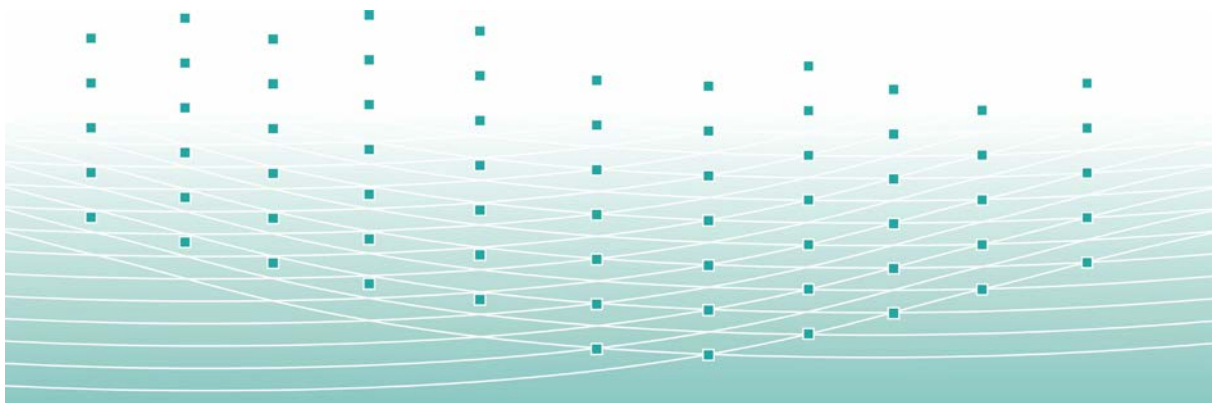




Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra  
Swiss Confederation

Federal Department of the Environment,  
Transport, Energy, and Communications DETEC  
**Federal Office of Communications OFCOM**

# Annual report 2012



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## Editorial

This year a number of entirely new tasks have been entrusted to OFCOM: since 1 October we have been the office for postal affairs. In this context we prepare political business for the attention of the Department or the Federal Council and carry out certain tasks under our own responsibility. These include, for example, the decisions on applications for subsidised transportation of newspapers and magazines. This task has a particularly close connection to our existing activities in the media sector. Consequently, the activities in relation to the post are accommodated organisationally within the "Radio and Television" Division, which has now been renamed "Media and Post".

Granting transport subsidies for press products brings us closer to issues related to promotion of the media. This creates good conditions for the development of a concept for support for the media, a mission which has been assigned to the Federal Council by Parliament (motion 12.3004 of the Political Institutions Committee of the National Council). We are currently working to develop the foundations for such a concept. In the future, in the context of responding to important issues in the media sector, we can expect an extra-parliamentary commission as a partner in our discussions. At the end of the reporting year the Federal Council appointed the president and formulated the mandate for a body which will make recommendations on media-related issues to the Federal Council and the government.

Switzerland currently has the best broadband coverage of all the OECD countries. Providers are working to build even faster information superhighways. With the world's first auction of all mobile radio frequencies, ComCom has given telecoms providers an opportunity to plan the long-term provision of mobile radio services in Switzerland and to provide high-speed broadband networks in the mobile sector.

In order to enable local authorities to independently answer questions related to high-speed broadband projects, we have produced a guide in collaboration with representatives of associations and network operators at the internet portal [www.hochbreitband.ch](http://www.hochbreitband.ch). It contains an overview, with various examples, of how regions can develop very fast telecommunications networks. The various measures for promoting high-speed broadband in Switzerland are in line with the Federal Council's legislature planning and with the strategy for an information society in Switzerland, the implementation of which is coordinated within OFCOM.

Martin Dumermuth  
Director

## 1

## The year 2012 in review

## 1.1 The year 2012 in review – Chronology of major Federal Council, OFCOM, DETEC and ComCom decisions

20.12.2012	The SRG is to receive more journalistic opportunities on the internet. The Federal Office of Communications (OFCOM) is presenting interested parties with a draft for revisions to the SRG licence for consultation.
18.12.2012	Radio Energy Basel is not infringing its licence. In a supervisory procedure, OFCOM concluded that Energy Basel just has sufficient human resources to fulfil its performance mandate, and has closed the procedure.
14.12.2012	Next year, 1222 publications will receive discounted delivery by Swiss Post: 140 daily and weekly newspapers plus 1082 newspapers and journals from not for profit organisations.
07.12.2012	The programme services of the SRG SSR promote exchanges and understanding among the four Swiss language regions, as the Federal Council recognises in a report submitted to Parliament. However, it calls on the SRG to take greater account of the respective other language regions in information broadcasts and places high expectations on the SRG's new concept to promote exchanges between the different language regions.
05.12.2012	The private radio stations in the regions of Aargau, Basel and Innerschweiz focus heavily on their coverage areas. However, they generally transmit less local information than the DRS regional programme services. These are the results of a survey commissioned by OFCOM.
05.12.2012	During prime time, the private regional television stations primarily offer their audiences topical news from the local and regional area. In the longer airtime broadcasts, the emphasis is on politics and society. These are the results of a study by the University of Fribourg commissioned by OFCOM.
04.12.2012	Licensed regional TV stations should in future be able to transmit their programme services digitally outside of their regional coverage areas. The public would thereby have simple access to the programme services via cable TV or on the internet. OFCOM has launched a public consultation on this project.
04.12.2012	It will now be possible to tune in to Radio Central in good quality whilst driving on the Hirzel Pass. This is the result of the Department of the Environment, Transport, Energy and Communications (DETEC) slightly expanding the coverage area of the licensed VHF/FM radio station in Central Switzerland to include the municipalities of Richterswil, Wädenswil, Horgen and Hirzel.
29.11.2012	For the first time, the telephone number for roadside assistance will be available to a total of four companies from 1 January 2013: in addition to the Touring Club of Switzerland (TCS), Allianz Global Assistance (AGA), Medcall and Swiss DLC will also be able to offer breakdown services on the 140 number, as per a decision of OFCOM.
22.11.2012	Timedia Holding SA is taking a majority holding in TeleTicino SA, operator of the regional TV station TeleTicino. Within Timedia Holding SA, the Società Editrice del Corriere del Ticino SA recently acquired a majority holding. This has repercussions for Radio 3i SA, which is owned by Timedia Holding SA. DETEC has approved the licence transfers for TeleTicino SA and Radio 3i SA.
21.11.2012	The Federal Council has established the new Federal Media Commission and appointed Professor Otfried Jarren of Zurich University as President. The Commission should be operationally active from mid-2013 and will advise the Federal Council and the Administration in relation to media issues. The other members of the Commission will be appointed in spring 2013.
31.10.2012	The regional news from Radio DRS will be available via digital radio. The Federal Council has authorised the SRG to provide news transmissions via a new DAB + transmitter network. At the same time, the Federal Council initiated the phase-out of analogue transmission of SRG TV programme services via the cable network.

31.10.2012	The Federal Council approves the ordinances which permit the exemption of a whole series of radiocommunications applications from licensing as of 1 January 2013.
27.09.2012	The owners of Radio Central AG can take control of Radio Sunshine: DETEC has approved the transfer of the licence and complied with the request from Radio Central AG. Previously, DETEC had given the green light for the transfer of Radio Eviva's licence. This folk-music radio station which is broadcast on a digital platform is being sold by Radio Central AG to three private individuals.
14.09.2012	The Federal Council does not yet see any necessity in allowing the SRG SSR to feature advertising on its internet websites. However, the Federal Council would like to give the SRG SSR greater opportunities for editorial content on the internet, so that in future it can continue to meet the needs of its audience and compete in the international environment. It has commissioned DETEC to draw up proposals for a change to the licence and for the establishment of a national media commission.
30.08.2012	At its meeting yesterday, the Federal Council acknowledged the results of the consultation procedure on post regulation. It decided that the date for entry into force of the Postal Act and Postal Ordinance should be 1 October 2012. At the same time it appointed the members of PostCom, the new regulatory authority for the postal market.
01.08.2012	Peter Pauli, head of the Frequency Management Division, was appointed by Federal Councillor Doris Leuthard as Vice Director of OFCOM. In so doing, Doris Leuthard recognizes Peter Pauli's function and the importance of OFCOM's Frequency Management Division.
06.07.2012	Since no licensee has lodged a complaint against the new mobile radio licences, the world's most extensive frequency award procedure is definitively and successfully concluded. With the new allocation of all existing and additional frequencies, the Federal Communications Commission (ComCom) has opened up the way for high-speed broadband mobile services (such as video streaming and cloud services). This can now take place using more efficient, more powerful fourth-generation technologies such as LTE (Long Term Evolution). Consumers will therefore be able to benefit also in future from very good mobile telephony coverage and high-quality products.
03.07.2012	In order to enable public officials in municipalities, cantons and regions to make decisions as to how the Swiss population and businesses can be provided with high-speed, efficient telecommunications networks, a guide is now available. The publication, with case studies, was presented at the media conference of OFCOM. Other topics included the new, device-independent fee for radio and television and changes to the frequency spectrum and the consequences thereof, especially in relation to the use of radio microphones.
15.06.2012	The Federal Council has eased the conditions on private TV stations receiving support through fee splitting and changed the relationship between fees and equity financing. In the future the fee must be matched with a lower proportion of in-house funds than to date. At the same time the Federal Council is phasing out the obligation to transmit TV programme services in analogue form on cable networks.
14.06.2012	Philippe Horisberger is appointed head of the Surveillance and Radiocommunication Licences Division (AF) and Deputy Director of OFCOM by Federal Councillor Doris Leuthard.
13.06.2012	In order to safeguard the interests of Switzerland, DETEC has submitted an application for the .swiss internet domain to the international body which administers domain names, ICANN (Internet Corporation for Assigned Names and Numbers).
18.05.2012	Radio Media AG is taking over Radio 24 from Tamedia AG. DETEC has approved the corresponding transfer of the Radio 24 licence.
16.05.2012	The Federal Council has concluded a new 4-year performance mandate with the Swiss Broadcasting Company SRG concerning its information provision services for audiences abroad. In future the Confederation will provide between CHF 18.6 and 20 million for the internet platform "swissinfo.org" and for the SRG's collaborative activities with international TV stations TV5 and 3Sat. As a result of a restructuring of Swissinfo, it has been possible to reduce the federal contribution by CHF 2-3 million per annum.

09.05.2012	The Radio and Television Act (RTVA) seeks an appropriate and practical fee system to secure the public service in Switzerland. With some exceptions - all households and companies are to pay a new universal radio and television fee. In addition, increased flexibility and a simpler licensing procedure are planned for private radio and television stations. The Federal Council has passed draft legislation and DETEC has commissioned a consultation procedure. The consultation procedure will run from 10 May 2012 until 29 August 2012.
25.04.2012	At its meeting today, the Federal Council appointed Philipp Metzger as Deputy Director of OFCOM. Mr Metzger was previously Vice Director of OFCOM.
10.04.2012	Digital radio in Switzerland is being further expanded. OFCOM has awarded the company SwissMediaCast AG (SMC) the radio licence for operating a new digital DAB+ transmitter network. The network consists of seven coverage areas in German-speaking Switzerland and enables the radio stations to target their programme services at a regional audience. Furthermore, the SRG SSR will also be able to transmit its regional news journal in digital form. Construction of the first coverage area will take place in November 2012.
28.03.2012	The Federal Council wants to progress work on a partial revision of the Telecommunications Act in the current legislative session in order to resolve important issues about the future development of electronic communications. In its new report on the evaluation of the telecommunications market for the attention of Parliament, the Federal Council notes that the current Telecommunications Act has had a positive effect on the telecommunications sector but is coming up against boundaries from a technological perspective.
09.03.2012	Through their potential for innovation, information and communication technologies (ICT) offer numerous opportunities for the economy and society in Switzerland. For example, they enable efficient, individual and cheaper processes to be implemented. In order to make the most of this potential, the Federal Council has updated its strategy for an information society in Switzerland. The strategy is applicable immediately and will be further developed regularly.
23.02.2012	The auction of mobile radio frequencies has been concluded: the companies Orange, Sunrise and Swisscom have equipped themselves with frequencies which presage a bright future. With the auction of existing and additional frequencies ComCom is paving the way for the use of modern and more efficient mobile radio technologies such as LTE. Consumers will therefore be able to benefit in future from very good mobile radio provision and high-quality service. The proceeds of the auction for the Confederation amount to CHF 996'268'000. The auction took place from 6 to 22 February.
16.02.2012	The revision of the RTVO sets out to improve the financial situation of those regional television stations with a public service mandate. Furthermore, digitisation of the cable network will be facilitated by removing the analogue transmission obligation. DETEC is submitting the draft of the revised Ordinance on Radio- and Television (RTVO) for consultation. Interested parties have until 30 March 2012 to submit their comments to OFCOM.
10.02.2012	The four-week World Radiocommunication Conference in Geneva (WRC-12) concluded its work. Thanks to the good preparation of the Frequency Management Division, the Swiss delegation was well prepared for the conference.
26.01.2012	In order to determine demand for transmission capacity for digital radio programme services, OFCOM is gauging interest in a third regionally configurable DAB coverage for German-speaking Switzerland. Companies who would like to construct and operate a transmission network according to the DAB+ standard with eight regional allotments have until the end of February 2012 to register their interest with OFCOM.
16.01.2012	Many areas of Switzerland are being made more accessible with modern telecommunications networks. Thanks to the discussions at the Round Table on fibre networks and the standards which have been developed, it is possible to avoid the uncoordinated construction of multiple networks and consumers are free to choose their telecommunications service providers. The players in the market and ComCom are therefore of the opinion that further discussions at the Round Table are no longer necessary.
05.01.2012	Round table on fiber networks: goals achieved.

**Table 1: The year 2012 in review**



## 2 Media and Post

The structural changes in the media sector continued in 2012. Although clearly less profound, this process of change is also evident within OFCOM: last year the Media and Post Division emerged from the previous Radio and Television Division.

The Division is dealing for longer and ever more frequently with issues related to media policy which extend beyond broadcasting: for example, the change in the licence in relation to the SRG's other editorial offerings (its online presence), producing the postulate report on "Ensuring press diversity" or the current work on responding to a motion on ensuring media functions with regard to the state and democracy.

Under the amended postal legislation, OFCOM has also taken on additional tasks in the postal sector. One major component is the assessment of the applications for indirect support of the press.

This and other tasks indicate that the work, previously orientated specifically towards radio broadcasting, is shifting towards tackling general challenges relating to media policy.

Some fixed points however remain: in the reporting year we again looked at the performance of the largest programme service provider, the SRG SSR. In a report dated 7 December 2012, the Federal Council acknowledged the activities of the SRG in linguistic and cultural exchange. At the same time, the Federal Council called upon the SRG to take greater account of the other language regions in its information broadcasts and set high expectations in the new concept of a public service programme provider which is under development.

