

ITU-D Regional Development Forum for EUR and CIS Region

“NGN and Broadband, Opportunities and Challenges”

Chisinau (Moldova), 24-26 August

NGN technologies: a leverage for services and business evolution

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Telco Market Main Trends (1/2)

Voice Revenue Decline

- ▶ Tier 1 operators are facing progressive traditional voice traffic decreasing both on mobile and fixed networks
- ▶ Voice is becoming a commodity

New players are emerging

- ▶ In the Digital media service segment **co-marketing** between NP, SP & CP, with overlap on CATV, Portal and Telco market
- ▶ New Players on **Social Networking** (MySpace, FaceBook, etc..) are bringing revolution on traditional business model and branding policy

Customer Experience

- ▶ Customer is asking **ubiquity and technology transparency**, focus is on service and quality not on platform
- ▶ It uses multiple devices (Blackberry, IP phone, Laptop, WebTV, etc..) to access services in a convergent way

CAPEX & OPEX reduction

- ▶ Actual Finance critical situation is reducing available economical resources
- ▶ **-10%-20% on yearly CAPEX (YoY)**
- ▶ Cost & debt reduction, efficiency growing are becoming the main strategic leverage

Telco Market main trends (2/2)

Tariff slowdown

- ▶ Competition from start-up companies and new comers, is dramatically reducing ARPU on the mass-market customers
- ▶ To mitigate margin erosion flat and bundle offers are promoted

Market saturation & Churn

- ▶ In EU Zone (e.g. Germany, France, NL), BB market penetration is reaching a saturation point, with stable customer base and increasing churn
- ▶ Customer Retention and Loyalty are gained only enforcing price reduction, Quality of service & support policies

Web Community evolution

- ▶ From Mobile (SMS, MMS, WAP) and Fixed VASs (3P call, voice msg) to Multimedia (Gaming on-line, Mobile TV, DVB-H, Video downloading)
- ▶ From IM, P2P, chat, to social networking, Web 2.0 (Second Life, semantic groups)

New regulatory scenarios

- ▶ Pressure for Network Infrastructure and Service Provisioning separation (e.g. Open Reach) to remove competition barriers and domestic incumbent dominating position
- ▶ Evolution towards UltraBB, overlay vs replacement model on NGN2 development

Telecom Italia is the Leading Telco Operator in Italy

Telecom Italia Key Facts (Operations in Europe, South America and Mediterranean)

- 20 million **fixed lines** in Italy
- 34,2 million **mobile lines** in Italy and 36.1 million mobile lines in Brazil
- 10.8 million **broadband** connections – of which over 2.5 million abroad
- Italy's **leading portal** Virgilio - 14.7 million Page Views (EoY 07)
- **Domestic Results at March 31, 2009**
 - **Revenues:** 6,8 Bln € (30,2 Bln € in 2008)
 - **EBITDA:** 2,8 Bln € (11,4 Bln € in 2008)
 - **Industrial Investments:** 1,0 Bln € (5,4 Bln € in 2008)
- Approx 70,000 **Employees**



Italian Consumer Market trends

- **Overall Telco Market** relatively flat
- **Decline** of traditional Telecom services (also due to regulator pressure)
- **Decelerating Fixed Broadband** growth
- **Internet = BB** and **mainstream** service in Italian lifestyle
- **Booming Mobile Broadband** (access and browsing)
- **Tightening ADSL competition** also from Mobile Operators
- **Rising Digital Advertising**



Telecom Italia engagement in international standard

Telecom Italia is from ever engaged in the international standard activities with active contribution in all telecommunication fields: from terminals to network infrastructure, to control and service platforms, to service application and to management platforms and systems.

The most of contribution done are shared with other companies, operators and market leader vendors, to get more chances to be accepted.



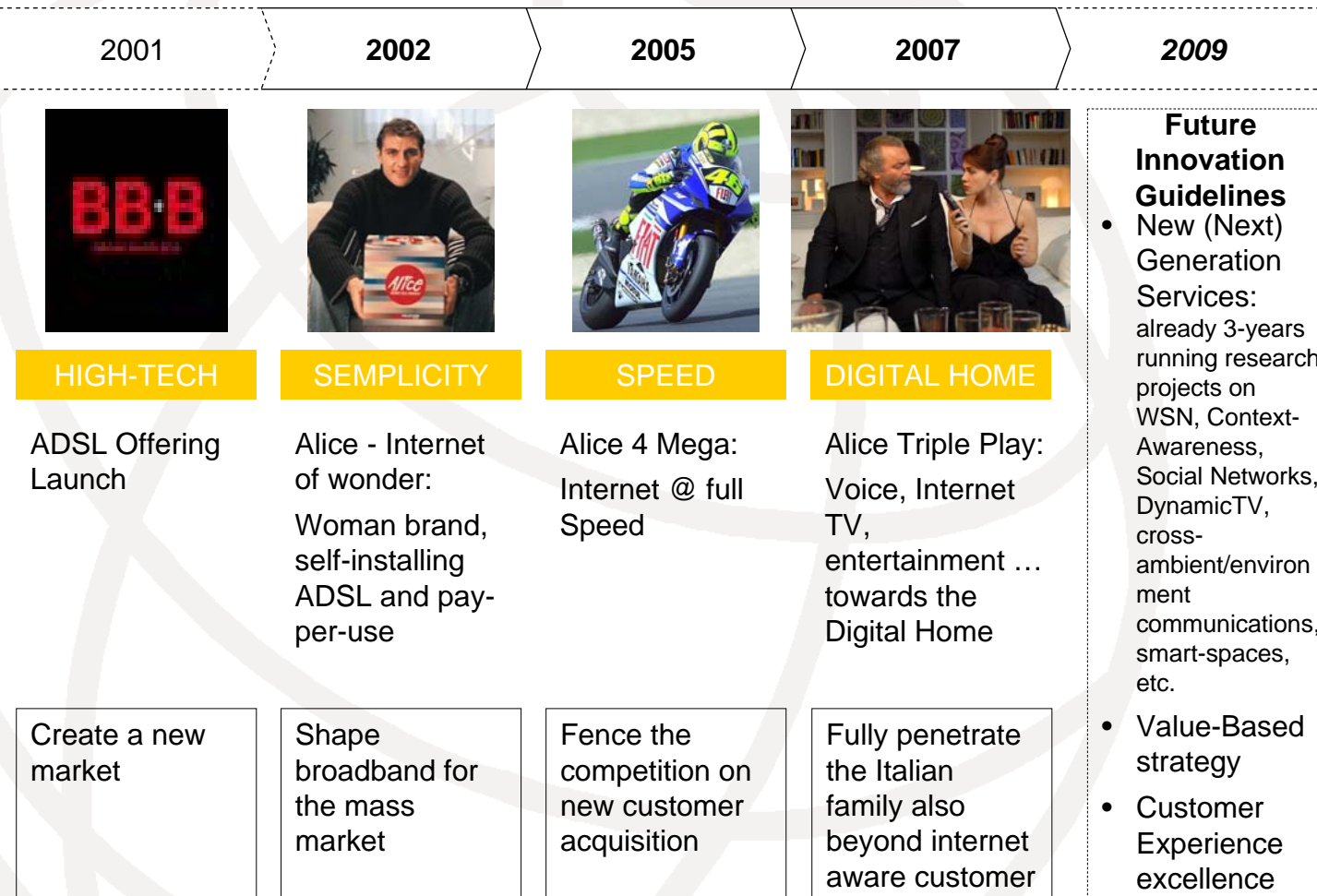
Telecom Italia appointment in ITU-T and ITU-R



