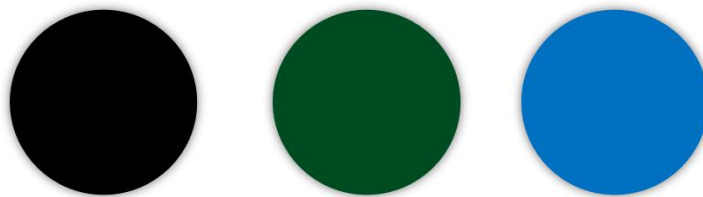




Professional Services Offerings



www.invas.net

Invas Professional Consulting

Invas focusses on testing new technologies & technology generations. It aims to be a preferred partner for enterprises that develop software products based on Telecom Wireless, along with providing QA / Testing services (products & services).

- Focussed on **Telecom Wireless**
- Expertise on telecom product development (Wireless), strong on all latest technologies in telecom wireless networks (2G, 3G, IMS, WiMAX, LTE..). We have telecom teams who are one of the first ones in India who worked on LTE & Air Interface.
- Deployment, testing of telecom network equipments and solutions
- Focus on implementation, support, development, upgrade, rollouts & QA services for Telecoms
- Invas brings in a very strong competency pool and experienced professional expertise that makes project commitments more reliable and consistent.
- Proven offshore delivery model to provide competitive edge

What Invas does for you

- > Transforms your highest-value business processes and improves your business performance...Our applications are empowering customers to meet their growing business...
- > **“Acquire-Build-Deliver”** model for global partners... Building efficient, energetic & empowered offshore R&D / Delivery teams for their businesses.

Telecoms

- > Product dev. on C, C++, Java
- > Field deployment & testing of telecom equipments
- > Proprietary scripting for baseline releases
- > Applications for all technology generations- GSM, CDMA, UMTS, LTE (RAN, EPC, Air).
- > Telecom Wireless Consulting

QA Services

- > E2E QA solution for LTE, EPC, IMS, WiMAX
- > Regression, Load Testing
- > Expertise on various simulators like EXFO EAST, IxLoad, dsTest scripts to test against real/simulated SUT/DUT;
- > Bug tracking; test plans & execution;
- > Sanity & regression tests of new packages/baselines

Off-shore Teaming

- > Joint Application / Product development for telecoms
- > C/C++ based design & development of any applications/ modules/ protocol stacks/ servers/ NPU/ in-house protocol simulators or load engines
- > GUI & Db applications;
- > Linux Kernel programming; Socket programming; Networking

