GTI

5G FORWARD

GTI SUMMIT SHANGHAI 2023

28th June, 2023 Shanghai, China

GTI Website

GTI WeChat Official Account

admin@gtigroup.org

GTIgroup2011

GTI Summit

GTI 1.0
2011-2015

Objective

Construct a robust ecosystem of TD-LTE

Speed up the commercialization of TD-LTE

Promote the converged development of LTE TDD and FDD

GTI 2.0
2016-2022

Objective

Further promote 4G evolution and expand global market

Promote 5G development and cross-industry innovation

GTI 3.0
2023-NOW

Objective

Promote intelligent, efficient, and green 5G-A tech and products

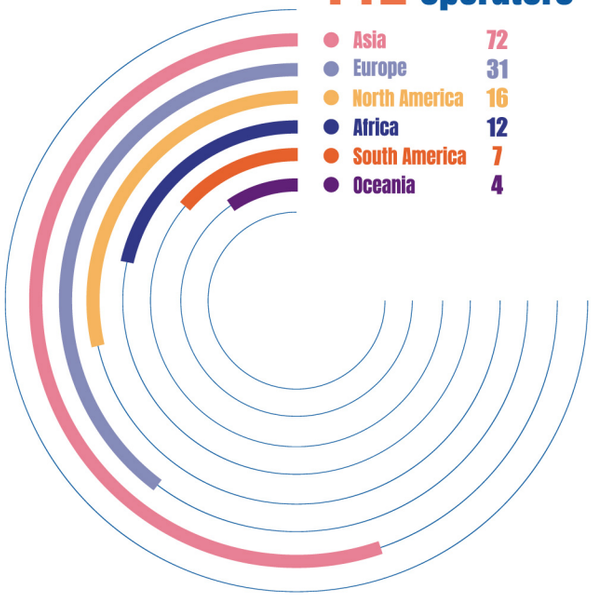
Foster integration of DICT to support next-gen digital infra

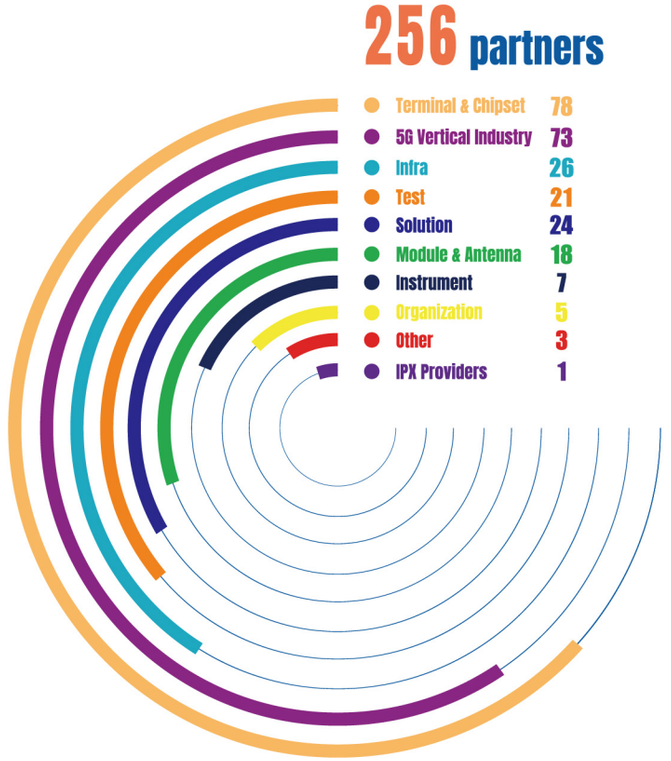
Enable 5G monetization and value creation

