

# Executive summary

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## Introduction

**J**uly 2004, Ritz Hotel, Madrid: experts in multiple disciplines meet at the Future Trends Forum (FTF), principal project of the Bankinter Innovation Foundation. For three intensive days they have been listening to, discussing, analysing, and placing on the table multiple ideas about the future most probably awaiting the new generation of mobile telephones, known as 3G. What opportunities may we expect to encounter, in which sectors, with what limitations and impediments? What is the potential lying before us for those new wireless communication procedures that will exploit greater bandwidths, more sophisticated terminals, new applications, and new suppliers of content? These were some of the questions debated.

The end of this experts' meet was merely the start for a study into the matter, carried out by the Foundation and its members. It was undertaken to analyse and assess everything seen and heard at the Forum. The current temperature of 3G in the world was measured. Members of the Forum and experts in the business of mobile telecommunications were consulted regarding the conclusions reached, the aim being to draw up the present final report.

## What is understood by 3G?

Under the heading third generation, 3G, the mobile telephony industry brings together a set of new procedures and technologies that will enhance and multiply the services available in mobile telephony.

3G will include a multitude of new services such as videoconference and enhanced voice, access to the Internet, electronic transactions with banks and outlets, locating, video games, music, and endless solutions that will combine the characteristics of the personal computers connected to high-speed networks on the Internet, with those of ubiquity, portability, and penetration into the mobile telephone population.

But 3G is something more than multiple technologies and new services. It represents the decision of an industry, on the basis of vast investment, to make a qualitative leap in the use of mobile telephones.

Perhaps encouraged by the overly optimistic expectations regarding the Internet, in 2001 a lot of the firms in mobile telecommunications invested heavily on the basis of predictions for the consumption of services by future users.

The mass media attributed special significance to the astronomical figures reached at the auctions organized by the governments of some countries in the 3G radio spectrum, the channels by which this new generation of telephony would reach the customer.

Also, the success achieved in mobile telephony data services in some Asiatic countries, such as Japan and Korea, has greatly excited the optimism of European and American operators in regard to these services.

And now, following great expectations and heavy investment, we come to the moment of truth, the start of third-generation telephony services. The dilemma at this point lies in how we must manage all the related complications, such as technology, design of terminals, business models, invoicing models, and critical masses where clients are concerned. We have to make sure we do not come up against another bubble, as in the case of the Internet.

### Forum conclusions

With everything on the table, the Forum members were able to reach consensus in certain areas. It was basically agreed that the future for mobile telephony lies in the "all-purpose Swedish blade", a device that will combine the function of the present-day mobile telephones, electronic agendas, and personal computers with high-speed Internet connection, camera, credit card and general payment means, etc.

Without doubt it will be necessary in the industry to have technological standards and format standards that apply to everyone. Especially in the interfaces of the mobile device itself, such as keyboards, screens, navigators, and memory cards.

The takeoff of this new generation of mobiles will also depend on the existence of a critical mass of terminals in the hands of users, a mass that will encourage others to purchase services of this new type. This in turn will call for contents and devices that are cheap, simple, and easily accessible to the mass markets steadily more accustomed to handling electronic devices.

In spite of all the advances that 3G brings us, the members concluded that the question is less one of rupture than one of the evolution of services currently offered. Perhaps by combining in one single device the functionalities currently available in a great many apparatuses. Here it is difficult to foresee the appearance of a new killer application capable of inducing a drastic change in users' customs, one reminiscent e.g. of voice on the first mobile telephones or the short messages (SMSs) that use digital transmission technology.

#### Notes

There are many social factors that will undoubtedly affect the development of these new services, the sense of belonging to various social groups, changes in habits, time employed in public transport, the ideal moment for using the mobile, the ageing of the population, etc. These will have to be taken into account in designing content for the technologies.

The experts also advise us that it is not so simple to extrapolate from Asiatic success models (especially in Japan and Korea) to Europe and the US, since the social features differ. Great care will have to be exercised in looking at these different models and drawing conclusions from one side or the other.

Finally, the acceptance of mobile telephony by large segments of the population in advanced countries suggests that third-generation mobile telephony will in time win over the mass markets.