



COSMOTE

our world is you



Welcome and Brief Description of Corporate Activities

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GROUP OF COMPANIES



COSMOTE – Corporate profile (I)

- ➔ **COSMOTE / OTE is Greece's largest telecommunications operator**
 - *Full service telecom group in the Greek telecoms market*
 - *OTE Group has expanded its footprint throughout South-Eastern Europe*

- ➔ **It is one among the 5 biggest national companies of the Athens Stock Market, while its shares are also negotiated in the international Stock Exchange of London.**

- ➔ **Provides services to consumers, Greek/foreign businesses and public agencies**

- ➔ **COSMOTE (*network operator & service provider*) offers an extended portfolio of e-communications services: *Broadband services, internet access, fixed & mobile telephony, data communications, high-speed leased lines, satellite communications, etc.***



COSMOTE – Corporate profile (II)

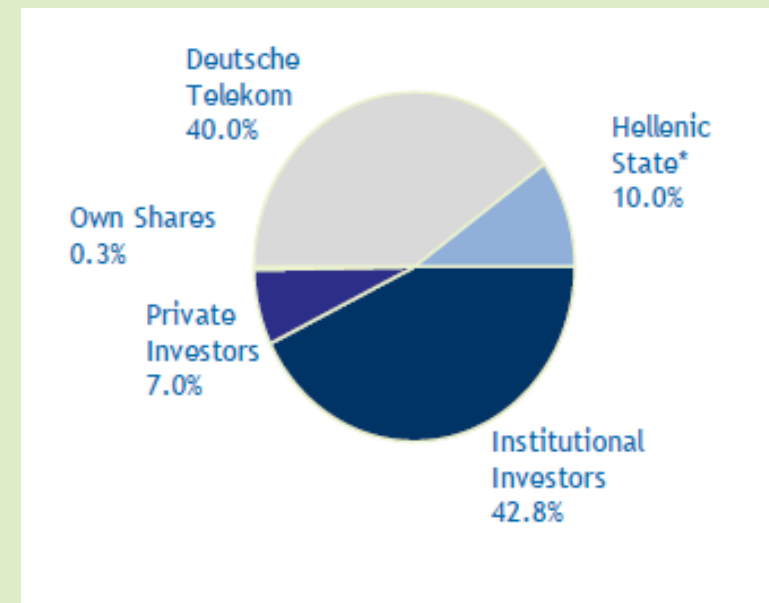
The company (*and the OTE Group*) is an active partner of the DT Group of Companies.

Shareholders' structure for prior OTE's part:

Share price: €9.0 (Feb'25, 2015)

