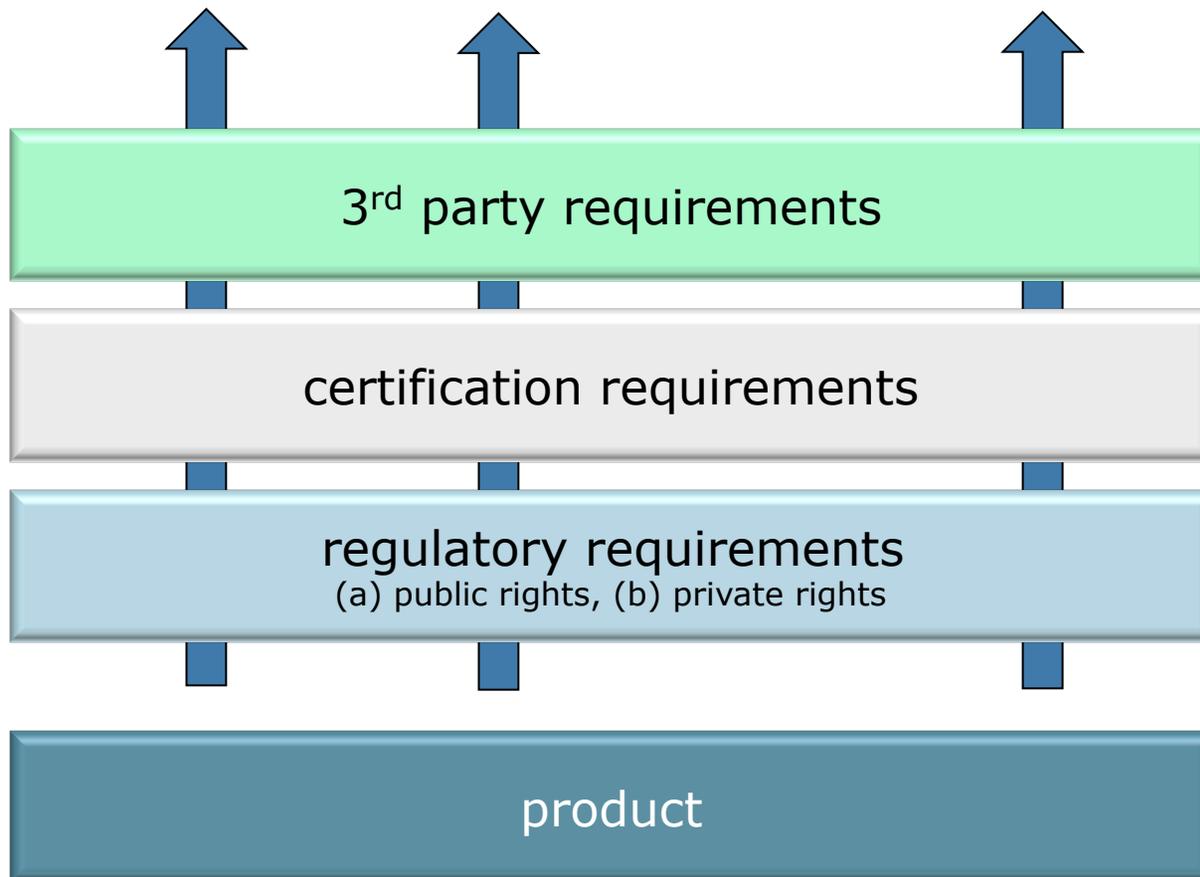## FOR CELLULAR COMMUNICATIONS PRODUCTS

BORIS BINGER / BORIS.BINGER@US.7LAYERS.COM

- **Market Access Overview**

- **About PTCRB**

- **Relation to GSMA NA and CTIA**

- **PTCRB documents**

- **Test Case Validation process**

- **Validation status LTE Band 14**

- **PTCRB UE Certification step-by-step**

- **Roaming Scenarios**

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Market 1 **Market 2** .... **Market N**

3rd party requirements	network operators and retailer
certification requirements	GCF, PTCRB, BT SIG …
regulatory requirements (a) public rights, (b) private rights	R&TTE, FCC, NAL, …
product	

About PTCRB

- **PTCRB Certification** is a voluntary process by which all **end-products and modules** are technically evaluated to meet the minimum requirements for registration on the PTCRB Operators' networks

  This process is **recommended for all manufacturers** who wish to have their products operating within the areas served by the PTCRB Operators

- PTCRB type certification is **based on 3GPP, OMA, CTIA and other specifications** with modifications per North American Standards and additional requirements from FCC rules, and any other government agency that may have jurisdiction and or competence in the matter

- All **PTCRB certification processes** requires manufacturer declarations as well as terminal assessments executed by PTCRB accredited ISO17025 test organizations

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GSM North America (GSMANA), formed in 1995, is the North American Interest Group of the GSMA, the premier global body that supports the world's leading wireless communications system. GSMNA's primary mission is to meet, identify and resolve issues related to the successful establishment and operation of the GSM family of wireless technologies – GSM, EDGE, HSPA and LTE - North America. GSMANA serves as a forum for the evaluation of technical problems and solutions related to interoperability. GSMANA is also the association for sharing the results of these evaluations with policy makers, industry bodies, standards organizations and each other.

