

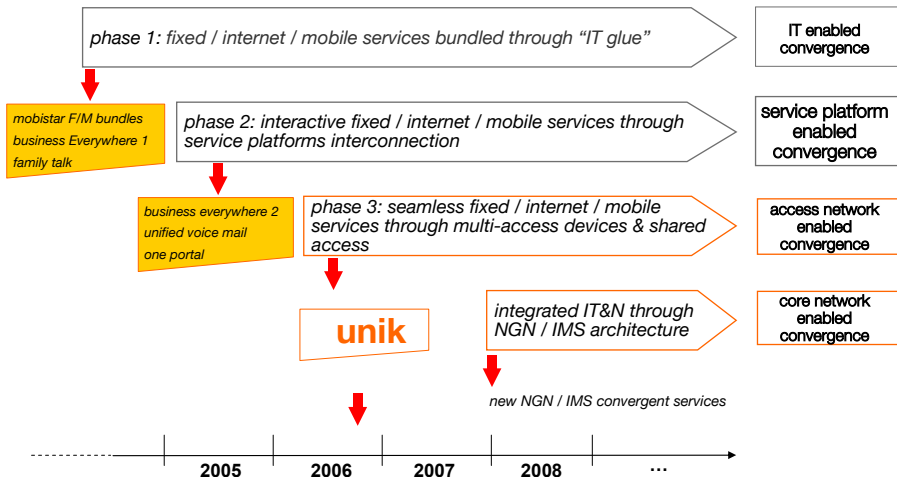
# On track to deliver 21<sup>st</sup> century services

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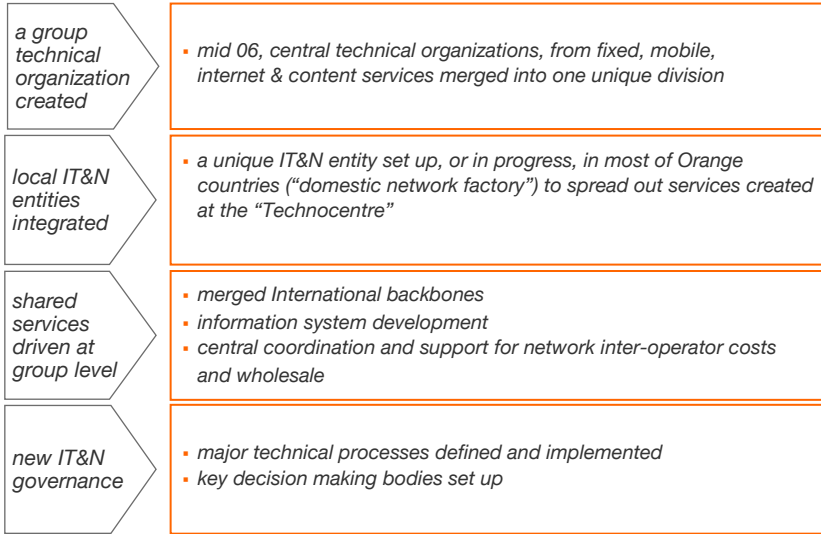


## on track towards “one IT&N” supporting the integrated operator



phased and pragmatic approach towards full convergence

## transformation of processes & organisation

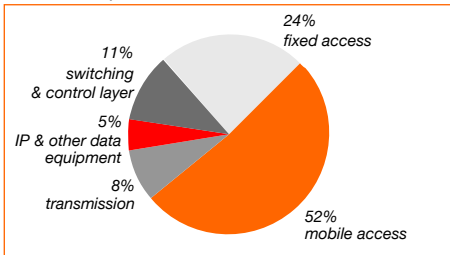


new organisation on track to deliver the full range of convergent services

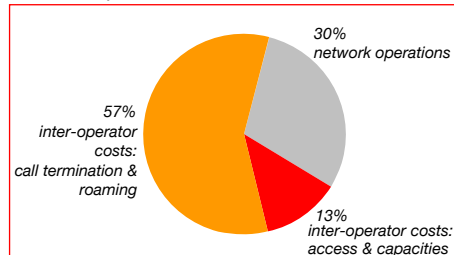
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## IT&N 2005 spend (\*)