ITU-R WP5D, SWG TECH on M.1457 (IMT2000), **chair** (Nicola Pio Magnani)
ITU-T SG15, **vice-chair** (Francesco Montalti)
ITU-T Q5/15, "Characteristics and test methods of optical fibres and cables",
rapporteur (Paola Regio)

Telecom Italia Acted as the “Broadband Market Maker” Through a Continuous Business and Technological Innovation

Telecom Italia Broadband Service Innovation Path



- Telecom Italia shaped the Italian **Digital Home** through a continuous innovation of:
 - **Internet Access**
 - **VoIP** products
 - **TV & Entertainment**
 - **Connected Home** products
- ... leveraging on **Convergence** to create value

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Alice: a European Broad Band Brand

Alice.
Alles ganz einfach.

Rasanter DSL-Internetzugang inklusive Telefonanschluss.
Nur **21,90 Euro/Monat**
+ 30-minütige Online- und Sprachanrufe*

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Alice arrive.
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Appeler le 1033 ou www.alice.it

ALICE 23,95€
Mensuellement
téléphone et ADSL
gratuitement

TOUT INCLUS - Pour votre satisfaction proposez-nous:
 - Une ligne fixe et une ligne ADSL
 - Une ligne fixe et une ligne ADSL
 - Une ligne fixe et une ligne ADSL
 - Une ligne fixe et une ligne ADSL
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Avec Alice
tout est clair

29,95€
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ALICEBOX ADSL+
TÉLÉPHONE



Alice ist
schnell.

Rasanter DSL-Internetzugang inklusive Telefonanschluss.
Nur **21,90 EUR/Monat*** + 0,99 Cent/Onlineminute.
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Alice und die Subnet

ADSL et Téléphone
avec Alice tout est clair.

Parque vous connectez le net
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 - Téléphone fixe
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 - 7 mois gratuits
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Appeler gratuitement depuis un fixe le 10 33
ou contactez-nous sur alice.it

Alice. Maintenant tout est clair.

Avec Alice l'ADSL accélère jusqu'à 20Mbit/s.

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...also for Mobile Services

Connectivity

- BB data offer integrating fixed and mobile accesses
 - TIM internet mobile (HSDPA technology at 3.6 Mb)
 - Internet at home with ADSL Flat up to 2Mb



Mail

- 3 GB mail with Antivirus/Antispam and 300MB Personal Area
- “Transparent” authentication through mobile
- Mail Push to receive & send mail through mobile device as well as Pc



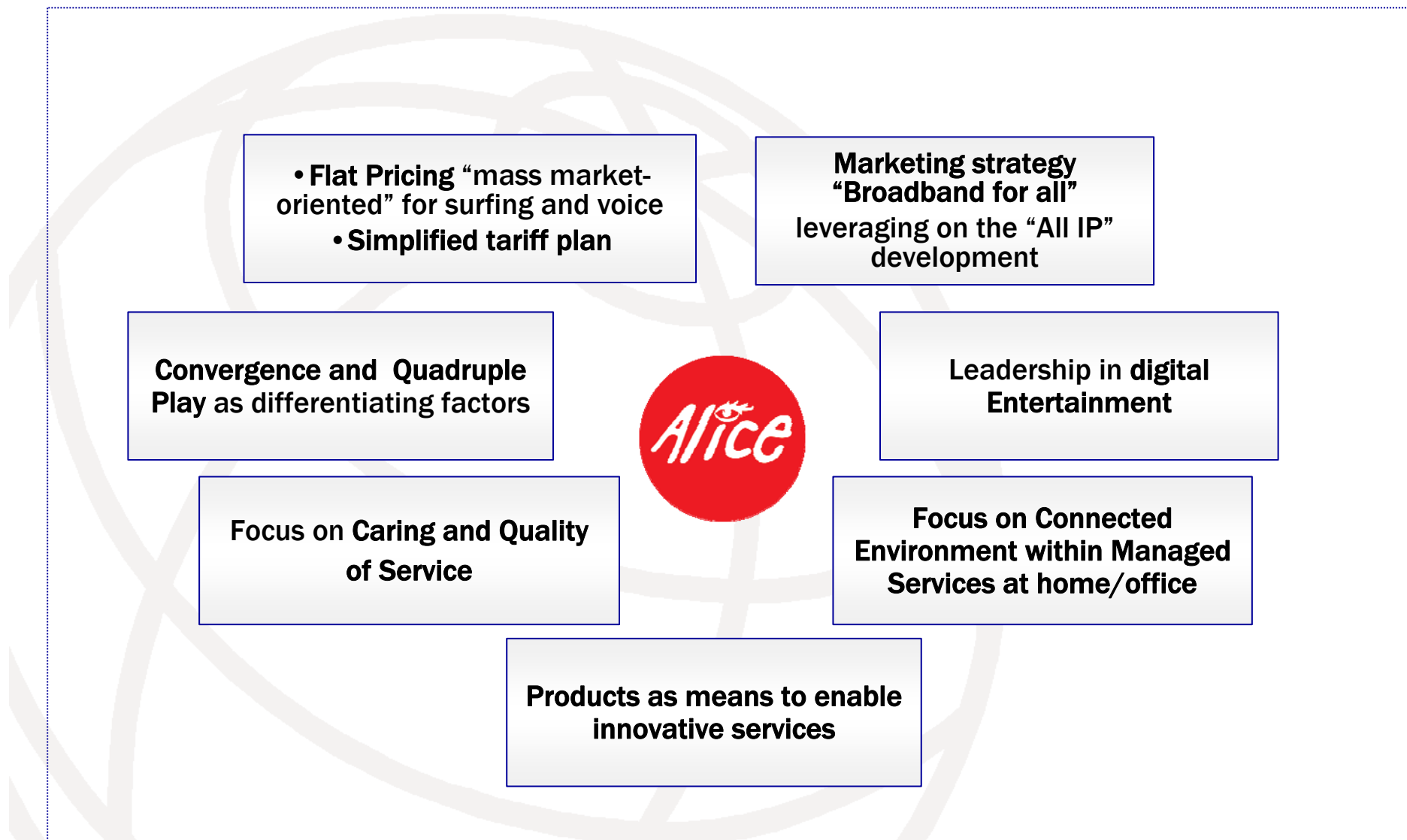
Instant Messenger

- Through PC & mobile
- “Transparent” authentication through mobile
- Interoperability with other communities
- Integration with mail and VoIP