Outstanding shares: 490,150,389

Market capitalization: €4.4bn





OTE Group's Presence

GREECE

Fixed Business: Incumbent/Leader

Total lines (000): 2,762

Broadband subscribers (000): 1,390

OTE TV subscribers (000): 353

Mobile Business: Leader

Mobile subscribers (000): 7,280

ALBANIA

Mobile Business: # 1 in the market

Mobile subscribers (000): 2,056



ROMANIA

Fixed Business: Incumbent/Leader

Total lines (000): 2,181

Broadband subscribers (000): 1,232

TV subscribers (000): 1,414

Mobile Business: Challenger

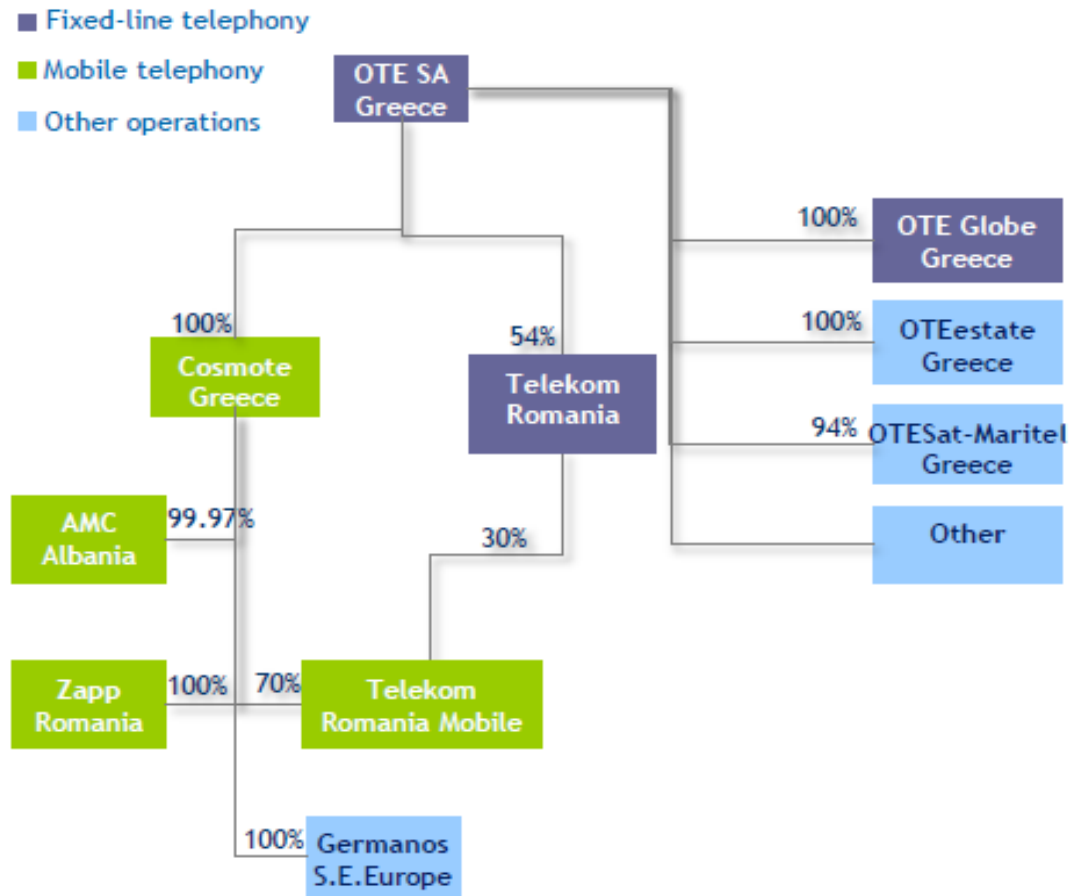
Mobile subscribers (000): 5,954

Note: Data as of December 31, 2014

OTE Group's strategy aims at further strengthening its market positions through successful leveraging of new technologies, active customer service and innovative marketing.



OTE Group's Structure





OTE Group Financial Objectives

▪ Secure Group's financial stability

Maintain necessary cash reserves to fund debt maturities in a challenging operating environment

▪ Support capex requirements to enhance competitive advantage

Invest in VDSL / 4G / FTTH (Ro) and TV to enhance competitive advantage and unique market offerings, leading to improvements in financial results

▪ Re-instate Dividend

Following 4 years of zero payout, we reinstate dividends out of 2014 net distributable income (OTE SA). The BoD will propose a dividend of 8 eurocents per share to the Shareholders meeting

▪ Maximise financial results

- Stabilize revenues in fixed business
- Gradually recover in mobile
- Maintain aggressive focus on cost base
- Sustain EBITDA margin
- Generate cash flow

▪ Maintain competitive market positioning

Maintain and extend market share focusing on profitability, avoiding, to the extent possible, irreversible profit erosion

▪ Enhance and deepen market presence

Identify opportunities in high growth market segments, to enhance existing market position



COSMOTE – Corporate Vision

- **Ensure the growth of the company, *at all sectors/levels (technology, business, finances, etc.)***
- **Maintain the leading position in the market, *in particular via the creation of a great and fully modernized IP-based network of high quality***
- **Offering the best-possible experience to its customers**
Both in Greece and South-East European market
- **Offering a dynamic portfolio of services/facilities to the customers, *within the DT Group***



COSMOTE – Corporate Mission

- **Achieving profitable and sustainable growth**
Taking into account the conditions prevailing in the current competitive market
- **Consolidating market share and creating new sources of revenue** (*IP-TV, satellite TV, ICT etc.*)
- **Fostering closer relations with customers and offering high-quality services, based on innovative technologies**
- **Further developing and expanding its portfolio of broadband services** (*e.g., VDSL2, 5G*)
- **Reducing operating costs and, by extension, improving the price of its service offering, in regard to both existing as well as new services**
- **Training its workforce, thus further developing the abilities and skills of its employees across all levels in the hierarchy**
- **Bringing added value to the markets where it operates, e.g., through the adoption of Corporate Responsibility principles**

