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Office of the CTO (OCTO) Update FirstNet Technology Committee

Jeff Bratcher
Acting Chief Technical Officer

June 2, 2015

- PSAC Task Team Meetings
- OCTO New Hires
- NPSBN Security Focus
- 3GPP Standards Update
- Early Builders Update

- Meetings held at Boulder Technical HQ in April
 - April 7 - Public Safety Grade Task Team
 - April 8 - Quality of Service / Priority / Pre-Emption



Since the last Technical Committee briefing:

Sr. Security Architect Glenn Zimmerman EOD: May 4

Glenn's Security Career Highlights:

- Over 25 years of experience in network and information security
- Cyber SME for the Secretary of the Air Force's Cyberspace Task Force
- Enterprise IAM for the Air National Guard Enterprise network
 - successfully accredited and re-accredited the largest autonomous network enclave for operations in the USAF
- Senior security consultant with Siemens Business Services North America
 - developed a targeted HIPAA compliance inspection service to address end to end compliance concerns for cyber and physical security
- Systems administrator and systems manager with the U.S. District Court
 - transitioned his district from peer to peer networks to a district wide network with nationwide email integration

- Acknowledgement of dynamic nature of security in the Public Safety Environment
 - High response rates, critical need for availability and reliability
 - Ease of use, minimal user intervention and distraction
 - Security is a continuum with a constantly shifting sweet spot which supports not restricts operations
 - The best protection never lets you know it is even there

- Develop baseline security architecture considerations
 - Perform RMF pre-assessment of overall NPSBN construct
 - Coordinate with peer subject domains and existing analyses to establish initial needs and way ahead to ensure end to end secure system model
 - Devices, Applications, Core, RAN, Network Operations

- Perform gap analysis of pre-assessment to establish key drivers requiring mitigation strategies
 - Create mitigation plan
 - Develop Concept of Operations
 - Complete associated input to RFP outlining security model