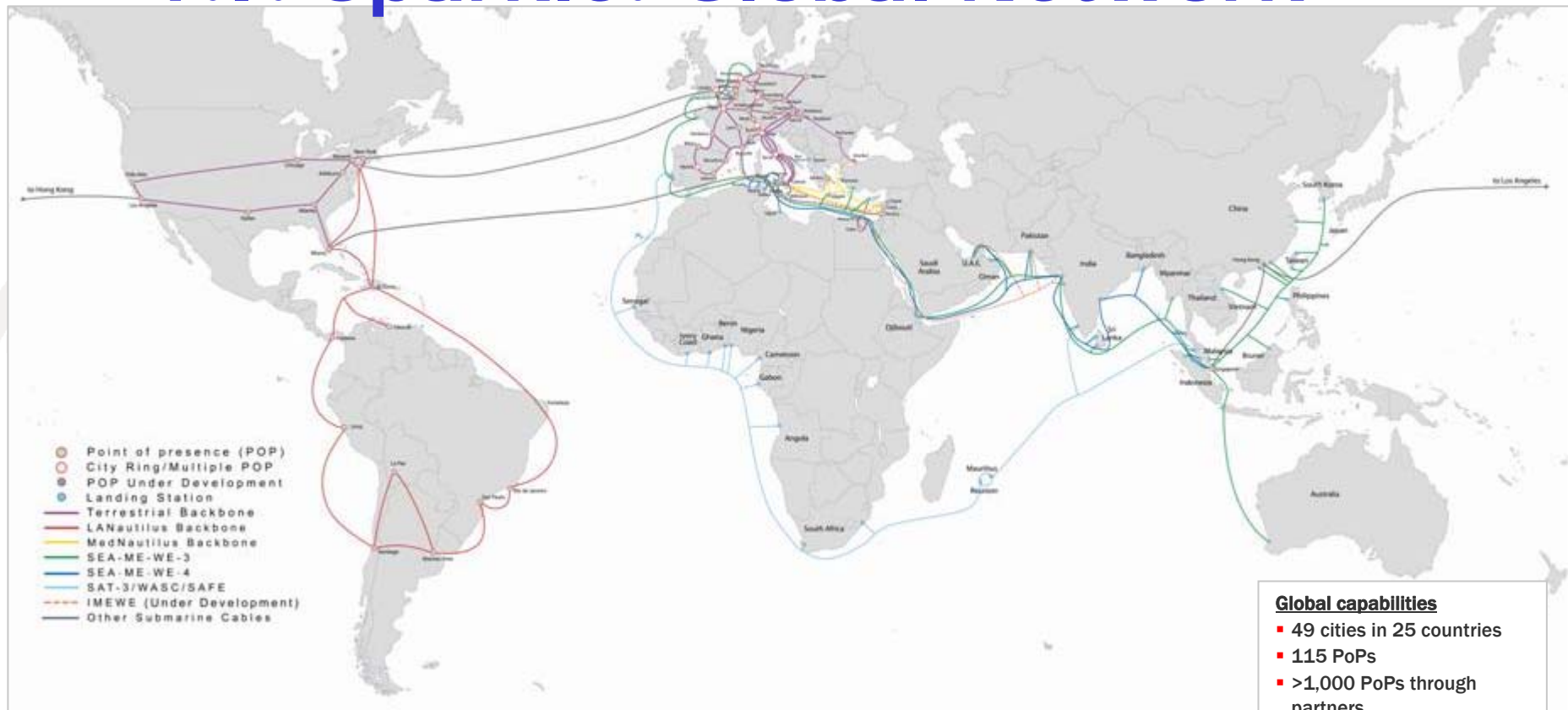


The first that communicates also via TIM mobile phones

Telecom Italia Offer : Our Priorities for the Evolution



T.I. Sparkle: Global Network



- Global capabilities**
- 49 cities in 25 countries
 - 115 PoPs
 - >1,000 PoPs through partners
 - 55,000 km/fibre PEB
 - 30,000 km LAN
 - 7,000 km MED
 - 3,500 km Italian Network
 - 434,500 km submarines cables

- **Worldwide coverage through bilateral network**
- **Integrated and resilient proprietary backbones in Europe (PEB), Mediterranean Basin, US and LatAm**
- **Unique dual protected fiber path in Europe**
- **Full IP - softswitch multi-service network**
- **Unique footprint in the Mediterranean region through bilateral cables, MED Nautilus and SMW4-3**
- **Protection of the optical link via meshed architecture and 3G interworking architecture in progress**

T.I. Sparkle Consulting: Mission

The mission of Consulting Services is to make available the big expertise of the T I Group

- In our view, there is a sizable difference between Telecom Italia's Consulting Services and other traditional consulting companies (AT Kearney, Accenture, McKinsey...)

We offer in-depth know-how, derived from our experience in the field

- We do not speak about theoretical strategic guidelines but we offer our concrete experience accumulated throughout the years in all the innovation areas where a big Group such as Telecom Italia is committed

Our target clients: Mobile and Fixed operators + Governments/TLC Ministries/Regulatory Institutions worldwide that may benefit from our broad telecommunications expertise