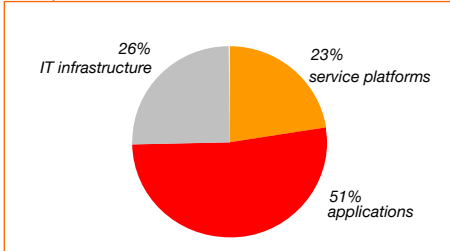
network Capex ≈ 4.0 Bn euros



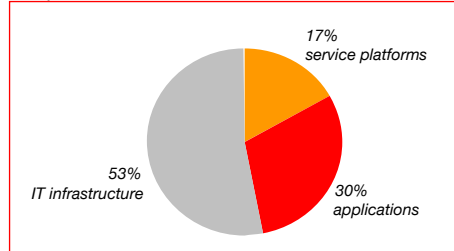
network Opex ≈ 11.4 Bn euros



IT Capex ≈ 1.6 Bn euros



IT Opex ≈ 1.4 Bn euros



(\*) excluding PagesJaunes, including Orange Spain full year

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total IT&N 2005 spend ≈ 18.4 Bn euros

## IT&N Capex & Opex guidance

june 2005

- IT&N Capex to sales to remain between 10 - 11% over 06 - 08
- Opex savings: up to 2 pp of GOM in 08 vs 05 with flat Opex (12.8 Bn euros in 08) due to expected revenue growth



december 2006

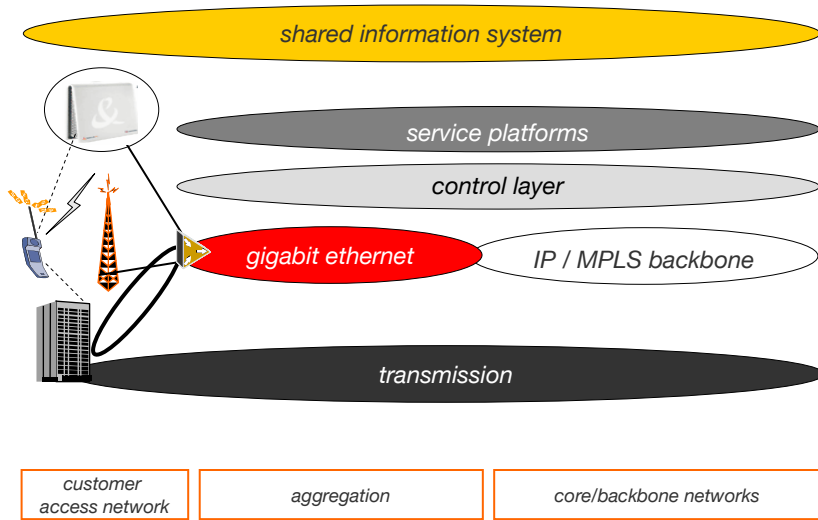
- IT&N Capex of 10 –11% of sales is confirmed
- IT&N Opex savings of 2 pp of GOM is confirmed, plan to reach in 08 500 - 800 Mn euros gain, given a lower revenue trend

a more challenging guidance for IT&N Capex & Opex

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# the network

## our vision: one IT&N



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one IT&N is our strategy to deliver the NEXt objectives

## next generation network: fixed VoIP development

### ► achievement

VoIP started as second line offer (France, UK, Poland, Netherlands)  
first line currently offered in France and in the Netherlands  
customer base in Europe end of Q3 2006 > 2 million  
wideband (VoIP enhanced)

- started in France

### ► outlook

#### wideband

- rolled out in most Europe Orange countries in 2007
- migration to SIP(\*) in 2H 2007 will
- prepare SIP convergence offers
  - take advantage of the SIP industry support for network, gateways and handsets

#### first line offered

- by January 2007 in Spain
- in the UK and in Belgium in 2007

(\*): Session Initiation Protocol

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## next generation network in the mobile: new MSC architecture roll-out

### ▶ target

*new standardized MSC architecture (softswitch): splitting the traditional MSC into 2 components:*

- *the MSC-Server(\*) for the control layer*
- *the Media gateway (MGW) for the connectivity / transport layer*

### ▶ achievement

*main benefits :*

- *switching and transmission savings: ≈ 40% savings on TCO(\*\*)*
- *scalability, network resilience improvement*
- *future proof solution : IP introduction on shared IP backbone, ready for IP interconnection and IMS(\*\*\*) introduction*

