

COMMUNICATIONS REPORT

2020

Austrian Regulatory Authority for Broadcasting and Telecommunications
(Rundfunk und Telekom Regulierungs-GmbH)
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Preface

Dear Reader!

Coronavirus. Overnight last year, the coronavirus pandemic turned our daily lives upside down. Nothing was left untouched. Virtual space became the destination of every conceivable activity, whether public or private, involving old or young. In meeting the many new day-to-day challenges, be it at work or at home, media-based services as well as postal and telecommunications services were soon being recognised as systemically relevant mainstays that bridge the gap between real space and virtual space. KommAustria, the PCK, the TKK and RTR have a regulatory mandate for such services.

We too spent most of 2020 working in virtual space. This edition of the Communications Report is a testimony to our success in fully meeting our responsibilities during the 'coronavirus year' – with great commitment, despite working conditions being completely altered. It serves to document our regulatory activities in compliance with the statutory reporting requirements set out in the KommAustria Act (KOG) and the Telecommunications Act (TKG 2003). The Communications Report additionally provides insight into changes in the markets falling under our regulatory mandate. And it gives some indication of the substantive issues that we grappled with alongside regulatory activities during the year covered by the report.

In meeting our wide spectrum of responsibilities, it always has been and will continue to be our foremost concern to ensure a high degree of transparency, based on objectivity, on a commitment to quality and on service orientation. Just a few examples here include our highly comprehensive website, which was relaunched last year, as well as our communication activities via social media and our numerous studies and reports.

We hope that this Communications Report will make interesting reading for you.

Vienna,
June 2021

Mag. Michael Ogris

*Chairperson
KommAustria*

Mag. Oliver Stribl

*Managing Director
Media Division
RTR*

Mag. Nikolaus Schaller

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*Managing Director
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RTR*

A look back on 2020. A look ahead to 2021.

The 2020 Communications Report reviews an unusually challenging year. During the first six months, many of us thought – or at least hoped – that the exceptional circumstances would be over by year’s end. The beginning of the first lockdown in Austria on 16 March 2020 was a turning point for us all. Once again, we became keenly aware of our vulnerability as human beings and the fragility of our economy. Our sector, the media, was also deeply shaken, with some areas suffering stronger disruption than others. Yet these exceptional circumstances also showed us once again how flexible, tenacious and resilient we can be, as individuals and as a community.

Various support packages were put together for the media sector, and we at RTR Media and KommAustria were tasked with managing the funds, processing requests and paying out assistance to the businesses under our oversight with as much flexibility and as little red tape as possible. In the case of grant funding from the Austrian Television Fund, we acted swiftly when the first lockdown brought all production activities to a sudden halt in March 2020, utilising our decision-making discretion to the full to help production companies in particular bridge budget gaps in the first half of the year.

Our ability to respond and act so quickly was largely due to the digitalisation initiative that we started back in 2019 and accelerated in 2020, which has helped us to significantly streamline our administrative workflows. Any proposal, enquiry or request can now be submitted and processed entirely electronically at any time of day with the help of highly efficient processes that avoid the need to repeatedly enter basic information.

We also made excellent progress on our new website in 2020 and went live shortly before the end of the year. Thanks to its focus on an intuitive design and menu system, our new site facilitates communication with the people and businesses for whom we are responsible, and helps them easily identify all the services we offer. We will continue on a similar path in 2021, as we now face new, important tasks and challenges that have arisen as a result of the legislation applying to media businesses and us as regulator that was passed shortly before the end of 2020. Areas where improvements still need to be made include the accessibility of audiovisual media services, the protection of children and young people from harmful advertising, and the coordination of media literacy programmes. But we are also concerned with combating disinformation, and with advancing the privacy and rights of users when they use communications and video-sharing platforms. To meet these goals, we are putting together a team and designing web services to ensure that those seeking information and assistance will benefit from ready access to our new service and support platforms.



Mag. Oliver Stribl

*Managing Director
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A look back on 2020. A look ahead to 2021.

As you page through our new 2020 Communications Report, what comes to mind in particular? A year like none other before? A year when a decade of digitalisation seems to have taken place at lightning speed in the short space of twelve months? A year that proved to be a stress test for our communications networks, while demanding virtually superhuman performance from our postal services and their employees? A year when working from home and online schooling unexpectedly became the norm for schoolchildren, their parents and teachers? I could ask many similar questions, but the common insight underlying them all is this: we have since become dependent on a network infrastructure that must be high-capacity and secure, more than many are aware or perhaps would like. This said, I would like to share a few thoughts on network infrastructure and network security, and the related topic of data security, from the perspective of the regulator responsible for information and communications technologies. I wish to make clear that – despite the hype surrounding digitalisation – we need to remember that technology does not just make our lives easier but can also make us more vulnerable. Regulators today must therefore not merely take steps to stimulate competition and so help us all to greater prosperity. They also need to create and enforce market conditions that encourage investments in infrastructure and, specifically, in infrastructure security.

Particularly in the context of market conditions, security plays a role in two respects. Investors are primarily interested in investment security. Solid regulatory decisions that serve as a basis for general trust are a major factor here, in addition to legislative continuity and investor-friendly rules that enable reliable planning. Investment security becomes disproportionately significant when large amounts of capital are involved, as is the case with telecommunications infrastructure. Anyone investing in optical fibre cables or mobile networks has to be sure of a return on investment in the long run. Unlike other sectors, where production sites are simply relocated in the face of adverse market conditions, telecoms face greater difficulties: cable networks cannot simply be dug up overnight. The issue here is not how tough or lenient regulation is but whether it is transparent and predictable.

Besides the central aspect of investment security, another issue in this context is the physical security of networks. Every day offers new proof of just how vulnerable we are. I only need to point to a recent case in the United States, where a pipeline hack caused fuel shortages at filling stations across the country. Or the cyber attack on the Irish health system that paralysed many hospitals.

Such examples clearly show how attacks on communications infrastructure have both immediate impacts with unforeseeable repercussions in many cases, as well as numerous side-effects, potentially leading to a general state of chaos. And we shrink from imagining the further consequences.

The motives behind such attacks can clearly be both numerous and varied. Potential reasons for attacking communications infrastructure range from ‘practical jokes’ to expose the vulnerabilities of (highly) complex systems or a simple interest in monetary gain to geostrategic objectives bordering on cyber warfare.

Often, the goal is to capture data as a direct or indirect way of making money. Health records in particular are a prized target, with the dark net offering abundant marketplaces for such data. Our traditional understanding of data privacy is not equal to the task of countering these abuses. Instead, we need to take preventive action with technology. Data, regardless of the type, can only be protected by securing the paths along which this information is transported. Modern-day network hackers are in principle no different from the highwaymen of the Middle Ages who waylaid unprotected travellers along unguarded roads.

Keeping this image in mind to underscore the importance of network security for our modern society: well-illuminated and properly paved roads are safe, making them unattractive for robbers, while travellers can use them confidently in expectation of safely reaching their destinations. The same applies to the internet and everything we do with it. Innovation presupposes security, and a smooth-running business needs a secure infrastructure as well as a clear road ahead – meaning sufficient capacity.

Indirectly, this is also tremendously important for many business models in the postal sector: relying increasingly on e-commerce and associated, innovative digital services, such businesses have also come to be regarded as part of our critical digital infrastructure.

To ensure Austria's continued economic success and appeal to businesses, two major requirements must be met, namely further infrastructural development and security, both for investors and in relation to physical infrastructure security. We at TKK, PCK and RTR have a major part to play here, and we look forward to meeting our responsibilities. The new Telecommunications Act (TKG) in particular is designed as a solid legal basis to enable us to meet these challenges while setting new regulatory standards.

To continue to effectively regulate the sectors under our supervision, we are called upon to broaden our scope. More than ever before, this means that conversations and collaborations with the regulatory authorities responsible for other sectors will play an important role in our efforts, providing a basis for sound decision-making that encourages investments and helps to safeguard our networks. Just how important this is, we can securely say after our experience in 2020.



Dr. Klaus M. Steinmaurer

*Managing Director
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RTR and the regulatory authorities

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01 RTR and the regulatory authorities

1.1 Our company: we stand for competition and media diversity

The Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) is wholly owned by the Republic of Austria. RTR's core mandate is to promote competition in the broadcasting, telecommunications and postal markets as well as to achieve the goals set out in the KommAustria Act and the Telecommunications Act. RTR is headed by two managing directors and structured into two specialist divisions: the Media Division, and the Telecommunications and Postal Services Division. RTR also serves as an administrative agency, providing support to the Austrian Communications Authority (KommAustria), the Telekom-Control-Kommission (TKK) and the Post-Control-Kommission (PCK). With the funds under its administration, RTR supports projects in the broadcasting and media sectors. The two specialist divisions within RTR additionally offer alternative dispute resolution services, also via RTR's officially recognised consumer arbitration centres.

In the 2020 reporting year, Oliver Stribl headed the Media Division and Klaus M. Steinmaurer was the Managing Director of the Telecommunications and Postal Services Division.

As a public corporation, RTR follows the requirements of the 2017 Federal Public Corporate Governance Code, which takes into account the special responsibility and duty to exercise the diligence that state-owned and state-affiliated businesses – as owners of state property – owe towards such property and thus towards the public. The RTR Corporate Governance Report is published (in German) on the RTR website at www.rtr.at/de/rtr/Aufsichtsrat.

Further information on RTR can be viewed at www.rtr.at.

RTR staff members: subject specialists in their areas of expertise

The figure below shows the relative proportion of personnel assigned to the two specialist divisions and the service area.

Figure 01: Service departments, media division and telecommunications and postal services division, average FTEs in 2020



As shown in the table below, staff size in 2020 remained virtually the same compared with previous years. Minor fluctuations are to be largely attributed to cases of parental leave and to changes in employees' working hours (for instance due to part-time work for parents).

Table 01: RTR STAFF SIZE 2018–2020

Average staff levels (FTEs)	2018	2019	2020
Telecommunications and Postal Services Division	53.675	54.629	55.721
Media Division	31.277	29.758	30.744
Service	17.246	16.996	17.354
Total RTR	102.198	101.383	103.819

RTR during the COVID-19 pandemic: our digitalisation strategy proved effective

When the first lockdown began on 16 March 2020, RTR along with the authorities KommAustria, Post-Control-Kommission (PCK) and Telekom-Control-Kommission (TKK) switched to working from home – to protect our customers, business partners and staff, as well as to support general efforts by society to contain the spread of the new form of coronavirus.

The need to move completely to working from home, while coming as something of a surprise, did not catch us unprepared at RTR. Thanks to the IT investments in staff mobility that RTR had made in previous years as part of the digitalisation project, all staff members already had the necessary technical equipment for working from home: their own notebooks including VPN access, internet-based phone service to allow calls to all employees at their normal extensions, even from the outside, and a video conferencing tool. This allowed RTR to provide customers with the full scope of services from day one of the lockdown.

The situation also revealed how well we at RTR were equipped to deal with taking care of official procedures, as a result of our digitalisation strategy and ongoing efforts to expand the eRTR e-government portal. The digital contact platform eingabe.rtr.at has been available since 2019, facilitating the legally compliant submission of any type of document to the KommAustria, PCK and TKK regulatory authorities as well as to RTR. In this way, even during the 'coronavirus year', we were able to handle each and every type of submission or request, as well as complaints, enquiries and other types of customer contact, digitally and without restriction.

Internal COVID management: we protect ourselves and others

At RTR, all of the action taken in view of the COVID-19 situation was based on the motto: we protect ourselves and others. A COVID crisis team was set up to coordinate all necessary activities, including the accompanying communication.

Staff members worked from home during lockdown periods, while strict on-site duty schedules applied in between lockdowns for departments and teams. Meetings with participants from Austria or from other countries were mostly held online.