International Expertise: Consulting Projects

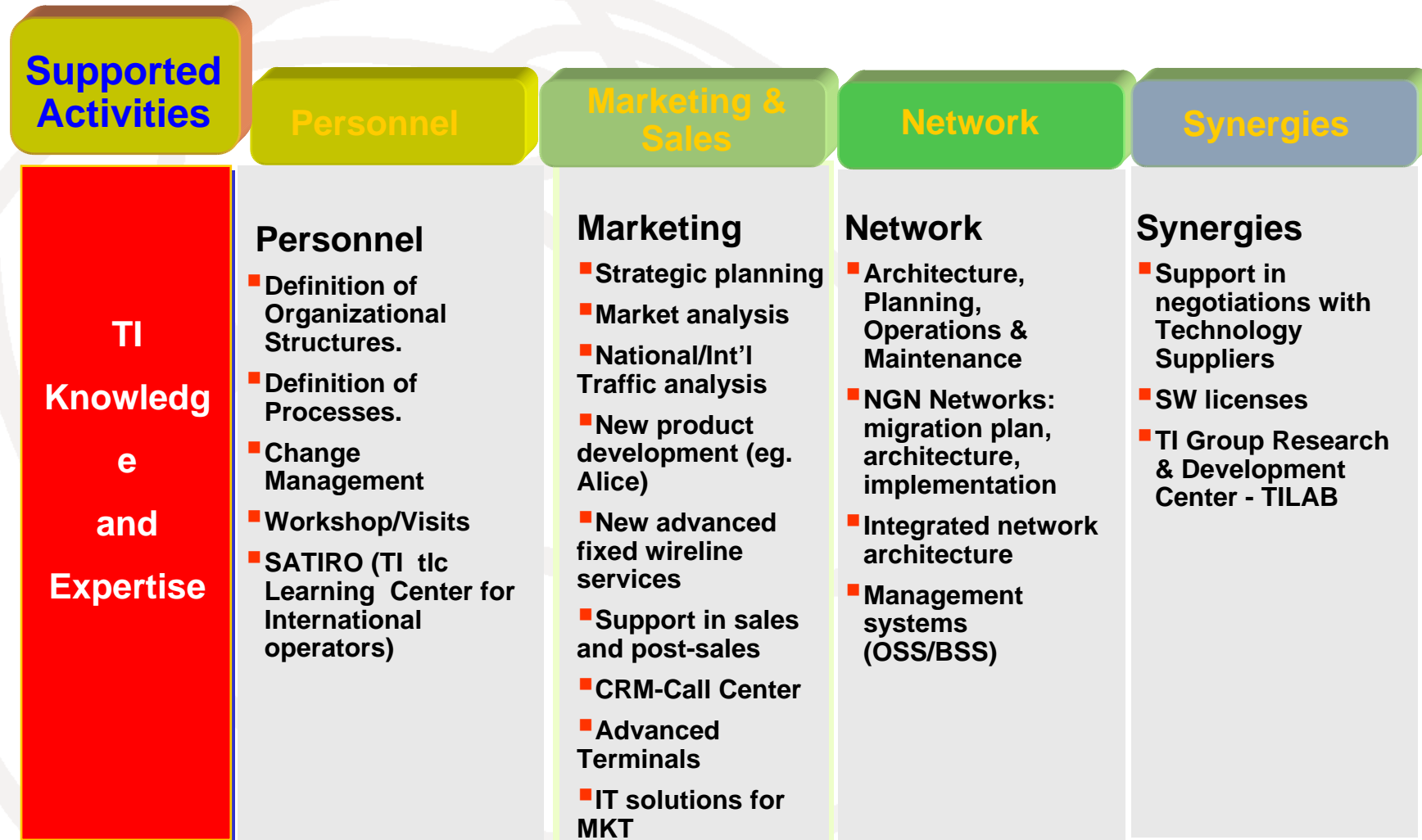


We have the experts!

Telecom Italia Lab:
over 1000 researchers
80 patents per year, about 2000 cumulated
TI Group: *3B Euro per year investments in innovation, about 70000 employees*

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Telecom Italia Consulting Services: Portfolio



Telecom Italia Consulting Services: 4 Levels of Service

● Training

- Standard and ad-hoc (tailor-made) courses: Telecom Italia Learning Services (TILS)
- Targeted courses, e.g. “Satiro” program on international telecoms
- On-the-job training, focused workshops and visits

● Know-how transfer

- Commercial areas: marketing (IPTV, BB, VAS), sales, customer care (CRM)
- Fraud Analysis & prevention
- Technical areas: network (NGN, IP, 3G), support systems (OSS, BSS)
- General areas: strategy, organization, security, change mgt.

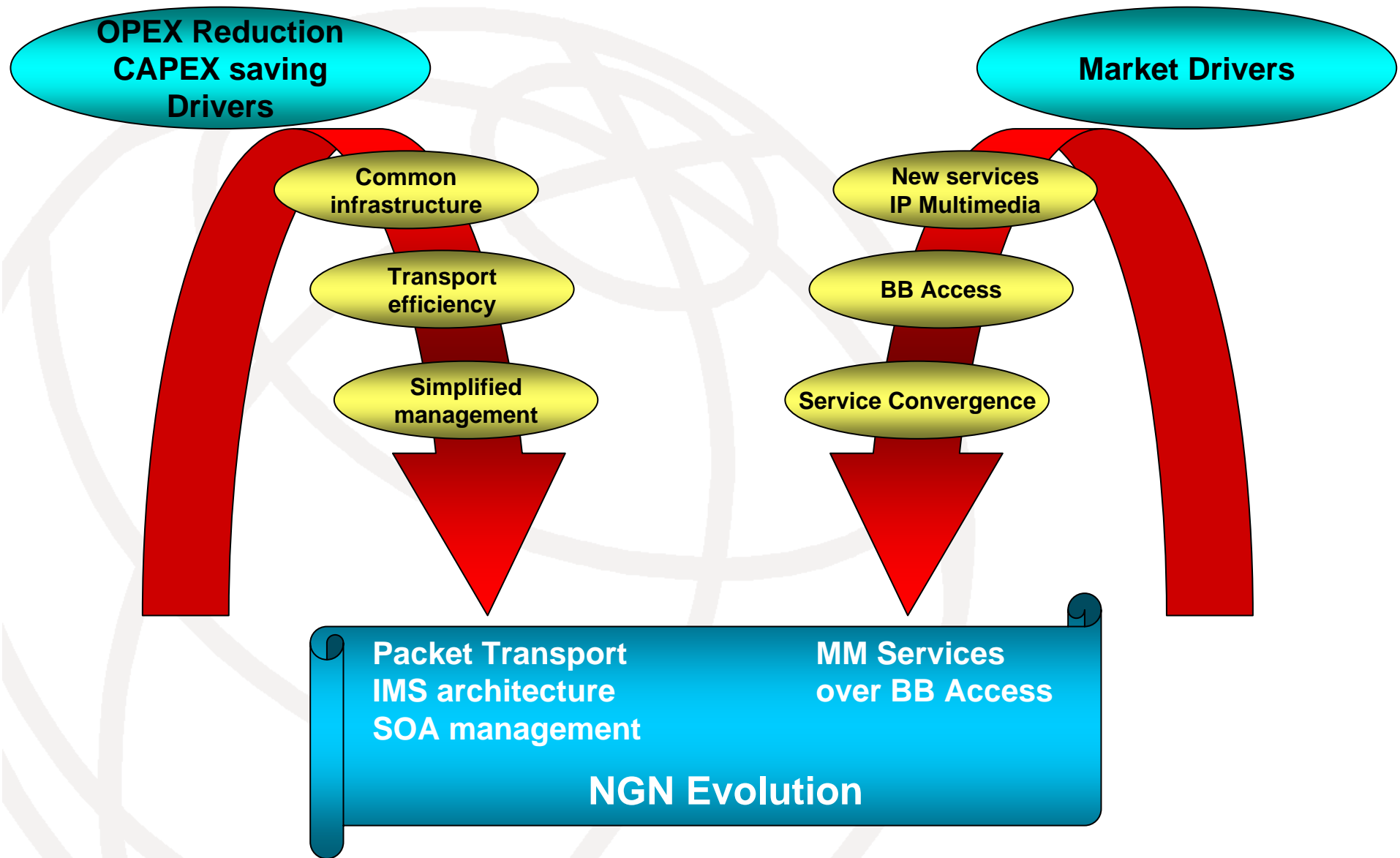
● Management Transfer

- Detachment of senior/middle level managers
- Short-term (6 mos.), long-term (>1 yr.), special assignments