Also unchanged this year: the interest expressed by the world of politics in the media, reflected by all the initiatives from Parliament which we have answered in the course of the year.

Nancy Wayland Bigler  
Vice-Director and Head of Division

❖ **Report: "Strengthening mutual understanding and national cohesion by the SRG SSR"**

<http://www.news.admin.ch/NSBSubscriber/message/attachments/29015.pdf>

(document available in German, French and Italian only)

### 2.1 Media

#### 2.1.1 Private radio and television stations

In 2012, the Federal Council and DETEC took a number of measures to improve the framework conditions for the activity of private radio and television stations. For example, in the spring of 2012, DETEC adjusted the level of the proportions of the reception fees, which had been fixed in 2007. Overall, DETEC distributed an additional CHF 4 million from the increased revenue from reception fees to the 13 authorised television stations and 21 local radio stations. The Federal Council also reduced the self-financed element of the television stations entitled to fees from 50% to 30% of their operating costs and lifted the restriction on digital broadcasting of these channels outside their local coverage areas.

- **Reducing the self-financed element of the television stations see also 2.2.1 "Legislation", p.10, § 2**

In the course of the reporting year, DETEC approved a number of transitions. For example, Radio 24 passed from Tamedia AG to Radio Medien AG (AZ Medien) and Radio Sunshine to Radio Central AG. Finally, Timedia Holding SA acquired a majority holding in TeleTicino and Radio 3i.

## 2.1.2 SRG

The negotiations between the SRG and publishers regarding possible cooperation on websites did in fact lead to convergence on many points, though on the main point of internet advertising no results could be achieved. There were disagreements in particular regarding the length of text and advertising on the SRG's web pages. The negotiations were broken off at the end of June. In September, the Federal Council decided that the SRG should not be allowed to advertise on the internet for the time being, but gave it more editorial latitude online. In this matter, it recommended an extra-parliamentary media commission to enable closer integration of the skills of media professionals in forming political opinion. The commission was officially established on 21 November; Professor Otfried Jarren was elected President.

On 16 May the Federal Government approved with the SRG a new four-year performance agreement on the information offering for foreign countries. The previous agreement expired at the end of 2012. From 2013 onward, the Federal Government will provide up to CHF 20 million for the internet platform "[swissinfo.ch](http://swissinfo.ch)" and for SRG cooperation with TV5 and 3Sat. In addition, the Federal Council enabled the SRG to eliminate a gap in its digital coverage and to broadcast its regional journals also in German-speaking Switzerland on the DAB+ digital transmitter network.

- **Contributions to the international offering of the SRG (Swissinfo, TV5, 3Sat) see also 8.1.1.2 "Expenditure", p. 35 § 2**

## 2.2 Law

### 2.2.1 Legislation

The proposed amendment to the Radio and Television Act was put out to public consultation in May 2012. The core of the revision: the replacement of the current collection system for radio and television reception fees by a general fee for households and businesses. The draft amendment gave rise to 222 comments, of which 97 were made by citizens. Parliament is expected to deal with the proposal for the first time in the second half of 2013.

On 1 August 2012 the partial revision of the Radio and Television Ordinance entered into force. As a result, the Federal Council reduced the self-financed element of the television stations entitled to fees from 50% to 30% of their operating costs. The ceiling constitutes the maximum amount fixed in the respective licence of the television station. Before the change, at least half of the operating costs of the licensed regional stations had to be funded via advertising and sponsorship. At the same time, the Federal Council prepared for the phasing-out of analogue broadcasting of television programme services on the cable network, which will allow an expansion of digital offerings.

- **Reducing the self-financed element of the television stations see also 2.1.1 "Legislation", p. 9, § 1**

In December, interested parties were able to comment on a further amendment to the Radio and Television Ordinance. As of 1 March 2013, the broadcasting restriction for regional television programme services will be lifted. As a result of the amendment, it will also be possible to broadcast these programs digitally via cable outside their allocated coverage areas. In terms of content, the programmes will, however, have to continue to focus on their licensed coverage area.

#### ❖ **RTVA partial revision – new fee for radio and television:**

<http://www.bakom.admin.ch/dokumentation/gesetzgebung/00909/04016/index.html>

(documents available in German, French and Italian only)

❖ **Partial revision of RTVO as of 1 August 2012:**

[http://www.bakom.admin.ch/themen/radio\\_tv/00509/01188/03536/index.html?lang=en](http://www.bakom.admin.ch/themen/radio_tv/00509/01188/03536/index.html?lang=en)

(documents available in German, French and Italian only)

❖ **Partial revision of RTVO – lifting of the broadcasting restriction**

<http://www.bakom.admin.ch/dokumentation/gesetzgebung/00909/04118/index.html>

(documents available in German, French and Italian only)

## 2.2.2 Surveillance

The reduction in the number of surveillance procedures in relation to advertising and sponsorship continued in the reporting year. The number of inquiries in this area also fell (313 information items in the reporting year compared to 383 in the previous year). However, individual interventions were made, in particular because of insufficient implementation of the sponsorship rules. Also, for example, we had to complain about a health programme in which a medicinal product subject to an advertising ban under the drugs legislation was named. On two other TV channels, there was advertising which endangers health.

In the context of surveillance proceedings, we continued to deal with the issue of how the stations with licences meet the corresponding performance mandates. In one case, we came to the conclusion that the human resources were just sufficient to fulfil the performance mandate. In the other case, among other things, the local and regional focus of the programming and the inclusion of linguistic and cultural minorities were inadequate.

Finally, one case concerned the online offering of the SRG, which is regulated under the licence as part of so-called 'other journalistic offerings'. It is therefore subject to broadcasting surveillance – unlike such offerings by the other stations. In an electronic programme guide (EPG) on the website, we ultimately found no infringement of the conditions of the licence.

❖ **Some decisions by OFCOM**

<http://www.bakom.admin.ch/dienstleistungen/entscheidatenbank/index.html?lang=de>

(documents available in German, French and Italian only)

## 2.3 Surveillance and collection of radio and television reception fees

The collection of radio and television reception fees by Billag was in order in the year 2012.

Within the framework of our surveillance activity, we focussed on auditing Billag's IT infrastructure and IT security. Billag was obliged to remedy the minor deficiencies which emerged.

In 2012 OFCOM answered some 500 written inquiries from citizens relating to radio and television licence fees. In the previous year, there were approximately 400 inquiries. The reason for the increase lies in the partial revision of the Radio and Television Act. The planned new fee system raised questions among the population.

### 2.3.1 Decisions by Billag

In 2012 approximately 45 complaints per month against decisions by Billag were received. This represents a slight fall compared to the previous year, when some 60 complaints per month were submitted to OFCOM. At the end of 2012, some 212 complaints were pending, of which about 17% were debt collection procedures. The remaining 83% of the complaints mainly concerned legal issues relating to registrations, de-registrations or exemptions from fees. In 2012 we decided on 580 complaints procedures; 8% of them were upheld.

Seventeen decisions on complaints were referred the Federal Administrative Court. In one case the Federal Administrative Court reversed OFCOM's decision. In the case of the other 15 proce-

dures, the higher court upheld OFCOM's decisions. Five decisions of the Federal Administrative Court were brought before the Federal Court. None of them was upheld.

### 2.3.2 Decisions by OFCOM

In 2012, some 2897 administrative penalty proceedings due to violations of mandatory notification were concluded; this corresponds to an increase of 647 procedures over the previous year. Billag provided us with 569 notifications, 276 more than in 2011. The vast majority of the procedures – 2498 – continue to be able to be resolved by means of fast-track procedures which are more convenient for the persons concerned. Nonetheless, 167 penalties had to be issued using the ordinary procedure; this constitutes a slight increase over the previous year (2011: 123). In one case, referral to a court was demanded; this procedure had not yet been concluded as of 31 December 2012. We had to conduct a total of three house searches, the same number of searches as in the previous year.

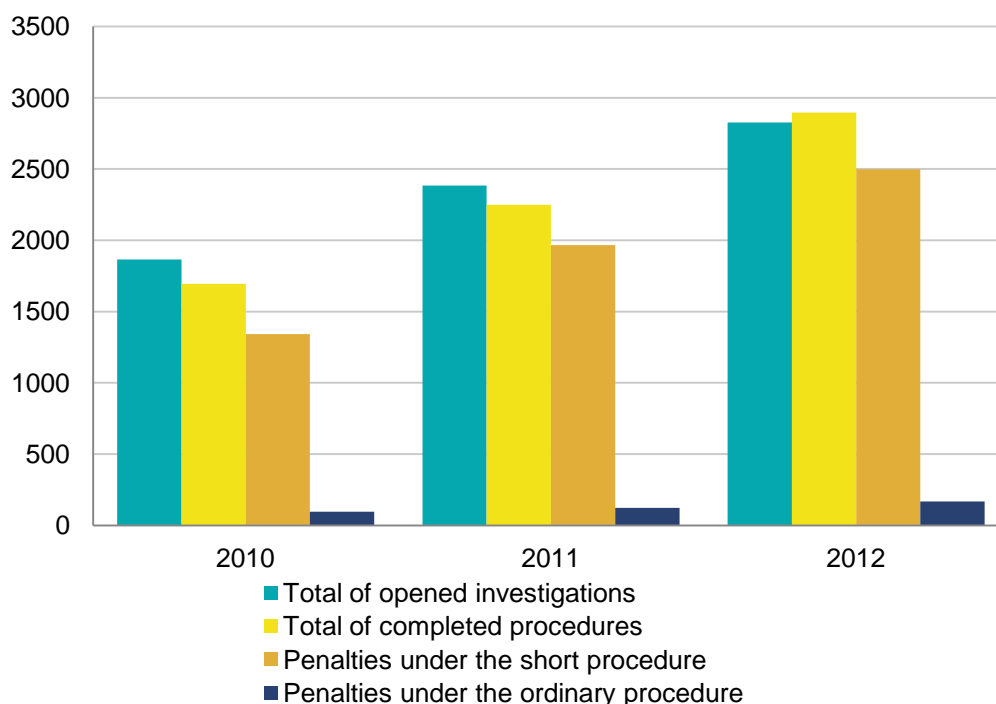


Figure 1: Criminal administrative procedures LRTV

## 2.4 Digitisation

The expansion of digital radio in Switzerland continued apace in the reporting year. In April 2012, OFCOM awarded SwissMediaCast AG (SMC) – a company owned jointly by the SRG, private radio stations, publishing companies, independent media professionals and technology companies – a radio licence for a third digital transmitter network in German-speaking Switzerland. Whereas the two existing transmitter networks of the SRG and SMC were designed on a regional language basis, the third network, which can be split regionally, is expected to broadcast its regional journals digitally. Similarly, private stations which wish to attract only a regional audience should now have an opportunity to operate digital radio. In French-speaking Switzerland too, digital broadcasting of private radio stations will soon make a breakthrough. Shortly before the end of the year, all key players (SRG, private stations, Swisscom Broadcast AG) reached agreement and submitted a joint application for the award of a digital radio licence via a company specially set up for this purpose. OFCOM is expected to grant the corresponding licence in early 2013.

Overall, digital radio is making positive progress. For example, in autumn 2012 the MCDT AG marketing company supported by the radio industry was able to announce the sale of the millionth digital receiver in Switzerland. According to MCDT AG projections, about a quarter of Swiss households now have a digital receiver

## 2.5 Financial supervision and statistics

The SSR is subject to financial surveillance by the Confederation. It is within this framework that OFCOM audited, under a DETEC mandate, the annual accounts, the budget and the financial planning of the company. In relation to reception fees, the Office on the one hand audited the initial costs of the transition to annual billing and on the other hand audited the collection account. The financial surveillance also related to the work on renewing the service agreement for the journalistic activities of the SSR destined for other countries, notably the determination of the necessary financial caps for the period from 2013 to 2016.

With regard to the private broadcasters, OFCOM carried out four on-the-spot audits. It presented and commented on the main shortcomings revealed by these checks during an information day organised by OFCOM on 15 November 2012.

## 2.6 Post

With the entry into force of the new, totally revised postal legislation on 1 October 2012, OFCOM took on some new tasks in the postal sector. Since 1 September 2012, the new Post Section has been responsible for developing postal policy for the attention of the Department of DETEC. We prepare the parliamentary business and legislative processes in the postal sector, carry out surveillance of the universal service with regard to payment transactions, assess applications for indirect press support and we are responsible for the coordination of the representation of Swiss interests in international organisations. We also have the task of carrying out an assessment of the Swiss postal market within three years of the entry into force of the new postal legislation and submitting proposals for future action to the Federal Council.

### ❖ **Link to the Post Section:**

<http://www.bakom.admin.ch/org/organisation/00537/04064/index.html?lang=en>

The responsibility for assessment of applications for press support was transferred from Swiss Post to OFCOM on 1 January 2013. We therefore carried out a full survey in the fourth quarter of 2012. 1574 applications were received, of which we approved 143 applications from daily and weekly newspapers from the regional and local press, as well as 1082 applications from not-for-profit organisations (membership and foundation publications). Although the legal requirements were slightly amended in the Postal Ordinance, the number of eligible titles hardly changed compared to the previous year. On the basis of our decisions, the Post Office has calculated the reductions for the regional and local press and for the membership and foundation publications. The Federal Government allocates CHF 50 million annually for these services. On 23 January 2013, the Federal Council approved the price reductions.

### ❖ **Link to press support:**

<http://www.bakom.admin.ch/themen/04073/04075/index.html?lang=de>  
(documents available in German, French and Italian only)

## 3 Telecom services

2012 was dominated by the mobile radio auction; on behalf ComCom, OFCOM awarded all frequencies up to the year 2028. Orange, Sunrise and Swisscom paid just short of CHF 1 billion and can now roll out the 4<sup>th</sup> generation mobile radio (LTE), which allows much faster data transmission. Since 1 March 2012, the universal service has also provided higher bandwidths: thanks to a revision of the Telecommunications Ordinance, Swisscom's connections throughout the country must now provide at least 1 Mbit/s.

The Federal Council reached another important milestone with the supplementary report on the evaluation of the telecommunications market. In it, the Federal Council sets out its intention to initiate a public consultation process on a revision of the Telecommunications Act in the course of the current legislature. In addition, in the course of the liberalisation of internet domain names, the Confederation submitted an application to the responsible corporation in the USA which would enable use of the ".swiss" extension on the internet in the future.

In summer 2012 a guide was published by a broadly based working group headed by OFCOM for the attention of policy decision-makers in the cantons and municipalities. This serves as an aid to decision-making related to investment in new telecoms infrastructures. In this context, an online map was also prepared, showing broadband penetration in Switzerland.

Finally, the Federal Administrative Court has defended ComCom's decision according to which access by Swisscom's competitors to the latter's leased lines is not restricted to specific technologies.