FirstNet Technology Team Goes to Citizens Fire Academy



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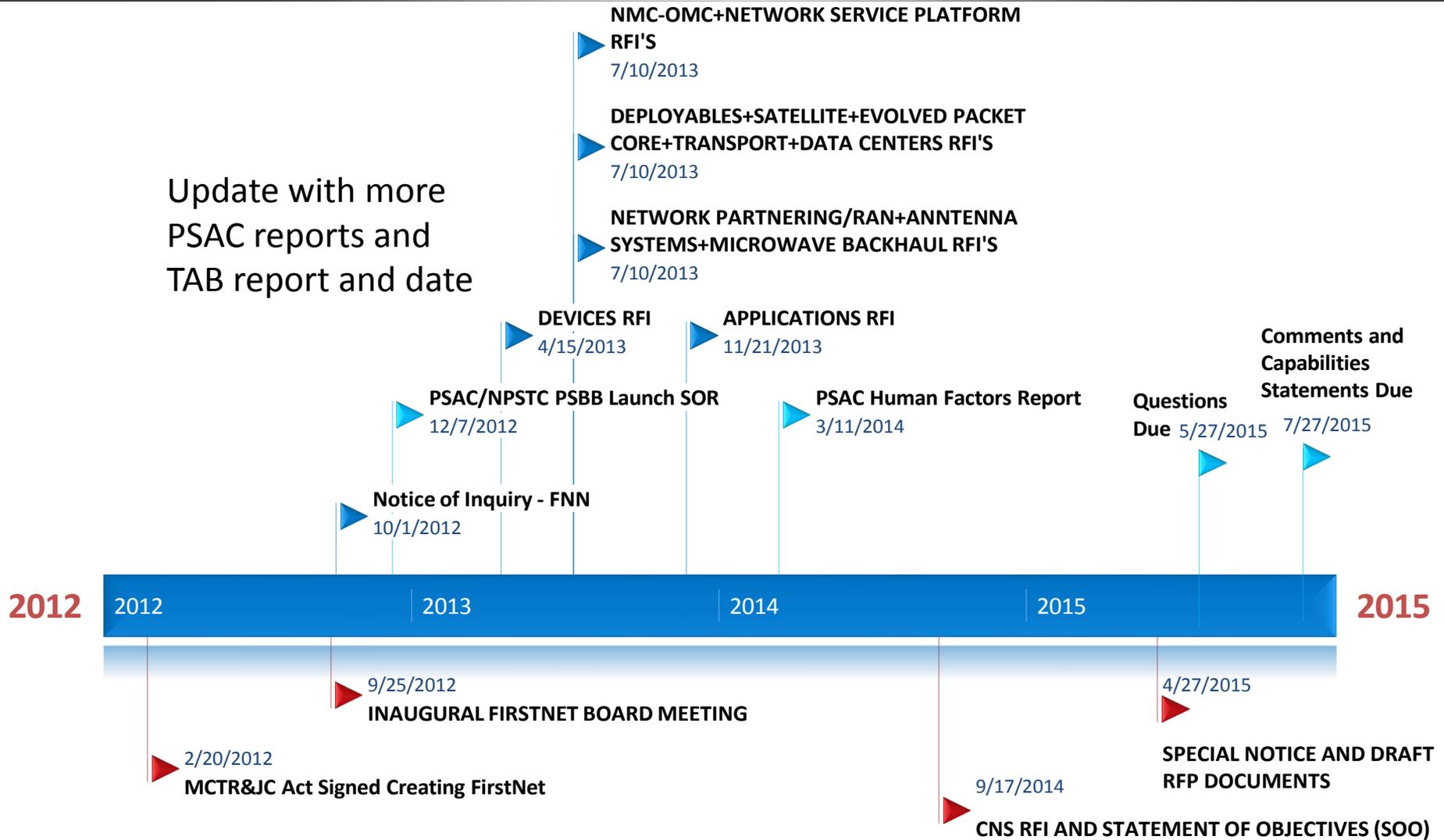
FirstNet Technology Team Goes to Citizens Fire Academy



Development of Draft RFP Technical Documents



Update with more
PSAC reports and
TAB report and date



3GPP Standards Development



Proximity Services

Release 12 & 13
(PROSE)

Group Communications

Release 12 & 13
(GCSE)

Mission Critical Push-to-Talk standards also supported by the United Kingdom, South Korea, Australia, Canada, France, Germany, and the Netherlands

Mission Critical Push-To-Talk

Release 13
(MCPTT)



