

Annual Expert Report 2005 on the Implementation of the Voluntary Commitment of Mobile Network Operators

Executive Summary

Berlin, December 2005

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The Voluntary Commitment of mobile network operators towards the federal government-“Measures for the improvement of security, and consumer protection , environmental care and health protection, information and confidence-building measures with the upgrading of mobile telecommunication networks” – came into force in December 2001. It largely derives from the so-called “Associations Agreement” (“*Verbändevereinbarung*”) reached with central municipal associations (“Agreement on the Exchange of Information and the Participation of Local Authorities in the Upgrading of Mobile Telecommunication Networks”) of July 2001.

The commissioning of an Expert Opinion by the mobile network operators (also referred to below as “operators) represented by the Information Centre for Mobile Telephony (Informationszentrum Mobilfunk - IZMF) is one component of the Voluntary Commitment: “Mobile network operators shall inform the government at least once a year in the form of an independent expert report about experiences made with the Voluntary Commitment.”

The present Expert Report is the fourth annual expert report on the implementation of voluntary commitments on the part of mobile network operators. The study design established in 2004 enables a comparison of results over a period of time and thus allows for the identification of changes and trends. It also enables specific topics to be broached in much greater depth in each following year.

The present expertise fulfils the commitment for regular monitoring and reflects the four central issues of the Voluntary Commitment. The authors of the Report are:

- v The German Institute of Urban Affairs (Deutsches Institut für Urbanistik - Difu; project management and subject area 1 “Communication and Participation”),
- v Prof. Dr. Dietrich Henckel of the Technical University Berlin (qualitative survey in subject area 1 “Communication and Participation”),
- v The Consumer Centre of North-Rhine-Westphalia (Verbraucherzentrale Nordrhein-Westfalen e.V.-VZ NRW; subject area 2 “Consumer Protection and Consumer Information”), and
- v The Scientific Institute for Communication Services (Wissenschaftliches Institut für Kommunikationsdienste - WIK; subject areas 3 and 4 “Research Funding” and “EMF Monitoring”).

Thus the various aspects to be treated in the Expert Report are covered by the specific skills and competencies of the project partners.

The particular study design, methodological approach adopted and key results are presented for each of following sections.

Communication and Participation

Patterned on the study design established in 2004, this year's investigation comprises of qualitative depth interviews and an empirical survey.

In a first stage 19 qualitative depth interviews were conducted with municipal officials responsible for mobile telephony and representatives of regional divisions of the network operators in selected cities and towns. The aim here was to confirm the relevance of the issues proposed by the 2004 survey as themes for investigation by an empirical survey. The key focus was on issues connected with information, locational planning and the role of operators in providing information for the public.

The written questionnaire based on these findings and distributed in 194 towns and cities and to a regional representative of a mobile network operator in each of these furnished the requisite empirical basis.

Generally speaking, in 2005 the operators have largely fulfilled their commitments from the voluntary Commitment. This has been the basic tenure of all Expert Reports since 2002. Even so, in most areas involving co-operation the situation has continued to improve from year to year. And the overall perception of the present survey is that existing shortfalls may chiefly be overcome by an intensification of bilateral dialogue.

This year's Expert Report firstly addressed the way operators provide information with respect to locational planning. The positive core findings of the 2004 Expert Report were confirmed by this year's findings. In general consultation processes are trouble-free. Qualitative improvements could be achieved in a number of cases if operators and local authorities effect a more proactive and on-going dialogue on the type and scope of information to be exchanged.

Whilst the main issue in terms of information about locational planning is now confined to process optimisation in individual cases, shortfalls in terms of information about the start of transmission are much more widespread and probably still have not been properly addressed. Even so, here too the overall picture has clearly improved from year to year. There is still a need for improvement so that information always flows down the right communication channel; in some cases the timing of announcements for the start of transmission could be better scheduled – i.e. not too late but not too long before the start of transmission. To ensure functioning communication between operators and local authorities, there should always be one central liaison officer appointed by the local authority.

The 2004 Expert Report noted that there has been no significant decrease in the number of disputes arising in connection with the planning and realisation of mobile network locations despite clear improvement of communication processes – and despite an overall lower level of disputes in larger towns and cities. A higher incidence of disputes occurs only on the small town level whereby there are clear differences of perception between local authorities and operators as to what constitutes a dispute. Leaving aside the different forms of understanding however, it is also apparent here that the deployment of dialogue instruments

has a clearly beneficial effect: if they do not serve to prevent disputes from arising in the first place at least they help to prevent their further escalation.