GTI Members

GTI 3.0

GTI Has Become One of The Most Important Platforms for Industrial Collaboration





Global Organizations

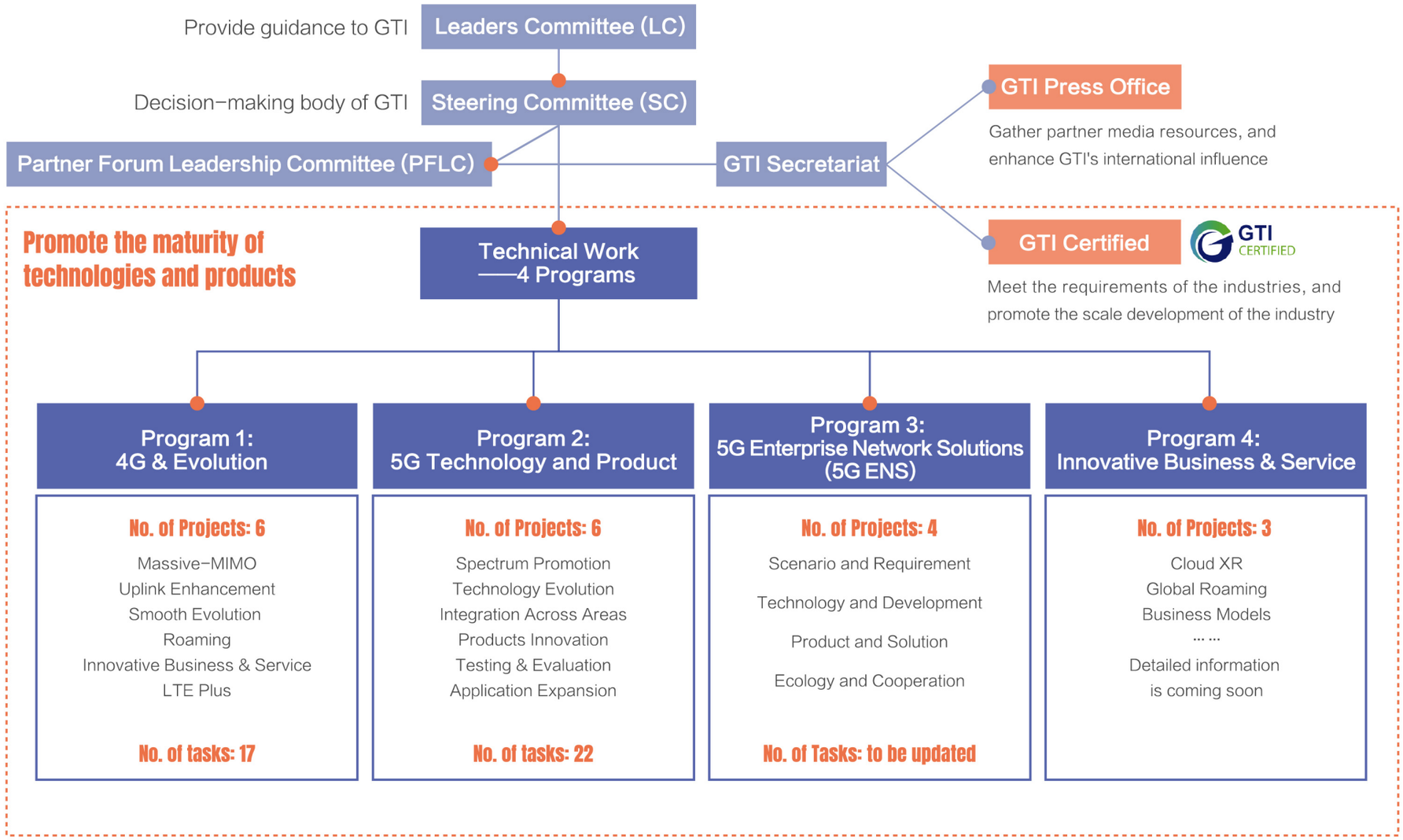
GSMA · ITU · 3GPP A GLOBAL INITIATIVE · NGMN · GCF Global Certification Forum · 5GAA Automotive Association · 5GACIA 5G Alliance for Connected Industries and Automation · TDIA · The true BWA XGP eXtended Global Platform · KHRONOS GROUP · .....

Technical Architecture

GTI 3.0

Focus on 4 programs, 19 projects, 39 tasks

90+ operators and partners, 370+ technical experts contributing to the technical work



Key Achievements

Promote TD-LTE as a global mainstream technology, achieve large-scale commercialization

Promote TD-LTE as one of global mainstream 4G technologies for the first time, build TD-LTE end-to-end ecosystem

SPECTRUM

TD-LTE spectrum flexible usage
TDD spectrum efficient allocation
TDD spectrum data base

Spectrum Data Base

GTI LSA White Paper

NETWORK

LTE TDD/FDD convergence
Carrier aggregation VoLTE/RCS

GTI FDD-TDD Convergence White Paper

GTI TD-LTE Carrier Aggregation White Paper

DEVICE

World's first TDD/FDD Multi-mode chips
World's first MMMB smartphone
5-Mode Low Cost Device Solutions