CTIA-The Wireless Association® is an international nonprofit membership organization that has represented the wireless communications industry since 1984. Membership in the association includes wireless carriers and their suppliers, as well as providers and manufacturers of wireless data services and products. The association advocates on behalf of its members at all levels of government. CTIA also coordinates the industry's voluntary efforts to provide consumers with a variety of choices and information regarding their wireless products and services. This includes voluntary industry guidelines; programs that promote mobile device recycling and reusing, and wireless accessibility for individuals with disabilities.

GSM A NA

CTIA

GSMA North America

recognized

PTCRB

recognized

CTIA The Wireless Association®

PTCRB

PVG (PTCRB Validation Group)

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PRDs		Database
PPMD	NAPRD.03	TC DB

Structural Documents

PPMD - PTCRB Program Management Document

Technical Documents

NAPRD.03 - Technical Overview of PTCRB Mobile/User Equipment Type Certification (criteria and status is maintained in PTCRB database "TC DB")

Other documents
additional PVG PRDs are maintained for PVG members and observers only

PTCRB TEST CASE VALIDATION PROCESS STEP-BY-STEP

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Test Requirements	Development of test cases	Validation of test cases	Approval of Validation	New Certification Require-ments

- Test requirements from PTCRB.

- Test requirements are mainly based on Standards 3GPP and OMA.

- Test Equipment Vendors develop test solutions covering PTCRB test requirements.

- Prior to PTCRB certification test solutions have to be validated.

- Test cases are validated by a validation organisation, 3rd party lab.

- Upon successful validation, validation reports will be uploaded to the PTCRB TC Database (www.ptcrb.com, Databases, TC Database).

- The PTCRB Validation Group (PVG), a technical consultation body of PTCRB agrees on validation reports.

- PTCRB approves recommendations from PVG, releases a new permanent reference document NAPRD. 03 which contains technical devices certification test and assessment requirements.

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PTCRB RFT 76 covers the validation for all LTE FDD Band14 tests

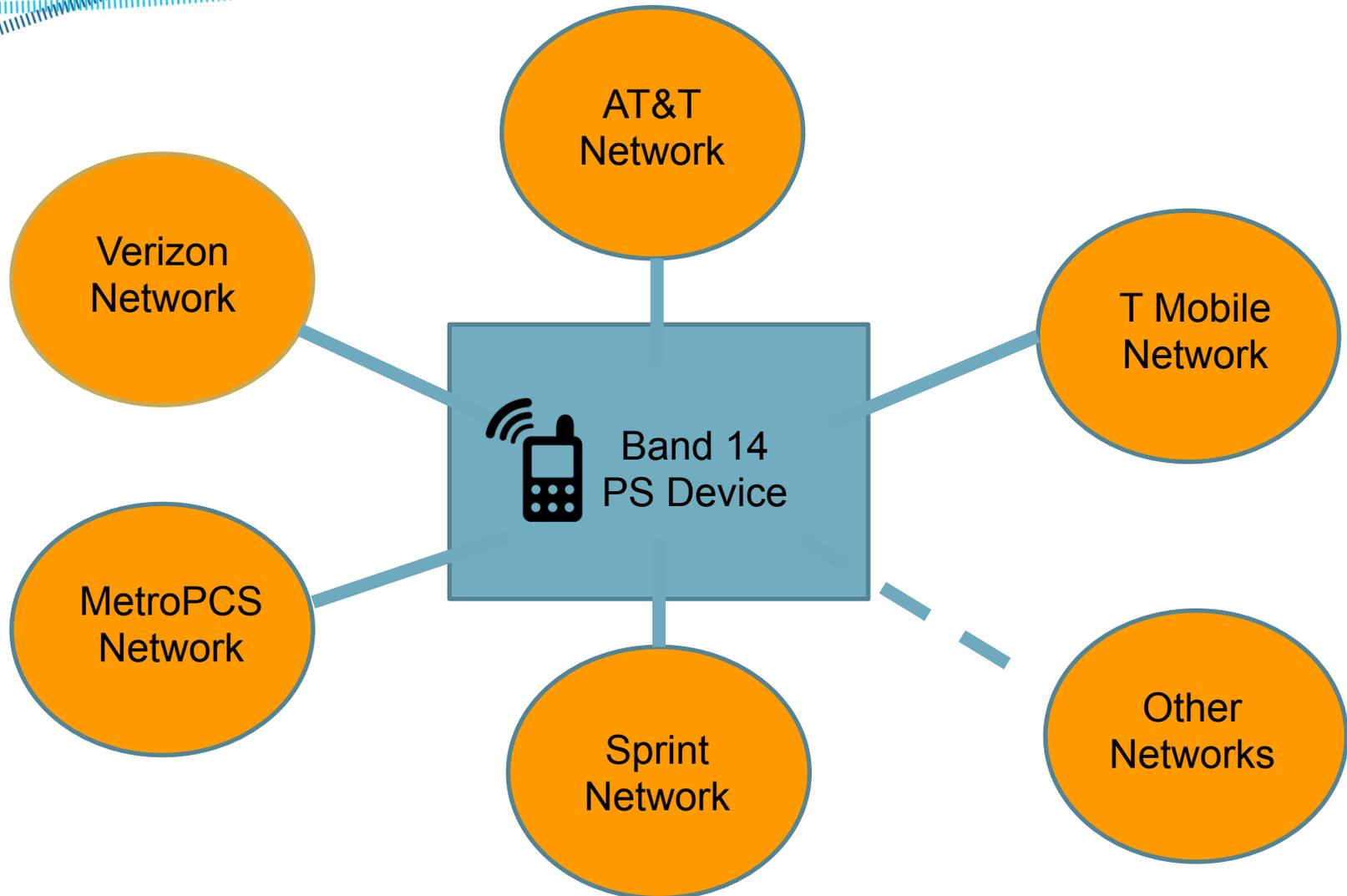| Type of test	Test Specification	Number of tests	Number of validated tests	Validation status
RF	3GPP 36.521-1	53	45*	85 %
RRM	3GPP 36.521-3	29	12*	41 %
Signaling	3GPP 36.523	288	225*	78 %