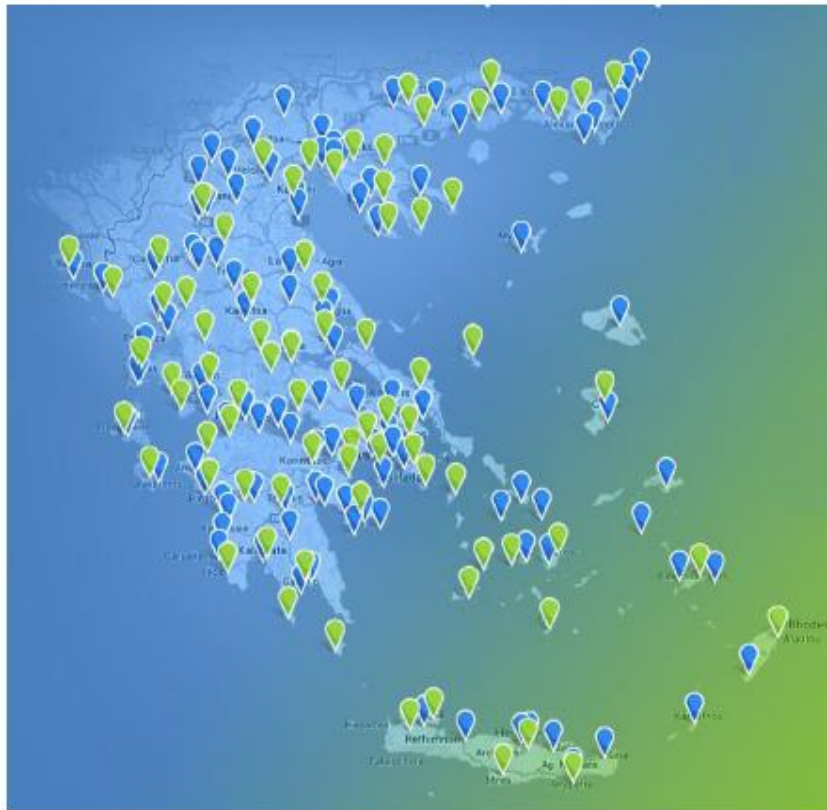


COSMOTE – Business Strategy

- ➔ **Offering innovative high-speed solutions, on the basis of its comprehensive network infrastructure, in such a manner as to generate value** both for its shareholders as well as for society
- ➔ **Expanding broadband penetration in the Greek market and maintaining corporate market-leading position, by fully tapping into the Company's competitive advantages**
- ➔ **Enhancing customer service, by providing more substantial and rapid after-sales support**
- ➔ **Expanding and upgrading the corporate network, aiming at the gradual transition to a “new generation” network**
- ➔ **Achieving “reasonable” treatment, by the NRAs**
- ➔ **Incorporating the principles of Corporate Responsibility within the Company's business plans.**

COSMOTE - NGN Expansion in Greece

COSMOTE pursues the rapid expansion of its New Generation Networks with VDSL and 4G high speed gradually covering the whole Greek territory



■ VDSL OTE
■ 4G COSMOTE

VDSL

- ✓ Currently covering approximately 1.4mn households and businesses
 - exceeding 30% population coverage

Mobile

- ✓ 50% increase in mobile broadband network capacity
- ✓ 60% increase in mobile internet speeds