BUSINESS

TD-LTE global roaming
Application innovation
Evolution from WiMAX to TD-LTE

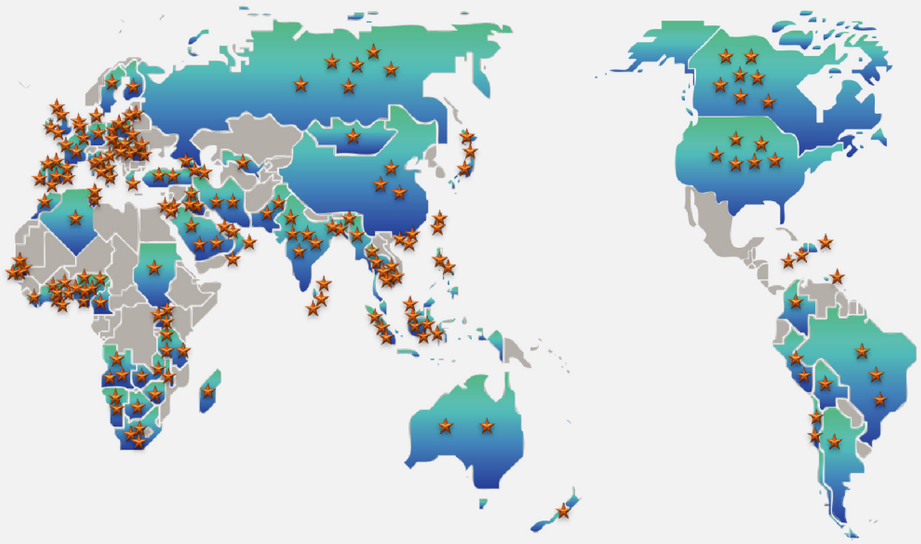
Innovative Application Data Base

Joint Virtual Innovation Labs

Cloud Test Infrastructure

Promote TD-LTE wide application, realize global large-scale commercialization

- **184** TD-LTE commercial networks in **86** countries were deployed, TD-LTE subscribers reached up to **2.93 billion**
- Promote TD-LTE in "Belt and Road Initiative" countries, **130** operators in **61** countries have deployed TD-LTE, among which over **40** operators are GTI members.



Global TD-LTE deployment as of Q1 2023

Key Achievements

Accelerate 5G end-to-end maturity and global large-scale development

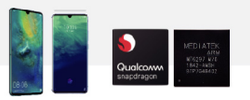
Promote 5G mid-band as global prime spectrum

- Build **global mid-band 5G ecosystem**
- Promote **3.5GHz end-to-end maturity**

Accelerate global 5G large-scale commercialization

- Promote **debut** of 2.6GHz end-to-end industry to accelerate 2.6G/4.9GHz 5G development
- Promote **5G S-Module** and **5G global device** to accelerate maturity and large-scale development of end-to-end industry
- Build **5G+ cross-industry ecosystem** to promote 5G innovative application

- Joint release 140+ white papers and research reports
- Joint release **5G in China–the Enterprise Story** and **Supportive Policies for a Sustainable Mobile Industry in the 5G Era** with GSMA



5G smart phone

5G chipsets

5G CPE

5G data device

- Promote **global debut** of 5G mid-band end-to-end prototypes and products
- Joint release **GTI 5G Global Device Initiative** with 27 operators and partners

GTI CERTIFIED

GTI Device Certification

Support sound development of IoT and other industries

- 5 GTI Certified Test Labs
- 5 Test Specifications
- 27 certified chipsets, modules and devices

Key Achievements in 2022-2023

GTI 3.0

5G

NGMN-GTI Definition of the Testing Framework for 5G Device Network Slicing Pre-commercial Trials_v1.0

This document was completed joint based on the actual network elements, which includes the test cases of the configuration and usage of NSSAI, UE route selection policy, interworking with EPC and other service specific network slicing test cases.

GTI White Paper on Future Spectrum Demand of 6GHz Band

This white paper will update the global market development progress and application trends, analyze the spectrum needs and address how new spectrum could benefit both the new market of mobile networks and the industry innovations. It concludes that additional spectrum is needed for IMT/5G to provide the capacity for innovation and future development. Harmonization of the 6GHz spectrum for IMT is imperative to sustain future capacity needs for affordable connectivity.

GTI 5G Device Function and Performance Test Specification _v4.3

This specification provides evaluation criteria for basic functions and performance in the 5G test. Considering various test requirements, specific test cases and methods are designed, together with the basic requirements for each test category, number of test devices, and tailored agreements.

NGMN-GTI Pre-Commercial Network Slicing Trials Major Conclusions_v1.0

This white paper tackles a more challenging, complex and practical domain by consolidating the pre-commercial network slicing test results from different chipset platforms and indicates that 5G smartphones and 5G S-modules have been able to support network slicing.