Focus activities within services: progress in the digitalisation of financial services and the restructuring of the TKP Division

In the reporting year, the entire financial services department (including controlling and accounting) was migrated to new business software (ERP tool) supporting all processes within one digital system. Whereas the legacy system was still operated in parallel during the year under review, the following year's budgeting was done using the new software.

To permanently embed the underlying principles of our AGILE regulation strategy, a new organisational structure was developed in the framework of a project taking into account all staff members of the Telecommunications and Postal Services (TKP) Division. As of 1 October in the reporting year, this division has three departments, each consisting of several teams of experts. In response to the restructuring, it was necessary to reallocate human resources as well as to adjust employment agreements accordingly and reorganise our system of cost centres.

RTR as an expert organisation: focus on digital knowledge sharing

The expertise of all staff members is the defining quality of our work as a regulatory authority. Staff development – both in a personal and professional capacity – is therefore a subject of particular importance at RTR. Opportunities for training and education were narrowly limited as a result of the measures taken to counteract COVID-19. Nonetheless, staff members completed a total of 121 days of training or education during the reporting year, equating to 1.2 days per person.

Digital communication dominated internal processes, with meetings taking place via video and information for staff members posted to a virtual notice board.

Job training for new employees proved especially challenging during the coronavirus year, and training in some cases had to be provided via video call. Despite the special circumstances, two interns had the opportunity to experience working at RTR first-hand in the summer months.

A wide spectrum of IT projects

A key project within RTR's digitalisation drive was to rebuild the RTR website. Besides a new design and structure, this mainly involved migrating to a new CMS, implementing new communications software for distributing newsletters and managing mailing lists, and, most of all, linking frontend applications with the underlying backend software solutions.

The IT team provided the Telecommunications and Postal Services Division with technical support in conducting the second 5G spectrum award, ensuring a smooth online auction process while complying with the highest security standards.

In addition to managing regular grants, the Media Division administered special COVID aid to subsidise the press and journalism and for private and non-commercial broadcasting. Here, converting to digital processes also proved an advantage. In addition, a complete digital workflow solution was implemented for the broadcasting funds to cover the entire funding process. The solution is to be extended to all of the funds in the coming award periods.

Health promotion in the coronavirus year

The pandemic also had a major impact on efforts to promote employee health. Planned sports events unfortunately had to be cancelled. RTR nonetheless participated in the Vienna Business Challenge, in which companies compete by tallying all of their employees' exercise minutes. RTR took first place within group 4 (businesses with 50–250 employees) and ranked fifteenth overall.

RTR's occupational physician was predominantly active in anti-COVID-19 efforts, while also administering regular annual vaccinations and providing related advice.

Equality at RTR

Following revision in 2019, the new equality policy was signed by the managing directors and the equal opportunities officer in early January 2020. The policy can be viewed (in German) on the RTR website at https://www.rtr.at/rtr/wer_wir_sind/Arbeiten_in_der_RTR/Gleichstellung/Gleichstellung.de.html.

As in many other areas, efforts to ensure equality at RTR were highly impacted in 2020 by the COVID pandemic. Activities were largely limited to providing counselling on equality issues and appropriately gendered wording. Planned training events had to be cancelled.

1.2 RTR's financial statements for 2020

The external auditors at Confida Wirtschaftstreuhandges mbH have issued an unqualified audit certificate confirming RTR's financial statements for the 2020 business year (1 January to 31 December 2020). The financial statements presented below were prepared in accordance with the Austrian Commercial Code (UGB) as amended.

The profit and loss account and balance sheet, as shown in RTR's financial statements, are presented below. Funding for the Regulatory Authority for Broadcasting and Telecommunications (RTR) derives from different sources depending on the areas of activity in question. Market participants are required by law to assume a portion of financing, while public funding is also tapped. The financial contribution is calculated based on each entity's estimated revenues in relation to total sector revenues. Once the actual revenues have been determined, the actual financial contributions are calculated and compared with the estimated financial contributions. To simplify administration, entities falling below a certain revenue limit, or threshold, are not required to pay financial contributions.

In 2020 RTR received federal funds amounting to EUR 1.693 million to finance media regulation; the share of funding provided by the market was 61.17 per cent, equivalent to EUR 2.667 million. Public funds totalling EUR 2.741 million were awarded for the regulation of the telecoms market; market participants contributed EUR 4.964 million, which corresponds to 64.43%. For postal service regulation, EUR 0.229 million was allocated from the federal budget, with the remaining expenditure, amounting to EUR 0.376 million or 62.21 per cent of the total, contributed by market participants.

The funds (Digitisation Fund, Austrian Television Fund, Private Broadcasting Fund and the Non-Commercial Broadcasting Fund), compensation for necessary spectrum changes (Articles 33a et seq. KommAustria Act, KOG) and the supervisory body for trust services are publicly funded.

More information is available at www.rtr.at.

RTR closed the business year running from 1 January to 31 December 2020 with a balanced result.

Table 02: Profit and loss account for the 2020 business year (1 January to 31 December 2020)

	2020 in EUR		2019 in EUR thousands	
1. Net income	14,272,589.83		13,811	
2. Other operating income				
a) Income from the disposal of fixed assets (excluding financial assets)	166.67		3	
b) Income from the release of provisions	8,720.14		20	
c) Other	<u>973,891.41</u>	982,778.22	<u>1,361</u>	1,384
3. Personnel expenses				
a) Salaries	-7,887,289.34		-7,604	
b) Social expenses				
ba) Pension insurance expenses	-258,040.22		-251	
bb) Severance pay expenses and contributions to staff provision funds	-117,108.42		-105	
bc) Statutory social insurance contributions as well as payroll-related fees and mandatory contributions	-1,914,724.57		-1,864	
bd) Other	<u>-94,043.83</u>	-10,271,206.38	<u>-107</u>	-9,931
4. Amortisation and write-downs of intangible assets, depreciation and write-downs of tangible assets				
a) Depreciation, amortisation and write-downs	-549,695.43		-480	
b) Release of investment grants	115,166.36	-434,529.07	109	-371
5. Other operating expenses				
a) Other	-4,552,389.86		-4,906	
b) expense subsidy	0,00	<u>-4,552,389.86</u>		<u>-4,906</u>
6. Subtotal of Items 1 to 5	<u>-2,757.26</u>		<u>-13</u>	
7. Income from other securities held as long-term investments	32,181.18		21	
8. Other interest and similar income	148.02		6	
9. Income from the disposal of and additions to financial assets	0,00		6	
10. Expenses for financial assets				
Impairment	-3,700.00		-4	
11. Subtotal of Items 7 to 10	-605.00		<u>0</u>	
12. Result before taxes	<u>28,024.20</u>		<u>29</u>	
13. Taxes on income	25,266.94		16	
14. Result after taxes / net annual income	<u>-24,736.21</u>		<u>-7</u>	
15. Release of profit reserves	530.73		9	
16. Appropriation to profit reserves	0.00		0	
17. Profit carried forward				
Appropriation to free reserves	-530.73		-9	
18. Profit carrier forward	0.00		0	
19. Net result	<u>0.00</u>		<u>0</u>	

Sector-specific expenditure in RTR's specialist divisions

In the annual financial statements submitted by RTR, funding use is not reported by division. Table 03 therefore provides a breakdown of the main items listed in RTR's profit and loss accounts for the Telecommunications and Postal Services Division and the Media Division (as specified in Art. 19 Par. 3 no. 3 KOG).

Table 03: RTR's income and expenses by division

In EUR thousands	Telecommunications and Postal Services	Media	Total
Net income	8,443	5,830	14,273
Other operating income	264	718	982
Personell expenditure	-6,739	-3,532	-10,271
Depreciation, amortisation and write-downs	-290	-144	-434
Other operating expenses	-1,675	-2,878	-4,553
Operating result	3	-6	-3
Financial result	17	11	28
Result before taxes	20	5	25
Taxes on income	-14	-9	-23
Result after taxes / net annual income	6	-4	2
Release of profit reserves	-6	4	-2
Profit carried forward	0	0	0
Net result	0	0	0

RTR's income and expenses for the individual areas of activity within each division are presented in the annex to the annual accounts as at 31 December 2020 as adopted by the general assembly. The individual areas within the Telecommunications and Postal Services Division are: telecoms regulation, supervisory body for trust services, and postal services regulation. The areas within the Media Division are: media regulation, compensation for necessary spectrum changes (Art. 33a KOG), Digitisation Fund, Austrian Television Fund and broadcasting funds (refer to www.rtr.at).

Table 04: Balance sheet as at 31 December 2020 – assets

	2020-12-31 in EUR		2019-12-31 in EUR thousands	
A. Fixed assets				
I. Intangible assets				
1. Industrial property and similar rights	976,727.97		591	
2. Prepayments	<u>24,500.00</u>	1,001,227.97	<u>146</u>	737
II. Tangible assets				
1. Buildings on third-party land	204,572.29		287	
2. Other equipment, operating and office equipment	<u>404,875.58</u>	609,447.87	<u>474</u>	761
III. Financial assets				
Long-term securities		<u>2,933,708.16</u>		<u>2,937</u>
		<u>4,544,384.00</u>		<u>4,435</u>
B. Current assets				
I. Receivables and other assets				
1. Trade receivables	453,490.56		1,468	
(Thereof with a maturity >1 year EUR 0 thousand; previous year: EUR 0 thousand)				
2. Other receivables and assets	<u>37,439.94</u>	490,930.50	<u>984</u>	2,452
(Thereof with a maturity >1 year EUR 0.00; previous year: EUR 0.00)				
II. Cash at bank and in hand		<u>3,156,643.02</u>		<u>1,654</u>
		<u>3,647,573.52</u>		<u>4,106</u>
C. Prepaid expenses		<u>157,302.50</u>		<u>137</u>
D. Trustee accounts – funds		<u>27,221,305.09</u>		<u>22,256</u>
		<u>35,570,565.11</u>		<u>30,934</u>

Table 05: Balance sheet as at 31 December 2020 – liabilities

	2020-12-31 in EUR		2019-12-31 in EUR thousands	
A. Equity capital				
I. Called-up and paid-in nominal capital	3,633,641.71		3,634	
II. Capital reserves				
Appropriated	1,924.59		2	
III. Profit reserves				
Other reserves / free reserves	41,900.98		41	
IV. Net result	0,00		0	
Thereof profit carried forward (previous year: EUR 0 thousand)	0,00	3,677,467.28	0	3,677
B. Special item: investment grant		124,988.07		240
C. Provisions				
1. Provisions for severance pay	146,500.00		137	
2. Other provisions	1,527,481.00	1,673,981.00	1,454	1,591
D. Liabilities				
1. Trade payables (Thereof with a maturity <1 year EUR 1,082,305.94; previous year: EUR 1,188 thousand; thereof with a maturity >1 year EUR 0 thousand; previous year: EUR 0 thousand)	1,082,305.94		1,188	
2. Other liabilities (Thereof with a maturity <1 year EUR 1,740,226.14; previous year: EUR 1,842 thousand; thereof with a maturity >1 year EUR 0 thousand; previous year: EUR 0 thousand; thereof from taxes EUR 443,169.25; previous year: EUR 340 thousand; thereof from social security obligations EUR 185,852.76; previous year: EUR 189 thousand)	1,740,226.14	2,822,532.08	1,842	3,030
E. Deferred income		27,271,596.68		22,396
		35,570,565.11		30,934

1.3 National regulatory authorities KommAustria, TKK and PCK

One of RTR's main responsibilities is to serve as the administrative agency for the national regulatory authorities KommAustria, TKK and PCK, introduced briefly below.

Austrian Communications Authority (KommAustria)

The Austrian Telecommunications Authority (KommAustria) is Austria's independent and autonomous regulatory and supervisory authority with responsibility for electronic audio and audiovisual media. In fulfilling every facet of its remit, the authority is supported by the RTR Media Division.

KommAustria consists of five members who are nominated by the federal government and appointed by the Austrian president for a term of six years. The members of KommAustria are independent in the performance of their duties and not bound by instructions from any other authority. Michael Ogris held the role of chair for KommAustria during the reporting year and Susanne Lackner served as deputy chair.