*3 suppliers selected in 1H 2006*

### ▶ outlook

- *deployment by swapping the traditional MSC when relevant (country per country decision)*

(\*): Mobile Switching Center Server

(\*\*): Total Cost of Ownership

(\*\*\*): Internet Protocol Multimedia Subsystem

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## NGN / IMS solution selected to provide fully integrated services

### ▶ target

*integrated IT&N through NGN / IMS architecture*

### ▶ achievement

- *pre-IMS solution used for VoIP SIP services (in fixed networks)*
- *selection of IMS providers is ongoing*

### ▶ outlook

- *IMS providers selected in 1H 2007*
- *testing for introduction by the end of 2007*
- *gradual phase out of PSTN switches to begin from 2008, starting with MT25 2G switches*

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## network Capex and Opex optimization: radio site sharing

### achievement

agreement with Vodafone for sharing network infrastructure in Spain within areas below 25,000 inhabitants

### outlook

3G  
UTRAN(\*)  
sharing

- 5,000 radio sites common roll-out in 4 years
- operational by 2H 2007, first time in Europe

2G  
site  
sharing

- optimization by decommissioning and re-installation of equipment in the operator's site responsible for the area

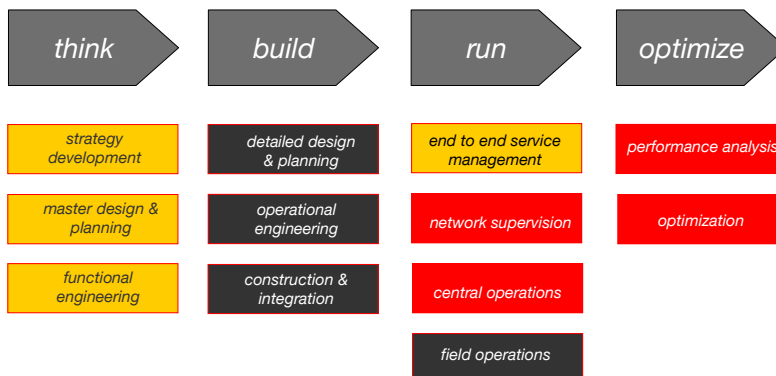
- important Capex and Opex savings at stake over the 5 coming years (200 Mn euros expected)
- further operations under analysis

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(\*): UMTS Terrestrial Radio Access Network

opex Capex

## all outsourcing not appropriate: partner for economic efficiency, control for competitive advantage



- be pragmatic
- keep & strengthen
- transfer if not critical size

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## network operations optimization: example of Switzerland

▶ achievement

- first line maintenance (on-site) and site infrastructure management
    - non significantly differentiating activity
  - no economy of scale achievable within the group
  - situation up to 3Q 2006: 2 subcontractors
  
  - new situation: one single partner from 3Q 2006
- =>forecasted Opex savings ≈ 40% in 06-08

transfer

▶ outlook

- ongoing projects through Orange footprint to implement new make or buy policy  
(in Belgium, in the Netherlands, additional steps in Switzerland)

be pragmatic

## operations optimization: an example of cross-border synergies

▶ target

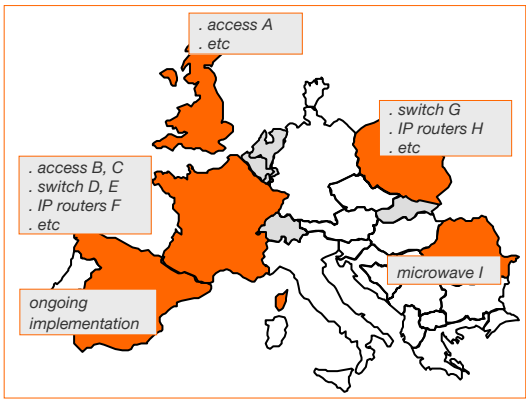
- activities performed by France for UK regarding a new 3G technology in the UK:
- 24x7 3G network element monitoring
  - first time fix, trouble ticketing
  - level 2 & 3 support / expertise
  - interface with vendor

▶ achievement

- key benefits:
- expertise concentration
  - improved operational efficiency & QoS
  - Opex reduction ≈ 25%
  - leveraged management of vendor

keep & strengthen

# operations optimization: corporate Skill Centers implementation



▶ target

Orange aims at implementing one single corporate skill center (SkC) for each technology in charge of:

- technology policy
- specification
- tests and implementation

▶ achievement

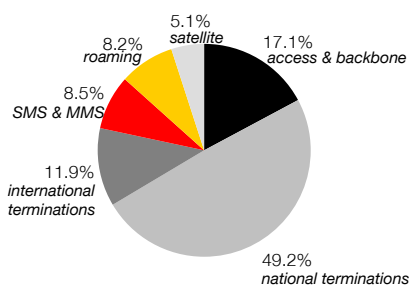
- 20 SkCs already launched
- 16 under implementation

▶ outlook

- ≈ 100 Skill Centers targeted by 2008 for network and service platforms
- corporate skill centers will reduce IT&N Opex and optimize technical skills management

# network inter-operator spend optimization

inter-operator costs breakdown



figures as of 3Q 2006

call termination costs are the major cost segment

▶ target

objective is to achieve savings representing 1pp on Opex to sales ratio by 2008.

▶ achievement

insourcing

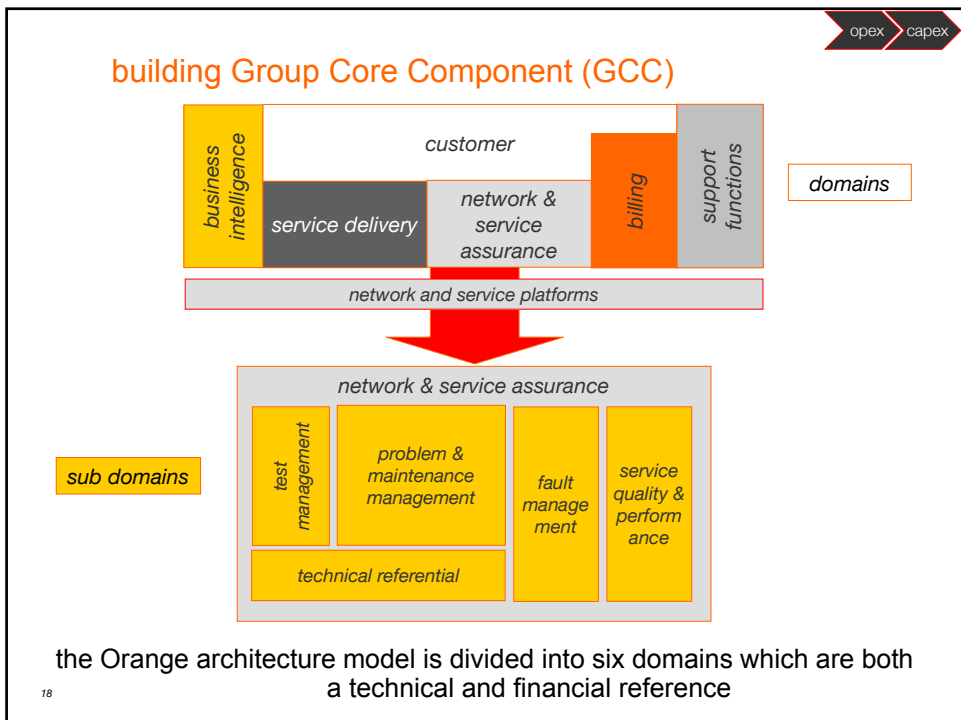
- access and backbone synergies
- internal traffic routing
- joint procurement approach & sourcing strategy
- cost assurance
- mastering of unlimited offers

▶ outlook

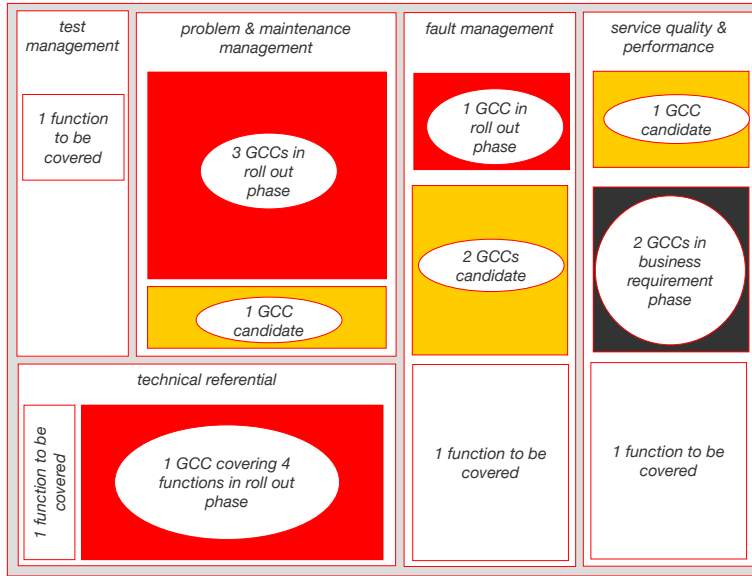
- mastering call termination & roaming
- improved control over abundance offers
- termination costs decreasing
- wholesale control at group level



