

# From mobility to ubiquity

The Italian experience

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# The Scenario

# The evolution to full mobility and ubiquity



- From standstill voice to
- Voice in mobility to
- Data in mobility to
  - Content
  - Transactions
  - Video in mobility

# Convergence



- There are 3 levels of convergence:
- **CONVERGENCE OF MEANS:** use of a single device in order to access different networks and services (e.g. use of a Personal Computer – through the internet - for voice calls and content download). A use of UMTS mobile phone to make voice, video and data calls, with content available when on the move.
- **CONVERGENCE OF SERVICES:** access to the same service by different means (e.g. use of a Mobile TV for mobility access to a TV program or to a single content or to the application of prices more favourable to clients in relation to the particular relation between the operator of the calling party and the operator of the called party.
- **CONVERGENCE OF RULES:** “rational” application of rules or self regulation of a certain sector to another sector, or creation of an organic system of rules in order to regulate/harmonize more than one sector
- The essential assumption for convergence is the increase and availability of bandwidth that enables more information by more means in a certain period of time.



# Real convergence

- Different devices can be used for purposes that satisfy the same needs.
- A mobile handset can be used to have access to content or to complete a transaction.



# Status of services, networks and customers



For on line content/transactions  
the Following are necessary:

- Multi-platform services and mobile enabled content;
- Devices with the ability to support multiplatform services;
- Skilled customers.



# Multiplatform Services/Content



The unavailability of content and services is a non-existent problem: content is available for those who want to offer it.

Burdens:

- Cost
- Limited extension of the rights.

# Advisable obligations:



Need for :

content providers to observe non-discriminatory practices between different distribution;

Review of holdback rights;

Right to content and right to signal regulation.

# Devices



- *Streaming* on video mobile phone and *broadcasting*;
- Data on mobile broadcasting systems and single client sending.
- Future development:
  - Advertisement,
  - Direct billing,
  - Credit Card payments,will be available for both sectors.



# Sophisticated customers

- In the ICT sector, penetration of mobile services is the highest: around 100% of population.
- Contents on video mobile phones/mobile phones enable a total fruition in terms of time, space and facility of usage.
- A recent Act provides for a payment penalty for who makes intellectual work for profit scopes available on the Internet.

# What there is



- The devices are currently available and hybrid tv, GPRS/UMTS mobile handset are going to go on the market this year: Voice, data, and broadcasting on the same device.
- The networks are ready: UMTS networks are in operation and Mobile TV networks are developing.
- The regulation in Italy is answering to the new situation, with new principles or with the application of specific regulations of the old sectors (telecommunications, broadcasting, commerce), but a convergent regulation is still missing.

# What is missing is now emerging



- The education of the customer on the use of the new services and of their potential.
- A new attitude amongst different sectors of the ICT community to work together in a cooperative and proactive way: Networks, content, client management are typical of different sectors in the ICT world but now each sector must share its points of strengths with the other sectors.



# Content

# Framework



- In the last few years the amount of available information has increased: information with format and characteristics more and more similar are now being made available on means that until yesterday were far from a technical point of view and in the perception of the customer.
- The application of rules in a specific sector may be misleading.
- While the New Regulatory Framework does not offer an organic scenario that integrates network, content and commerce provisions, in Italy there have been several acts and documents that have anticipated such convergent regulatory vision: e.g. the recent Document on content policy and the imminent new Television Code, and the introduction of the Integrated System of Communications that includes any communication on any platform or devices, traditional or new.



# Contents



Content is available in the monopolistic period (e.g. numbering 190 for news programs or wire broadcasting).

With the advent of GSM, content SMS services started to be offered, sent to a customer from a service center billed as an SMS originated by the same customer.

Until today content service has always been the same but modified in terms of quality and available bands: from a simple SMS outlining a press agency notice to videonews downloaded on a UMTS device.

# Control



Distribution of content protected by rights through different means creates the need to determine the person responsible for guaranteeing availability of rights of the network operator.

If in the TV broadcasting world such responsibility is of the network operators; in the communication world such responsibility is borne by content providers that will have to guarantee the effective availability of contents.

In order to avoid violations of limits to right diffusions jeopardizing diffusion of new technologies it is necessary to define directly by the mobile operator the control of content offered through mobile phones.



# Mobile TV



# Mobile TV (1/1)

## Mobile TV

- Less energy consumption necessary for mobility.
- Correct management of frequencies in mobility in order to allow programs screening from one network coverage area to another.
- Both requirements are present in the mobile world and are under study.

If no equipment that integrates Mobile TV and SIM/USIM (as payment and authentication tool) is created, free television content will be available for customers through Mobile TV systems, with a loss for the ICT sector in terms of value creation.



# M-COMMERCE



# Mobile payments (1/3): current services

- Mobile portal 3: products developed by 3 using content provided by third parties
- Payment systems: billing for content is made directly by 3 to its customers
- Therefore three subjects with three different roles may be determined: the network operator, the content provider and the customer, i.e. the subject that accesses content through the UMTS equipment
- The customer has no contractual and economic direct relationship with the content provider. The relation with the customer on one side and with the content provider on the other side is managed as a whole and separately by the operator.

# Mobile Payments(2/3): regulatory framework



Correct application of the regulatory framework: Mobile prepaid card may not be qualified as “electronic money” in accordance with Law n.19 of March, 1, 2003 that implements Directive 2000/46/CE.

Such a position has been recently confirmed by the EU Commission Guidelines on the interpretation of Directive 2000/46

- According to the above mentioned directive “electronic money” shall mean monetary value as represented by a claim on the issuer which is:
  - (i) stored on an electronic device;
  - (ii) issued on receipt of funds of an amount not less in value than the monetary value issued;
  - (iii) accepted as means of payment by undertakings other than the issuer.



# Mobile Payments (3/3): development of future services

- If the current relationship between the mobile network operator, the content provider and the customer is modified for the offering of new services (e.g. payment of bus tickets, cinema, etc.etc.) mobile operators will risk being identified as an “Electronic Money Institution” with all consequences in terms of banking supervision.
- In particular, the Usim card may not be used in order to buy third party services as otherwise it can be defined as an electronic money

Solution(1):configuration of services in order that customers have a unique contractual and economic relation with the mobile operator that will bear all risks related to possible insolvency of the customer.

Solution(2):usage of a videomobile as transaction *enabler*: an sms sent by the customer authorizes a bank account or credit card for the payment of a certain service.

The drafting of a new directive on a New Legal Framework for Payments will introduce an Institution Payment Licence for micro payments.





# Conclusions

# Conclusions



- 1 UMTS is a unique opportunity to fill the Italian digital gap.
- 2 The network is present, the services are available and the clients are learning
- 3 The inter-relation between the regulation of Electronic Communications, Broadcasting, E Commerce must be studied in order to have the easiest and safest access to new services and applications for customers.
- 4 Must offer and must carry, Protection of minors, Universal service are just some of the topics that have to be analysed in the light of convergence and subject to single regulation.
- 5 The need of ubiquitous networks and services is the fact from which it is possible to build a real point of convergence and meeting of sectors that were once out of reach.