Playground

TELECOM WIRELESS CONSULTING



Telecom Testing

Offshore Teaming

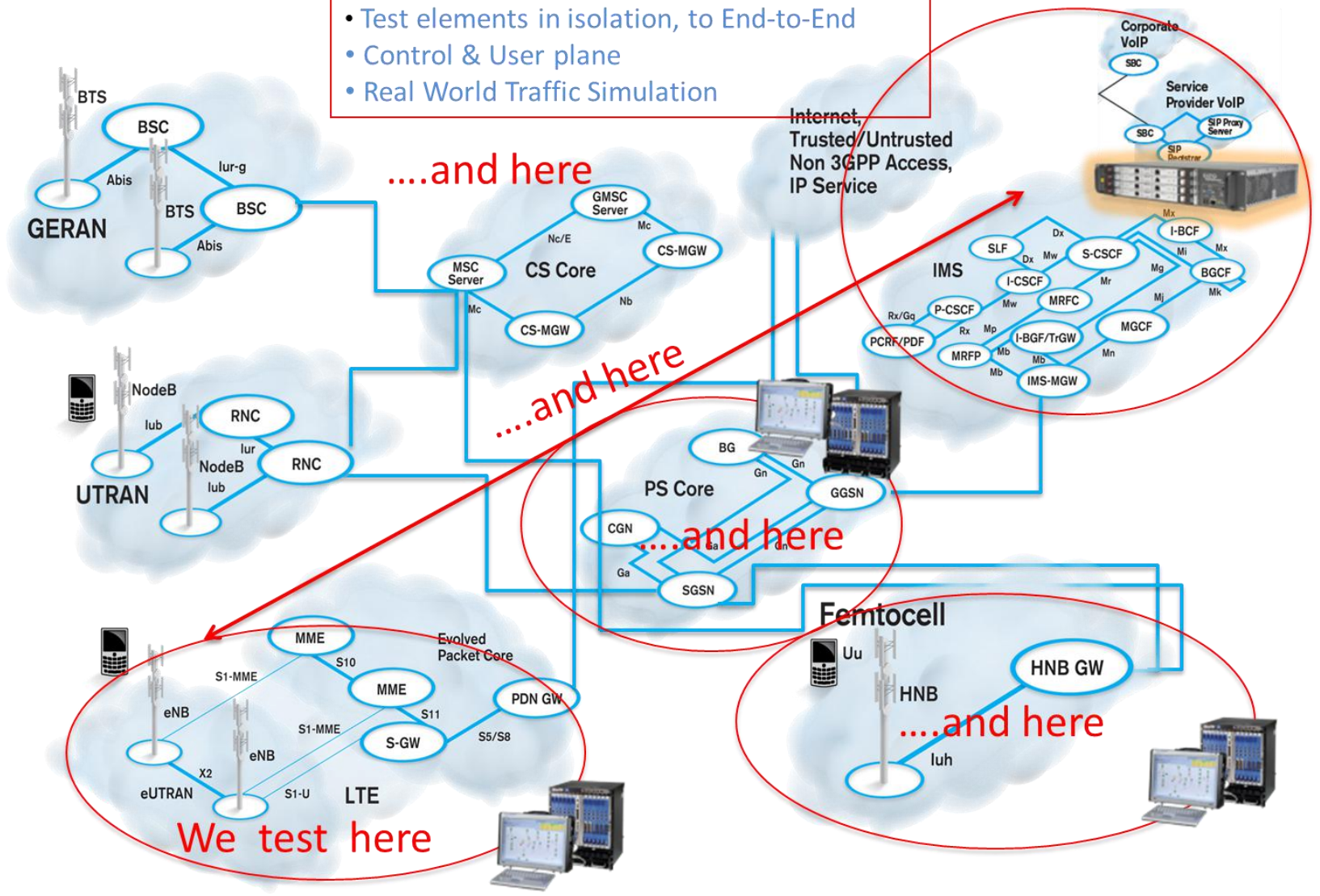
Offshore QA team to test SUT/DUT simulating E2E
Offshore Telecom Stack / Product development

Contract Programming



Network Playground of our Services

- Test elements in isolation, to End-to-End
- Control & User plane
- Real World Traffic Simulation



We test here

...and here

...and here

...and here

...and here

What we can do

- > What is happening & challenges against NEMs/OEMs
 - For the foreseeable future, wireless networks will be a mix of different technologies including LTE, 2G, 3G, UMTS, CDMA, ..different domains need to seamlessly interwork, esp. for Mobility
 - Explosive growth in Mobile Data, Operators have to manage this data, profitably
 - Inherent Security vulnerability of an All-IP network

- > **What Invas offers**
 - QA for E2E testing of your equipments, taking over your lab and testing needs
 - *Surround Testing – Simulate all required elements to completely surround the System Under Test*
 - *QA for Multiple domain, interface, protocol testing from one platform*
 - *Efficient to test both Signalling & Bearer*
 - *Also capable of creating test scripts for:*
 - Conformance Testing, Negative Testing, Functional & Regression Testing
 - Development of new features / components for your products



Deployment and Lab Testing for Telecom Wireless

- > We look forward to long term partnership to serve telecom wireless business requirements
- > Efficient team to do field deployment, installments, commissioning of telecom equipments
- > From product development to maintenance, we are capable of delivering quality solutions to client's requirements
- > **Capabilities on LTE / 3G / IMS**
 - Core applications & scripting packages development
 - Expertise on EXFO's EAST, IxLoad, dsTest and other proprietary tools
 - Testing expertise on LTE interfaces / protocols, 3G / IMS
- > We can support interfaces needed to test mobility: S10, S3, Gn, S4, S12, S101, S102, S103, Sv, IuPS, Gb, Gn, IuCS, A, A1, S2a, STa, Gxa...And Many more
- > LTE interfaces interwork with these
- > We can also support features needed to effectively test mobility: NACC, SRVCC, bearer continuity verification, response time measurements

Consulting for Telecom Wireless

> Advantages that Invas can offer

- We have people who are one of the first ones in India who worked on LTE & Air Interface back in 2010
- More than a decade of experience working on projects & product development for leading NEMs and NSPs like NSN, Motorola, Al-Lu, Ericsson, NTT DoCoMo
- Shorter ramp-up time & support cycles compared to other possible partners because of our long years of experience on telecom wireless
- Cost advantages because of our proven processes, expertise & competitiveness
- As a long-term partner, you can leverage Invas capabilities and build it for future



Thank You !