Philipp Metzger  
Deputy Director and Head of Division

### 3.1 Market for telecommunication services

The market for fixed-network telephony continued to shrink in 2012, as can be seen from the falling number of fixed-network telephone connections. Prices for calls to landlines remained stable.

The number of mobile phone contracts continued to increase slightly and totaled about 10.5 million contracts and prepayment cards sold at the end of 2012. This figure includes mobile broadband, which is being increasingly used by mobile data terminals such as smartphones or tablets. The prices for calls to Swiss mobile networks continued to fall slightly in 2012.

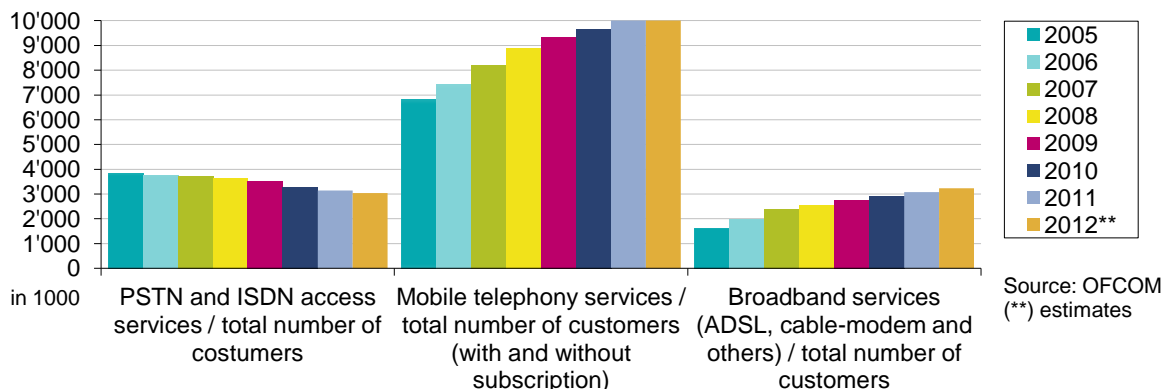
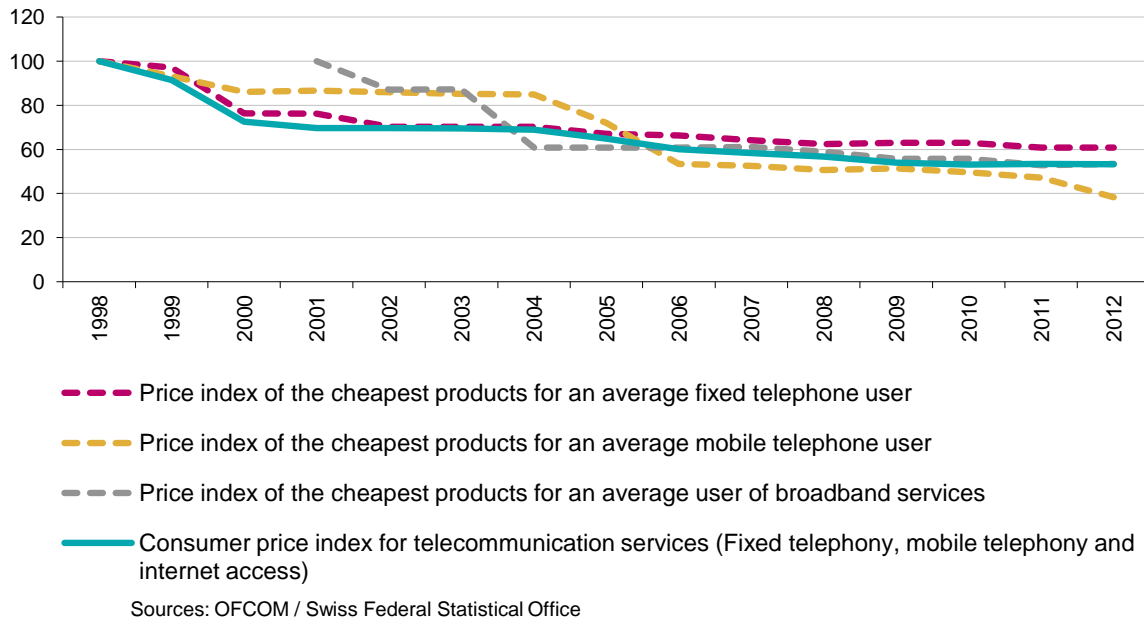


Figure 2: Numbers of subscribers (31.12.2012)

The trend was also positive in the case of broadband connections. We estimate that in Switzerland at the end of 2012 there were more than 3.2 million broadband connections. At the same time, broadband prices increased slightly.

The Federal Statistical Office (FSO) general price index for telecommunication services at the end of 2012 was at about 53.2 (base year = 1998). Prices for telecommunications services have therefore fallen by nearly 47 percent since the liberalisation of the market in 1998.



**Figure 3: Administrative Price index for telecommunication services and consumer price index for telecommunication services (fixed telephony, mobile telephony and internet access)**

## 3.2 Market access and universal service

### 3.2.1 Market access

The number of newly registered telecommunications service providers again increased slightly. Over all categories, 46 new providers were registered, and in the same period 35 providers were de-registered.

After a procedure lasting almost two years, the Federal Administrative Court reached a decision on two complaints about access to leased lines and to a large extent rejected them. The court upheld the ComCom interpretation of the leased line concept, according to which this is configured in a technology-neutral way and does not conceptually rule out new transmission standards and technologies. Therefore, IP-based and Ethernet services as point-to-point connections across all bandwidths can meet the requirements of the leased line concept and are subject to the access regime of the Telecommunications Act. Following the verdict of the court, the three suspended procedures concerning access to leased lines were resumed: we have issued instructions for the 2010 and 2011 prices for those services which the applicants had specifically included in these years, as well as the comprehensive leased line offering for 2012. In May, ComCom again set leased line rates for the years 2007 to 2009 by means of a partial order. In so doing, it took into account the clarifications which had been made during the period of suspension of the two complaint procedures in the price calculation in parallel proceedings; the Federal Administrative Court had requested these clarifications.

The Federal Administrative Court reached another appeal decision in proceedings relating to access to cable ducts, conditions for charging for local loops in the fixed network and access to the main distribution frame (collocation). In this case also, the court largely confirmed the decision of the lower court. The deduction of marketing costs for the calculation of the price for local loop charging was contested, where the court decided against ComCom. On the basis of the appeal decisions in parallel proceedings, two analogous complaints were withdrawn, so at the end of the year four complaints against ComCom access decisions were pending before the Federal Administrative Court.

During the reporting year, four new access applications were received, three of which were settled in the court of first instance for formal legal reasons. In the case of two applications with the same content, the fixing of mobile termination charges was requested. In the course of the procedure the parties came to a mutual agreement, so the procedures could be written off as settled. In another procedure concerning granting of transit, ComCom did not grant the access application. The decision was not yet legally in force at the end of the year. The fourth procedure raised last year again concerns prices for various forms of access, so no decision could be reached in the reporting year.

### 3.2.2 Telecommunications Service providers obliged to register

The number of registered telecommunications service providers increased slightly. There was growth only in the case of small and niche providers. Changes remain within the range of the previous year.

Ref.	Service category	2010	2011	2012
1.a	Telephone service via fixed-network connections	167	181	180
1.b	Telephone service via fixed-network connections	146	125	129
1.c	Telephone service via terrestrial mobile networks	51	60	63
1.d	Telephone service via satellite mobile networks	9	11	11
1.e	Telephone service via access number (two-step dialing)	35	39	46
2	Transmission of radio/TV programme services	145	149	151
3	Internet access	243	257	266
4.a	Constant bitrate transmission capacity	139	149	147
4.b	Variable bitrate transmission capacity	211	216	216
5.a	SMS/MMS services	86	96	98
5.b	Hosting of individual numbers and/or short numbers	35	41	45
5.c	Other services	118	118	138

**Table 2: Telecommunications Service providers obliged to register**

### 3.2.3 Universal service

On 1 March 2012 the new 1000/100kbit/s minimum bandwidth was introduced. With regard to this increase, Swisscom migrated some of the building connections, for which this new minimum bandwidth could not be guaranteed, to VDSL. In practice, today almost all DSL-mini customers (equivalent to the Swisscom universal service product) achieve the required minimum bandwidth. Customers for whom Swisscom cannot provide the required minimum bandwidth via DSL are informed of the fact and optionally receive an alternative provision which complies with the universal service. Some of these customers prefer a slightly lower bandwidth via DSL to an alternative provision via satellite, because apart from the bandwidth no other volume restrictions are associated with this. The change did not generate any significant queries to OFCOM. The number of complaints about the universal service declined considerably.



The number of customers served via satellite continued to fall: 1713 (2010) 1653 (2011) 1582 (2012).

The number of public telephones ('Publifon') was also reduced further. The removal of 544 pay-phones in 2012 was in the scheduled range (2011: 379)

Telephone box statistics	2009	2010	2011	2012
Universal service public telephones: locations in municipalities	4813	4437	4058	3514
Municipalities without universal service public telephones	237	332	517	797

**Table 3: Telephone box statistics**

The annual report on the quality of the services forming part of the universal service confirms that Swisscom, the licensee, fully met all target values in the regulations.

### 3.2.4 Mobile radio licences

In a successful auction, OFCOM, on behalf of ComCom, auctioned the currently free mobile radio frequencies and those which will become free by 2014 and 2017 respectively, including those of the so-called digital dividend (previously broadcasting frequencies). The three existing mobile operators Orange, Sunrise and Swisscom were able to purchase spectrum which will enable them to extend their networks using the latest mobile technologies such as LTE and to provide consumers in Switzerland with high-quality mobile communication services. The revenue from the auction amounted to a total of CHF 996 268 000. This goes to the Federal Treasury.

The auction took place in February 2012 and lasted 13 days. The complete allocation of all mobile radio frequencies, unique worldwide, was carried out using an electronic auction system which allowed secure bidding over the internet.

- *Mobile auction see also 6.4.2 "Mobile communication", p.30 § 1, 8.1.1 "Income and expenditure account", p. 35, § 3 and 8.1.1.1 "Income" p. 36*

## 3.3 Consumer protection and surveillance

The number of consumer complaints in relation to telecommunications fell very slightly in 2012 (1457 complaints recorded compared to 1524 in 2011). Most of the complaints were sent by e-mail or reported by telephone. As in previous years, the complaints mostly related to unwanted preselection (slamming), but also to a large extent unsolicited telephone canvassing (particularly despite the opt-out 'asterisk' designation in the directory), unlawful mass advertising (spamming) and billing problems on the part of the operator. One encouraging finding was that the number of complaints in relation to unwanted preselection showed a falling tendency in the second half of the year.

In relation to surveillance of addressing resources and in particular of numbers for added-value services (090x numbers), the number of surveillance measures against holders of addressing resources fell in 2012. OFCOM took action in almost 290 cases (compared with 360 in 2011). Around 170 surveillance dossiers were established and could be resolved within the framework of a pre-clarification and approximately 120 revocation procedures were initiated. The main infringements were non-payment of annual fees and failure to comply with the provisions relating to the indication of prices.

### 3.4 The .swiss internet domain name

In May 2012, OFCOM submitted an application to acquire the .swiss internet domain on behalf of DETEC to ICANN (the Internet Corporation for Assigned Names and Numbers), the company responsible for managing domain names at the global level. By means of this application, the Confederation intends to defend the interests of the country and avoid any monopolisation or abuse by third parties of the geographic designation 'Switzerland'.

The Swiss International Airlines Company, which also wanted to be able to use the swiss domain to further its own interests, withdrew its application to ICANN in December 2012, after several discussions with senior DETEC and OFCOM officials.

By March 2013, ICANN will conduct an evaluation of the application. In parallel, OFCOM has to define how the registration of new domain names will be managed and what the conditions will be to acquire one of these new domain names. Finally, it will have to prepare the necessary changes to the legal framework. If all the requirements imposed by ICANN are met, implementation of the new domain is scheduled for 2014. Starting from this date will it be possible to apply for the registration of a .swiss domain name.

- *ICANN see also 4.2 "Activities of the Information Society Business Office", p. 19, 7. "International Relations", p. 32 and 7.4 "Information Society", p. 33 § 3*

## 4 The information society in Switzerland

On 9 March 2012 the Federal Council again paved the way and adopted an updated version of its strategy for an information society in Switzerland. Its goal is to ensure, through the use of information and communication technologies, that Switzerland is an innovative and competitive place to do business and to apply these technologies for the benefit of everyone in Switzerland. For the first time the Federal Council has included the area of "Infrastructure" in the strategy as a foundation for the information society sector, together with the theme of "Energy and resource efficiency", in order to strive for sustainable, environmentally-friendly use of ICT. An "Information Society Steering Committee", under the chairmanship of the OFCOM Director General, has been tasked with ensuring coordinated and focused implementation of the strategy. An "Information Society Business Office", based within OFCOM, supports the Committee in its work.

Sabine Brenner  
Deputy Director of the Information Society Business Office

- ❖ **Strategy of the Federal Council for an Information Society in Switzerland**  
<http://www.bakom.admin.ch/themen/infosociety/00695/index.html?lang=en>

### 4.1 Key areas in the information society

Together with the updated strategy, the Federal Council gave the federal administration three new tasks on 9 March 2012: Under the auspices of DETEC, a Confederation strategy for dealing with internet addresses is being drawn up to ensure that Switzerland is well positioned in the liberalized domain name market. Under the auspices of the Federal Department of Home Affairs (FDHA), a

package of measures in relation to "e-Accessibility" is to be drawn up, to ensure barrier-free, equitable access to online information and to communications and transaction services of the government and the federal administration. The FDHA was also commissioned to adapt the statistical basis for measuring the information society with reference to the updated strategy. In 2012, the Interdepartmental Information Society Steering Committee also dealt with the issue of how monitoring (surveillance) of the projects carried out decentrally within the federal administration should be designed to ensure targeted implementation of the Federal Council's strategy.

- *Information Society see also 4.2 "Activities of the Information Society Business Office", p. 19 and 7.4 "Information Society", p. 33*

## 4.2 Activities of the Information Society Business Office

In 2012 the Business Office was busy setting up the Information Society Steering Committee and developing monitoring tools for the implementation of the information society strategy, which is taking place decentrally within the federal administration. In May 2012 the Business Office organised a conference on "Basic ICT skills for the employment market" and in November 2012 an experts' workshop on "Security opportunities for Switzerland as a business location". It also participated in various working groups of the federal administration, for example in relation to "Youth and media", "e-Accessibility" and the updating of the system of statistical indicators for the information society. It was also involved in the Confederation's candidature at ICANN, the organisation for the administration of internet addresses, for the **.swiss** extension and drew up the federal strategy for dealing with internet domain names; this will be adopted by the Federal Council in the spring of 2013. Another focus of its activities was the preparation of the report entitled "Legal basis for social media", in fulfilment of a postulate submitted by National Councillor Viola Amherd (postulate No. 11.3912); the report is expected to be presented to the Federal Council in mid-2013. At the international level, the Business Office monitored the developments of the information society by participating in conferences and workshops, and represented Switzerland's position in OECD and EU working groups.