# IT

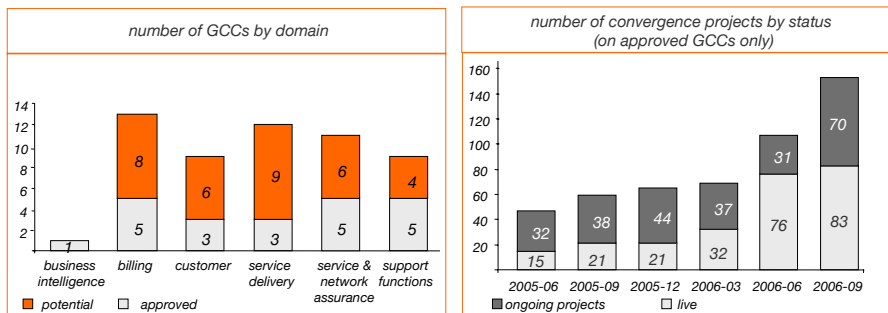


## most of network & service assurance domain is covered by GCCs



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## agreement and implementation of GCCs is progressing steadily



- 22 GCCs have been approved and 33 are under study or validation
- 83 fully rolled out implementations, and 70 are ongoing
- a GCC is implemented 6 times on average.
- maintenance is mutualized in the skill center.

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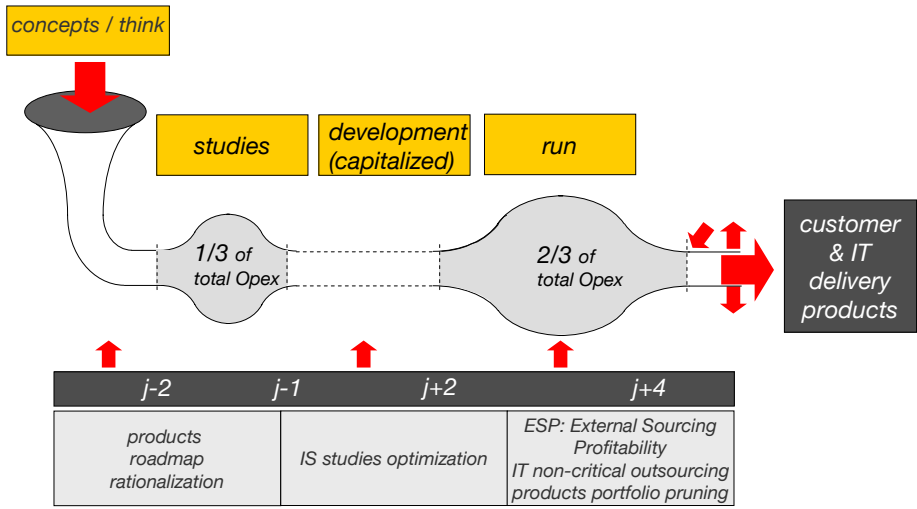
## IT active suppliers portfolio management enables rationalization & cost management

<i>example of France</i>	2003	out	in	2005
suppliers	63	- 29	+ 16	50

overall IT services prices have been contained, with a slight decrease compared to 2004 baseline, involving a price evolution in the 3 countries (France, UK, Poland) of about 5% on unit costs

- referenced new offshore IT suppliers within the core list of suppliers

## the IT Opex PIPE & our domains for actions



## from a heterogeneous billing system situation to a streamlined current situation

mobile business	billing system version
Belgium	BSCS V5.1
Botswana	BSCS V6
Caribbean	BSCS V5.0 US => V8
Dominican	BSCS V5.0 US => V8
Egypt	BSCS V6
Ivory Coast	BSCS V5.21 => V8
Jordan	BSCS V5.21
Madagascar	BSCS V6
Netherlands	BSCS V5.1
Spain	BSCS V6

