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| **http://www.iris-media.com/IMG/arton349.gif**  **Multi Media Mobil(e)** |

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*Mobile Dienste in digitalen Rundfunk- und Telekommunikationsnetzen. Analysen & Perspektiven.*

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**Multi Media Mobile**

**Mobile Services in Digital**

**Broadcasting and Telecommunications Networks**

**Analyses & Perspectives**

Study   
commissioned by

Gesellschaft zur Förderung der Rundfunkversorgung mbH (GARV)

in cooperation with

Medienanstalt Berlin-Brandenburg (MABB)

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# The issue

**Limits and opportunities for broadcasting services in an increasingly mobile information and communications-oriented environment**

The Gesellschaft zur Förderung der Rundfunkversorgung (society for the promotion of broadcasting transmission, GARV) in cooperation with the Medienanstalt Berlin-Brandenburg (Berlin-Brandenburg regulatory authority for private broadcasting, MABB) commissioned VisionConsult International (VCi) with a study of the services likely to score a high take-up rate among users of portable and mobile terminals.

In the light of the irreversible decision to digitize all terrestrial means of transmission for radio and television services, this issue is many-fold. Not only does it highlight a number of technical and economic aspects, it also has consequences for the regulatory regimes, and, most significantly, it presents considerable implications for today's and tomorrow's service applications.

Considering the enormous investment and advance funding involved, analysis needs to be clearly separated from speculation, and speculation from forecast. Who will ultimately manage the breakthrough for new mobile multimedia services? What will they be like? How much will they cost? How will they be transmitted? When will they reach penetration in the market?

Having assessed the situation and gathered views and positions in a large number of varied discussions on these and other questions, we wanted to go at least one step further by developing some clear-cut forecasts. Our objective was to draw up a roadmap and to establish milestones and criteria for mobile services that might be potentially successful in the wake of the introduction of digital broadcasting.

The decision makers and experts we were to approach in this task were selected together with the client. The experts were in almost every case nominated in close agreement with the management, and all interest groups we contacted actively participated in the discussions. All of these factors considerably contributed to appropriating our objective. And the fact that everyone was prepared to talk to us underlines the willingness to tackle the tasks involved in the issue successfully so that everyone may ultimately benefit - irrespective of the complexity and potential controversy surrounding the subjects under discussion.

Our analyses and discussions were complemented with examples from outside Germany which were integrated into a detailed investigation; here our international network of offices and correspondents was of great benefit. The present study thus also contains these findings; they could serve as indicators as to which of the tops and flops experienced elsewhere might be of relevance for the German market.

The following study will assess which systems and networks might be in a position to realize mobile services successfully. It concentrates on the potential co-existence and co-operation of broadcasting networks and mobile radio networks to which the title already refers, and puts a special emphasis on the opportunities arising from broadband transmission systems. Hybrid systems offering a return channel via a telecommunications network will be particularly highlighted.

Furthermore, selected hardware will be described to show the progress achieved by these developments to-date; we are, of course, aware, that this can only ever reflect the status quo of the moment. We therefore concentrated less on drawing up a complete list of all the equipment available, but focussed instead on describing a range of devices selected to highlight the new developments in an exemplary fashion.

The assessments, findings and forecasts presented in the study are devised to provide some orientation. The scope of the study forced us to forego interesting background material and side aspects; these are available from "berlin@visionconsult.com"[[1]](#footnote-1). The interviews and the research undertaken outside Germany are complemented by some parallel studies investigating similar subjects and issues.

The study could offer a suitable basis for decision makers and experts upon which to build their own further work. Ideally, it might serve as a focus point for further investigations and action with the results being put to practical use first and foremost in the region of Berlin and Brandenburg - to the benefit of consumers and the industry alike.

We are grateful not only to all the experts listed in the annex but also to some further specialists without whom we would not have been able to carry out this study in the depth it has now gained. Our thanks go to our teams abroad, especially to Barclay Dutson in London, to Hadmut Hölken in Paris, Arne Johannsen in Tokyo, Claire Sehringer in Boston, Olivia Wetterwald in Geneva, Johanna E. Fell in Munich, as well as to Marian Bichler, Dr. Frank Eckart, Michael Ley, Klaus Meier and Frauke Syamken in Berlin and to all those who prefer to remain unnamed. And although last, certainly not least, we would like to express our gratitude to GARV and MABB for entrusting us with this study on such an exciting and progressive issue of the future.

Dipl. Ing., MBA Jean-Claude Bisenius Dr. phil. Wolf Siegert[[2]](#footnote-2)

# Change of paradigms

**"In the 21st century, man will be flexible, cordless and mobile, and will use a terminal incorporating as many functions as possible." [EHRENBERG 03/2001b]**

Why venture afar? As a starting point of the study we would like to promote the theory that the successful introduction of "narrowband and broadband mobile transmissions" will depend largely on whether they will offer merely the classical radio and television services or whether more will be available via these new digital transmission routes

**[…]**

# Let's do something. Together.

This process may require a neutral mediator to promote initiatives and to steer developments. In the solution described above, the groups involved in the development should continue the dialogue with the experts and decision makers which was initiated for the purpose of this study in an on-going process with the objective of putting the findings of the dialogue to practical realization. Those selected to be involved should be prepared to commit themselves to cooperate for a longer period. This study could serve as a starting point, offering qualified, concise views on the issue under debate via which the decision-makers could be welcomed to participate in the process. It will be imperative to continue the dialogue on a level beyond day-to-day politics and nitty gritty trouble to ensure the success which is everyone's ultimate objective.

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