4G expansion

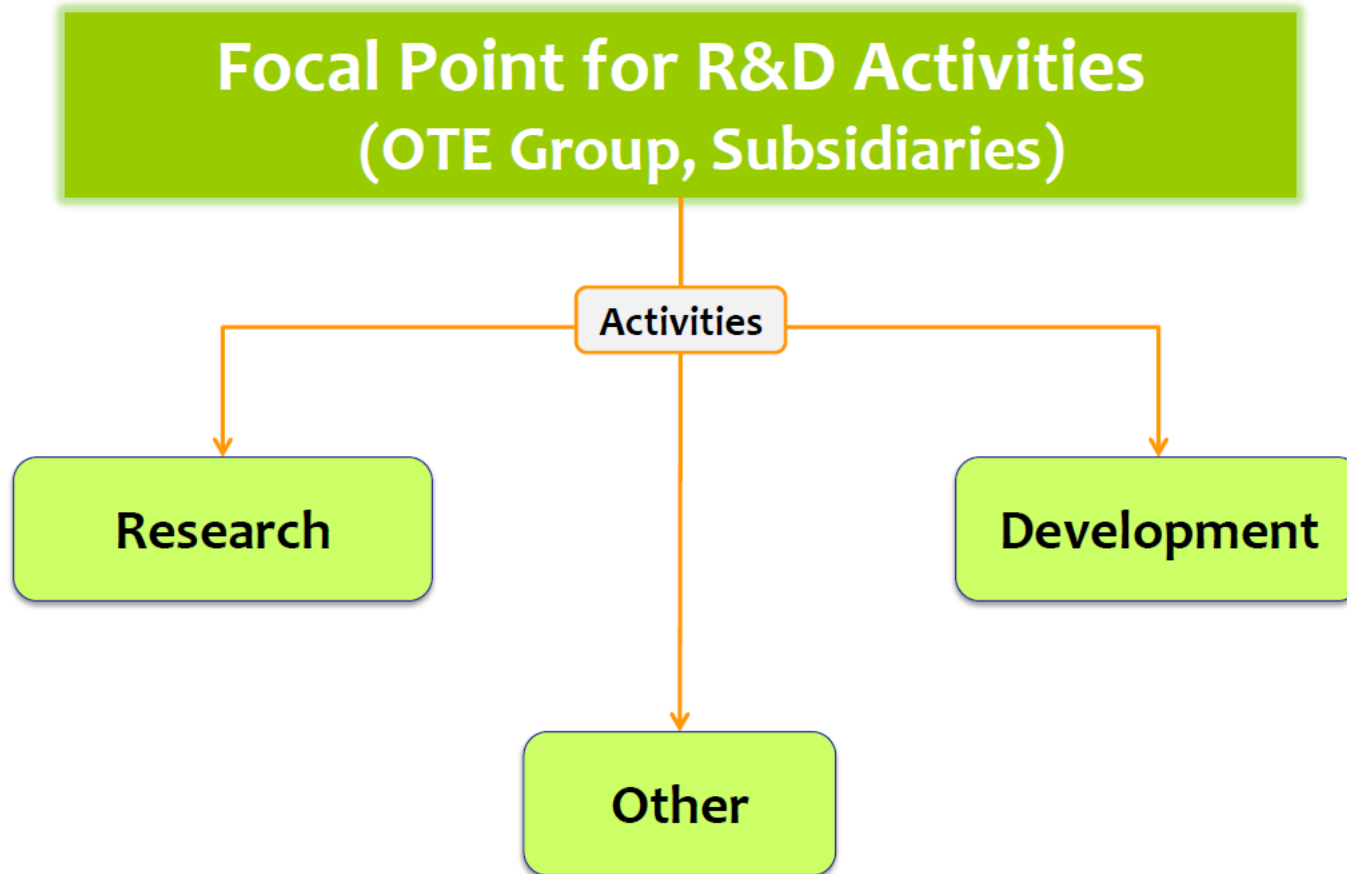
- ✓ Coverage of all cities of over 40,000 residents, smaller towns & popular summer destinations
- ✓ 70% population coverage in 2014 year-end

LTE Advanced (4G+)

- ✓ Cosmote upgrading its 4G network to 4G+, offering internet speeds up to 300Mbps
- ✓ Commercial launch of 4G+ technology with speeds up to 300Mbps within 2015



COSMOTE - Activities in R&D (I)





COSMOTE - Activities in R&D (II)