Details on KommAustria, including rules of procedure and distribution of duties, are published (in German) at https://www.rtr.at/medien/wer_wir_sind/KommAustria/KommAustria.de.html.

Telekom-Control-Kommission (TKK) and Post-Control-Kommission (PCK)

The TKK is responsible for regulating the telecommunications market in Austria. The PCK is the regulator for the postal services market. The two regulatory authorities are assisted by the experts at RTR's Telecommunications and Postal Services Division.

The TKK and PCK each comprise three primary members and three substitute members who act independently and autonomously. Each member is appointed by the federal government for a term of five years. During the year under review, Nikolaus Schaller, justice at the Vienna Regional Court (Oberlandesgericht), held the position of chair. Elfriede Solé, senior official with the Austrian Supreme Court of Justice, served as deputy chair.

Details on the TKK and the PCK are published (in German) at https://www.rtr.at/TKP/wer_wir_sind/tkk/TKK.de.html and https://www.rtr.at/TKP/wer_wir_sind/pck/startseite.de.html.



Regulatory activities of KommAustria

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02 Regulatory activities of KommAustria

The Austrian Communications Authority (KommAustria) is responsible for administrative and regulatory duties in the field of electronic audio media and electronic audiovisual media. Its mandate entails a broad spectrum that ranges from regulation of market access for content services as well as general and specific monitoring of compliance with statutory provisions, while additionally includes infrastructure regulation, and press and journalism subsidies. It is responsible both for providers under private law (broadcasters, media service providers and communications network operators) and the Austrian Broadcasting Corporation (ORF) and its subsidiaries.

KommAustria decisions are published (in German) on the RTR website at www.rtr.at/de/m/EntscheidungenGesamtRF.

2.1 Access to media markets

KommAustria regulates access to media markets through assigning broadcasting frequencies, issuing broadcasting licences, accepting and reviewing notifications from cable broadcasters and other providers of audiovisual media services, and through reviewing new services prior to launch by the ORF or its subsidiaries. This work also includes the issuing of multiplex licences for radio and television broadcasters.

2.1.1 Private radio broadcasting licences

The licensing procedures conducted by KommAustria during the period under review involved processing applications for creating new or expanding existing coverage areas, as well as officially tendering licences after expiry at the end of the legal term. Furthermore, numerous licences were also granted for radio event broadcasting and educational broadcasting.

Nationwide radio broadcasting

Since December 2014, KRONEHIT Radio BetriebsgmbH. has held a renewed, ten-year licence authorising private terrestrial broadcasting throughout Austria. The network broadcasts KRONEHIT, an adult contemporary radio format, in vast parts of the country.

KRONEHIT Radio BetriebsgmbH had consequently been assigned a total of 167 frequencies as of the end of this reporting period. Also during the reporting period, KRONEHIT Radio BetriebsgmbH. requested six changes to broadcasting equipment, subsequently approved by KommAustria.

An additional nationwide licence was awarded in early 2019, to Antenne "Österreich" and Medieninnovationen GmbH (now Radio Austria GmbH). Under this licence, the Radio Austria network has been on air since November 2019.

Once in receipt of the licence, Radio Austria GmbH was assigned 48 frequencies, potentially allowing coverage of 61 per cent of the resident population. In the course of 2020, this licence was awarded 14 further frequencies as well as additional single-frequency broadcasting facilities to expand and improve coverage, while five procedures for awarding further transmission capacities were still pending at the end of the reporting period.

Regional and local radio broadcasting

In the local and regional terrestrial broadcasting sector, a total of 22 procedures were carried out in 2020, 18 of which were still pending at the end of the reporting period.

In this context, licences were issued as follows, pending finalisation: Radio Event GmbH was assigned a licence for a radio station for the coverage area 'WIEN 104.6 MHz', Welle 1 Graz Der Rocksender GmbH was assigned a radio licence for the coverage area 'Graz 104.6 MHz', and the association Radio Maria Österreich Der Sender mit Sendung was assigned a radio licence for the coverage area 'Graz und Teile des Bezirks Graz-Umgebung'. A total of 13 licensing procedures were still pending at the end of the reporting period: each of these is to be reassigned by means of an official invitation to tender after licence expiry.

Five other licensing procedures, relating to requests filed by parties for the creation of new coverage areas, were still pending at the end of the reporting period.

In a number of other instances, the parties' applications were aimed at expanding existing coverage areas or improving coverage in existing areas. In these cases, frequencies as listed below were assigned through a total of six decisions:

- TATTENDORF (Raiffeisen Silo) 90.8 MHz' to N & C Privatrado Betriebs GmbH,
- 'SALZBURG 6 (Hochgitzten mobile mast) 89.3 MHz', 'SALZBURG 6 (Hochgitzten mobile mast) 102.8 MHz' and 'GOLLING (Haarberg) 106.6 MHz' to Antenne Salzburg GmbH
- 'S POELTEN 2 (Schildberg) 93.2 MHz' to Superfly Radio GmbH
- 'GRAZ 12 (Schlossberg) 100.0 MHz', 'GRATKORN 2 (Gsoller Kogel) 95.0 MHz', 'FROHNLEITEN 2 (A1 mobile mast) 103.3 MHz' and 'PERNEGG (radio mast) 103.3 MHz' to Radio Grün Weiß GmbH
- 'INNSBRUCK 1 (Patscherkofel Feratel) 107.1 MHz' to T-ROCK GmbH

In 2020, KommAustria awarded medium-wave transmission capacity for the first time.

Event and educational radio licences

Event radio refers to a radio broadcasting licence granted for a maximum of three months for use in the vicinity of an independent public event and simultaneously with the event. A total of seven event radio licences were issued in 2020, which were used to provide radio coverage for events in Vienna.

Educational radio licences refer to licences granted to education or training institutions, authorising them to locally broadcast radio programmes related in function to the duties of the particular institution. Such licences can be granted for a maximum of one year. Six educational radio licences were granted in 2020.

Procedures under telecommunications law

To simplify administration, the Telecommunications Act 2003 (TKG 2003) empowers KommAustria as a kind of 'one-stop shop', additionally authorising it to issue permits under telecommunications law that are required for the radio equipment used in broadcasting. Permits under telecommunications law are issued either in conjunction with a permit under broadcasting law or with no direct reference to broadcasting law, in the latter case solely on the basis of an application under telecommunications law. Such cases usually involve technical changes planned for radio equipment, such as the use of new transmitter antennas, the relocation of transmission sites or increased transmission power.

In addition to the procedures described above relating to the two nationwide broadcasting licences, KommAustria approved seven changes to broadcasting equipment in 2020, as well as four applications by private radio broadcasters requesting permission for test transmissions. Tunnel radio systems for broadcasting were approved for one private radio broadcaster. In addition, KommAustria approved 78 requests for permission to operate, for non-broadcasting purposes, radio equipment within broadcasting frequency bands (for example to cover drive-in cinemas, conferences and similar events).

Radio broadcasting frequency assignments to the ORF

As part of its responsibility for assigning radio broadcasting spectra and for issuing corresponding permits under telecommunications law, KommAustria is also active where radio transmission systems used by the ORF are involved.

In this context, a total of nine procedures were carried out in 2020, all of which related to the extension or modification of radio equipment already assigned to the ORF.

Additional information has been published (in German) on the RTR website at <https://www.rtr.at/medien/aktuelles/entscheidungen>.

National digital radio

In the reporting period, a total of two changes to telecommunications licences and three station line-up changes were approved in relation to the nationwide MUX I multiplex platforms.

In addition, one station was approved for nationwide broadcasting via MUX I instead of only regionally. Two new, nationwide stations were additionally approved.

At the end of 2020, the overall station line-up comprised twelve stations and two additional services. With ten broadcasting systems in operation, technical DAB+ service coverage reached 72.6 per cent of the Austrian population in 2020.

Regional and local digital radio

In the period under review, no licences were issued for operating new regional multiplex platforms for digital terrestrial radio. Accordingly, only one licence for operating a regional multiplex platform was still in use at the end of the reporting period, providing service to around 2.2 million people in greater Vienna.

The station line-up comprised 14 stations and two additional services at the end of 2020. One station ceased broadcasting in 2020 while two new licences were issued in the same period. One station slot was therefore available on the multiplex platform at the end of 2020.

Licences for satellite radio

KommAustria issued no licences for satellite radio in 2020.

Radio stations subject to notification requirements

In the 2020 reporting period, KommAustria was notified of one new cable radio station.

2.1.2 Approvals and notifications relating to audiovisual media services and multiplex platforms

Nationwide television

During the reporting period, three changes were approved to telecommunications licences for the nationwide multiplex platforms A and B, and for the multiplexes D, E and F; one broadcast permit renewal was also approved. One change to a channel line-up was also approved.

Preparations began in 2018 for freeing up the 700 MHz band, planned for mobile use (5G broadband service) starting in 2020. In 2020, twelve other changes to telecommunications licences were approved, meaning that work to free up the band was completed on time.

Regional and local television

In the period under review, no licences for operating new regional multiplex platforms (multiplex C) were issued. As of the end of the period under review, 15 licences to operate local multiplex platforms were valid, covering roughly 64 per cent of the Austrian population. A total of five changes to telecommunications licences were approved in this area.

In addition, three licences for digital terrestrial television (Ennstal TV, dorf tv and KRONE TV) were issued in the period under review. A total of eight changes to channel line-ups were also approved.

Satellite television licences

Satellite licences were issued in 2020 for five television channels (Schlager Deluxe, Waidwerk, KRONE TV, Servus TV Deutschland and MEGA TV). One licensing procedure was still pending at the end of 2020.

Media services subject to notification requirements

A total of one cable television channel, two (linear) television channels broadcast via the internet and 32 on-demand media services were registered with KommAustria in the 2020 reporting period.

Television pilot projects

Alongside the '5G Broadcast' pilot project first approved in 2019, an initial pilot project for trialling the use of UHD and the utilisation of frequency gaps for television channel broadcasting was also approved in 2020. A local pilot project was also approved for trialling the general business and technical feasibility of broadcasting digital terrestrial television in the vicinity of Turracher Höhe.

2.1.3 Approvals and notifications of new ORF services

In the 2020 reporting year, the ORF notified two changes to the service plan for kundendienst.ORF.at, der.ORF.at and themenschwerpunkt.ORF. Essentially, the broadcaster was planning to use helfen.ORF.at to provide background information on the 'Austria helps Austria' initiative while also offering 'Get involved' websites featuring interactive content related to programming.

In response to the change requests in relation to the service plan for TVthek.ORF.at and for the ORF's social media programming (short online news broadcasts), which had been submitted to KommAustria by the ORF in 2019, the prior evaluation procedure was completed successfully in the year under review. A prior evaluation procedure for the topos.ORF.at service was also received.

2.2 Legal supervision

2.2.1 Commercial communication

Pursuant to Art. 2 Par. 1 no. 7 of the KommAustria Act (KOG), ex officio evaluations of audiovisual media services and radio stations were carried out regularly during the reporting period.

ORF broadcasts were evaluated as follows in 2020: the national Ö1 radio station and the regional radio stations Radio Burgenland, Radio Niederösterreich and Radio Oberösterreich were evaluated once each, while the national radio stations Ö3 and FM4 were each evaluated twice. Two procedures were initiated as a result of the evaluation of the ORF radio stations.

In terms of the ORF's national television channels, ORF III and ORF Sport Plus were monitored once each, with ORF eins being observed twice and ORF 2 on four occasions. As regards its online portfolio, the ORF's TVthek and web presence were observed once each.

In the private radio segment, channels from eight commercial radio broadcasters and two non-commercial broadcasters were evaluated. In four cases, procedures were initiated due to infringements of conditions for commercial communications; two of these procedures are not yet completed with final effect. Ten separate radio broadcasters were observed in total.