GTI Autonomous Network White Paper_v3.0

This white paper will focus on the key technologies and high value use cases enabling the L4 autonomy, with expectations to pool strengths from all parties to solve the challenges and fully unleash the potential of those new trending and solutions to help the industry moving its way forward.

GTI 5G Wireless Network White Paper: Towards a Low-Cost 5G_v1.2

This white paper will serve as a platform to share and present the solutions and experience of the low-cost 5G network deployment, thus providing a reference to the industry partners to jointly promote the low-cost 5G industry maturity, drive its scale commercialization, and embrace the property of 5G ecosystem.

5G ENS

GTI Classification of Malicious Links for Vertical Industries_v1.0.0

This white paper aims to unify the malicious links classification framework and standardize the type and name of malicious links. This is conducive to the design, development, construction and evaluation of the malicious links monitoring system. At the same time, it provides basic support for different vendors to realize information sharing and exchange. It also provides strong support for internet governance.

GTI Computing Force Network Service Security White Paper_v1.0.0

Based on the service operation mechanism of the computing force network, this white paper comprehensively analyzes the security risks and gives the security strategies in the four stages of user access, computing network arrangement, task execution and transaction settlement, so as to guide the industry to improve the security ability of computing network service.

GTI 5G+ Proximity Network Architecture Based on Digital Twin White Paper_v2.0

This white paper introduces the digital twin-oriented 5G+ proximity network architecture, and gives the future 5G+ proximity network technology evolution direction and application prospects based on market, industry, technical requirements, etc., which may promote the digital and intelligent transformation of vertical industries.

GTI Network Digital Twin Capability Grading White Paper_v1.1

This white paper constructs a network digital twin capability grading system. It provides technical requirements based on the characteristics of each level, and the application value of network digital twin is reflected in combination with typical scenarios and use cases. Finally, the future evolution of network digital twin technology and industry development are summarized and prospected.

GTI Operator Secure Access Service Edge White Paper_v1.0.4

This white paper mainly introduces the background, definitions and requirements of SASE, analyzes the benefits and advantages of establishing a SASE framework for operators, details the key capabilities, functional frameworks, and deployment architectures required by operators and discusses the technical challenges, ecological cooperation and scenario expansion of SASE framework.

GTI White Paper

Scan for more GTI white papers

Event Plan in 2023

Feb.

GTI Summit 2023
(At MWC Barcelona 2023)
Time: 28th February
Venue: Barcelona, Spain

Apr.

36th GTI Workshop
Time: 25th–26th, April
Venue: Online

Jun.

37th GTI Workshop
Time: 26th–27th June
Venue: Shanghai, China

Jun.

GTI Summit 2023
(At MWC Shanghai 2023)
Time: 28th June
Venue: Shanghai, China

Sep.

38th GTI Workshop
Time: September
Venue: Turkey (TBD)

Oct.

The 4th 2.3GHz Roundtable Ad-hoc
Time: October
Venue: TBD

The 12th GTI Spectrum and Technology Workshop
Time: October
Venue: TBD

GTI

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

KEY MOMENTS

2011

Kick-off of GTI by China Mobile, SoftBank, Vodafone and other operators

2012

Release of world's first TDD/FDD Multimode chips

2013

发布全球首款多模多频智能手机

2014

World's first TD-LTE VoLTE phone call was made

2015

Release of 5-Mode Low Cost Device Solutions

Release of Native RCS Devices

2016

Launch of GTI 2.0 by China Mobile, Bharti Airtel, KT, SoftBank and Vodafone to promote 5G development and cross-industry innovation

Release of HPUE on Band 41 to promote Massive MIMO commercialization and improve systematic performance

2018

Release of 5G in China-the Enterprise Story with GSMA

Release of GTI 5G S-Module Industrial Cooperation Plan to promote wide application of 5G devices and expand the scale of application

2019

Debut of 5G 2.6GHz End-to-end Products to accelerate maturity of 2.6GHz industry chain and promote 5G commercial process

2020

Release of Supportive Policies for a Sustainable Mobile Industry in the 5G Era with GSMA to promote sustainable mobile industry

Release of GTI 5G Global Device Initiative to promote maturity of multi-mode, multi-band and multi-form devices

2021

Unveil the joint "2.3GHz Band Industry Statement" to promote efficient use of TDD 2.3GHz spectrum and accelerate commercial launch by global operators

2023

Launch of GTI 3.0 by China Mobile and over 20 global organizations, operators and industry partners for continued global cooperation on 5G-ADV[1] toward greater commercial success

More to come . . .
Let's make it together

Note:

Welcome to join

GTI 3.0

http://www.gtigroup.org