● Outsourcing

- Platform interconnection, usage-based (revenue sharing) tariffs
- Main platforms: SMS/MMS, Web and BB (Alice), intl. Pre-paid and Tool-free, MNC's services (IP-VPN with MPLS), call centers
- CAPEX-free, fast introduction of new services

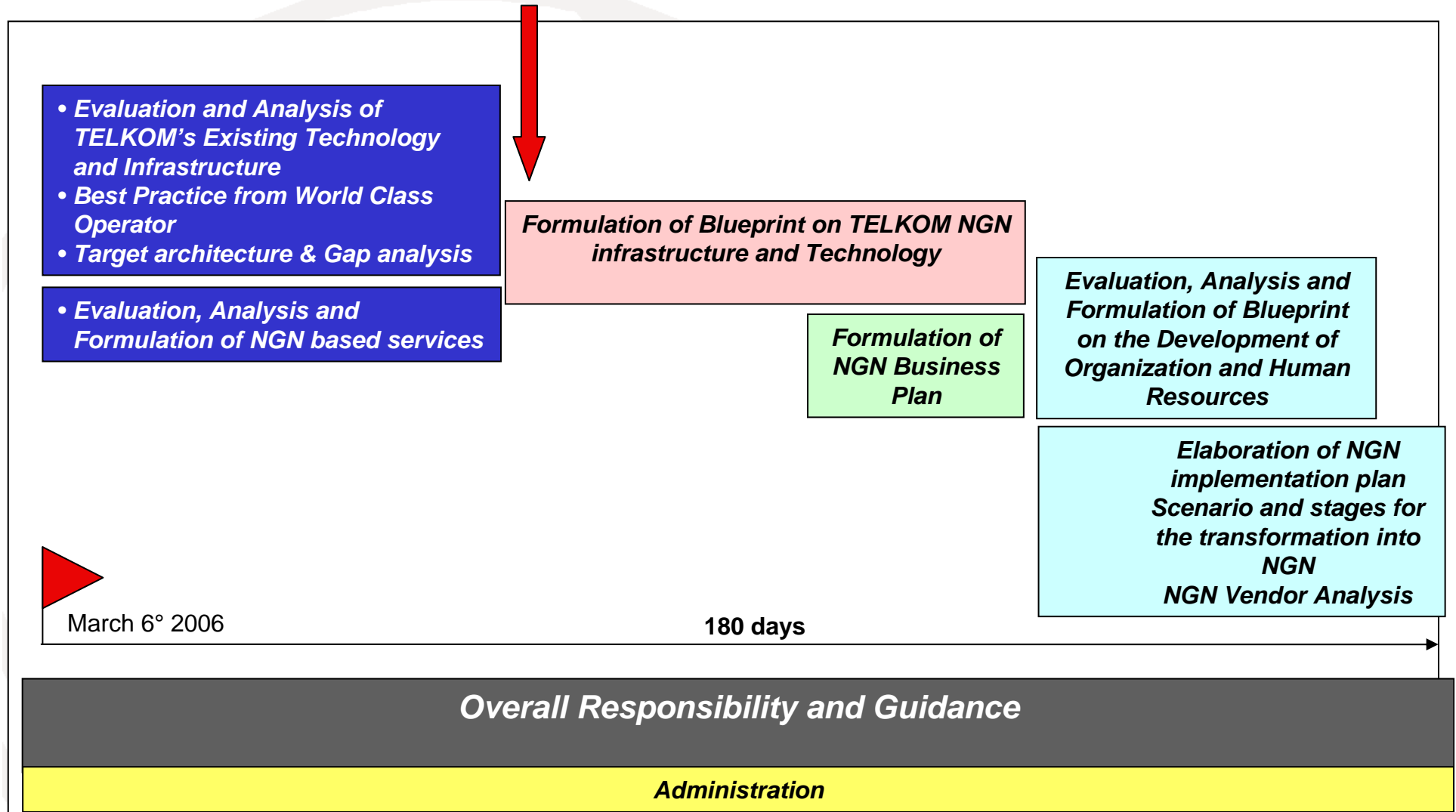
NGN Drivers



NGN key items considered

- Business model and business strategy definition
 - Customer and HIS/HER Services in certain market in certain epoch
- New attention to Customer Relationship Management
- Infrastructure and service evolution plan
 - Service platforms and service layer
 - Network infrastructure for Fixed and Mobile
 - Physical transport network
 - Wireline and wireless access
 - Metro network
 - IP-MPLS backbone
 - IT management architecture and systems (OSS/BSS/CSS)
 - Mobile evolution plans
- Business plan definition
 - Service profitability forecast
- Human Resources organization
- Change Management
- Culture Change

Example of an NGN Work Consulting Project: Gantt



NGN Project Drivers

The main NGN drivers are:

- The **increase of the IP non-voice traffic** for business and residential users on the backbone and access networks
- The necessity of the OPEX reduction of the traditional TDM infrastructure:
 - Rationalize existing platforms
 - Replace old technologies
 - Concentrate control and supervision in few centralized locations
- the opportunity of CAPEX safeguarding and optimisation investing in the most advanced and future safe technologies with lower cost/bit
- the availability of new technological leverage that enable the deployment of BB and **Multi Media services** with **unique IP based core platform** capable to grow and evolve in terms of capacity and performances

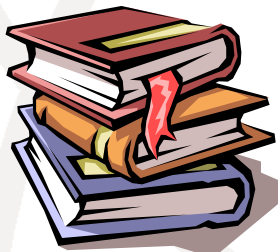
Example of an NGN Work Consulting Project: Workbench

- Task 1: Next Generation Service Portfolio, Definition & Road Map
- Task 2: Service Platform Assessment & Evolution Guideline
- Task 3: Network Infrastructure Assessment & Evolution guideline
- Task 4: NGN Network CAPEX evaluation and business plan, tariff & costing model
- 7 Training courses in Rome, Italy