In the private television segment, six channels were evaluated. In four cases, procedures were initiated due to infringements of conditions for commercial communications. Of these, breaches were identified in one procedure completed with final effect while three procedures are still pending. Five separate television broadcasters were observed in total.

In addition, seven other procedures were initiated ex officio in relation to the verification of compliance with regulations on commercial communications.

Programmes were evaluated or recordings of programmes were requested from a total of 17 separate providers of on-demand audiovisual media services. Procedures due to suspected infringements of advertising regulations were initiated in seven cases, of which two have already received a final decision.

2.2.2 Programming principles

In their television and radio programmes, broadcasters are required to uphold the principles of objectivity and diversity of opinions.

Similar principles are set forth in the ORF Act (ORF-G) for the ORF, which in all of its service offerings is required to strive for quality, innovation, integration, equal rights and mutual understanding. Information must be comprehensive, independent, impartial and objective, and help the public freely form opinions and so contribute to democratic discourse.

Based on its public service remit, the ORF is also obliged to reflect the diversity of opinions represented in public life and to respect human dignity, personality rights and individual privacy rights. Commentaries, analyses and presentations must be objective and based on verifiable facts.

A total of seven procedures involving complaints of alleged breaches of programming principles by the ORF were pending in the period under review.

Here the ORF was mainly alleged to have breached the principles of objectivity and impartiality in its reporting. In one case, the complaint was dismissed due to failure to comply with the order to remedy deficiencies. In one procedure, KommAustria found the complaint to be unjustified. A complaint was dismissed in one case, on the grounds that the complaint lacked legitimacy. Two complaint procedures were withdrawn and two procedures are still pending with KommAustria.

Within the scope of legal supervision of private broadcasters, six requests for an ex officio review were submitted to KommAustria during the reporting period, alleging that broadcasters had breached programming principles. Four procedures were also initiated ex officio due to potential infringements of programming principles.

2.2.3 Conciliation procedures in media

The RTR Media Division acts on behalf of KommAustria among other things as the conciliation body for complaints relating to communications networks and services used in broadcasting. The main prerequisite for a conciliation procedure is a previously unsuccessful attempt by the customer and operator or provider to reach an agreement. In the course of a conciliation procedure, RTR attempts to negotiate an amicable solution or informs the participants of its position on the case in question. The conciliation body received 125 complaints in the period under review. Details about conciliation cases are available in the annual conciliation report¹ (Schlichtungsbericht), published annually in German.

¹ <https://www.rtr.at/TKP/aktuelles/publikationen/Uebersichtseite.de.html?!=de&q=&t=category%3Dtaetigkeitsberichts-chlichtungsstelle>

2.2.4 Specific supervision of the ORF and its subsidiaries

2.2.4.1 Purpose of business, public mandate and bodies

In the 2020 reporting period, KommAustria completed with final effect proceedings for confiscating revenue from the ORF due to the publication of printed materials that overstepped the bounds of its public service remit. The 'ORF Viewer's Magazine – Wintertime Edition' in question had, according to a ruling previously made by the Supreme Administrative Court, not restricted itself to providing details of the ORF's channels and listings. The ORF had therefore exceeded the bounds of its public service remit with this act of publication. The related expenses were therefore to be confiscated from the programme fee.

In the 2020 reporting period, KommAustria issued a non-final decision regarding a procedure to verify the ORF's compliance with the procedure for establishing and revising the quality assurance system for the 2017/2018 period (pursuant to Art. 4a ORF-G). This decision found that the ORF had disregarded its legal obligation to consult the Audience Council regarding revisions to the quality assurance system in 2018 and was accordingly in breach of Art. 4a Par. 2 of the ORF-G. The decision also found that the ORF had otherwise complied with the requirement to uphold the quality assurance system revision procedure for the 2017–2018 period.

In the reporting period, KommAustria initiated an infringement procedure on account of a suspected overstepping of the limits of a service plan approved as part of a prior evaluation procedure for the online service 'Public on-demand service for providing mainly fictional content' (Flimmit).

During the period under review, two complaints relating to questions of the purpose of business of the ORF and the activities of GIS Gebühren Info Service GmbH were lodged; final decisions on these complaints are still pending. In addition, a total of six complaints were filed against the ORF: however, these did not make reference to any particular provision of the ORF Act.

2.2.4.2 Supervision of business activities

As part of supervising the ORF's business activities, during the 2020 reporting year KommAustria audited the consolidated financial statements and the individual financial statements as at 31 December 2019. In this case, the KommAustria audit commission issued, based on the service agreement, audit reports with unqualified audit certificates.

A key part of the supervision of ORF business activities is to perform a business audit to ascertain whether ORF management is complying with the principles of economy, efficiency and expediency. In the 2020 reporting year, the business audit for the 2018 business year was materially concluded with the submission of the audit report by the audit commission. The audit reports for 2019 were also submitted to KommAustria. A recent guide on maintaining separate accounts was also received and reviewed in the reporting period.

In the reporting period, KommAustria also issued final decisions to conclude two procedures involving complaints against the ORF and its subsidiary Österreichische Rundfunksender GmbH & Co KG (ORS), which had alleged breaches of competition rules in the context of satellite broadcasting and access to the encryption system. One complaint was dismissed as inadmissible. The other complaint was dismissed on the grounds of being partially unjustified and partially inadmissible. Appeals were lodged against both decisions.

During the reporting period, KommAustria also carried out one procedure, pursuant to Art. 38b ORF-G, to confiscate revenues from the economic advantage the ORF gained by breaching advertising provisions. The procedure had not yet been completed in the reporting period.

2.2.5 Specific supervision of private providers

One main area of KommAustria's responsibilities in the way of legal supervision involves monitoring ownership of private broadcasters and media service providers as well as multiplex operators.

The aim here is to ensure consistent compliance with the legal prerequisites for broadcasting or for providing a media service even after a licence is issued or a service notified. These prerequisites include professional, financial and organisational qualifications, absence of grounds for disqualification, and safeguarding a diversity of opinions (by avoiding excessively concentrated media ownership). Any breach of or failure to adhere to these (licensing) prerequisites constitutes grounds for revoking the broadcasting licence or for prohibiting broadcasts.

In order to enable the monitoring of broadcasters' compliance with these legal prerequisites, the Private Radio Act (PrR-G) and the Audiovisual Media Services Act (AMD-G) require any and all (direct or indirect) changes in ownership or membership shares occurring during the period under review to be reported to the regulatory authority. As of 1 August 2015, entities subject to notification requirements only need to report any shareholder changes once a year.

In 26 cases in the 2020 reporting year, KommAustria carried out procedures to identify infringements involving tardy compliance or non-compliance with requirements to report changes in ownership. Six of these procedures were concluded in the period under review. Five administrative penal procedures were also initiated on account of parties failing to report ownership changes or failing to do so in good time: the procedures were dropped, however, once legal compliance had been achieved.

In those cases where new partners acquire more than 50 per cent of the shares in a broadcaster, prior to the transfer of shares, an official decision must be obtained from KommAustria to determine whether the relevant legal prerequisites for broadcasting will continue to be met under the new conditions. In the 2020 reporting period, one such procedure was initiated pursuant to the AMD-G.

Another area of activity under the legal supervision of KommAustria is the option for radio broadcasters to request an official decision from KommAustria to determine whether a planned programming change actually represents a fundamental change of the programme format. Whether a change in programme format is fundamental is to be decided based on the original licence decision. No official approval is necessary for implementing the programming change in cases where in its decision KommAustria does not identify any resulting fundamental change of the programme format. The broadcaster is required to obtain official approval, though, if KommAustria determines that a planned change does in fact constitute a fundamental change in programming. In the reporting period, one such programme change was approved for radio broadcasters while another procedure is still pending.

Under the AMD-G, holders of broadcasting licences for satellite television and digital terrestrial television channels also have the option of applying for approval of major changes to television channels they broadcast via satellite or digital terrestrial transmitter. As these licences are not issued by way of a competitive selection procedure, more flexible options for channel changes are available. Two such procedures were conducted and completed during the reporting year.

Two infringement procedures were initiated due to tardy notification of a distribution mode change; one of these procedures was completed in the reporting period.

Holders of licences for multiplex platforms similarly have the option of making changes to the channel line-up being broadcast. They can request a decision to determine whether the prerequisites for the licence to operate a multiplex platform will continue to be met after making the change. KommAustria conducted and completed a total of six such procedures in the 2020 reporting year.

During the 2020 reporting year, KommAustria also concluded a procedure resulting from the late submission or non-submission of recordings requested for a broadcast. Another procedure due to the late submission or non-submission of recordings requested for a broadcast is still pending at the Federal Administrative Court.

2.3 Public communications networks and services

Operators and providers must notify to KommAustria any planned operation of a public communications network or provision of a public communications service used to transmit broadcasts (radio and television programmes) or to provide additional broadcasting services, as well as any changes to or discontinuation of such services. This notification requirement applies to all operators of such communications networks and all providers of such services in Austria, regardless of their domicile. After receiving a complete notification report, KommAustria issues confirmation (general authorisation) pursuant to Art. 15 Par. 3 in conjunction with Art. 120 of the Telecommunications Act 2003 (TKG 2003). In practice, this notification requirement is especially significant in the case of broadcasting activities by cable network operators. On the basis of the legal opinion of the European Court of Justice and its ruling of 30 April 2014 in case C-475/12, UPC DTH, certain services are considered broadcasting services and thus subject to notification requirements. Such services consist in detail of providing access rights to a package of programmes which contains radio and audiovisual broadcast services and is transmitted via satellite or cable in return for a fee. In the reporting period, five new broadcast networks and broadcasting services were notified, as well as the withdrawal of four broadcast networks and broadcasting services. Additional information (in German) can be found on the RTR website at https://www.rtr.at/medien/service/agg_verzeichnis/Uebersichtseite.de.html.

Pursuant to the TKG 2003, KommAustria is also responsible for regulating competition among public communications networks and services used for broadcasting. In this same context, KommAustria issued a decision on 1 August 2018, in a procedure affecting Österreichische Rundfunksender GmbH & Co KG and ORS comm GmbH & Co KG (ORS), to the effect that the wholesale market 'Analogue terrestrial transmission of radio signals to end users via FM' forms a relevant market in the sense of being subject to sector-specific regulation. In the 2020 reporting year, KommAustria also reviewed ORS' adherence with imposed obligations relating to the wholesale market for FM radio in 2019, specifically with regard to the cost accounting system and the question of whether the rates offered were in line with the costs of efficient service provision. No objections were raised as a result of this verification.

2.4 Act on Transparency in Media Cooperation and Funding

The main objective of the Act on Transparency in Media Cooperation and Funding (MedKF-TG) is to ensure full transparency when public authorities award advertising contracts or funding (cf. government bill in annex 1276 to the shorthand verbatim records of the National Council, 24th legislative period).

The MedKF-TG consequently requires certain legal entities to provide KommAustria with quarterly reports of expenses resulting from advertising placed in periodical media and from grants awarded to media owners, specifically all legal entities that under constitutional and ordinary legal provisions are subject to business auditing by the Court of Audit. As the independent recipient of the reports, KommAustria has the duty to verify compliance with reporting requirements.

To achieve the objective of full transparency of advertising contracts and funding, the MedKF-TG sets out two disclosure measures.

Firstly, KommAustria publishes quarterly lists classifying legal entities under those that have fulfilled their reporting obligations by the regular reporting deadline and those that have not. The second measure is

publication, here again on a quarterly basis, of the data reported by the legal entities. This involves data on those media products that were actually awarded advertising contracts, as well as details of the particular (legal) persons who received media funding.

This information can be viewed (in German) at www.rtr.at/medien/was_wir_tun/medientransparenz/veroeffentlichungen/veroeffentlichungen.de.html.