- *ICANN see also 3.4 "Internet Domain .swiss", p. 18, 7. "International Relations", p. 32 and 7.4 "Information Society", p. 33 § 3*
- *Information Society see also 4.1 "Key areas in the information society", p. 19 and 7.4. "Information Society", p. 33 ", p. 32*

## 5 Surveillance and radiocommunication licences

The year 2012 was marked by significant changes in the management of the AF Division.

Following the appointment of Véronique Gigon as Deputy Secretary General of the General Secretariat of DETEC, Gerhard Käser replaced her at AF in April 2012. In late August, he took well-deserved retirement after working at OFCOM since its foundation in 1992. Philippe Horisberger took over from him on 1<sup>st</sup> July, assisted by Olivier Pauchard, appointed as Deputy in August. Lucio Cocciantelli was promoted in September to head of the Market Access and Conformity (MK) Section.

The Division worked throughout the year on the implementation of the decisions of the IFN project (new instruments for the award and use of frequencies). In particular, it prepared the revision of the ordinances to permit exemption from licensing for a whole series of radiocommunication applications such as wireless microphones, CB radios, radar on vessels, etc... These amendments to ordinances were approved by the Federal Council in October and entered into force on 1 January 2013. A significant effort was required to inform the various players involved of the changes.

Philippe Horisberger  
Vice-Director and Head of division

### 5.1 Telecommunications equipment

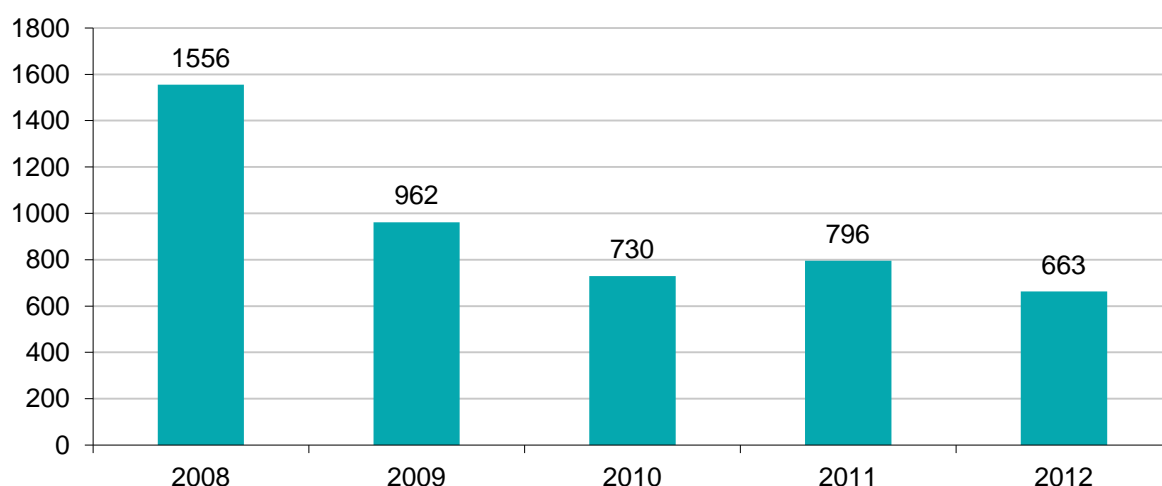
#### 5.1.1 Amendments to the legislation

A new provision in the Ordinance on Telecommunications Installations (TIO) makes it possible for OFCOM, from 2013 onwards, to publish a list on the internet which provides better information for consumers and market players about telecommunications equipment which poses a risk of interference. In addition, the TOI provides stricter regulation on the offering, placing on the market and operation of jamming transmitters.

In October 2012 The European Commission presented its proposal for a revision of the R&TTE (Radio & Telecommunications Terminal Equipment) Directive. It will be discussed in 2013 in the Council of Europe and the European Parliament and will in principle be adopted during 2014. Since the telecommunications sector falls within the scope of the agreement on mutual recognition of conformity assessments, Switzerland also incorporated this Directive in the Ordinance on Telecommunications Installations (TIO). The latter must therefore be revised by 2014/15.

#### 5.1.2 Notifications

In 2012, OFCOM processed 663 notifications of radio equipment, i.e. some 17% fewer than in the previous year. This figure is declining because of the progress in frequency harmonisation at European level, which has made it possible to increase the number of items of equipment exempted from notification. Among these notifications, the proportion relating to equipment subject to restrictions on use in Switzerland - because it uses frequencies that are not assigned to it - is increasing (20% in 2012 compared to 15% in 2011).



**Figure 4: Number of notifications of radiocommunication equipment**

In 2012, OFCOM was committed, alongside the European Commission, to the establishment of a list of equipment for which notification is not necessary. This document, intended to clarify the situation with the players in the market, was published for the first time at the end of 2012. It will be updated regularly within the framework of a working group headed by OFCOM.

❖ **List of equipment for which notification is not necessary**

[http://ec.europa.eu/enterprise/sectors/rte/documents/index\\_en.htm#h2-5](http://ec.europa.eu/enterprise/sectors/rte/documents/index_en.htm#h2-5)

### 5.1.3 Market observation

In 2012, 51 new companies which place telecommunications equipment on the market and three exhibitions were visited by an OFCOM official. In this way OFCOM was able to provide specific information about market access of telecommunications equipment and update its database of telecommunications equipment importers, which now includes 1039 companies.

## 5.2 Electromagnetic compatibility of electrical equipment and installations

In the reporting year, OFCOM followed the discussions in the European Council and Parliament regarding the revision of the Directive on Electromagnetic Compatibility. The new text has been drafted and is expected to be formally adopted in early 2013. At that point, OFCOM will have to start work on revising the relevant Swiss legislation.

- **EMC see 5.4 "Surveillance of devices and equipment and preventive measures, p. 23 § 2, 5.4.1 "Preventive measures", p. 25 § 3 and 6.2.1 "CEM", p. 28**

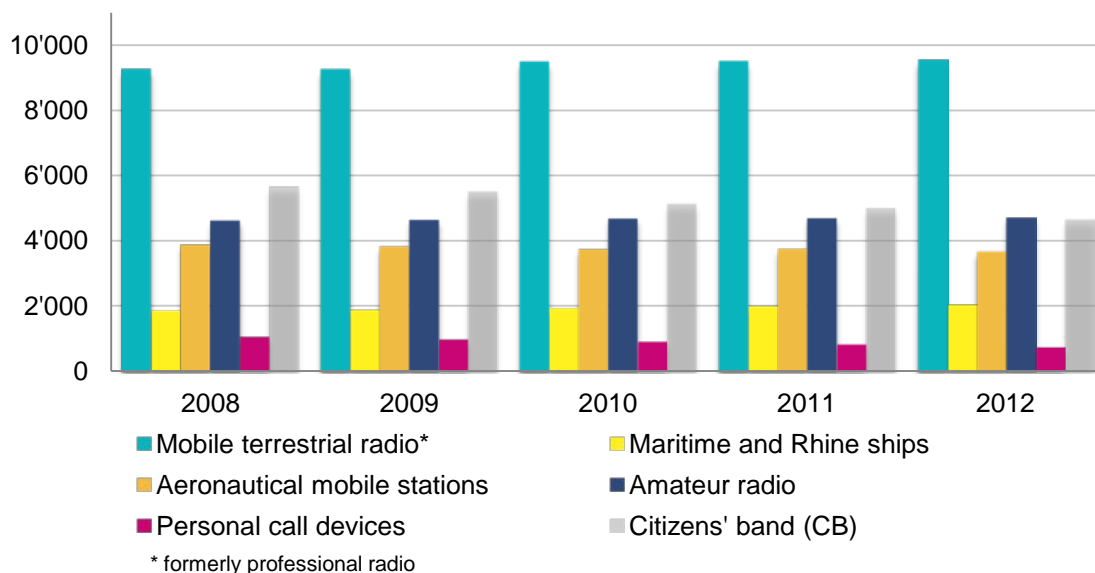
## 5.3 Radiocommunication licences

The use of frequencies for professional needs (taxis, transport companies, emergency services, police, fire, public administrations, etc.) is reflected in the number of radio licences for land mobile radio.

In 2012 the number of licences required for use by the national security network for fire-fighters, police and medical services, etc. (POLYCOM) again increased markedly, with the further expansion of cantonal sub-networks. Rescue and security organisations are increasingly switching from analogue to digital radio communications. The trend towards combining more local fire brigades into regional fire departments also continued. With these mergers to form larger associations, synergies can be exploited.

Overall, the number of licences and the number of licensed devices increased once again in land mobile radio.

As in the last few years, in 2012 there was a slight increase in the number of amateur radio, maritime and Rhine vessel licences. However, the decrease in the mobile aeronautical radio sector seems to be continuing, although somewhat less rapidly than in the previous year. There is also a continuing decline in the numbers of "citizens' band radio" and "pager" equipment.



**Figure 5: Number of radio licences**

### ❖ one-stop shop

[www.ebakom.admin.ch](http://www.ebakom.admin.ch)

We advise our customers to use our online "Virtual front desk"; the processing of licence applications and registrations for radio examinations is handled very efficiently electronically, and independently of office hours.

[www.ebakom.admin.ch](http://www.ebakom.admin.ch)

➤ **"OFCOM Online" see also 8 "Resources and Organisation, p. 35"**

### 5.3.1 Radio operators' examinations

Compared to the previous year, the number of candidates - spread across the four types of examination - has not seen any further reductions. In all, 770 candidates passed a radio operators' examination required under international provisions.

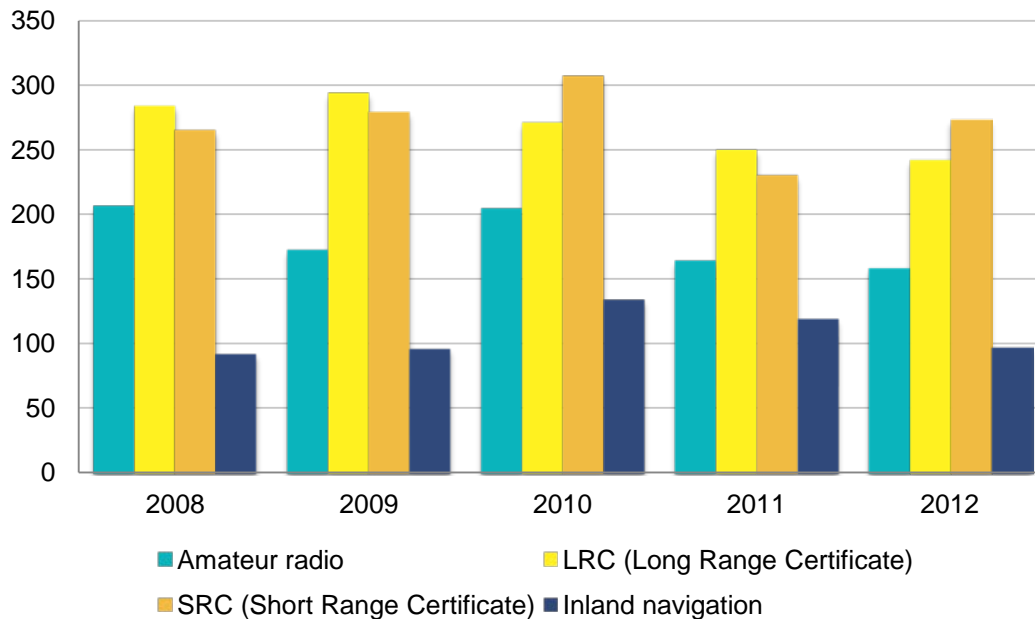
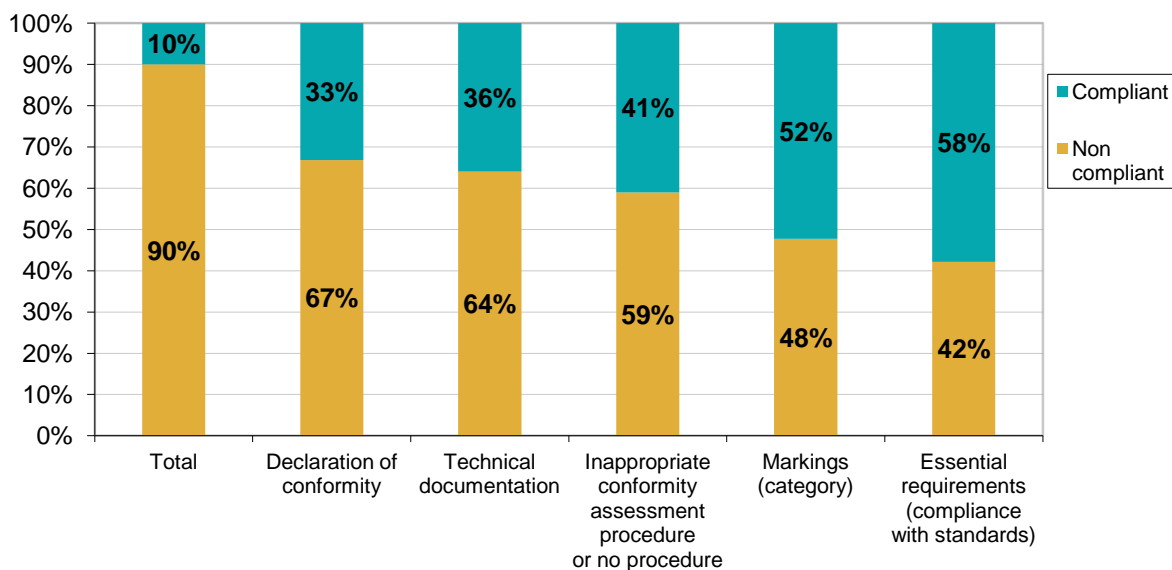