- **RFT76 covers also validation of other LTE frequncy bands**
- **Tests of other RFTs might be applicable for a LTE FDD Band14 UE, but they are not a lab entry requirement from PSCR**
- ***Status with all CRs submitted to the PVG#56 meeting accepted**

PTCRB UE CERTIFICATION PROCESS STEP-BY-STEP

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PTCRB User Account Set-up	PTCRB Test Creation Request	PTCRB Test Process	Report Submission to PTCRB Database	Test Report Review & Approval

- Create new account if you are already a user, www.ptcrb.com.

- Select the "New User Registration" tab, complete the registration process.

- Initiate a PTCRB certification request via the PTCRB certification database. Enter your company and product information.

- Testing will be executed in a PTCRB accredited lab according to the latest PTCRB regulations.

- Upon successfull completion of all tests, test reports will be generated and uploaded to the PTCRB certification database.

- CTIA, the administrative organization from PTCRB, will review and approve the submitted test reports.

TEST HOUSE
EXPERIENCES AND RECOGNITIONS

- Years of experience in mobile communications testing

- High efficiency & accuracy based on InterLab$^®$

- Experiences of software and systems house beneficial for test house clients for test process efficiency, product evaluation, debugging

- Large range of state-of-the-art test systems from various manufacturers

- Well equipped, comfortable client rooms

- Wide range of partner labs covering in-country testing and/or extending 7Layers test portfolio

- Extensive accreditation and listing scope of 7Layers laboratories

- ISO/IEC 17025 by DAkkS, CATL, CNAS, PTCRB, GCF, BQTF, BQE, FCC, IC Canada, BSI for TETRA BOS (Germany), Verizon wireless, Sprint, Vodafone, Deutsche Telekom, Made for iPhone…

CONTACTS

7layers
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NORTH AMERICA

USA
Irvine, CA
Phone   +1.949.716.6512
E-Mail   info.us@7Layers.com

MIDDLE EAST

Israel
Tel-Aviv
Phone   +972.3.6450.756
E-Mail   info.il@7layers.com

EUROPE

Germany
Ratingen
Phone   +49.2102.749.0
E-Mail   info@7layers.com

Spain
Bilbao
Phone   +34.634.507.296
E-Mail   info@7layers.com

United Kingdom
Stevenage
Phone   +44.759.0544.180
E-Mail   info@7layers.com

ASIA

P.R. of China
Beijing
Phone   +86.10.6805.0369
E-Mail   info.cn@7layers.com

South Korea
Suwon
Phone   +82.70.8853.2301
E-Mail   info.kr@7layers.com

Taiwan, R.O.C.
Taipei
Phone   +886.2.2955.1270
E-Mail   info.tw@7layers.com

Japan
Yokohama
Phone   +81.45.472.9907
E-Mail   info.jp@7layers.com