Reports have been submitted for a total of 34 quarters since the MedKF-TG entered into force on 1 July 2012. After a clear trend towards increasing reporting discipline in the initial quarters, the reporting rate has become stable at a high level in recent years, remaining there in 2020. Over the year on average, more than 99 per cent of the legal entities required to report had complied. Some four penal procedures were initiated on average each quarter as a result of failure to report. In addition to this, a total of two administrative penal procedures were initiated in 2020 due to reports having obvious inaccuracies or being incomplete.

An analysis of recent quarters also revealed that about 80% of the regularly examined legal entities had submitted zero reports. The majority of these cases involve municipal associations (sewage treatment associations, water supply associations, district social and healthcare bodies, citizenship associations, register office associations, and planning associations). Municipal associations account for just under 2,000 of the roughly 5,300 legal entities currently required to file.

2.5 Administration and coordination of broadcasting frequencies

The frequency spectrum for terrestrial broadcasting (reception of radio and television via an antenna) is managed in Austria by KommAustria. The authority is supported in this work by the department for broadcasting frequency management within the Media Division.

Frequency negotiations with neighbouring states

Travel restrictions imposed because of the coronavirus pandemic resulted in the cancellation of most of the frequency negotiation meetings planned with neighbouring states in the reporting year. The ADSL Working Group meeting arranged with Germany, Liechtenstein and Switzerland was held as a video conference. In general, the number of active frequency negotiation groups in which Austria participates has declined in comparison with previous years. The working groups for freeing-up the 700 MHz band have been disbanded, with the 700 MHz band now largely freed up by European broadcasters. In Austria, the last 700 MHz band television broadcaster ceased operations in June 2020.

In the remaining negotiation groups, the focus is now on implementing the GE06 Allotment Plan for DAB/DAB+ as an Assignment Plan, so as to bring actual DAB+ broadcasting networks into service at existing transmitter locations.

Existing usage of DAB+ and the current need for commissioning DAB+ networks presents a very heterogeneous picture both within Austria and its closest neighbours. While many DAB+ broadcasters are now operating in Germany and Switzerland, especially in regions bordering Austria, neighbouring countries to the east and southeast still have only few DAB+ broadcasting networks – if any – in service.

In western Austria, negotiations for the DAB+ Assignment Plan have been completed in recent years with neighbours Germany, Italy, Liechtenstein and Switzerland.

In eastern Austria, however, these negotiations have only just begun. Currently, two multilateral groups are actively working on this geographical area. Due to the coronavirus pandemic, however, plans to establish a trans-regional group were shelved for 2020. This group will be formed only once travel conditions are conducive to making the arrangements. There will therefore be delays to negotiations for implementing the GE06 allotment plan in eastern Austria.

In the digital television segment, there was less new planning overall in Austria and in neighbouring countries during the reporting year than in 2019. However, broadcasting frequency management worked through a large backlog of registrations for the Geneva frequency plan involving bilaterally agreed frequency usages. Czechia was an outlier here, with a relatively large number of coordination enquiries in the reporting year that also contained a lot of new planning for locally restricted coverage areas.

One new topic that broadcasting frequency management covered in some depth in 2020 was 5G Broadcast, for which final specifications were published with 3GPP release 16. If this new broadcasting standard becomes established at international level, restructuring will probably be required in the UHF spectrum used for broadcasting. In this case, the DVB-T2 and 5G Broadcast broadcasting systems would at least need to use the spectrum in parallel for some time. The simultaneous operation of both systems without interference would also have to be guaranteed.

Compared with both previous years and neighbouring countries, the FM segment generated the lion's share of coordination activities in Austria in 2020. FM can truly be said to have made a 'comeback' in the year under review.

Yet for DAB+, there were fewer coordination activities in the reporting year than in previous years. The main reason for this is the completion of most DAB+ network setup work in Germany and Switzerland over the last few years: most coordination activities are therefore also now concluded.

The ADSL Working Group – comprising Austria, Germany, Liechtenstein and Switzerland – held a virtual meeting via video conference in early November. Alongside a number of DAB+ coordination procedures still pending, details of general experience and strategies in the radio segment were discussed, as well as the topics of WRC-23 preparation and 5G Broadcast.

2.5.1 Collaboration in licensing and assignment procedures

Broadcasting frequency management participates in decisions made by KommAustria on licences for the use of broadcast frequencies by preparing evaluation reports. First and foremost, this involves appraising the technical feasibility and usage options for the frequencies to be put to public tender.

Focus activities in analogue radio

During the reporting period, KommAustria published new tenders for radio licences and re-awarded licences that had expired on account of their ten-year term. For these procedures, the spectrum evaluation reports recalculated the geographical coverage areas and the number of residents receiving coverage by using up-to-date population figures supplied by Statistics Austria.

In other FM business, there were many procedures, some new requests but also a large number of change requests for existing radio broadcasting systems, for which evaluation reports needed to be prepared and international coordination procedures completed.

Analogue single-frequency FM systems were again the subject of many requests from radio operators in 2020. Accordingly, a corresponding add-on module was procured for the simulation software used by frequency management to calculate coverage for synchronised FM single-frequency transmitters.

Together with the telecommunications office, 79 requests for radio equipment in the broadcast spectrum were planned, evaluated, processed and approved, primarily for drive-in cinemas throughout Austria. Demand for frequencies for drive-in cinemas has tripled from the previous year, due to the Covid-19 crisis. Many coordination enquiries for drive-in cinema and event radio frequencies were also received from Germany.

Focus activities in digital television

The 5G Broadcast pilot in Vienna was extended and a channel migration was also completed. The two locations of Vienna 1 (Kahlenberg) and Vienna 8 (Liesing) will now broadcast until 30 June 2021 on channel 45 (Vienna 8 also on 2 MHz from channel 46). Channel 45 is a channel that has been made available on a temporary basis by Slovakia and can therefore be used for testing work.

Channel 21 is being used by the transmitter locations of Vienna 1 and Vienna 8 for a UHD pilot. This pilot project, which is trialling digital transmission technologies and the development of programming content using HEVC-coded UHD signals, will run until 15 August 2021.

By early June 2020, 44 base stations had been converted in order to free up 700 MHz frequencies: this enabled the completion of a multi-year replanning process that had been agreed in the course of multilateral frequency negotiations. Further network optimisation work was also completed for multiplexes A and C, which largely consisted of relocations, increasing transmission power or antenna adjustments.

The frequency approvals for Bayerischer Rundfunk were renewed at the transmitter location Bregenz 1 – Pfänder. This exposed Austrian location provides wide-area coverage to the Lake Constance area, and is used for broadcasting Austrian, German and Swiss radio stations and television channels (TV, DAB+ and FM).

Focus activities in digital radio

The rollout of the first nationwide multiplex platform (MUX I) was completed in the reporting year with the launch of additional DAB+ stations. Coverage was extended to southern Burgenland and parts of Styria by mid-May 2020. The first phase of the expansion process was completed by the launch of two stations in Carinthia. As a result, the nationwide multiplex I platform delivers indoor service via portable receivers to approximately 84 per cent of Austrian residents.

No changes regarding station expansion or conversion occurred with the regional multiplex platform (MUX II) that provides coverage to the City of Vienna and its environs.

2.5.2 Frequency coordination procedures and frequency usage

The following table lists the number of international broadcasting frequency coordination procedures completed where Austria was a participant:

Table 06: Number of international broadcasting frequency coordination procedures in 2020

Country	Analogue radio	Digital radio	Digital television	Analogue AM
Austria	67	3	47	0
Bosnia	1	0	2	0
Germany	33	56	0	0
Italy	2	0	0	3
Croatia	3	0	1	0
Poland	8	5	1	0
Switzerland	0	14	0	0
Slovakia	2	1	2	0
Slovenia	16	1	0	0
Czechia	17	5	23	0
Hungary	1	0	1	0
TOTAL	150	85	77	3

2.5.3 Measurement projects

Despite the pandemic, measurement tours were still conducted in the reporting year, although fewer overall than in previous years.

Several FM measurement tours were completed in greater Vienna. Test transmissions with measurement tours accompanied the expansion of the second nationwide chain in southern Lower Austria as well as the Villach region. The test transmissions conducted near to Villach enabled the measurement of potential interference affecting the ORF broadcasting network. This multi-day measurement was conducted together with the ORS Carinthian measurement team.

One focus of work in 2020 was the verification of measurement techniques used in the field of digital broadcasting. In this context, measurements were conducted before and after transmitter commissioning, so as to be able to make comparisons of DAB+ coverage here in association with SFN (single-frequency network) network planning.

2.5.4 Frequency register

The frequency register and transmitter map currently lists over 1,380 radio transmitters in the FM band, with power output ranging from less than 1 W to 100 kW.

Approximately 850 frequencies are accounted for by the ORF, while the remaining roughly 500 frequencies are used by private broadcasters. In terms of the power classes of individual frequencies, most of the high-power frequencies can be ascribed to ORF stations.

In the 470 to 694 MHz television frequency band, the currently approved DVB-T/T2 transmitters in the frequency register were distributed among the individual multiplex platforms as shown below at the end of 2020.

Table 07: Approved DVB-T/T2 transmitters (as of 31 December 2020)

Multiplex	No. of transmitters
DVB-T2 multiplex A (ORS multiplex)	316
DVB-T2 multiplex B (ORS multiplex)	43
DVB-T/T2 multiplex C (regional/local multiplex platforms)	35
DVB-T2 multiplex D (ORScomm multiplex)	43
DVB-T2 multiplex E (ORScomm multiplex)	43
DVB-T2 multiplex F (ORScomm multiplex)	43

The 35 base stations in the DVB-T/T2 multiplex C platform are operated by a total of 14 other licence holders in addition to ORScomm.

In VHF band III, which is reserved for DAB+, the following DAB+ multiplexes were approved as at the end of 2020:

Table 08: Approved DAB+ transmitters (as of 31 December 2020)

Multiplex	No. of transmitters
DAB+ multiplex I (ORS comm)	14
DAB+ multiplex II (RTG Radio Technikum GmbH)	1

Data on approved broadcasting transmitters are available to the public on the RTR website (www.rtr.at) in the form of a transmitter map as well as tables.

2.5.5 Contributions to working groups under international organisations

Participation in ITU study group 6

Broadcasting frequency management is an active member of this international working group. Activities focused first and foremost on additional work on broadcasting standards, and the implementation of the various digital broadcasting systems in particular. Another recent point of focus chosen by this working group is representing broadcasting interests in the run-up to WRC-23 (World Radiocommunication Conference), as regards a potential refarming of the UHF spectrum.

In order to survey current broadcasting use as well as future demand for broadcasting services in the 470 to 960 MHz frequency band, a questionnaire agreed between KommAustria, the regulatory authority and ORS was conveyed to Study Group 6 by mid-August 2020. Study Group 6 must forward the frequency requirements for broadcasting use in Region 1 to ITU Working Group TG 6/1 by 15 May 2021.

Participation in working groups PTD and TG 6/1

As part of preparations for the upcoming WRC-23, two new working groups were formed in 2020: the working group PTD at European level by CEPT and the working group TG 6/1 at international level by the ITU. Both working groups are responsible for preparing WRC-23 agenda item 1.5, which deals with the question of whether additional broadcasting frequencies should be made available for mobile telecommunications (as part of Digital Dividend III) in ITU Region 1 (which essentially consists of Europe, Africa and the Arabian Peninsula).

Participation in the EU RSPG working group: Good Offices

One physical meeting and two virtual meetings were held in the reporting year. Freeing-up the 700 MHz frequencies was again a key topic at these meetings, with other points of focus being support for difficulties encountered during bilateral coordination work and interference from non-coordinated broadcasters.

2.6 International activities

2.6.1 KommAustria and ERGA

KommAustria's international cooperation with and in relation to ERGA continued apace in 2020, although limitations due to the coronavirus pandemic naturally made their presence felt. Cooperative activities with the various ERGA subgroups were handled by means of video conferences and written correspondence, and so the work programme for 2020 was kept to successfully, despite these difficult circumstances. KommAustria/RTR-GmbH were represented and participated actively in the three ERGA subgroups dedicated to the topics of enforcement, media plurality/disinformation and findability. Such international cooperation activities ensure that the interests of Austria media markets have also been properly accounted for. The results of the individual subgroups can be summarised as follows.