Figure 6: Number of radio examination

### 5.4 Surveillance of devices and equipment and preventive measures

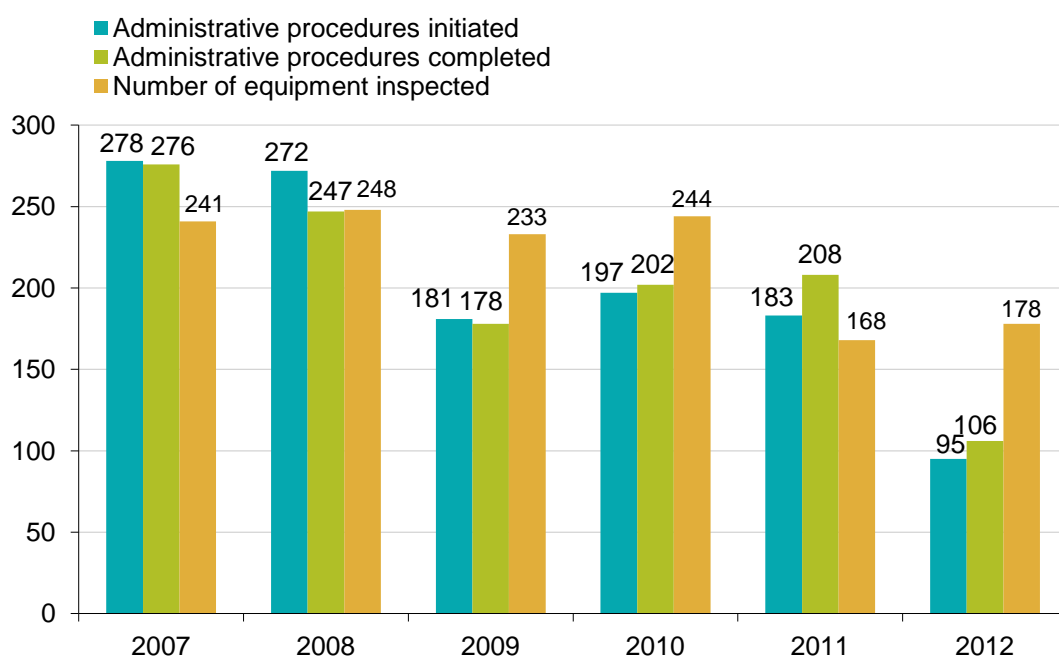
As required by the performance mandate defined for the Office by the Federal Council, OFCOM must take prevention and control measures in relation to telecommunications equipment and the electromagnetic compatibility of electrical equipment. 150 items of telecommunications equipment and 28 items of electrical equipment were tested in 2012. The rate of non-conformity of telecommunications equipment remained high (90%); 160 items out of 178 did not meet the applicable requirements (88% in 2011). As in the past, the most problematic areas were the declaration of conformity (67% non-conformity compared to 70% in 2011), the technical dossier (64% compared to 59% in 2011), characterisation (48%, as in 2011) and the essential requirements (42% compared to 38% in 2011). 105 items of equipment (59%, compared to 58% in 2011) had not been subjected to a conformity assessment by the manufacturer or had undergone an inappropriate procedure.



**Figure 7: Most frequent non-conformity rates among equipment inspected**

Of the 95 procedures initiated in 2012, 14 involved market surveillance in relation to electromagnetic compatibility (EMC) and 81 in relation to telecommunications equipment. In the same period, 13 procedures were concluded in the EMC sector and 93 in the telecommunications equipment sector, of which some involved several items of equipment. OFCOM was therefore able to conclude 106 procedures in total.

➤ *EMC see also 5.2 "Electromagnetic compatibility of electrical equipment and installations", p. 21, 5.4.1 "Preventive measures, p. 25 § 3 and 6.2.1 "CEM", p. 28*



**Figure 8: Administrative procedure relating to equipment**



## 5.4.1 Preventive measures

In 2012, OFCOM continued to provide up-to-date information on the changes in the conditions of use of the spectrum for wireless microphones. Market players were thus able to prepare for the entry into force of the new provisions on 1 January 2013.

### ❖ Wireless microphones

<http://www.bakom.admin.ch/themen/geraete/00568/01208/index.html?lang=en>

OFCOM will also be publishing on the internet information about telecommunications equipment which it has tested and which does not comply with the applicable requirements, in particular the technical requirements. In these cases, the Office issues a ban on the sale of such equipment, since its use can interfere with radio traffic or the reception of radio and television programmes. By checking on the internet, consumers can find out if the product they are intending to buy is not in conformity. However, the fact that an item of equipment does not appear on this list in no way guarantees its conformity.

<http://www.bakom.admin.ch/themen/geraete/04113/index.html?lang=en>In 2012, the Office continued the briefings on the legal framework in relation to electromagnetic compatibility. With the help of other players in the sector (suppliers of measuring equipment, laboratories, consultants,...), it also began to prepare an information day on this topic. This event will be held in January 2013.

- *EMC see also 5.2 "Electromagnetic compatibility of electrical equipment and installations", p. 21, 5.4 "Surveillance of devices and equipment and preventive measures, p. 23 § 2 and 6.2.1 "CEM", p. 28*

OFCOM's efforts to provide information also focused on the issues related to the technical non-conformity of energy-saving LED lamps. In fact, a European campaign conducted in 2011 revealed that 33% of the lamps tested were technically non-compliant. In Switzerland, 16 of the 21 lamps checked in 2012 had this same problem and could cause interference in the radio spectrum.

### ❖ Energy-saving LED lamps: a source of interference?

<http://www.bakom.admin.ch/dokumentation/Newsletter/01315/04042/04057/index.html?lang=en>

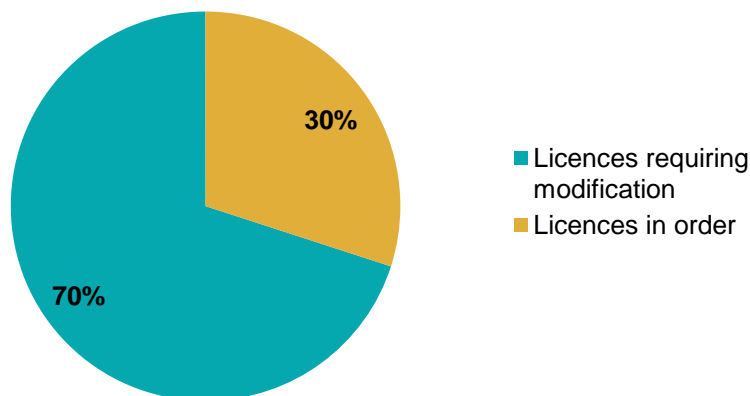
## 5.5 Surveillance of the frequency utilisation and preventive measures

### 5.5.1 Amendments to the legislation

As a result of technical advances and regulatory developments at the international level, it is possible to waive the licensing obligation for the utilisation of certain parts of the frequency spectrum. The amendments to the relevant ordinances will enter into force on 1<sup>st</sup> January 2013 and allow the unlicensed use of wireless microphones, citizens' band radio (CB), radar - both on ships and for ground/wall-probing radar [GPR/WPR]) - paging systems and certain types of remote controls. The use at sea of portable maritime radio equipment with digital selective calling (DSC) has now been authorised: this will make it possible to improve the safety of various groups of users (divers or windsurfers who end up a long way from their boat or from the coast).

### 5.5.2 Licence inspections

The performance mandate imposed by the Federal Council envisages that surveillance of licensees will be ensured by means of a sufficient number of targeted inspection and prevention measures each year. In 2012, we checked a total of 197 licences (206 in the previous year) on site, including, in accordance with a list of priorities, mainly licences which had not changed in five years. The high figure of 70% irregularities increased slightly compared to the previous year (67%). More serious infringements, such as for example the use of additional radio frequencies which had not been awarded in the licence, were pursued within the framework of 68 procedures (70 in the previous year).



**Figure 9: Results of licence inspections**

### 5.5.3 Other checks on utilisation of frequencies

In 2012, 200 items of equipment which had been operated without a licence or which was not in conformity were inspected (previous year: 247). The corresponding 120 procedures (previous year: 200) meant there was a net increase of 18 new licences (previous year: 68).

### 5.5.4 Preventive measures (e.g. information)

We provided information and advice to 44 potential customers, in particular regarding wireless microphones (PMR) and professional mobile radio (PMR).

In relation to amendments to ordinances which enter into force on 1<sup>st</sup> January 2013 we provided spectrum users and licensees with detailed information on the upcoming changes, via the internet and by means of letters to customers.

## 6 Frequency Management

The World Radiocommunication Conference of the International Telecommunication Union (ITU), which is held every three to four years, was the first important occasion for the Frequency Management Division in 2012. The national preparations for this Conference had taken several years to complete.

The second major event was the re-assignment of the mobile radio frequencies in the first quarter of the year by ComCom. The years of technical preparations by FM helped bring the auction to a satisfactory conclusion. The creation of the new mobile radio landscape under the changed conditions will also keep FM very busy in 2013.

Peter Pauli  
Vice-Director and Head of Division

### 6.1 Frequency planning

#### 6.1.1 At international level

At the World Radiocommunication Conference (WRC-12) held in Geneva in February 2012, OFCOM represented the spectrum policy interests of Switzerland. The extension of the mobile radio allocation in region 1 in the frequency range +/- 694-790 MHz was among the most important results of the WRC-12. This allocation will take effect after the WRC-15. The discussions associated with this allocation will keep OFCOM's Frequency Management Division very busy over the next few years. Furthermore, the WRC-12 decided on additional internationally harmonized frequency allocations for civil aviation, as well as for various scientific services.

##### ❖ Results of the WRC-12

<http://www.bakom.admin.ch/dokumentation/Newsletter/01315/04042/04060/index.html?lang=de>  
(document available in German, French and Italian only)

The international agreement on the use of the spectrum (the Radio Regulations), updated at the World Radiocommunication Conference, is a multilateral treaty negotiated between the administrations involved. Following on from the WRC-12, OFCOM made preparations so that the Federal Council can ratify the new Radio Regulations and so that it can become effective at the national level.

The spectrum policy interests of Switzerland are put forward and represented by OFCOM's Frequency Management Division in the relevant European and international bodies. In 2012 OFCOM worked in particular within the Electronic Communications Committee (ECC) and its working groups.

##### ❖ Working groups of the ECC which are relevant to spectrum policy

<http://www.cept.org/ecc/groups-list>

#### 6.1.2 At national level

The Swiss National Frequency Allocation Plan (NFAP) is updated annually. The latest version includes adjustments which we had to make as a result of the decisions of the 2012 World Radiocommunication Conference. NFAP-2013 was approved by the Federal Council in October 2012 after consultations with national spectrum users. The new NFAP becomes effective the 1<sup>st</sup> of January 2013.

## ❖ NFAP-2013

<http://www.bakom.admin.ch/themen/frequenzen/00652/00653/index.html?lang=en>

In 2012 we also revised various technical interface requirements (Radio Interface Regulations = RIR). The RIR describe the prerequisites for the use of radio spectrum by radio equipment. In addition to technical parameters, they also include frequency bands, as well as the possible mandatory requirement for a radio licence in Switzerland.

## ❖ technical interface requirements

<http://www.bakom.admin.ch/org/grundlagen/00563/00575/01285/index.html?lang=en>

## 6.2 Electromagnetic compatibility

### 6.2.1 EMC (ElectroMagnetic Compatibility)

Since several units of OFCOM contribute to the implementation of the Ordinance on Electromagnetic Compatibility (OECM), the management decided first to transfer the EMC competency centre from the Frequency Management (FM) Division to the Surveillance and Radiocommunication Licences (AF) Division and secondly to make it a Section. This change, effective as of 1 January 2013, will make it possible to exploit synergies and to bring the decision-making centres closer together. The definitive performance mandate for this new Section will be drawn up in 2013.

The EMC technical conformity checks, carried out in the context of market surveillance procedures, were again carried out at METAS (the National Metrology Institute), since OFCOM will not have adequate infrastructure available until mid 2013.

These checks revealed shortcomings, for example in the quality of the interface cables used for measurements of multimedia devices. Since the standards do not take into account the qualitative aspects, the results of the analyses which are carried out are difficult to reproduce and differ significantly from one laboratory to another. Another problem which was encountered concerns the excessive radiation from flat-screen televisions, owing to the fact that no standard specifies a limit below 30 MHz. Unfortunately, the standardisation committees are not yet fully aware of these issues.

In 2012, OFCOM strengthened its commitment to the EMC standardisation committees, by assuming chairmanship of the 'TK CISPR' technical commission of the Swiss Electrotechnical Committee (SEC). This body focuses primarily on issues related to interference radiation from electrical installations and equipment.

- **EMC see also 5.2 "Electromagnetic compatibility of electrical equipment and installations", p. 21, 5.4 "Surveillance of devices and equipment and preventive measures, p. 23 § 2 and 5.4.1 "Preventive measures, p. 25 § 3**

### 6.2.2 EMF (ElectroMagnetic Fields)

The EMC/EEMC competency centre continued to give effective technical support to the cantonal and federal authorities in the application of the Ordinance on Protection from Non-Ionising Radiation (OPNIR).

OFCOM had to use all its weight within the various working groups tasked with defining the implementation of the OPNIR in an attempt to reduce the complexity of implementing this ordinance. However, the low level of emission limits in Switzerland compared to other countries, as well as the complexity and duration of the cantonal investigative procedures, remain the largest obstacles which must be overcome in order to simplify significantly the framework conditions and to promote the development of fourth-generation mobile telephone networks.

## **6.3 Radio technology**

### **6.3.1 Interference from mobile satellite terminals in the adjacent UMTS frequency bands**

In Europe in the 1990s, the 1900-1980 MHz, 2010-2025 MHz and 2110-2170 frequency ranges were assigned to the terrestrial mobile radio systems (IMT2000 / UMTS). Adjacent frequencies were intended for corresponding satellite systems. In this plan, it was assumed that satellite systems with an orbit of about 20,000 kilometres – known as the MEO system - would be used for this. In practice, however, other satellite mobile communications systems with a geostationary orbit of approx. 36,000 kilometres are becoming more common. The associated mobile satellite terminals naturally do not have the same technical characteristics as originally assumed. In a report by the European Conference of Postal and Telecommunications Administrations (CEPT), their potential for interference was examined and it was clarified under what technical conditions they can be operated in the 1980-2010 MHz and 2170-2200 MHz frequency range, in order to minimise the effect on the UMTS frequency bands. OFCOM took part in drawing up this report, which is expected to be published in 2013.

### **6.3.2 Pseudolites**

Pseudolites (pseudo-satellites) are terrestrial transmitters which emit signals similar to satellite navigation signals and which can be used for determining positions inside buildings or in topographically difficult terrain. Various radio services, as well as GPS and GALILEO receivers, may suffer interference as a result of their unregulated use. Within the framework of the CEPT, simulations were carried out in the 1164-1215 MHz, 1215-1300 MHz and 1559-1610 MHz frequency bands, which highlight the potential for interference by pseudolites. Though the CEPT report also indicates technical countermeasures, aviation authorities in particular have major reservations about any interference effects on satellite navigation receivers. It will therefore be necessary to clarify regulatory measures at the European level.

### **6.3.3 Radiocommunication Assembly (RA-12)**

Before every World Radiocommunication Conference (WRC), a Radiocommunication Assembly (RA) takes place. Among other things it regulates the structure and working methods of the radio sector of the International Telecommunication Union (ITU). In January 2012, 613 delegates from the Member States, together with a number of representatives from industrial and scientific organisations took part in the RA-12 in Geneva. OFCOM headed a working group on new wireless technologies which revised a resolution on Short Range Devices (SRDs) and drew up three new resolutions on Cognitive Radio Systems (CRS), Electronic News Gathering (ENG) and Green Radio. These resolutions also served as a basis for the subsequent work of the WRC-12.