- **Active Participation in Funded Project (EU, National)**
 - Proposals Preparation/Submission
 - Technical Coordination/Contributions | Project management
 - Administrative/Financial/Legal Issues (timesheets, reporting, consortium agreements, financial responsibilities, etc.)
- **Tools/Applications' Development** (to support company's business and/or users) - Apps for OTE/COSMOTE (iOS, Android, WebGUIs)
- **Info Dissemination (internal, external)**
 - Press Releases, papers, demos, presentations@Conf/Workshops, Apps distribution, etc.
- **Co-operation with:**
 - “Internals” (*NewTech Labs, Engineering Div., Commercial Div., Media Relations...*)
 - “Externals” (*universities, industry, “Corallia”, GSRT, start-ups, etc.*)
 - DT



COSMOTE - Activities in R&D (III)

- **New Technologies Investigation/Demos**

- 5G, WebRTC+SIP, Proximity Services, cognitive radio, device-to-device comms, e-call based services, s/w defined optical networks, network-based services, carrier aggregation, cloud, network security, ITS, etc.

- **“Live” Experimentation Testbed**

- Maintenance, upgrades, expansions, interoperability with NewTech Labs

VISION

Exploit the knowledge/know-how acquired (documentation, experience), to affect current/future company’s operations/technologies/products and/or identify new business opportunities

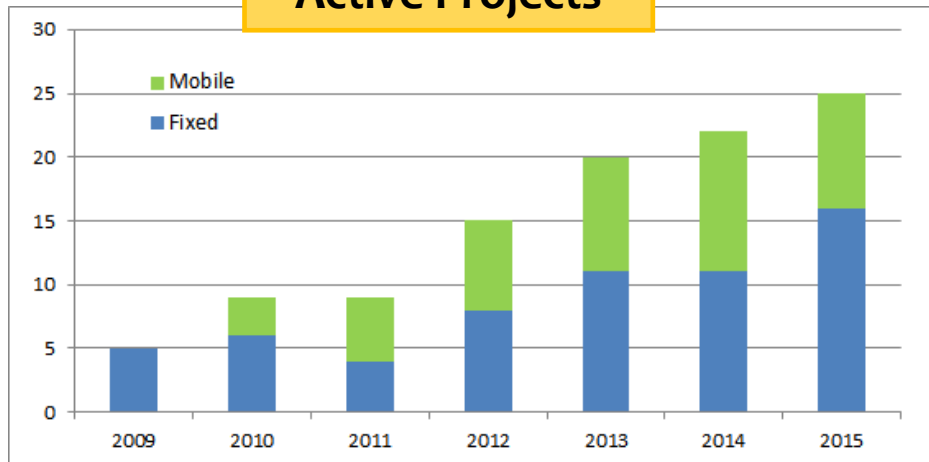


R&D Projects' Highlights (2009 - Nov.2015)

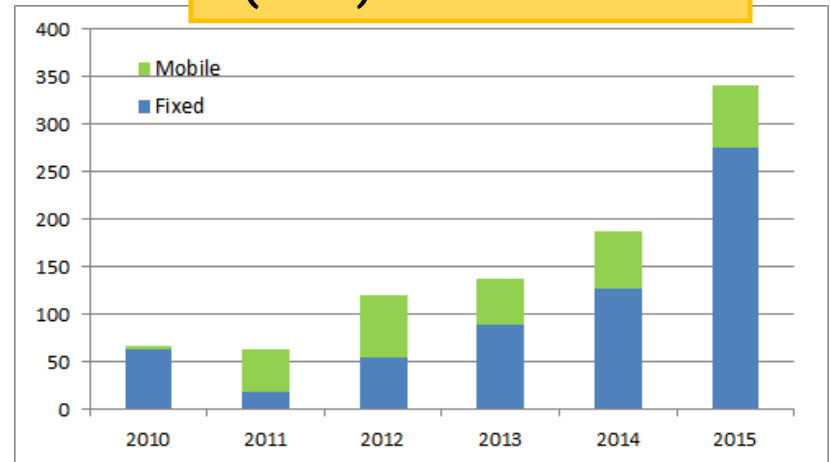


Y-2014: 61 proposals

Active Projects



(Tech) PMs Consumed





Other R&D Project's Highlights (2009-2014)