Subgroup for the enforcement of the legal framework

One milestone worthy of mention for the advancement of international cooperation is the conclusion of a memorandum of understanding² (MoU) between the media regulatory authorities. The purpose of this MoU is to strengthen cooperation between the regulatory authorities so as to achieve coherent and effective enforcement of the regulatory objectives of the revised AVMS Directive. A further goal is to create an environment that simplifies the cooperation and exchange of information between the regulatory authorities with the aim of achieving efficient solutions to practical problems that arise from transposition of the revised Directive and, in particular, relate to the application of the provisions on video sharing platforms.

Further information:

https://erga-online.eu/wp-content/uploads/2020/03/ERGA_SG1_2020_ToR_Adopted_2-03-2020.pdf

Subgroup for media plurality and disinformation

Two workstreams were utilised here, one focusing on identifying the various notions and concepts of disinformation used by media regulatory authorities in the various countries, and the other focusing on the portrayal of corresponding insights into this topic as achieved in these countries. In this work, ERGA is meeting its obligations to act in an advisory role to the European Commission regarding the measures adopted by the latter to combat disinformation (https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1568) Further information: https://erga-online.eu/wp-content/uploads/2020/05/ERGA-2020_SG-2-ToR_Adopted_4-05-2020.pdf

² https://erga-online.eu/wp-content/uploads/2020/12/2020-12-03-Press-Release-14th-ERGA-Plenary_final.pdf

Subgroup for findability

This subgroup has set itself the goal of contributing rules that are intended to lead to improvements in the prominence (ensuring the findability) of content in the general interest. The work of this group has focused mainly on the development of parameters that can be of use in identifying content of general interest as well as parameters that can be used to ensure the prominence of what the Directive's recitals refer to as 'European works.'

Further information:

https://erga-online.eu/wp-content/uploads/2020/04/ERGA_SG3_2020_Tor_Adopted_17-04-2020-1.pdf

Last but not least, the last ERGA plenary meeting was used to agree the Work Programme 2021 and to re-elect the current ERGA Chairman for the 2021³ term of office.

2.6.2 KommAustria and EPRA

As a platform extending beyond the borders of the European Union and representing 54 media regulatory authorities from 47 countries, EPRA set the following points of focus for its work in 2020:

- Implementation of the Audiovisual Media Services Directive
- Disinformation
- Media literacy

KommAustria/RTR-GmbH also played an active role here and contributed to the positive results achieved by EPRA. In working to achieve the implementation of the Directive, EPRA's international activities also focus on simplifying this task for nations outside the European Union and European Economic Area. These countries must harmonise their national legislation on media markets with the European Union's AMSD since this harmonisation also forms an integral part of EU association agreements, for example. Accordingly, there is an interest in harmonised application as part of international cooperation with the aim of avoiding issues in relation to cross-border services.

On the topic of disinformation, work continued on the evaluation of the Code of Practice⁴ initiated by the European Commission. In the area of media literacy, further efforts were made to expand activities in relation to this topic alongside a related conference organised jointly between the European Commission and the Croatian EU Council Presidency. The topic of media literacy is especially important in the context of raising awareness about media content and ensuring the critical scrutiny of such content. This has now led to the introduction of a dedicated Media Literacy Network, to be used as a framework for exchanging insights and information on this topic.

As can be seen, the efforts of KommAustria and RTR-GmbH in the field of international cooperation extend well beyond the borders of the European Union and the European Economic Area, since media services are not confined within geopolitical boundaries but are accessible on a truly global scale. Notwithstanding this, ERGA's engagement in this field deserves especial attention as a result of the increasingly transnational character of challenges encountered in terms of online markets and platform regulation.

³ https://erga-online.eu/wp-content/uploads/2020/08/ERGA_WorkProgramme2021.pdf

⁴ <https://ec.europa.eu/digital-single-market/en/news/code-practice-disinformation>



Digital broadcasting usage and developments

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03 Digital broadcasting – usage and developments

Introductory note

As in previous years, the summaries below are based on data from the Teletest survey, carried out by market research institute GfK Austria on behalf of the Teletest Working Group (AGTT), a group of Austrian television broadcasters and their advertising marketers. In December 2020, GfK Austria notified AGTT of a programming error that had been the source of irregularities in evaluations of TV viewing habits in multi-person households since 2015. AGTT shared this information through a press release.

The error had resulted in the inaccurate categorisation of viewing times when under certain conditions family members simultaneously watched TV, as the AGTT press release of 16 December 2020 disclosed.⁵ This had led to exaggerated reach figures for the market as a whole – more or less equally distributed across all TV channels. Market share figures are largely unaffected. While the impact before November 2019 can no longer be traced in detail, the deviations in the early years (until 2017) are marginal, in any event. The magnitude of the error affecting the various age categories varied over time; yet the deviations amounted on average to less than 5 per cent, even in 2020. Thus, the extent of the previously reported increase in television viewing – also as a result of the pandemic – needs to be slightly revised but remains significant.

AGTT mandated GfK with comprehensive analysis and correction of the data where possible by the earliest possible date, in order to obtain reliable figures.

The statistics for 2020 underlying this report have been verified and rectified, according to AGTT. Thus, as previously, this Communications Report enables a picture of television viewing habits and the respective reception modes, here as of the end of 2020. Nonetheless, comparisons with previous years are sparse, and made only where possible without doubt. This is the case in particular for the figure below showing reception modes as distributed among Austrian television households, and for the number and size of television households; these statistics are not affected by the Teletest programming error, as far as we know. The error does not affect any results presented here from the Video Survey, which is commissioned separately by the RTR Media Division and AGTT and carried out by GfK Austria using a different methodology.

3.1 Digital linear television

As of the end of 2020, 7.546 million Austrians aged twelve and over were residing in 3.872⁶ million television households. This means an increase of 16,000 individuals aged twelve and over and also 21,000 more television households, compared with 2019.

Shift in relative use of conventional TV reception modes

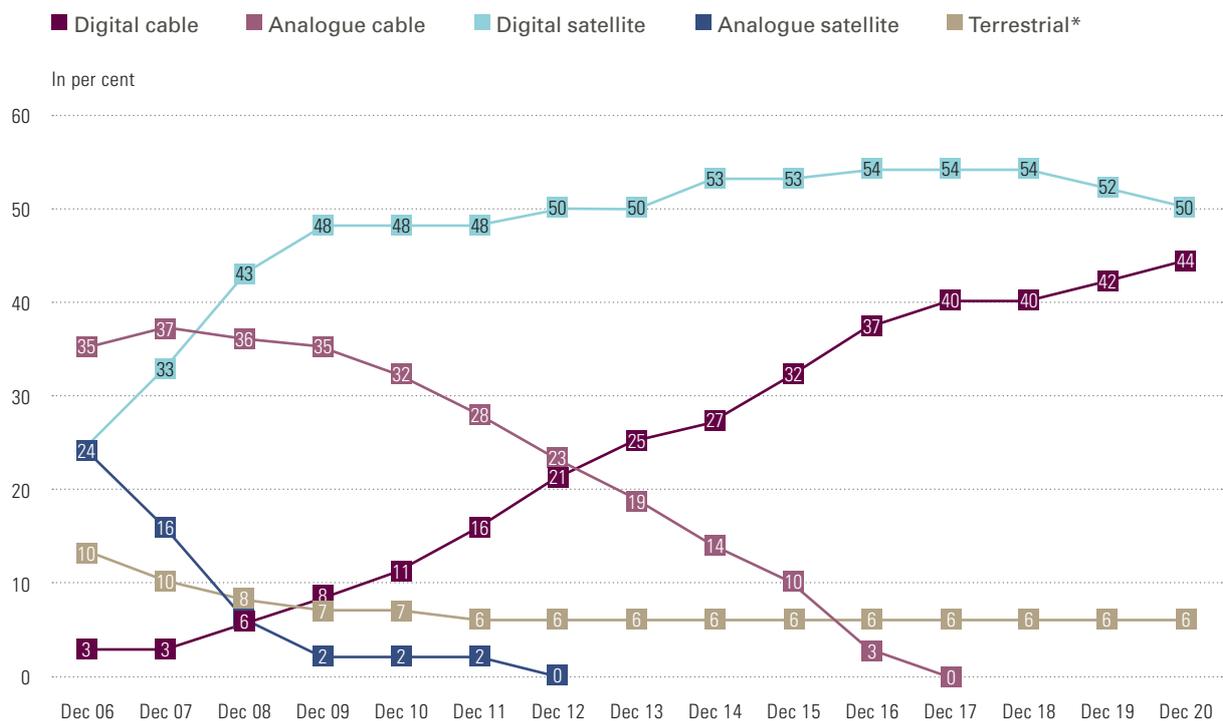
After 2019, the year 2020 saw a repeated shift in the relative numbers using satellite, cable or terrestrial as TV reception platforms – all exclusively digital since late 2017. The share of TV households using satellite reception shrank by another 2 percentage points to the current 50 per cent, while TV households connected with a

⁵ https://www.ots.at/presseaussendung/OTS_20201216_OTS0207/mitteilung-der-agtt

⁶ Unless otherwise specified, all data originate from the Teletest Working Group/GfK Austria (2020).

cable TV provider increased by 2 percentage points to a total of 44 per cent. Only the percentage of terrestrial viewers remained the same. Six per cent of television households watch via a roof or room antenna using their only or main TV reception device.

Figure 02: Distribution of reception modes among Austrian television households 2006–2020



*Terrestrial includes around 15,000 cable households with basic coverage (reception of roughly eight TV channels).
Source: AGTT/GfK Austria.

Cable households continue to increase as more viewers drop satellite

As previously in 2018 and 2019, all 21,000 of Austria’s new TV households in 2020 selected cable as their reception mode. A total of 79,000 households dropped satellite viewing (after a loss of 45,000 in 2019), all of which similarly switched to cable. Terrestrial reception – via a room or roof antenna – recorded a marginal increase for the first time in years.

This mode was preferred by 225,000 households as of December 2020, which was 1,000 more than in the same month of the previous year, at 224,000. In December 2020, 1.925 million households were still viewing via satellite (after 2.004 million in December 2019). The number of cable households, on the other hand, rose to 1.729 million by the end of 2020, an increase of 100,000 (2019: +76,000).

As recently as in 2017, the increase in Austrian television households – 101,000 that year – was distributed more or less according to the relative shares of satellite, cable and terrestrial reception among TV households overall. Since then, households that are new to TV and those wishing to switch platforms have been expressing a clear preference for cable service.

The striking growth of cable reception and the accompanying shift away from satellite TV, seen since 2018, are interpreted by industry experts as reflecting the TV-viewing population's mounting interest in video-on-demand (VOD) usage via the internet, with cable connections offering TV channels and high-speed internet connectivity from a single provider. Nationwide terrestrial provider simpliTV additionally offers linear TV reception as well as mobile internet connectivity in package products.

3.1.1 Satellite

As of the end of 2020, the percentage of satellite households in relation to all TV households dropped by 2 percentage points for the second successive year, to the current 50 per cent. Satellite nonetheless continues to enjoy a high level of popularity. One in two TV households still continues to tune in satellite signals to watch programmes. This means that satellite television now still reaches 4.008 million individuals (2019: 2.004 million) aged twelve and over in 1.925 million satellite households (2019: 2.004 million). The percentage of the viewing population living in satellite television households dropped by 2 percentage points to 53 per cent.

3.1.2 Cable including IPTV

As of the end of 2020, Austria had 1.723 million cable television households (2019: 1.623 million). This share thus increased to just over 44 per cent of all television households (2019: 42%). The percentage of television viewers aged twelve and above who live in cable households increased marginally from the year before, by roughly 2 percentage points to 42 per cent. This equates to 3.159 million individuals (2019: 2.990 million). At 169,000, the rise in cable household residents was once again higher than in the two previous years (2019: +105,000; 2018: +115,000).