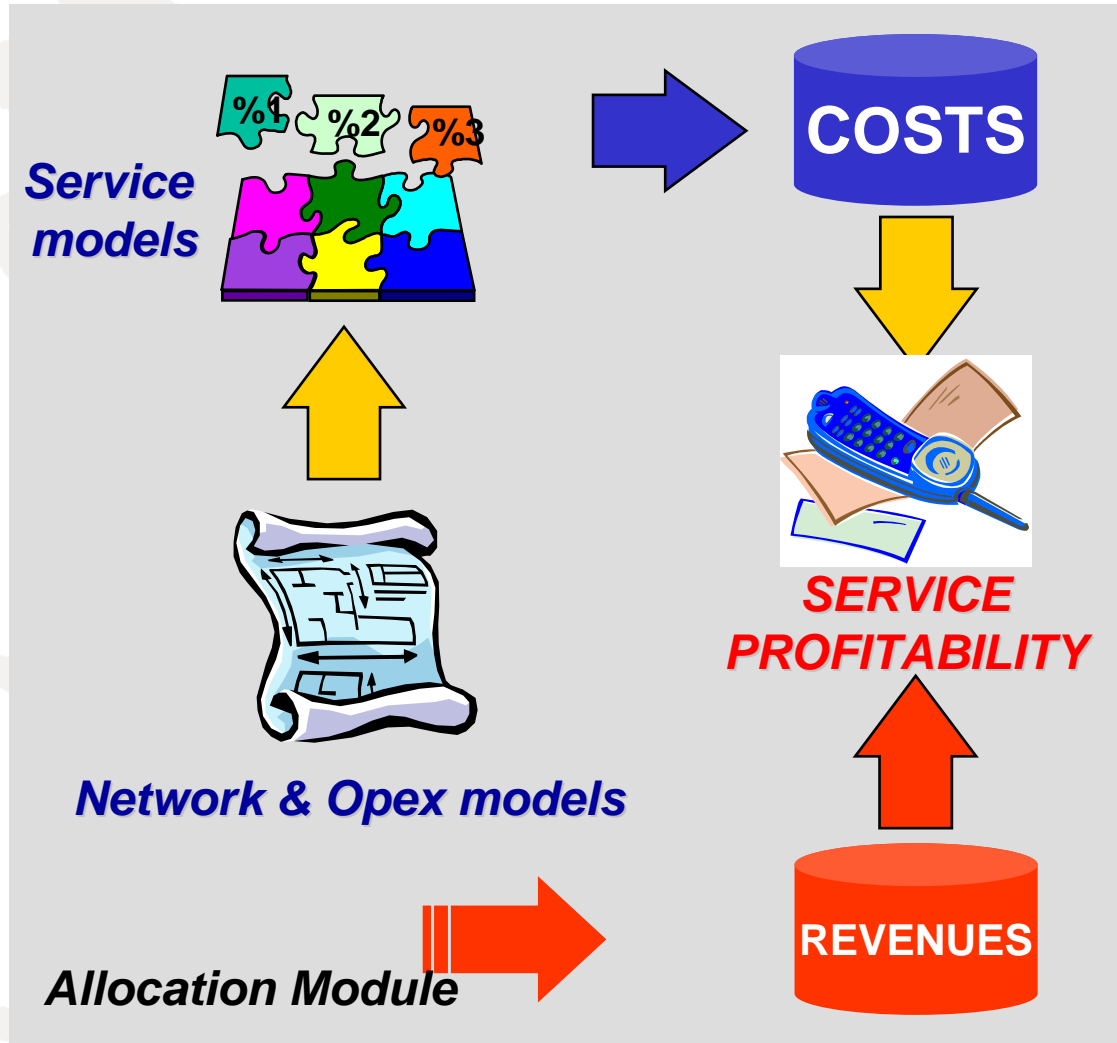
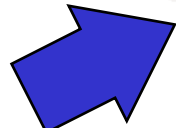
.... for all this 90 days duration only!