- **>25 Press Releases**
- **>95 Papers/Publications**
 - 22 book chapters
 - 9 articles in journal-magazines
 - 65 papers in conference proceedings
- **10 One-Day Conferences/Workshops Organization**
- **Participation in Events** (*12 national, 26 abroad*)
- **4 Awards** (*Panlab-II, LiveCity, "Ethos", Best Book Chapter in the FIA-2011 Book*)
- **15 References in Corporate Annual Reports and/or Corporate Responsibility reports**
- **(Internal) Tools' Development (>100K€ funding)**



Research Areas – Ongoing projects

Research Areas	Technology-Oriented	Business-Oriented	
Intelligent Transport Systems	M	H	short-term
Mobile Backhauling (PON, SAT)	H	H	short-term
Technology Interoperability	H	H	short-term
NextGen Emergency Services	H	H	short-term
Security in Smart Mobile Ecosystem	H	H	short-term
Federated Testbeds (LTE)	H	L	medium-term
Devices Virtualization	H	H	medium-term
Energy MicroGrids	H	H	medium-term
HD Video-to-Video Comms	L	H	short-term
SDN/NFV	H	H	medium-term
Security in the Cloud	H	H	medium-term
Terabit Photonic TX/RX	H	H	short-term
Very Broadband Amplifiers	H	H	short-term



Active European projects (I)



1. **NEMESYS** - Enhanced Network Security for Seamless Service Provisioning in the Smart Mobile Ecosystem
2. **TEAM** - Tomorrow's Elastic, Adaptive Mobility: fostering behavioural change towards collaborative traffic
3. **EMERALD** - Energy ManagEment and RechArging for efficient eLectric car Driving
4. **LiveCity** - Live Video-to-Video Supporting Interactive City Infrastructure (**OTE = Project Coordinator**) – completed Feb/2015
5. **E3NETWORK** - Energy Efficient E-band transceiver for backhaul of the future networks
6. **SECURIT** - Secure Cloud Computing for critical Infrastructure IT
7. **FLEX** – FIRE LTE testbeds for open experimentation
8. **VIMSEN** - Virtual Microgrids for Smart Energy Networks



Active European projects (II)



9. **UNIFY** - Unifying Cloud and Carriers Networks
10. **SPIRIT** - Software-defined energy-efficient Photonic transceivers
Introducing Intelligence and dynamicity in Terabit super-channels for flexible optical networks
11. **INPUT** – In-network Programmability for Next Generation Personal Cloud Service Support
12. **SANSA** – Shared Access terrestrial-Satellite Backhaul Network Enabled by Smart Antennas
13. **VITAL** – Virtualized Hybrid Satellite-Terrestrial Systems for Resilient and Flexible Future Networks
14. **SmarterEMC2 – Smarter Grid**: Empowering SG Market Actors through Information and Communication Technologies

Active European projects (III)



15. **PrivacyFlag** - Enabling Crowd-sourcing based privacy protection for smartphone applications, websites and Internet of Things deployments (OTE = Project Coordinator)
16. **CREDENTIAL** - Secure Cloud Identity Wallet
17. **5G-Xhaul** - Dynamically Reconfigurable Optical-Wireless Backhaul/Fronthaul with Cognitive Control Plane for Small Cells and Cloud-RANs
18. **CHARISMA** - Converged Heterogeneous Advanced 5G CloudRAN Architecture for Intelligent and Secure Media Access
19. **SESAME** - Small cELLS coordinAtion for Multi-tenancy and Edge services (OTE = Project Coordinator)
20. **COHERENT** - Coordinated control and spectrum management for 5G heterogeneous radio access networks



Active National projects (I)



1. **WIKIZEN** - Wiki Citizens
2. **PANDA** - Ασύμμετρο παθητικό οπτικό δίκτυο για πρόσβαση xDSL σε FTTH
3. **WiSE-PON** - Σύγκλιση Ετερογενών Ευρυζωνικών Δικτύων Επόμενης Γενιάς Τεχνολογίας FTTx και Radio-Over-Fiber (RoF) (OTE = Project Coordinator)
4. **FLAME** – Flexible, Manageable and Cost Effective Solutions for Cooper based Last Mile Access Systems
5. **DIOGENES** – Cloud for Media Aware Real-time Applications and Services in Heterogeneous Networks (OTE = Project Coordinator)

Thank you for your attention!

For further information:

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