IPTV households are classified under cable reception and correspondingly included in the number of cable TV households overall. Even though many conventional cable TV providers have already been supplying a portion of customers with IP signals rather than with DVB-C for some time, this report nonetheless classifies such households among conventional cable users. Nonetheless, subscribers to the A1 TV or the new A1 Xplore TV service supplied by A1 Telekom Austria are included here under IPTV households. At 318,000,⁷ the number of such households was the same as the previous year (2019: 318,300). This meant the first-ever no-growth year for A1 TV's cable service. While the growth rate had been falling in previous years, significant increases had been seen nonetheless (2019: +10,000, 2018: +17,000, 2017: +12,000).

The percentage of IPTV households in relation to total cable households saw a drop, from 19.6 per cent in 2019 to 18.5 per cent by the end of 2020.

⁷ A1 Telekom Austria Group, Quarterly Results, Q3 2020.

3.1.3 Terrestrial

At year-end 2020, 225,000 Austrian television households were using digital terrestrial television as their primary or sole form of television reception. That was an increase of 1,000 households from 2019. This compares with the number of TV viewers aged twelve and over living in such households, which rose disproportionately by 5,000 to a total of 379,000 (2019: 374,000; 2018: 380,000; 2017: 392,000). The fact that 1,000 additional households in 2020 meant 5,000 additional terrestrial viewers is an intriguing novel development, considering that the average terrestrial-viewing household has only just over 1.5 members. This suggests that the overwhelming majority of new terrestrial households in 2020 were large multi-member households. This figure continues to include roughly 15,000 residents of households with 'basic cable service.'⁸

Moderate rise in DVB-T/DVB-T2 use with second devices

Six per cent of all TV households have digital terrestrial television as their only form of reception. Moreover, DVB-T/DVB-T2 is also used in satellite/cable television households as an additional reception platform for second TV devices, for instance in bedrooms, or to view local television channels that are still broadcast in many cases on the basis of the DVB-T standard and not yet via DVB-T2.

As a way of watching TV on second devices or as an alternative reception mode, terrestrial reception has nonetheless become less of a factor in recent years. Yet 2020 was the first exception ever to this downward tendency. Households with primarily cable TV were the source of a counter-trend in 2020, as previously in 2019, while an ever-rising number of satellite households discontinued terrestrial reception with second devices. The fact that the total number of viewers in Austria who (additionally) use terrestrial reception nonetheless rose, can thus be attributed foremost to the increase of 5,000 among residents of solely DVB-T/DVB-T2 households.

In addition to the roughly 379,000 viewers aged twelve and over who live in terrestrial-only television households, the overall figure includes another 118,000 persons in satellite households with secondary terrestrial usage (2019: 126,000; 2018: 155,000; 2017: 169,000). Added to this are another 60,000 individuals living in cable households with supplementary terrestrial reception (2019: 54,000; 2018: 35,000; 2017: 27,000).

As of December 2020, viewers living in households using terrestrial TV with access via DVB-T/DVB-T2 totalled roughly 556,000 (2019: 554,000; 2018: 569,000), equating to 7.4 per cent of the TV-viewing population aged twelve and over (2019: also 7.4%; 2018: 7.6%); this group includes both households solely using terrestrial reception as well as cable/satellite households with secondary terrestrial use.

Technical range of terrestrial multiplexes (DVB-T/DVB-T2) in 2020

The technical range of coverage among the population for the national multiplex A remains unchanged at 98 per cent, after minor improvements by the broadcasting network operator.

The technical range for the other nationwide multiplexes B, D, E and F is also constant, at 92% of the population. This needs to be regarded as an achievement, considering that, as part of refarming to accommodate the second digital dividend, a number of operating frequencies had to be migrated to lower ranges by June 2020.

The percentage of the population also living in the multiplex C reception area (DVB-T/DVB-T2), with programming varying from region to region, likewise remains unchanged at 64 per cent.

⁸ Non-cable subscriber households in residential complexes with cable service, with the number of channels roughly equal to free TV via DVB-T2.

3.1.4 Digital terrestrial television – spectrum refarming (second digital dividend)

Refarming and migration of spectrum in the 700 MHz band previously used for broadcasting was fully completed in June 2020. This means that all spectrum for broadcasting DVB-T and DVB-T2 via multiplexes A, B, C, D, E and F is now located exclusively in the 470–694 MHz frequency range.

It was agreed across Europe that the 'second digital dividend' – that is, the television spectrum above channel 48 (700 MHz band) – was to be freed up by June 2020, primarily for subsequent use by mobile broadband services. KommAustria had been taking this target into account for some time when putting to tender expiring licences for regional and local terrestrial television transmission capacities (multiplex C). The national regulatory authority also had the duty of issuing several decisions in 2019 and 2020 to allow frequency migrations for numerous broadcasting systems.

Previously, in 2018, a legislative solution had been adopted to provide compensation for the migration expenses that would be incurred to broadcasting system operators who hold long-term licences to operate frequencies above channel 48. Lawmakers had passed an amendment to the KommAustria Act (KOG) effective as of 1 December 2018, with Art. 33a, b and c specifying a related compensation procedure and entrusting the RTR Media Division with administrating this task. Once legal certainty had been established for the operators concerned, the migration process in the affected broadcasting systems was launched in 2019.

The tasks remaining in 2020 were to migrate nine multiplex A broadcasting systems, 20 similarly nationwide broadcasting systems for multiplex E (8 systems) and F (12 systems), as well as two regional multiplex C systems, converting them from the 700 MHz band to the UHF band further below (470–694 MHz). Broadcasting systems belonging to the nationwide multiplexes B and D were no longer operating above channel 48 in 2020.

3.1.5 5G broadcasting trials

Toward further progress in digital broadcasting, and to test broadcasting applications based on the 5G transmission standard, KommAustria approved in November 2019 an initial related pilot study, to be carried out in the Vienna area by Österreichische Rundfunksender GmbH & Co KG (ORS). ORS applied for funding for the test transmissions, which was subsequently granted from the Digitisation Fund by the RTR Media Division, which is responsible for approval.

Broadcasting trials were performed from two large systems in Vienna, Kahlenberg and Liesing. For the tests, KommAustria made available a channel within the 700 MHz band (a broadcasting frequency previously within KommAustria's scope of responsibility), initially for a limited term until 30 June 2020. The 700 MHz band, allocated throughout Europe for mobile use as of 1 July 2020, was along with the 1500 MHz and 2100 MHz bands awarded in Austria through an auction in Q3 2020, with the aim of setting up and expanding 5G mobile communications. KommAustria accordingly issued a decision on 25 June 2020, approving extension of the trial broadcasts in the 662–672 MHz range to include the period of 1 July 2020 to 30 June 2021.

The findings from the trials should help identify the potential for establishing terrestrial broadcasting in the long term and thus contribute to progress in digital terrestrial technology in general. This technology is mainly to serve in expanding the level of coverage already offered for terminal devices using DVB-T2, to include mobile devices.

With 5G broadcast, television and radio programmes are broadcast in the real sense as 'one-to-many' signals, in this case based on the 5G mobile communications standard using 'further evolved Multimedia Broadcast Multicast Service' (feMBMS). The signals generated based on feMBMS – or, soon, its successor '5G New Radio' (5G NR) – are transmitted within broadcasting frequency ranges and not mobile bands. Users' mobile data volumes are not affected through receiving such broadcasts and there is no added traffic within mobile

cells. This shows how economically the application for broadcasting information services to mobile devices uses spectrum.

To receive linear radio and television programmes being transmitted via 5G broadcast, a 5G-ready device requires only the antenna integrated in the receiver, but not a SIM card or internet access. With 5G broadcast functionality specified as part of the 5G mobile communications standard, it is supported by every terminal device that is manufactured in full compliance with the 5G specification standards.

By approving 5G broadcast trials, KommAustria recognises that mobile devices have long since become basic tools for access to information on a day-to-day basis, and will continue to play an increasingly significant role. While non-linear online media services provided on demand are gaining ground particularly in the entertainment industry, linear information services continue to dominate news reporting. Taken together, these two observations suggest that, on the one hand, unlimited reception of 5G broadcasts via mobile devices could be easily implemented at a technical level, without any restricting factors. It is also clear that implementation would entail a dimension relating to democracy in the information society, a factor considered by policymakers in Art. 21 of the Audiovisual Media Services Act (AMD-G). This provision calls for the rollout and advancement of digital broadcasting to be enabled and supported for all transmission platforms, while scenarios are to be detailed for the introduction, rollout and advancement of digital broadcasting and multimedia services.

3.2 Digital radio based on the DAB+ standard

As of year-end 2020, Austrian listeners had potential access to 24 domestic radio stations broadcast based on the DAB+ digital standard. This means two stations more than at the end of the year before.

Twelve of those 24 DAB+ radio stations are accommodated on a multiplex (MUX I) that first began transmitting nationwide on 28 May 2019, with the goal of reaching 83 per cent of the population by late August 2020. The goal was realised on 25 August 2020.

The other twelve digital radio stations are broadcast in greater Vienna, under a regional licence and via the multiplex referred to as 'MUX II'.

Identically to FM radio, DAB+ is broadcast and received via antenna. To listen to the broadcasts, a radio receiver compatible with the DAB+ digital transmission standard is required. Such receivers, which usually support FM reception in addition to DAB+, have for some time been available in Austria, in everything from kitchen radios to high-end stereo tuners.

Neither the Austrian Broadcasting Corporation (ORF) nor most of the private FM radio networks have to date availed themselves of the option, either at regional or nationwide level, of broadcasting programmes digitally based on the DAB+ standard.

3.2.1 Nationwide DAB+ service (MUX I)

Original plans had called for the 'MUX I' multiplex, the first nationwide DAB+ broadcasting network, to be rolled out in four phases and completed by September 2020. The operator, Vienna-based ORS comm GmbH & Co KG (ORS comm), began stepping up efforts already in 2019, so that work was finished as of 25 August 2020.

After KommAustria had granted to ORS comm authorisation for the project on 2 August 2018, the MUX I rollout began on 28 May 2019. As early as 11 December 2019, 77 per cent of the Austrian population had access to DAB+ service. After two further phases in 2020, completed as of 26 May and 25 August, the envisaged coverage level of 83 per cent of the population was achieved.

3.2.2 Changes in DAB+ service to the Vienna region (MUX II)

The initial digital radio line-up based on the DAB+ transmission standard began service to the Vienna region on 4 April 2018, and twelve stations were broadcasting as of year-end 2020. The operator's licence awarded by KommAustria to RTG Radio Technikum GmbH for the Vienna regional multiplex (MUX II) applies to the broadcasting region referred to as 'Großraum Wien und Teile des Wiener Umlandes' (greater Vienna and parts of neighbouring areas), with technical coverage of roughly 2.25 million people.

Half of the 14 stations originally broadcast via MUX II in 2018 later switched to the nationwide MUX I multiplex when it began transmitting. To replace them on MUX II, entirely new broadcasters emerged, so that the line-up again includes 12 stations.

3.2.3 Digital radio via DVB-T2

Besides the DAB+ transmission standard, radio stations can also still be received in digital terrestrial mode via the DVB-T2 multiplexes A and F primarily used for terrestrial television. Such stations are thus also included in the digital terrestrial product packages marketed in Austria under the name of 'simpliTV'.

ORF radio stations Radio Österreich 1 (Ö1), Hitradio Ö3 and radio FM4 are broadcast without encryption via multiplex A, which achieves the highest technical coverage range among the population (98%).

Among private radio stations, Radio Maria is broadcast at no charge but with encryption by way of multiplex F, which is also nationwide (92% technical coverage range). Initial registration at no cost is required in order to receive the station.



www.rtr.at

Management of funds and grants

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04 Management of funds and grants

The RTR Media Division is the largest funding body in the broadcasting sector (television and radio) and for television film productions in Austria. Regulatory authority KommAustria awards grants in the print media field. This grant administration helps to preserve and further develop media plurality and fair competition.