According to the appraisals given by local authorities and operators in the present investigation, there are several key reasons for disputes whose potential is by no means exhausted so that further disputes may be expected. They are:

- v A high level of sensitivity about mobile radio in the population, also fuelled by the upgrading of the UMTS network,
- v Problems with proposals and the evaluation of alternative locations, and
- v To some extent the limited availability of suitable locations from the standpoint of local authorities and operators.

The sensitivity of the population to mobile network stations (point 1) has been co-related to the level of information circulating among citizens which in some instances is still insufficient. In this context, as in the context of evaluations of the degree of objectivity with which the disputes are waged and of the putative development of citizens' protests, respondents in different federal states show clear differences in the reference terms of their evaluations. Against this backdrop, a central challenge will be the formulation of communication and information policies for citizens informing them of the benefits and impact of the further development of mobile network locations – with different action priorities set for each federal state.

Disputes in connection with alternative locations (point 2) can also arise if the local authority rejects the proposals put forward by the operator or fails to provide an alternative proposal acceptable to the operator. Both situations are regular occurrences. One solution that increases the acceptance of alternative proposals put forward by the local authority is to instigate an on-going location-based dialogue. This enables the technical expertise of the operator to be brought together with the local knowledge of the municipal authorities and their perceptions of what is acceptable.

Another reason why the incidence of disputes remains unchanged despite enhanced communication and process optimisation (point 3) is that in a certain number of local authorities the number of locations acceptable to both sides (from a municipal point of view locations acceptable in terms of urban development, acceptable by local residents, and imposing no limitations on "critical" facilities; from an operator's point of view locations that are technically and economically feasible) appear to be in very short supply. In the main the overwhelming majority of respondents are confident that there will continue to be mutually acceptable locations in the future, even if there will not always be a great number of them. A situation of scarcity will become critical when a high network density is required in conjunction with the upgrading of UMTS. The issue of whether there are still suitable and mutually acceptable locations is to some extent related to the availability of local authority land for mobile radio stations and public acceptance of such uses.

In a final stage an in-depth investigation was conducted to see whether the range of information material offered by the IZMF and the operators met the requirements formulated in the Voluntary Commitment for informing both local authorities and the general public in co-ordination with the authorities. This investigation took locational planning as its main focus together with measures designed to increase public acceptance of the location. It found that both the IZMF and the operators meet these requirements. The majority of local authorities are well acquainted with the range of informational material on offer and to some extent also use it to inform the general public. In terms of general brochures, the various offerings on the internet and the readiness of operators to take part in events and meetings organised by the local authorities, the options for optimisation have been largely exhausted. For this reason recommendations for information policy-making on the part of the operators tend to propose supplementing the general information campaign with targeted and case-related information with the aim of achieving overall transparency for the public in the planning and designation of locations.

Consumer Protection and Information

This section of the Expert Report addressed the issue of how far the commitments of the operators have been realised in terms of providing information to the consumer.

The investigation focused on the realisation of commitments in the thematic area of "Mobile Telephony – Health- Environment" with special reference to information about SAR values. It included an evaluation of the whole range of information channels and materials for consumers provided by mobile telecommunication network operators and the IZMF.

The following studies were carried out in the period from August to November 2005:

- √ Covert survey of the shops of mobile telephony operators
- √ Evaluation of the content of information material available in print
- √ Assessment of the material available on the internet
- √ Monitoring of the channels for interactive contact
- √ Inspection of the range of mobile phones with low SAR values
- √ Investigation of the status of a Quality Seal for mobile phones with low SAR values.

A test customer scenario was used to survey staff members in 40 shops owned by network operators in two federal states. A grid with 15 criteria as established in the Expert Report for 2004 and based on the goals in the Declaration of Voluntary Commitment was used to assess printed information material. The internet pages of network operators and the IZMF were appraised to establish the accessibility and availability of information in the thematic area "Mobile Telephony – Health – Environment". To monitor interaction options test persons took the general contact addresses of network operators and the IZMF and contacted them directly by post, phone and email on a random sample basis.