### **6.3.4 Joint Task Group 4-5-6-7**

The World Radiocommunication Conference (WRC-12) decided in February to provide additional radio spectrum for mobile telephony. A joint working group, Joint Task Group 4-5-6-7, has the responsibility on the one hand for identifying suitable frequency ranges. On the other hand, JTG 4-5-6-7 will draw up the technical and regulatory provisions which were decided on at the WRC-12 and provide work towards the possible use of the frequency range from approx. 694 to 790 MHz for mobile radio. This frequency range has to date been reserved exclusively for broadcasting and related applications. The final decisions will be taken at the 2015 World Radiocommunication Conference, among other things on the basis of the results of the JTG 4-5-6-7.

## 6.4 Frequency assignment

### 6.4.1 Broadcasting

Developments in the mobile radio sector also have an impact on the broadcasting sector. For example, in close collaboration with the broadcasting licensees we drew up planning concepts for the freeing-up of TV channels 61 to 69 (the digital dividend).

In digital radio broadcasting, we prepared the assignment of radio channels so that the new regional digital radio network could start operating with DAB+ in December in Zurich.

In the FM sector, after a comprehensive analysis we instigated a paradigm shift: in the future, radio broadcasters will be able to plan and optimise their networks themselves. With the provision of the necessary data, the definition of the processes and regulation of special cases, the necessary preparation work has been completed, so that the change can be implemented from 2013 onwards.

With regard to radio interference from Italy we have made a little progress: however, further solutions will be required owing to changes in digital television in Italy. We will continue talks with the Italian administration in the forthcoming year.

### 6.4.2 Mobile communication

After the mobile radio auction, which we monitored closely from the technical spectrum perspective, in February we once again analysed the conditions for the use of the spectrum along the national frontiers. In negotiations with neighbouring countries we achieved the result that the Swiss operators of the new mobile radio technology LTE will be able to plan along the country's frontiers, subject to the usual conditions.

- *Mobile auction see also 3.2.4 "Mobile radio licences", p. 17, § 1, 8.1.1 "Income and expenditure account", p. 35, § 3 and 8.1.1.1 "Income" p. 36*

For GSM-R railway radio we were also able to gain some additional channels in the corresponding border region, in cooperation with Germany and Austria.

One major focus throughout the year was the frequency resources to be deployed, often at very short notice, for events and conferences, where wireless applications play an increasingly pivotal role in terms of organisation, security and coordination. Despite technological advances in the field of automatic frequency selection, much manual coordination work and human expertise is still required for trouble-free use of the spectrum.

### 6.4.3 Microwave radio

Several major mobile operators have chosen a new equipment partner for microwave radio. We monitored the operators when the new equipment was launched onto the market; with a view to a transfer of knowledge, we held a microwave seminar for planners, project workers and suppliers on current topics such as the potential interference effects of wind farms on radio links, as well as the use of adaptive modulation (ACM, a procedure in which modulation and therefore the transmitted data rate adjusts dynamically during operation).

The opening-up of the 42 GHz frequency band provides mobile operators in particular with an additional method of feeding signals to their base stations.

Initial investigations into the use of a technology - which is otherwise used in mobile communications to increase transmission rates (MiMo) - indicate that the end of technological development in microwave radio has not yet been reached, despite the expansion of fibre networks.

## 6.5 Radio Monitoring

### 6.5.1 Radio Monitoring

In the context of the frequency auction we had to examine the compatibility of mobile radio with other services. Two effects emerged from the analysis of the interference potential of the new mobile radio networks on the cable TV networks and connected devices: many domestic installations are sensitive to interference, either because they were not properly installed or because they are out of date. The second vulnerability is the susceptibility of the terminals themselves to interference and their defective wiring.

The reciprocal effects of radar installations and new mobile radio networks were also investigated and the appropriate measures arranged.

The expansion of the mobile radio networks again resulted in many incidents of interference in the 1920-1930 MHz UMTS frequency range due to unlicensed cordless telephones which were ordered directly on the internet or imported from abroad.

### 6.5.2 Reporting centre of radio interference

Despite the digitisation of the police, fire and rescue services' radio networks, the number of interference incidents did not fall. Though we had to locate fewer cases of spectrum interference, we were nevertheless confronted with more cases of incorrect operation and concepts of use. Thanks to the continuous availability of the interference reporting centre at OFCOM, we were able to resolve all problems within a reasonable time.

### 6.5.3 Notifications of interference handled by Radio Monitoring

Of the approximately 800 internal and external tasks faced by Radio Monitoring, about 50% concerned interference reports. The most frequent cases of interference were with radio and television reception; here the causes of the interference can differ greatly.

Year	2010	2011	2012
Interference reports	436	397	413

**Table 4: Interference reports**

## 7 International Relations

In 2012 there continued to be one question at the core of the conflicts between the industrialised countries and the developing countries in various international forums: what role should governments play in defining the rules on the internet? Disagreement on this issue meant that in December 2012 the industrialised countries and some developing countries declined, at least for the time being, to sign the new telecoms agreement of the ITU at the World Conference on International Telecommunications. This issue was controversial as well within the discussions at the UN. As a compromise, on which Switzerland was also active, it was decided to establish a UN Working Group in Geneva with representatives of governments, business and civil society to analyse these issues more closely. A number of questions also remain open in relation to the implementation of the liberalisation of domain names adopted by ICANN, the global body which administers internet addresses. The theme of "Internet Governance" will therefore generate fierce political debate in the coming years during the preparatory process for the 10-year review of the World Summit on the Information Society (WSIS).

Frédéric Riehl  
Vice-Director and Head

- *ICANN see also 3.4 "Internet Domain .swiss", p. 18, 4.2 "Activities of the Information Society Business Office", p. 19 and 7.4. "Information Society", p. 33*

### 7.1 The International Telecommunication Union (ITU)

Beyond the regular activities of the ITU (in particular the annual session of the Council in July 2012), 2012 was marked by two important meetings held in Dubai: the World Telecommunication Standardisation Assembly (WTSA, 18 - 29 November 2012) and the World Conference on International Telecommunications (WCIT, 3 - 14 December 2012). The WTSA-12 decided on the working framework for the standardisation sector for the next 4 years. The WCIT-12 was entrusted with reviewing the Melbourne International Telecommunication Regulations (ITR) dating from 1988. The negotiations on this new ITR revealed differences of opinions, so Switzerland, like the other western countries, did not sign these final Acts, considering that certain clauses of the ITR-2012 should be studied more closely.

### 7.2 The European Union (EU)

The year 2012 was marked by the adoption of two high-priority legislative dossiers from the Digital Agenda for Europe: the multi-annual radio spectrum policy and the regulations on roaming charges. To implement this programme, the Commission is working closely with the member States through a group of high-level representatives. Switzerland, represented by OFCOM, participates in the meetings of this group as an observer.

The multi-annual Radio Spectrum Policy, adopted in March 2012, envisages the provision of the 800 MHz band for electronic communication services by 1 January 2013. In addition, the programme plans to assign a portion of the spectrum extending to at least 1200 MHz to mobile data transfer by 2015. Another key measure is the production of an inventory of the existing uses of the spectrum and of the possible future demand for radio frequencies in the Union between 400 MHz and 6 GHz. The European Commission has invited Switzerland to participate in the preparation of this inventory.



## 7.3 TV5 Monde

OFCOM participated in the work of the financial commission of TV5 and in the preparation of its recommendations to senior officials with a view to optimising funding of the channel. OFCOM defended maintaining the distribution of TV5 Monde and the transition to High Definition (HD) television, believing that these are priority activities. At the same time it pointed out that TV5 Monde should find economies within the channel and increase its own revenue, even though the situation in the advertising market has become difficult. Finally, it emphasized that it was important to lay down development priorities for the channel which take into account the current financial difficulties.

Within the framework of the reform of the company *Audiovisuel extérieur de la France* (AEF), OFCOM favoured the option which fixes at 49% the share in the capital of TV5 Monde held by the company *France Télévisions*. In this way the channel will be guaranteed to maintain its status as an independent company under public law. The Office also stressed that reform of the AEF must not prejudice the independence and autonomy of the TV5 Monde channel or its multilateral character.

## 7.4 Information Society

At the UN, the preparations for the 10-year review of the implementation of the results of the World Summit on the Information Society (WSIS) held in Geneva in 2003 and Tunis in 2005 have begun. OFCOM has lobbied for a preparatory process which builds as far as possible on existing processes and on the multi-stakeholder approach. This approach references the cooperation between state and non-state participants at all levels.

Since the industrialised countries and the G77 countries are still divided on the issue of the role of governments in the governance of the Internet, Switzerland has encouraged a comprehensive consultation process within the UN and supports the establishment of a multi-stakeholder working group on this theme. In addition, OFCOM coordinated Switzerland's participation in the WSIS Forum of the ITU, UNESCO and UNCTAD (the United Nations Conference on Trade and Development) in Geneva in May 2012 and in the 7<sup>th</sup> Internet Governance Forum held in November 2012 in Baku, Azerbaijan.

In the Government Advisory Committee (GAC) of the Californian ICANN Corporation, OFCOM lobbied for further reforms by ICANN and for a strengthening of the GAC. In relation to the liberalisation of generic internet domain names (gTLDs) adopted by ICANN, which is intended to permit new internet extensions such as .bank or .paris from 2013 onward, OFCOM lobbied for appropriate consideration to be given to the public interest.

- ***ICANN see also 3.4 "Internet Domain .swiss", p. 18, 4.2 "Activities of the Information Society Business Office", p. 19, 7. "International Relations", p. 32***
- ***Information Society see also 4.1 "Key areas in the information society", p. 18, 4.2 "Activities of the Information Society Business Office", p. 19***

## 7.5 The Council of Europe (CoE)

OFCOM represented Switzerland at the meetings of the new Steering Committee on Media and Information Society (CDMSI). It was elected to the Bureau of this Committee, which is committed to advancing issues relating to the governance of public service media, the protection of freedom of expression and information in the new information and communication technologies such as the internet and online media. A representative of OFCOM was elected to the post of Vice-Chairperson of the Committee of Experts on Rights of Internet Users (MSI-DUI), whose goal is to draw up a compendium of the rights of internet users. The Office was also involved in the preparatory work for the first Council of Europe Conference of Ministers responsible for the media and the information society, a conference which will be held in Belgrade, Serbia, in October 2013. Switzerland stressed that, in its work in relation to the media and the information society, the Council of Europe focuses on its key competencies, namely human rights issues. In this way it is attempting to avoid encroaching on areas handled by other bodies within the Council of Europe (CoE) or by the European Union (EU).

## 7.6 Satellite Organisations

As an elected member of the Consultative Committee of the European Telecommunication Satellite Organisation EUTELSAT IGO, OFCOM assisted the Executive Secretariat of this organisation throughout the year in carrying out its tasks.

It also represented Switzerland at the 35<sup>th</sup> Assembly of Parties to the International Telecommunications Satellite Organisation (ITSO) in Uganda. Among other things, this meeting made it possible to extend the term of the ITSO Agreement until July 2021.

OFCOM was also mandated by the Confederation to participate in the 22<sup>nd</sup> Assembly of Parties of the International Mobile Satellite Organisation IMSO in London. In particular, the participants adopted a major reorganisation of the structure and operation of the General Secretariat of the Organisation, with the aim of significantly reducing the fees collected annually from the LRIT (Long-Range Identification and Tracking) data centres, which make it possible to monitor and identify vessels across the globe.

## 7.7 Organisation for Economic Cooperation and Development (OECD)

OFCOM also sits on the Committee on Information, Communications and Computer Policy (ICCP) of the OECD. In 2012, this body approved the Recommendation on international mobile roaming services, a text which provides for different options for drawing up agreements between two or more countries. It continued its work on revising the "OECD Guidelines on the Protection of Privacy", which since 1980 have been a key element at the global level of the harmonisation of the legal principles intended to regulate data protection. It also continued to examine "Guidelines for the Security of Information Systems and Networks." Adopted in 2002, these guidelines must be adapted to the evolution of technology and the essential future importance of the security of the infrastructure of the internet for the economy and for society as a whole. It is expected that these guidelines will be updated sometime in 2013.

## 8 Resources and organisation

Following the introduction of various electronic processes in previous years (e-Billing Out, electronic creditor workflow), in 2012 we continued working on the automation of work processes. As in the federal administration as a whole, in 2012 OFCOM introduced the electronic expenses procedure as an additional module. With this procedure, the processes associated with the settlement of travel expenses are now much simpler and more efficient. In addition, our specialists from the IT and Organisation Section, together with OFCOM's technical divisions, continued to work on the expansion of our "OFCOM Online" internet platform.

Christine Fuchs  
Head of Division

➤ *"OFCOM Online" see also 5.3 Radiocommunication licences, p. 22 § 5*

### 8.1 Finance

#### 8.1.1 Income and expenditure account

The 2012 income and expenditure account showed a **total expenditure** of CHF 84.3 million, up by CHF 0.3 million (0.4%) on the previous year. Operating expenditure accounted for 69%, transfer expenditure 28% and other expenditure 3%. The operating expenditure includes OFCOM's financial outlay on human resources and materials, the service charges of other federal agencies and the non-financially effective depreciation of fixed assets. The transfer costs include contributions to international organisations and subsidies in the radio and television sector. The other expenses include bad debt losses.

The **regular total revenue** increased by CHF 4.3 million (7.9%) compared to the previous year and amounted to CHF 58.6 million. Of this, 48% was attributed to operating revenue and 52% to revenue outside the global budget. The operating revenue corresponds to OFCOM's administrative fees. The revenue outside the global budget includes radio licence fees (these constitute the majority at CHF 27.0 million, i.e. 89%), the licence fees from the licensed radio and television stations for special financing in the radio and television sector and the revenue from violations of the law (fines and confiscated profits).

In 2012, **extraordinary revenue** of CHF 738 million was recorded; this originates from a re-allocation of mobile radio frequencies by auction. This extraordinary income was credited by the Federal Financial Administration to the amortisation account of the debt brake and thus serves to counterfinance the extraordinary expenditure in the federal budget in 2011 (CHF 2 billion: restructuring contribution to the SBB pension fund and infrastructure fund contribution). Ultimately, this revenue will not be limited to the term of the mobile radio licences awarded by auction and will be recorded in the respective years (up to 2028) on an accrual basis.

➤ *Mobile auction see also 3.2.4 "Mobile radio licences", p. 17, 6.4.2 "Mobile communication", p.30 § 1 and 8.1.1.1 "Income" p. 36*

The **regular funding requirement** according to the income and expenditure account (excluding the extraordinary income from the mobile radio auction) amounted to CHF 25.6 million and was therefore CHF 3.9 million lower than in the previous year. This is essentially attributable to the transfer costs, down by CHF 3 million, resulting from a smaller contribution to the SRG's international offering (swissinfo).