**target**

objective of our new billing solution project (BSCS):

- cost optimization through consolidation of supplier base
- better sharing and re-use of developments
- ensure viability of BSCS maintenance until implementation of new system

**achievement**

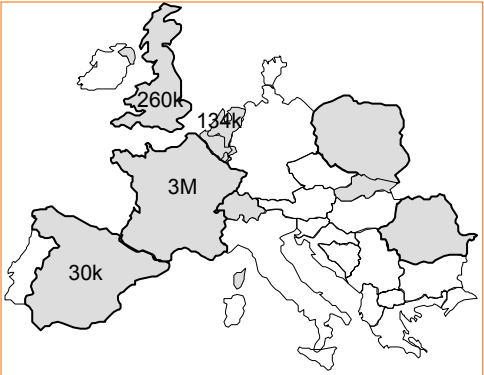
the total annual spend for previous billing system was 15.8 Mn euros with a heterogeneous situation:

- 5 suppliers and 10 countries.

**outlook**

12 Mn euros savings (25%) over 3 years

## industrialize home gateway remote management (livebox)



**target**

scope and context

- firmware livebox update for 4 countries + franchise entities
- wifiphone and liveradio updates
- 3 launches per country in 2006
- equipments audit value added of Karma
- precise equipment management
- target off-peak period
- target per subscribed services

**achievement**

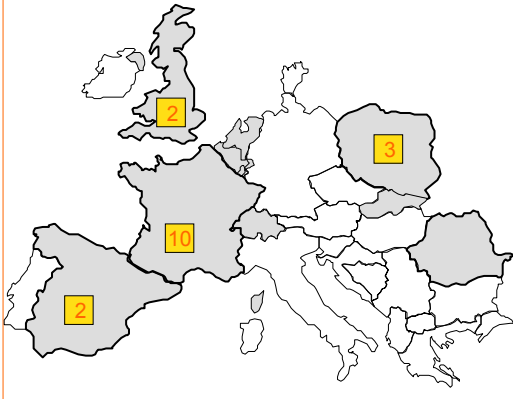
- deployment gains of around 4Mn euros per year in direct costs + time to market opportunities
- a clear improvement of the brand and the QoS (i.e. indirect gains)

**outlook**

- in 2007, introduction in Poland, Belgium, Slovakia, Switzerland, diminution of generalisation delays, immediate update on customer care request

# IT infrastructure optimization: data centers reduction, desktop standardisation

## 2008 targets for data centers



▶ target  
reduce number of Data Centers (DC) from > 80 beginning 2004 to ≤ 17 end 2008 (excluding hosting customers data centers), with 4 country hubs

▶ achievement  
▪ by the end of 2006, 17 DC in France  
5 in UK, 9 in Poland and 2 in Spain

▶ outlook

- unique desktop standardization in all Europe
- fully unified messaging system
- group internal network rationalization
- DC infrastructure consolidation (servers consolidation and virtualization, ...)

data centers consolidation on track, and other IT infrastructure consolidation already launched

## Conclusion

- technology roadmap on track to deliver converged products and services
  - cost optimization improvement programs in place and delivering savings in view of increased challenge
  - inter-operator costs on track to deliver 1pp improvement
- => on track to deliver ambitious IT&N guidance on Capex & Opex, and put in place network, IT and service platforms enabling 21st century services

# glossary

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BSCS	Business Support and Control System
FTE	Full Time Equivalent
IMS	Internet Protocol Multimedia Subsystem
IP	Internet Protocol
IS	Information System
IT	Information Technology
MGW	Media Gateway
MPLS	Multi-Protocol Label Switching
MSC	Mobile Switching Center
MSC-S	Mobile Switching Center Server
MT25	2nd Generation Fixed Network Switching Center
NGN	Next Generation Network
PSTN	Public Switched Telephone Network
QoS	Quality of Service
SIP	Session Initiation Protocol
TCO	Total Cost of Ownership
UTRAN	UMTS Terrestrial Radio Access Network
VoIP	Voice over Internet Protocol
Wifi	Wireless Fidelity

(\*): UMTS Terrestrial Radio Access Network