The results of the investigations have shown that in comparison to last year's Expert Report significant improvements have been made in large parts of the area covered by consumer protection and information.

However, the appraisal of the level of knowledge shown by shop staff in terms of "Mobile Telephony – Health - Environment" yet again reveals shortcomings. Their level of awareness is still unsatisfactory and needs improving by an extension of company-own training measures to cover all aspects of SAR values.

All the available information material had been fully revised and amended to incorporate the recommendations of last year's Expert Report so that in terms of the provision of consumer information about SAR values ten out of twelve information brochures were rated as "good" whilst the remaining two were considered as "satisfactory".

The internet pages offer a good and comprehensive presentation of the themes although their visibility could be improved by adding appropriate links and references within the overall structure. Two of the network operators already clearly indicate the SAR values in the range of their mobile phones currently on offer. Such a mention would be a welcome addition to the pages of the remaining providers in the sense of better transparency of consumer information.

In terms of interaction with operators and the IZMF, it was found that contact options for the various specialist departments had been extensively improved. There is still room for improvement though in terms of passing on enquiries about "Mobile Telephony – Health – Environment" to the relevant specialist departments.

In comparison to last year some operators have extended their range of low-emission mobile phones. It should be noted that nearly all operators comply with the ratio of 33 percent for mobile phones with a SAR value of ≤ 0.6 W/kg as recommended by the Federal Office for Radiation Protection (BfS) or offer even higher ratios.

In terms of the introduction of a Seal of Quality for mobile phones with particularly low SAR values, no satisfactory solution is yet in sight. The present "Blauer Engel" ecological seal is still not being supported by manufacturers of mobile phones. It thus might seem more appropriate for manufacturers and operators to seek consensus in the sense of transparent information for the consumer in a joint initiative with additional support from the government.

Research Funding

The two key issues investigated in this section were (1) have mobile network operators met the financial obligations arising from the Voluntary Commitment, and (2) have they established appropriate awards and administrative procedures?

To supply answers to these questions, a number of researchers were interviewed but in particular the officer at the Federal Office for Radiation Protection (BfS) with special responsibility for the German Mobile Research Programme (DMF). Furthermore, a desk research approach was adopted to evaluate the secondary material available in the public domain.

In 2005 operators have once more fully met their financial obligations arising from the Voluntary Commitment. Even the partial defaults of payment on the part of Quam GmbH and Mobilcom AG were covered by the four remaining companies - T-Mobile, Vodafone D2, E-Plus and O2 Germany - on a pro-rata basis.

Research funds were and continue to be used to promote a total of 53 research projects in the fields of biology, dosimetrics, epidemiology and risk communication in a timeframe stretching from 2002 to possibly 2006. To date seven projects have been completed, 36 projects awarded and ten others are at the planning stage.

Informing the public about research results is done by the Federal Office for Radiation Protection (BfS) and by the researchers themselves. In addition, the "Round Table of the German Mobile Research Programme" offers social groups and institutions an opportunity to both receive information and to make their own contributions to the debate.

Monitoring

The key issue addressed in this section of the investigation concerned the current status of the database of locations and of the Monitoring Programme. A hybrid approach was adopted to address these questions, consisting of a mixture of desk research, internet research, direct interviews and written questionnaires.

In 2004 mobile network operators put forward funding to the tune of € 1.5 million for the Monitoring Programme. The network operators T-Mobile, Vodafone D2, E-Plus and O2 Germany covered the default of payment on the part of Quam and Mobilcom on a pro-rata basis. The money was credited to the Federal Network Agency (*Bundesnetzagentur*).

The municipal location database and the public EMF database merged into a single database on 2 January 2005. It is also intended to include test measurements from federal states with a similar measurement concept to that of the Federal Network Agency in the database. Furthermore, the federal states wish to see the inclusion of links to further test measurements conducted by the federal states themselves.

In co-operation with the ministries for the environment of federal states, the Federal Network Agency has drawn up an implementation plan for the realisation of the Monitoring Programme with 12 monitors. A monitor prototype should be built in the course of 2005. In early 2006 the first measurement data from the monitors should be accessible via the Federal Network Agency's web site. It is planned to have the monitors transmit the data they have measured directly to the Federal Network Agency via GPRS.