### 8.1.1.1 Income

The regular total revenue (excluding extraordinary revenue from the mobile radio auction) was CHF 4.3 million higher than in the previous year. There were surplus revenues in the operating revenue, primarily from additional administrative revenues for carrying out the auction for allocation of the mobile radio frequencies (CHF 3.7 million) and from access and interconnection procedures in the telecommunication sector concluded in the year 2012. In the case of the annual radio licence fees and licence fees from radio and television broadcasters, revenues fell, as they did in the previous year.

- *Mobile auction see also 3.2.4 "Mobile radio licences", p. 17, 6.4.2 "Mobile communication", p.30 § 1 and 8.1.1 "Income and expenditure account", p. 35, § 3*

### 8.1.1.2 Expenditure

Total expenditure increased by only CHF 0.3 million. OFCOM's operating expenditure (global budget) was a moderate CHF 0.9 million higher than in the previous year. In "other expenditure" - in the cases of bad debt losses - the difference at plus CHF 2.4 million was large compared to the previous year. It is due to a single massive loss on receivables (bankruptcy of the debtor).

In contrast to the above-mentioned expenditure items, subsidies/financial aid (expenditure outside the global budget) fell by a total of CHF 3 million. This is mainly because the contributions to the international offering of the SRG (Swissinfo, TV5 and 3Sat) were CHF 3.5 million lower than in the previous year due to savings at swissinfo.

- *Contributions to the international offering of the SRG (Swissinfo, TV5, 3Sat) see also 2.1.2 p. 10 § 2*

Contributions to international organisations (also expenditure outside the global budget) remained the same as in the previous year.

### 8.1.2 Investment account

OFCOM's capital expenditure was within the same range as in the previous year. Once again there was no revenue.

### 8.1.3 Operating account (costs and services account)

Coverage of costs at OFCOM rose by 6% to 46% compared to the previous year. This is mainly due to the additional/one-off administration revenue for carrying out the auction to allocate mobile radio frequencies, amounting to CHF 3.7 million (Equipment and Radiocommunication Division) and to revenues for access and interconnection procedures concluded in 2012 (Telecom Services Division).

### 8.1.4 Special finance, radio and television

The revenue for special finance of radio and television in 2012 exceeded costs by over CHF 1.0 million. Since the unused revenue is placed in the special fund for media research, new technologies in programme service broadcasting and archiving of programmes, this balance increased by CHF 1.0 million to CHF 8.8 million.

## Financial development in the period 2010-2012 (according to the Confederation's New Accounting Model NAM)

1. Profit and loss account (revenue, expenditure)	2010 (CHF mill.)	2011 (CHF mill.)	2012 (CHF mill.)	Change on previous year (CHF mill.)	%
<b>1.1 Ertrag</b>					
<b>Function revenue – global budget OFCOM</b>	<b>-25.2</b>	<b>-24.0</b>	<b>-28.2</b>	<b>-4.2</b>	<b>18%</b>
Administrative fees	-25.1	-23.6	-27.9	-4.3	18%
Resolution of reserves holiday/overtime credits	-0.1	-0.3	-0.2	0.1	-24%
Other revenue / (CO2 tax)	0.0	-0.1	0.0	0.0	-45%
<b>Revenue outside the global budget – regular</b>	<b>-30.7</b>	<b>-30.4</b>	<b>-30.4</b>	<b>-0.1</b>	<b>0%</b>
Radio licence fees	-26.9	-25.9	-25.9	0.0	0%
Radio licence fees (not effective on financing)	-1.1	-1.1	-1.1	0.0	0%
Revenue from administrative penalty procedures	-0.6	-0.5	-0.6	-0.1	13%
Licence fees, radio and television	-2.2	-2.8	-2.8	0.0	-1%
<b>Subtotal regular revenue</b>	<b>-56.0</b>	<b>-54.3</b>	<b>-58.6</b>	<b>-4.3</b>	<b>8%</b>
<b>Revenue outside the global budget – extraordinary</b>	<b>0.0</b>	<b>0.0</b>	<b>-738.0</b>	<b>-738.0</b>	
Revenue from re-allocation of mobile radio frequencies (Auction)	0.0	0.0	-738.0	-738.0	
<b>Total revenue</b>	<b>-56.0</b>	<b>-54.3</b>	<b>-796.6</b>	<b>-742.3</b>	

<b>1.2 Expenditure</b>	2010 (CHF mill.)	2011 (CHF mill.)	2012 (CHF mill.)	Change on previous year (CHF mill.)	%
<b>Function expenditure – global budget OFCOM</b>	<b>57.1</b>	<b>57.1</b>	<b>58.1</b>	<b>0.9</b>	<b>2%</b>
Personnel costs I (effective on financing)	40.7	41.2	41.6	0.4	1%
Personnel costs II (Confederation, cost allocation)	0.0	0.1	0.1	0.0	-17%
Material expenditure I (effective in financing)	5.6	5.9	5.7	-0.2	-3%
Material expenditure II (effective in financing – withdrawal from reserves for specific purposes)	0.5	0.5	1.1	0.6	128%
Material expenditure III (Confederation, cost allocation)	8.7	8.1	8.1	-0.1	-1%
Depreciation (not effective on financing)	1.5	1.3	1.5	0.2	18%
<b>Contributions to international organisations</b>	<b>3.8</b>	<b>3.7</b>	<b>3.7</b>	<b>0.0</b>	<b>1%</b>
Contributions to international organisations	3.8	3.7	3.7	0.0	1%
<b>Subsidies / Financial aid</b>	<b>23.5</b>	<b>22.9</b>	<b>19.9</b>	<b>-3.0</b>	<b>-13%</b>
Contribution to SRG offering for foreign countries	20.5	20.1	16.6	-3.5	-17%
Training of programme-makers	1.0	0.9	1.0	0.1	6%
Contribution to media research	1.4	1.1	1.7	0.6	59%
New broadcasting technology	0.0	0.1	0.0	-0.1	-100%
Programme archiving	0.1	0.1	0.0	-0.1	-65%
Contribution to broadcasting of programmes in mountain regions	0.5	0.6	0.6	0.0	-1%
<b>Other expenditure</b>	<b>0.2</b>	<b>0.2</b>	<b>2.6</b>	<b>2.4</b>	<b>1186%</b>
Losses on receivables (separate since 2011)	0.2	0.2	2.6	2.4	1186%
<b>Total expenditure</b>	<b>84.6</b>	<b>83.9</b>	<b>84.3</b>	<b>0.3</b>	<b>0%</b>
<b>Regular financing requirement (regular revenue + expenditure = financing requirement)</b>	<b>28.6</b>	<b>29.6</b>	<b>25.6</b>	<b>-3.9</b>	<b>-13%</b>

<b>2.2. Investment account (revenue, expenditure) (global budget OFCOM)</b>	2010 (CHF mill.)	2011 (CHF mill.)	2012 (CHF mill.)	Change on previous year (CHF mill.)	%
<b>Revenue</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0%</b>
<b>Expenditure</b>	<b>1.8</b>	<b>1.5</b>	<b>1.4</b>	<b>-0.1</b>	<b>-7%</b>
Thereof withdrawal from reserves for specific purposes	0.0	0.1	0.1	0.1	70%
<b>Balance (revenue – expenditure)</b>	<b>1.8</b>	<b>1.5</b>	<b>1.4</b>	<b>-0.1</b>	<b>-7%</b>

<b>3. Operating account (revenue, costs)</b>	2010 (CHF mill.)	2011 (CHF mill.)	2012 (CHF mill.)	Change on previous year (CHF mill.)	%
<b>Revenue (administrative fees)</b>	<b>-25.1</b>	<b>-23.6</b>	<b>-27.9</b>	<b>4.3</b>	<b>18%</b>
Costs (incl. calculated interests and insurances) until 2011 including ComCom	58.5	58.6	60.8	2.2	4%
<b>Balance (revenue + costs)</b>	<b>33.4</b>	<b>35.0</b>	<b>32.8</b>	<b>-2.2</b>	<b>-6%</b>
<b>Level of cost coverage</b>	<b>43%</b>	<b>40%</b>	<b>46%</b>		<b>6%</b>

**Table 5: Financial development in the period 2010-2012**

#### 4. Special finance, radio and television

<b>Funds for specific purposes to licence fees, radio and television broadcasters</b>	<b>2010 (CHF mill.)</b>	<b>2011 (CHF mill.)</b>	<b>2012 (CHF mill.)</b>
<b>Revenue, related to specific purposes</b>	<b>-2.2</b>	<b>-2.8</b>	<b>-2.8</b>
Licence fees, radio and television	-2.2	-2.8	-2.8
additional removal from funds for specific purposes	0.0	0.0	0.0
<b>Expenditure, specially financed</b>	<b>1.5</b>	<b>1.2</b>	<b>1.7</b>
Contribution to media research	1.4	1.0	1.7
New broadcasting technology	0.0	0.1	0.0
Programme archiving	0.1	0.1	0.0
Deposit into funds for specific purposes (end of year)	0.7	1.6	1.0
<b>Balance of funds for specific purposes (end of year)</b>	<b>6.2</b>	<b>7.8</b>	<b>8.8</b>

**Table 6: Special finance, radio and television**



## 8.2 Employees

### 8.2.1 Number of staff

On the reporting date 31.12.2012, OFCOM had 272 employees (permanent staff - excluding apprentices, trainees and ComCom).

Of the 273 employees, 100 were women (37%).

We also employ 14 apprentices.

### 8.2.2 Linguistic distribution

About 61% of OFCOM employees speak German as their mother tongue; 31% speak French and 4,5% Italian. Other languages, such as Arabic, English, Laotian, Portuguese, Russian, Spanish and Thai represent approximately 3,5%.

### 8.2.3 Average age

The average age is 48 years.

### 8.2.4 Trainees

With a rate of just over 5% of the workforce, we clearly exceed the requirements of the Confederation with regard to apprentices.

This year also, two commercial and two mediamatics apprentices were able to successfully complete their three- or four-year training with OFCOM. In addition, an electronics technician in his third year at the Physiological Institute of the University of Bern completed a high-frequency internship with us, which lasted several months.

In cooperation with the Lugano vocational college, we again conducted a practical course on high-frequency measurement technology in Gudo.

### 8.2.5 Equal opportunities

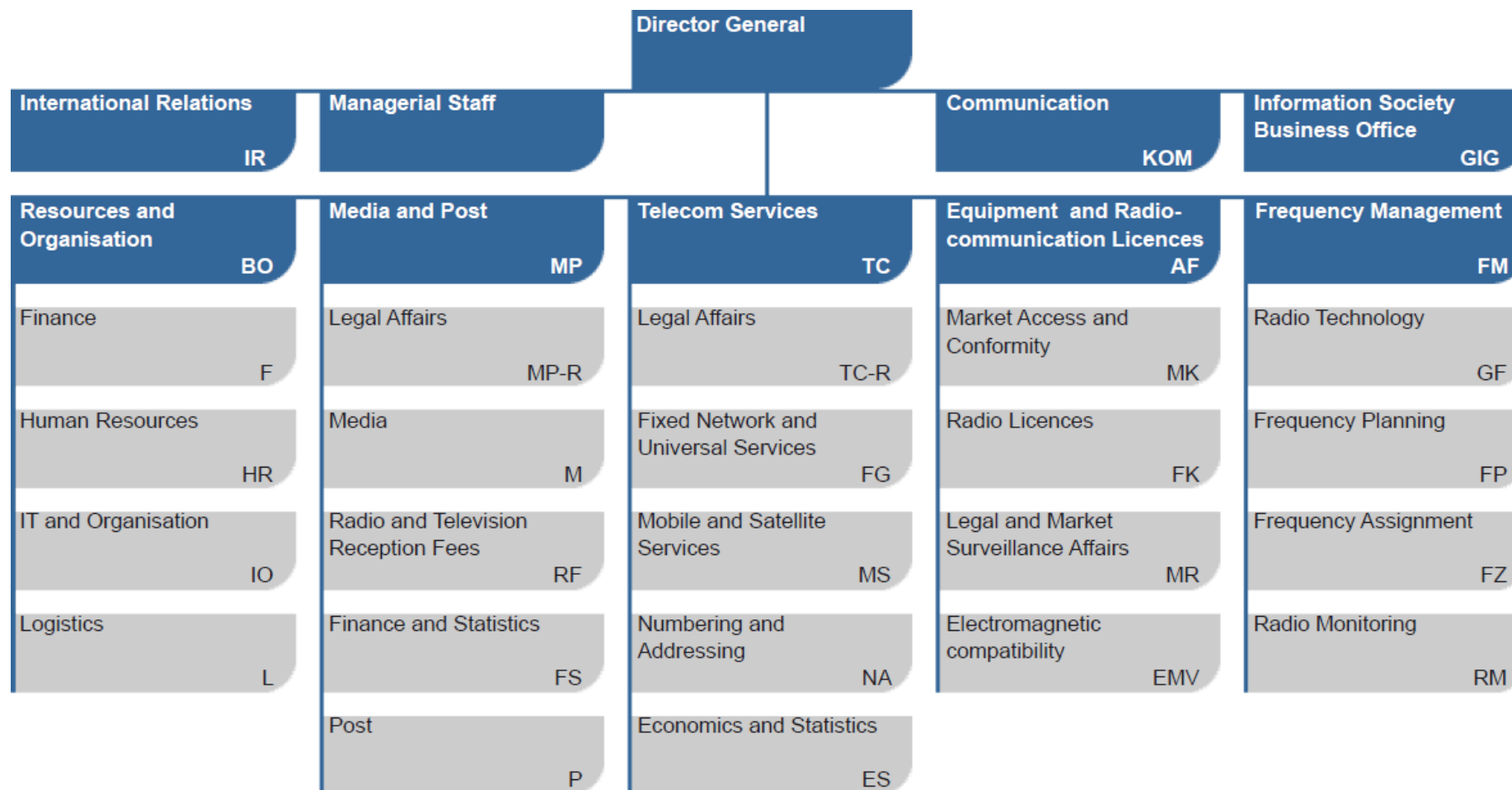
In November we received the rating relating to the balancing of family and professional life. The "UND" quality label marks us out as an undertaking which implements a progressive human resources policy and which provides good working conditions - for people with very different visions of life: families with children or dependent family members, and for other possible life models. With part-time work, job sharing, teleworking and other flexible working time models, our current and future employees have numerous possibilities of optimally balancing their private and professional lives.

OFCOM's equal opportunities commission initiated and monitored the certification process carried out by the "UND" centre. It is pleased with the success and sees the award as an incentive to continue striving in the future for good working conditions for employees.