A GLOBAL INITIATIVE



Release 12 Frozen

Release 13 Start

Release 14 Start

Stage 1 Freeze –
June 2013

Stage 2 Freeze –
March 2014

Stage 3 Freeze –
March 2015

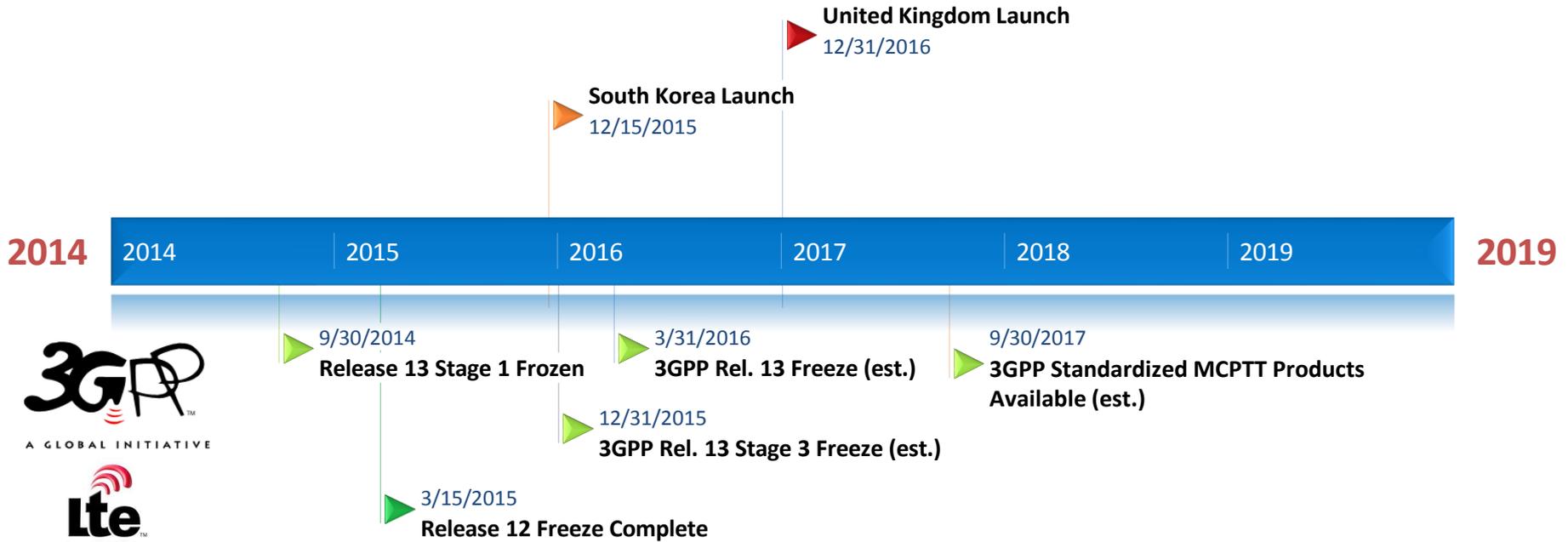
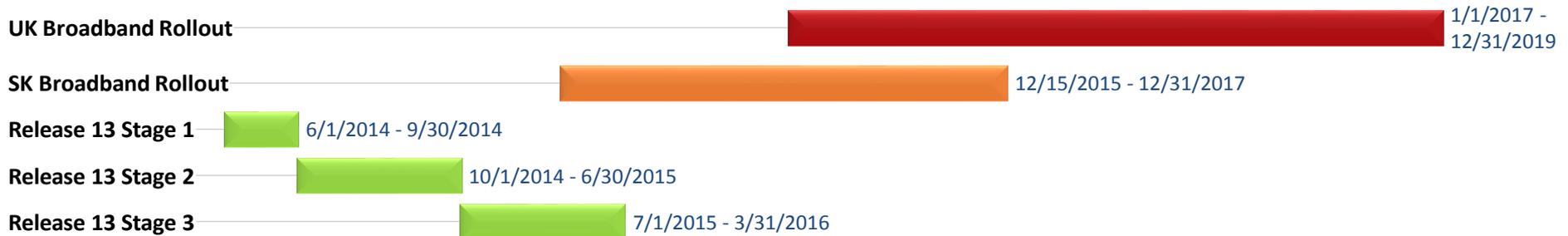
Stage 1 Freeze
December 2014

Stage 2 Freeze –
June 2015

Stage 3 Freeze –
March 2016

Stage 1 Freeze –
June 2016
(Tent.)

United Kingdom, South Korea, & 3GPP Timelines



Early Builder Band 14 LTE Projects



Project	SMLA	KLCP	Sites	Primary Focus Areas / Key Learning Conditions	On-Air
1. LA-RICS	Yes	Yes	82	Secondary responders partnerships, Quality of Service (QoS), priority/pre-emption	FY15 Q2
2. NM	Yes	Yes	7	Hosted core, int'l border spectrum management, Federal partnerships	FY15 Q3
3. NJ	Yes	Yes	30	Deployables, disaster recovery, training, Network Ops Center notification	FY15 Q3
4. ADCOM	Yes	Yes	16	PSCR/FirstNet test support, Band 14 device testing, demonstration access	NOW
5. TX	Yes	Yes	14	Core migration, data analytics, rural coverage, special events, LTE training	NOW

SMLA: Spectrum Manager Lease Agreement

KLCP: Key Learning Conditions Plan



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Thank You