Profitability Analysis: General Approach

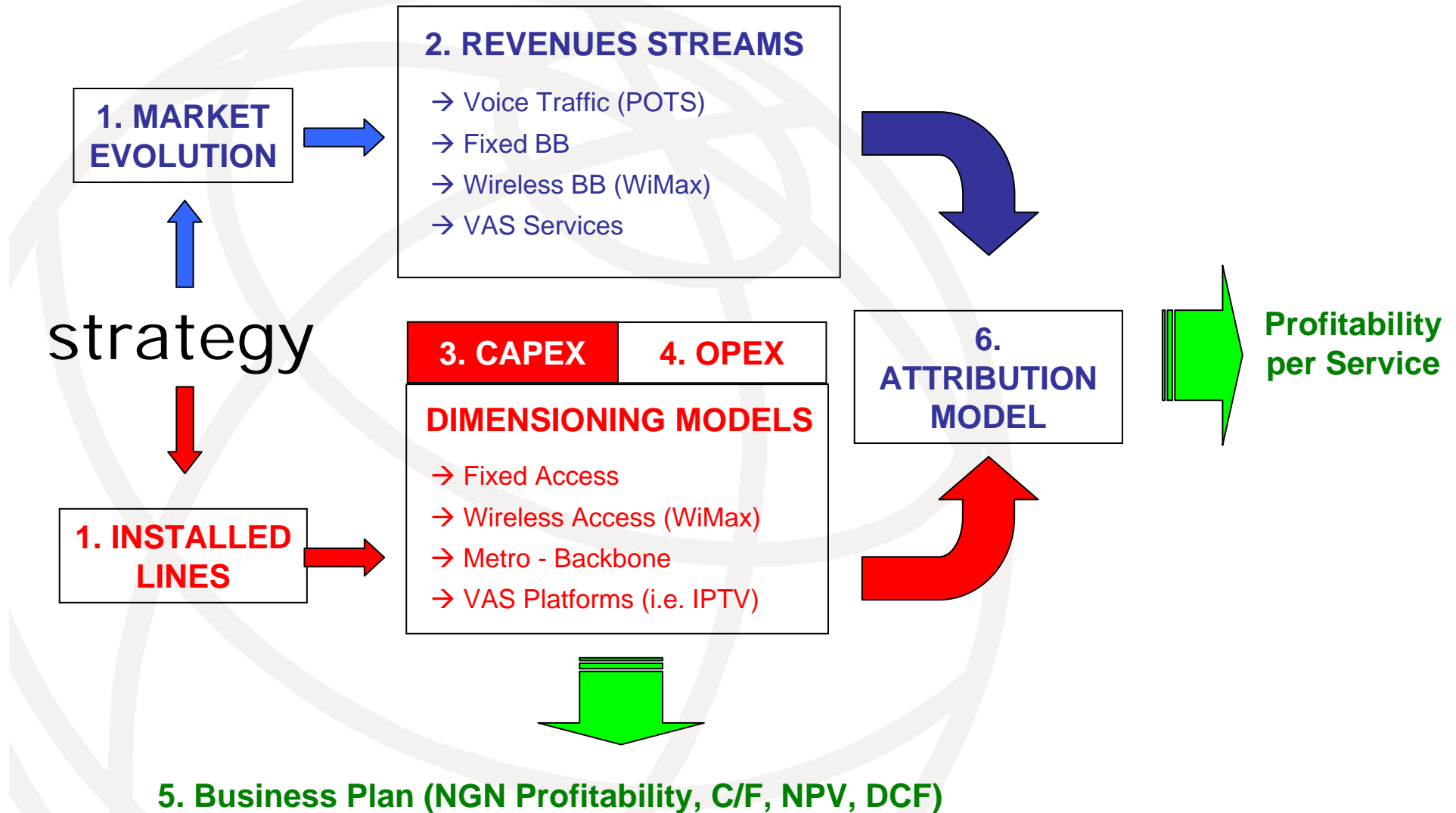
*Investments,
Costs & Revenues*



*Business
Plan*

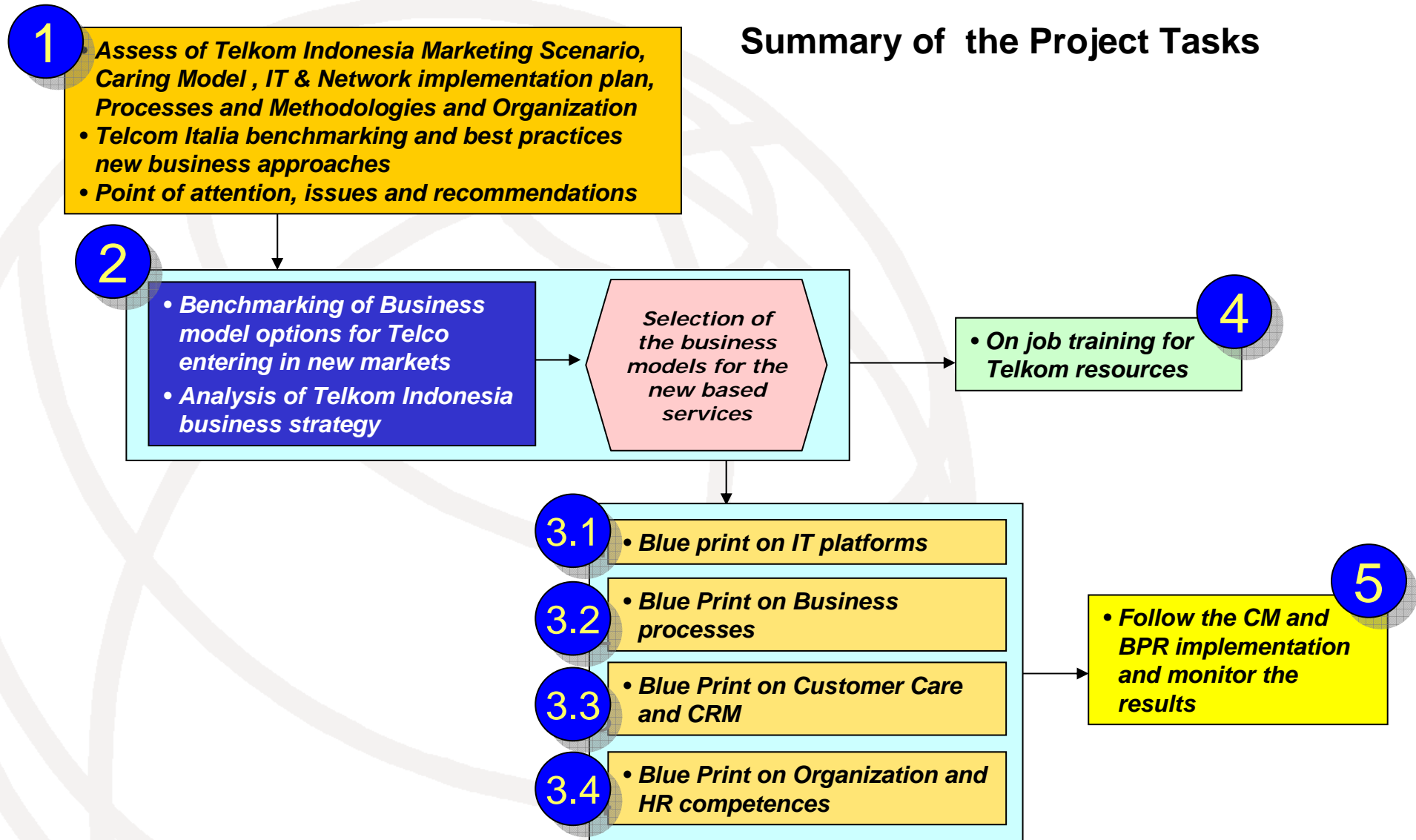


Project Example: Business Plan Methodology

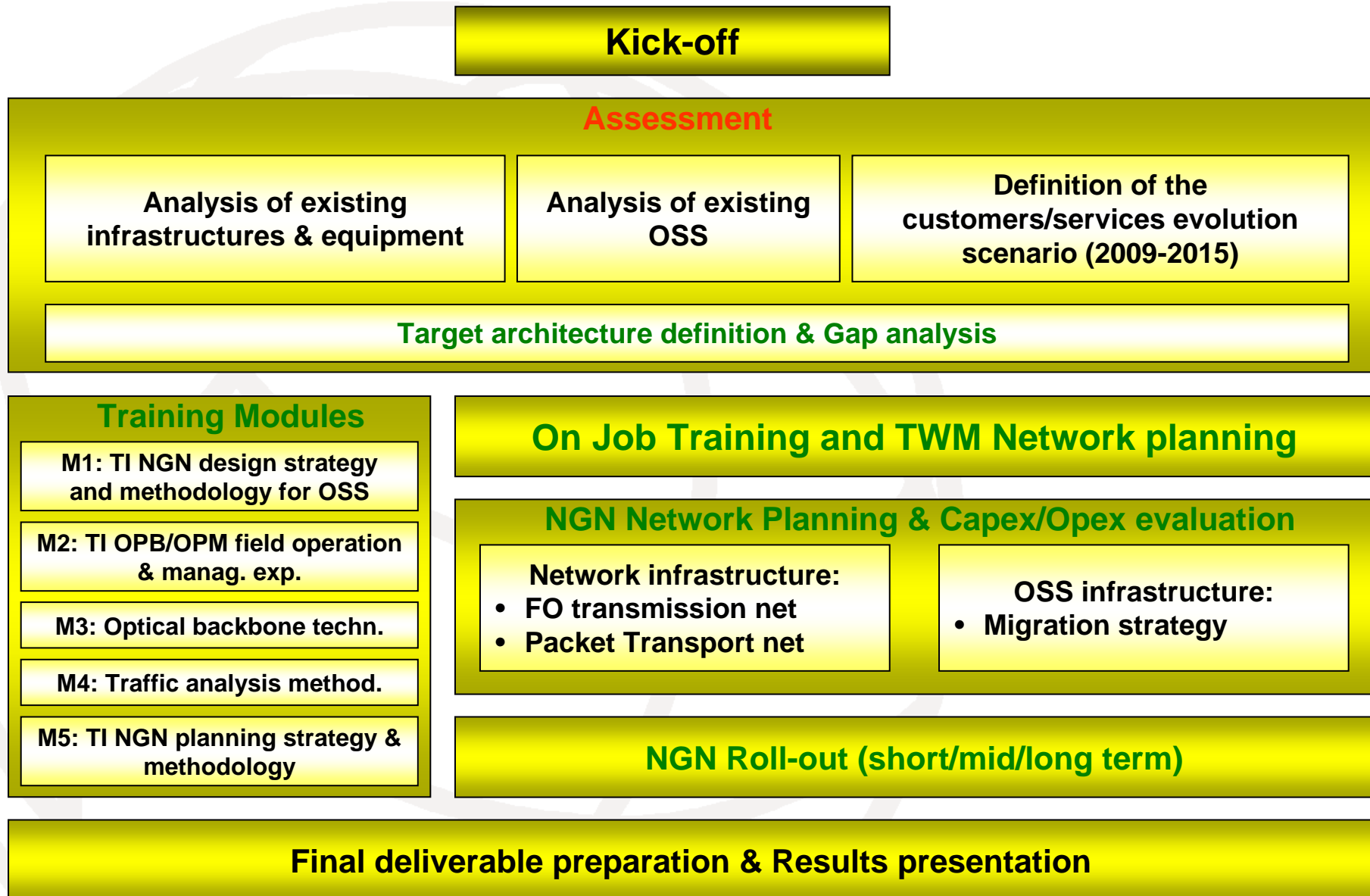


Example of a Project activities organisation

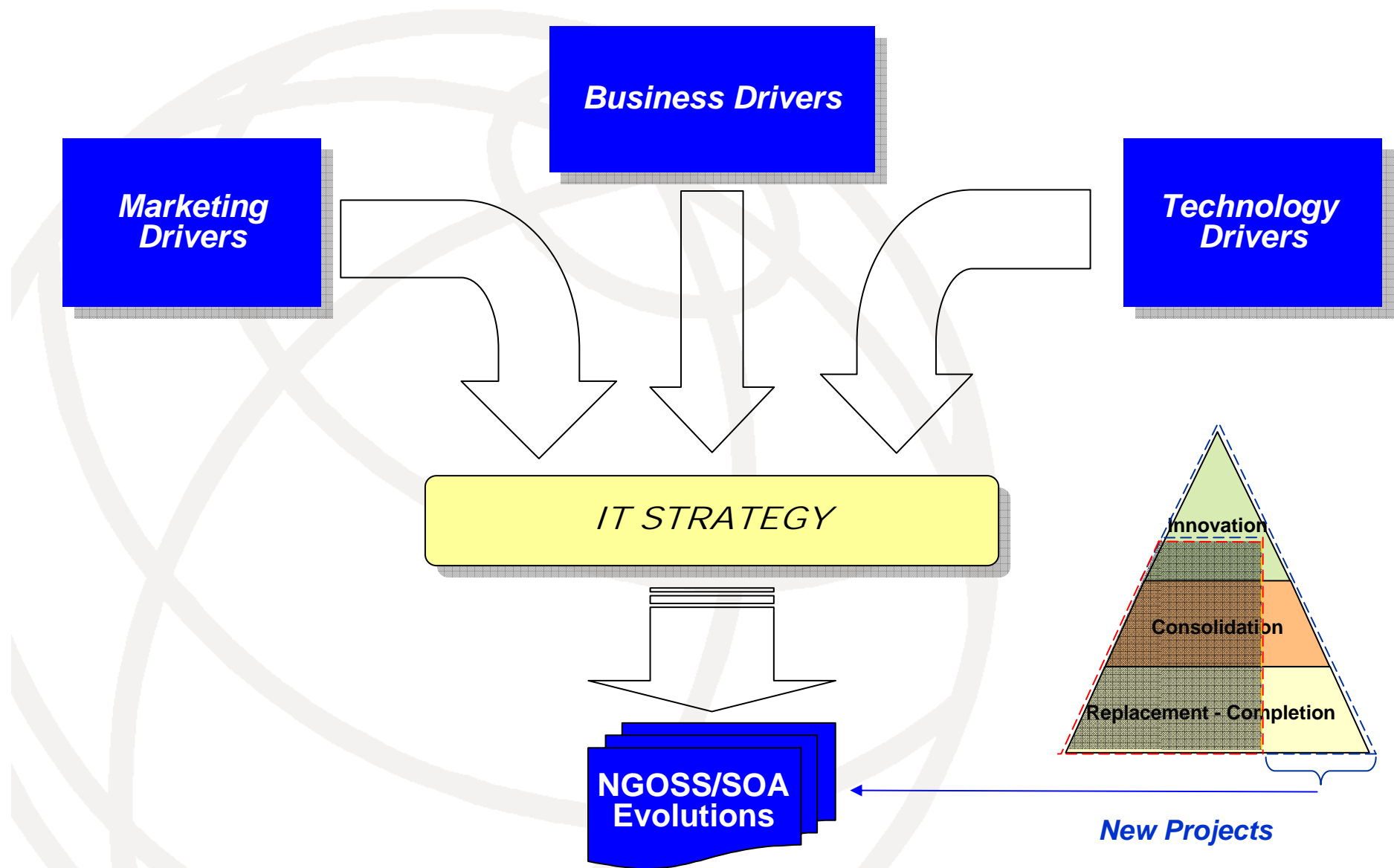
Summary of the Project Tasks



Example of NGN Evolution project



Drivers of NGN Evolution Consultancy Project



Example of NGN Evolution Project Results

Taking into account the needs for TWM of:

- renewal transport network
- exploit Fixed-Mobile Convergent (FMC) Architecture both for the network and for its management
- saving deployment and operational costs for TWM

the Consultancy Project results are:

- Evolution plan for convergent transport networks (in particular Metro infrastructure) and a coherent plan for CAPEX/OPEX in the timeframe of the next 7 years.

In parallel

- Evolution plan for OSS architecture according the principles of NGOSS and SOA

Partnership in the European East Countries

- Telecom Italia has defined a business agreement with a Russian Consultancy Company **iKS-CONSULTING**, linked with Telkom Operators for organization of “training courses” (for Fixed and Mobile environments)
- The training courses are organized in Italy
- iKS-CONSULTING offers the ALL-INCLUSIVE package
- The program for Training is typically of 1 week, involving up to 30 trainers (managers and experts)

Questions?

Thank You!

Chisinau, Moldavia, 24-26 August 2009