## 8.3 Direction

The management of OFCOM consists of: the Director Dr. Martin Dumermuth, the Deputy Director and Division Head Telecom Services Philipp Metzger; the Vice-Director and Division Head Media and Post Nancy Wayland Bigler, the Vice-Director and Division Head Surveillance and Radiocommunication Licences Philippe Horisberger, the Vice-Director and Division Head Frequency Management Peter Pauli; the Division Head of Resources and Organisation Christine Fuchs; the Vice-Director and Head International Relations Service Frédéric Riehl, the Managerial Staff Head Andreas Sutter, and the Head of Communications Dr. Roberto Rivola.

## 8.4 Organisation chart



**Table 7: Organisation chart**  
December 2012

## 8.5 Managers

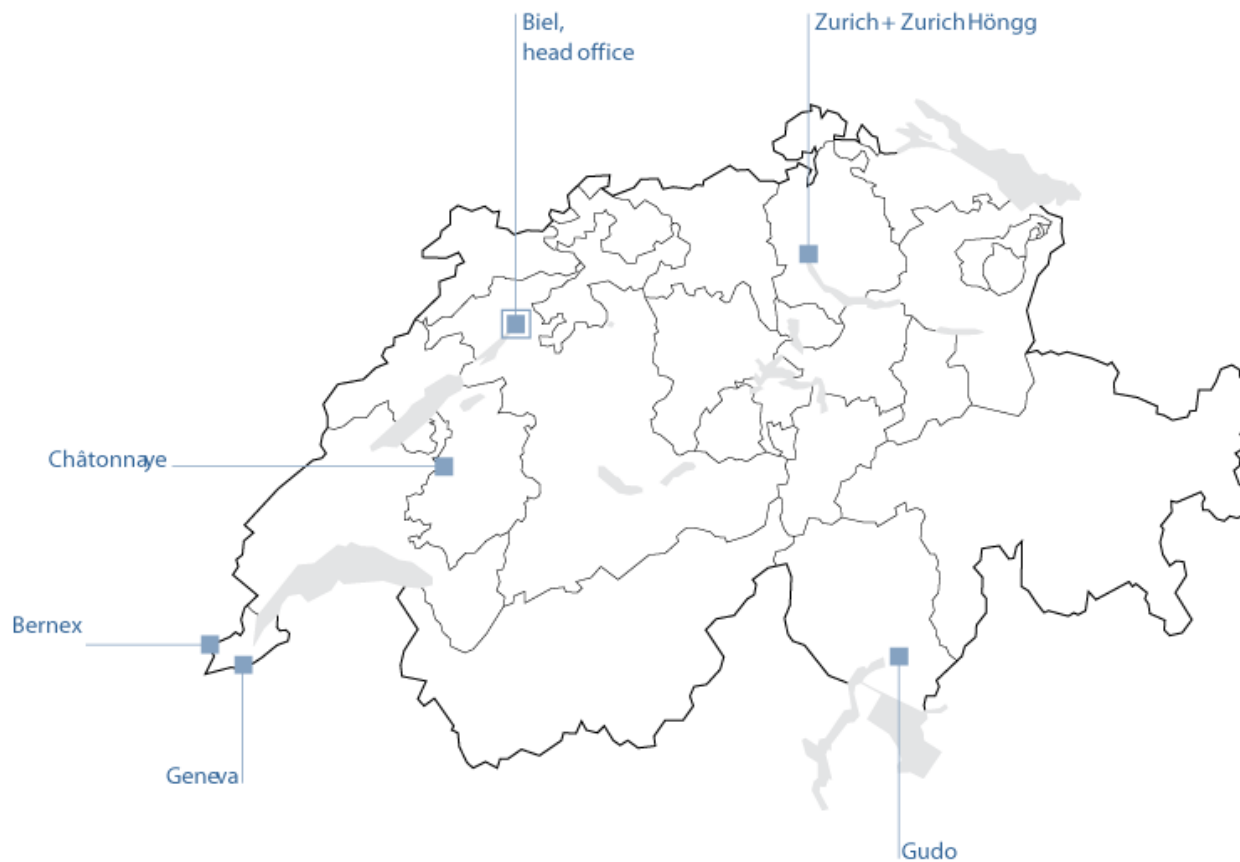
Organisational unit	Name	Telephone +41 32 327
<b>Management</b>		
General Director	Dr. Martin Dumermuth	5501
Head of Managerial Staff	Andreas Sutter	5503
Head of Communications	Dr. Roberto Rivola	5650
Deputy Director of the Information Society Business Office	Sabine Brenner	5879
International Relations Vice-Director and Head	Frédéric Riehl	5454
<b>Resources and Organisation</b>		
Head of Division	Christine Fuchs	5707
Finance	Urs Liechti	5843
Human Resources	Brigitte Müller	5514
IT and Organisation	Michel Giraudel	5529
Logistics	Peter Lendenmann	5456
<b>Media and Post</b>		
Vice-Director and Head	Nancy Wayland Bigler	5510
Legal Affairs	Susanne Marxer	5948
	Carole Winistörfer	5449
Media	Marcel Regnotto	5535
Radio- and Television Licence Fees	Daniel Büttler	5445
Finance and Statistics	Michel Grandjean	5504
Post	Katrin Nussbaumer	5460
	Annette Scherrer	5465
<b>Telecom Services</b>		
Deputy Director and Head	Philipp Metzger	5599
Legal Affairs	Annalise Eggimann	5582
Fixed Networks and Universal Services	Armin Blum	5579
Mobile and Satellite Services	Urs von Arx	5856
Numbering and Addressing	François Maurer	5576
Economics and Statistics	René Dönni	5543
<b>Equipment and Radiocommunication Licences</b>		
Vice-Director and Head	Philippe Horisberger	5411
Market Access and Conformity	Lucio Cocciantelli	5559
Radio Licences	Beat Scheidegger	5830
Legal and Market Surveillance Affairs	Olivier Pauchard	5430
Electromagnetic compatibility	Pascal Krähenbühl	5726
<b>Frequency Management</b>		
Vice-Director and Head	Peter Pauli	5700
Radio Technology	Daniel Vergères	5720
Frequency Planning	René Tschannen	5725
Frequency Assignment	Konrad Vonlanthen	5583
Radio Monitoring	Silvio Rubli	5730

**Table 8: Managers**

December 2012

## 8.6 Locations

OFCOM has support points throughout Switzerland. This enables us to exercise our regulatory function in the interest of markets which operate satisfactorily.



**Figure 10: Locations**

## 8.7 Contact

Do you want to contact us? Dial +41 32 327 55 11 (exchange),  
send a fax to +41 32 327 55 55  
or an e-mail to [info@bakom.admin.ch](mailto:info@bakom.admin.ch).

**Opening hours:** Monday – Friday / 07.30 – 12.00 and 13.30 – 17.00

### Postal address

OFCOM, P.O. Box, CH-2501 Biel/Bienne

### Web address

[www.bakom.admin.ch/index.html?lang=en](http://www.bakom.admin.ch/index.html?lang=en)

A map and directions to our location, Zukunftstrasse 44 in Biel can be found at  
[www.bakom.admin.ch](http://www.bakom.admin.ch) > OFCOM > Address or [www.bakom.admin.ch/org/adresse/index.html?lang=en](http://www.bakom.admin.ch/org/adresse/index.html?lang=en)

## List of Abbreviations

<b>ACM</b>	Adaptive modulation – a procedure in which modulation and therefore the transmitted data rate adjusts dynamically during operation.
<b>AEF</b>	L'Audiovisuel Extérieur de la France
<b>AF</b>	Division Surveillance and Radiocommunication Licences (new name since December 2012: Equipment and Radiocommunication Licences)
<b>AZ Medien</b>	Radio Medien AG
<b>BO</b>	Division Resources and Organisation of OFCOM
<b>CB</b>	Citizens' band
<b>CDMSI</b>	Steering Committee on Media and Information Society
<b>CEPT</b>	European Conference of Postal and Telecommunications Administrations
<b>CES</b>	Comité Electrotechnique Suisse
<b>Collocation</b>	Access to the main distribution frame
<b>ComCom</b>	Federal Communications Commission
<b>CRS</b>	Cognitive Radio Systems
<b>DAB</b>	Digital Audio Broadcasting
<b>DETEC</b>	Department of the Environment, Transport, Energy and Communications
<b>Digital dividend</b>	The digital dividend refers to the spectrum which is released in the process of digital television transition. When television broadcasters switch from analog platforms to digital only platforms, part of the electromagnetic spectrum that has been used for broadcasting will be freed up because digital television needs less spectrum than analog television.
<b>DSC</b>	Digital Selective Calling
<b>DSL</b>	Digital Subscriber Line
<b>FDHA</b>	Federal Department of Home Affairs
<b>EMC</b>	Electromagnetic compatibility
<b>EMF</b>	Electromagnetic Fields
<b>EMV</b>	Section Electromagnetic compatibility
<b>ENG</b>	Electronic News Gathering
<b>EPG</b>	Electronic programme guide
<b>ES</b>	Section Economics and Statistics of OFCOM
<b>EU</b>	European Union
<b>EUTELSAT</b>	European Telecommunications Satellite Organisation
<b>F</b>	Section Finance of OFCOM
<b>TIO</b>	Ordinance on Telecommunications Installations
<b>FG</b>	Section Fixed Network and Universal Service of OFCOM
<b>FK</b>	Section Radio Licences of OFCOM
<b>FM</b>	Division Frequency Management of OFCOM
<b>FP</b>	Section Frequency Planning of OFCOM
<b>FS</b>	Section Finance and Statistics of OFCOM
<b>FSO</b>	Federal Statistical Office
<b>FZ</b>	Section Frequency Assignment of OFCOM
<b>G77</b>	The Group of 77 at the United Nations is a loose coalition of developing nations, designed to promote its members' collective economic interests and create an enhanced joint negotiating capacity in the United Nations.
<b>GAC</b>	Governmental Advisory Committee of the Californian ICANN Organisation
<b>GALILEO</b>	Is a global navigation satellite system (GNSS) currently being built by the European Union und European Space Agency.
<b>GF</b>	Section Radio Technology of OFCOM

<b>GIG</b>	Information Society Business Office of OFCOM
<b>GPR</b>	Ground Probing Radar
<b>GPS</b>	Global Positioning System
<b>GSM-R</b>	Global System for Mobile Communications - Rail(way)
<b>gTLDs</b>	Generic internet domain names
<b>HD</b>	High Definition television
<b>HR</b>	Section Human Resources of OFCOM
<b>ICANN</b>	Internet Corporation for Assigned Names and Numbers
<b>ICCP</b>	Committee for Information, Computer and Communications Policy
<b>ICT</b>	Information and communication technologies
<b>IFN</b>	New instruments for the award and use of frequencies
<b>IGO</b>	Intergovernmental Organisation
<b>IMSO</b>	International Mobile Satellite Organisation
<b>IO</b>	Section IT and Organisation of OFCOM
<b>IR</b>	Service International Relations of OFCOM
<b>ITR</b>	International Telecommunication Regulations
<b>ITSO</b>	International Telecommunications Satellite Organisation
<b>ITU</b>	International Telecommunication Union
<b>JTG</b>	Joint Task Group
<b>KOM</b>	Service Communications of OFCOM
<b>L</b>	Section Logistics of OFCOM
<b>LED</b>	light-emitting diode
<b>LRC</b>	Long Range Certificate
<b>LRIT</b>	Long range identification and tracking
<b>LTE</b>	Long Term Evolution is a standard for wireless communication of high-speed data for mobile phones and data terminals. It is based on the GSM/EDGE and UMTS/HSPA network technologies, increasing the capacity and speed using a different radio interface together with core network improvements.
<b>M</b>	Section Media of OFCOM
<b>METAS</b>	The national metrology institute
<b>MiMo</b>	A technology, which is otherwise used in mobile communications to increase transmission rates
<b>MK</b>	Section Market Access and Conformity of OFCOM
<b>MP</b>	Division Media and Post of OFCOM
<b>MP-R</b>	Section Legal Affairs of division Media and Post of OFCOM
<b>MR</b>	Section Legal and Market Surveillance Affairs of OFCOM
<b>MS</b>	Section Mobile and Satellite Services of OFCOM
<b>MSI-DUI</b>	Committee of Experts on Rights of Internet Users
<b>NA</b>	Section Numbering and Addressing of OFCOM
<b>NAM</b>	Confederation's New Accounting Model
<b>NFAP</b>	Swiss National Frequency Allocation Plan
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OECM</b>	Ordinance of Electromagnetic Compatibility
<b>OFCOM</b>	Federal Office of Communications
<b>OPNIR</b>	Ordinance on Protection from Non-Ionising Radiation
<b>P</b>	Section Post of OFCOM
<b>PMR</b>	Private Mobile Radio

<b>POLYCOM</b>	The national radio system of the authorities and organizations responsible for rescue and safety.
<b>PostCom</b>	Regulatory authority of the postal market
<b>Pseudolites</b>	pseudo-satellites are terrestrial transmitters which emit signals similar to satellite navigation signals and which can be used for determining positions inside buildings or in topographically difficult terrain.
<b>R&amp;TTE</b>	Directive Radio & Terminal Telecommunication Equipment
<b>RA</b>	Radiocommunication Assembly
<b>RF</b>	Section Radio and Television reception fees of OFCOM
<b>RIR</b>	Radio Interface Regulations
<b>RM</b>	Section Radio Monitoring of OFCOM
<b>RTVA</b>	Radio and Television Act
<b>RTVO</b>	Radio and Television Ordinance
<b>SEC</b>	Swiss Electrotechnical Committee
<b>Slamming</b>	Unwanted preselection
<b>SMC</b>	SwissMediaCast AG
<b>Spamming</b>	Unlawful mass advertising
<b>SRC</b>	Short Range Certificate
<b>SRDs</b>	Short Range Devices
<b>SRG SSR</b>	Swiss Radio and Television Association
<b>TC</b>	Division Telecom Services of OFCOM
<b>TC-R</b>	Section Legal Affairs of the division Telecom Services of OFCOM
<b>TCS</b>	Touring Club of Switzerland
<b>TK CISPR</b>	Technical Committee of the Special international committee on radio interference
<b>TV5 Monde</b>	Is a global television network, broadcasting several channels of French language programming. It is an approved participant member of the European Broadcasting Union.
<b>UMTS</b>	Universal Mobile Telecommunications System
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UND</b>	A label that awards organisations that implement measures to optimize the compatibility of family and working life and equality of women and men successfully.
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNO</b>	United Nations Organisation
<b>VDSL</b>	Very High Speed Digital Subscriber Line
<b>WCIT</b>	World Conference on International Telecommunications
<b>WPR</b>	Wall Probing Radar
<b>WRC</b>	World Radio Communication
<b>WSIS</b>	World Information Society
<b>WTSA</b>	World Telecommunication Standardization Assembly