4.1 Digitisation Fund

In 2020 the Austrian Digitisation Fund was endowed with EUR 0.5 million. The purpose of the fund is to promote digital transmission technologies and digital applications based on European standards relating to broadcasting. Funding is derived from those broadcasting fees which, while collected jointly with ORF programme fees, are primarily allocated to the federal budget.

4.1.1 DAB+ or other funding

One of the key points of focus for the Digitisation Fund in 2020 was funding the rollout of regular DAB+ service, based on the funding guidelines issued in 2018.

The project involves the introduction of a regular service based on the DAB+ standard for the digital broadcasting of the radio stations operated by funding recipients. The funding provided covers the planning, procurement and setup costs for technical infrastructure (technical broadcasting costs) or the prescribed portion of the fees to be paid by broadcasters in order to cover the technical costs of broadcasting DAB+ radio programmes. The latter portion refers to the fees charged by the multiplex operators to the broadcasters of digital terrestrial radio stations for the technical broadcasting of their radio programmes.

The funding which originally began in 2018 or 2019 for launching a regular service was continued (with now seven radio broadcasters on the regional multiplex platform MUX II in Vienna and nine radio broadcasters on the nationwide multiplex platform MUX I).

Funding of '5G Broadcast' (by Österreichische Rundfunksender GmbH & Co KG) and of the digital transition of regional television (by RTS Regionalfernsehen GmbH), started in 2019, was also continued.

Furthermore, in the course of 2020, Radio RU GmbH and FHW Radio und Forschung GmbH applied for funding to broadcast their stations via the regional MUX II multiplex platform in Vienna; Mein Kinderradio Limited, Zweigniederlassung Österreich and the Radio Stephansdom church foundation applied for funding to broadcast their stations via the nationwide MUX I multiplex platform. The Digitisation Fund assisted these projects with grants covering 50 per cent of the project costs eligible for funding.

In accordance with the reporting requirements for the Digitisation Fund, an evaluation report on the launching of regular service of regional and nationwide multiplex platforms is to be prepared at the end of the funded project term (mostly by 31 May 2022), with this report to be submitted to RTR for publication.

4.1.2 Funding of a pilot project for DAB+ tunnel coverage

Österreichische Rundfunksender GmbH & Co KG applied for project funding to identify the requirements and costs relating to the coverage of road tunnels in the primary road network with DAB+ transmission technology. A vital element of the funded project consists of pilot DAB+ coverage of the 'Rannersdorf' and 'Vösendorf' tunnel systems. The findings from this project should contribute towards achieving (ideally) nationwide coverage of road users in Austria's tunnel systems. The project costs that are eligible for funding amount to EUR 37,867.00 for the period from 16 November 2020 to 31 December 2022. Funding was approved to cover 50 per cent of the costs.

4.1.3 Notes on the 2020 annual accounts

Based on the statement for the trustee account as at 31 December 2019, and considering the credits and disbursements as well as the grants already approved but not yet disbursed, EUR 2,058,463.61 was available in the fund as at 31 December 2020 (see the table below for details).

Table 09: DIGITISATION FUND – EXCERPT FROM THE 2020 ANNUAL ACCOUNTS

DIGITISATION FUND	(EUR)	(EUR)
Income and expenditure statement		
Trustee account balance as at 31 December 2019		3,219,841.54
Credits		
Revenues received in 2020	500,000.00	
Repayment of administrative expenses from 2019	14,136.91	514,136.91
Debits		
Interest	-702.18	
Administrative expenses and RTR participation in projects in 2020	-104,500.00	
Grant disbursements in 2020	-691,450.89	-796,653.07
Balance resulting from initial amount, credits and debits in 2020		
= Trustee account balance as at 31 December 2020		2,937,325.38
Outstanding administrative expenses in 2020 and RTR participation in projects in 2020, for repayment in 2021		-4,424.80
Balance of trustee obligations as at 31 December 2020		2,932,900.58
Approved grants pending disbursement	-874,436.98	-874,436.98
Funds available in 2021		2,058,463.61

4.2 Austrian Television Fund

The Austrian Television Fund is Austria's largest institution for funding TV productions. It supports the production and commercial exploitation of television films, series and documentaries. It was set up at RTR in 2004 by the Austrian federal government to provide support to the Austrian film industry and promote Austria's attractiveness for the media industry. RTR manages the annual available budget which amounts to EUR 13.5 million. Grants are awarded from this fund based on guidelines, along with Articles 26 to 28 and Articles 23 to 25 of the KommAustria Act (KOG), which together constitute the legal basis for the activities of the Austrian Television Fund.

The Austrian Television Fund has set itself the objective of financially backing independent Austrian producers, thereby stimulating the productivity of the domestic production sector and creating jobs in the film industry in the long term. The grants are also intended to preserve a versatile cultural landscape by increasing the quality of the television productions and making an important contribution towards strengthening the audiovisual sector in Europe. Key criteria considered by the grant award process include value creation and spending in Austria in particular.

4.2.1 New grant guidelines as of 15 December 2020

Market developments already addressed in the most recent amendment of the guidelines, becoming effective as of December 2018, continued apace – including an increased focus on exploitation in the pay TV, VoD (video on demand) and streaming segments. The restrictions on acquiring rights for these forms of exploitation were tightened in the new guidelines applying to pay TV VOD, in order to further strengthen the hand of the production industry.

In future, pay TV and pay VOD rights may be acquired only by television broadcasters participating in a correspondingly high level of financing and for half of the licence period. This should enable producers to exploit their productions in the long term.

The trend towards multi-part productions and television film series also continued in 2020. This made it all the more important to facilitate financing through relaxed distribution conditions, which ultimately resulted in 'corridor' rules for distributors being lifted. Financial participation by distributors in the form of minimum guarantees can now be recovered as is customary to the market, which should also create a co-financing incentive.

2020 was a record year in terms of the financial expense of productions, resulting in the funding from the Austrian Television Fund being exhausted as early as the first submission deadline in January 2020. This necessitated changes to the guidelines, making it easier to predict the reductions that became necessary as a result of the limited availability of funding.

Degrassive funding was introduced for fictional productions as a result of this.

4.2.2 Support for television films in 2020

4.2.2.1 Production grants

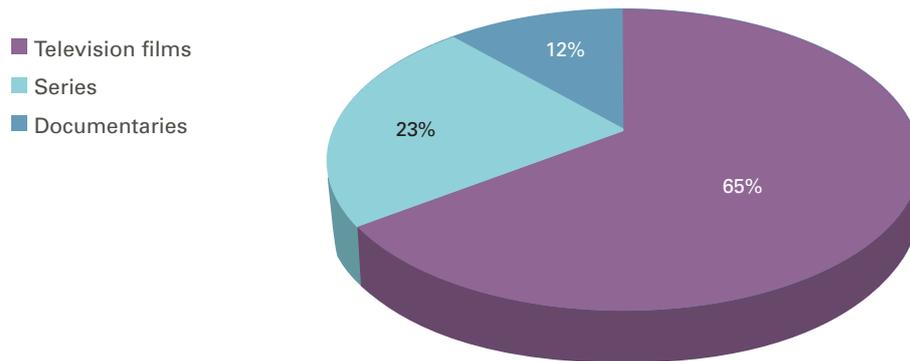
Of the 55 applications that were submitted in 2020, 42 productions were approved amounting to EUR 12,672,359.

Funding was approved to cover roughly EUR 73.3 million of planned total production costs. About EUR 46.3 million is expected to be spent in Austria on the production of these films. The latter figure represents 3.6 times the amount of total funding awarded by the Austrian Television Fund.

Details of production grants

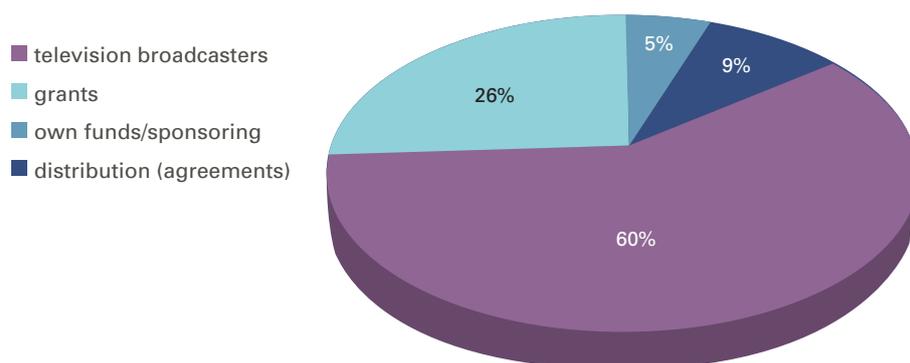
The 42 grants approved provided support to 13 television films, two series and 27 documentaries. The figure below gives details on how the funding shares were distributed:

Figure 03: Austrian Television Fund – grants approved in 2020



The proportion of funding awarded to the television films and series rose from 42 to 65 per cent compared with the previous year. This contrasts with the increase in grant share for series, which dropped from 39 to 12 per cent. The proportion of funding awarded to documentaries shrank from 19 to 12 per cent.

Figure 04: Austrian Television Fund – share contributed to projects funded in 2020



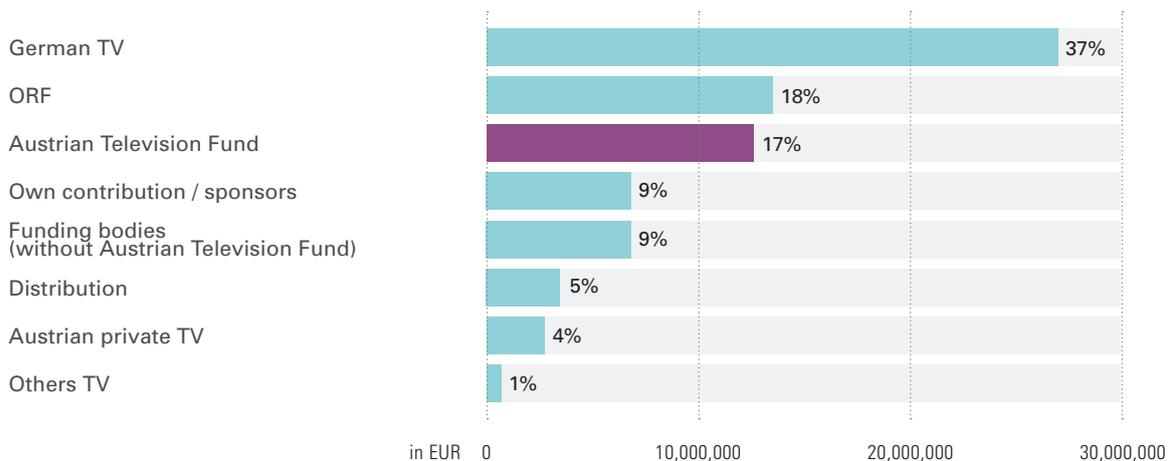
The proportion of funding contributed to productions by each of the various sources remained roughly the same compared with the previous year. The sources are: grants, television broadcasters, distribution and own funds/sponsors.

The supported projects sourced 60 per cent of their funding from television broadcasters, 26 per cent from grants, 5 per cent from own funds and sponsoring, and 9 per cent with distribution agreements.

Co-financing provided by funding bodies other than the Austrian Television Fund accounted for 9 per cent of the total in 2020, 2 per cent less than the year before. Of a total 42 funded television productions, Austrian funding bodies were exclusively involved in the financing of 39 productions; three projects were also supported by European funding bodies.

The chart below gives a detailed breakdown of the funding in the reporting year:

Figure 05: Financing shares for television film projects funded in 2020



Participation by television broadcasters

From the total number of 42 funded projects, 35 television productions were co-financed by the ORF. The number of productions receiving funding from Austrian private television broadcasters increased from five to six compared with the year before while the share of financing covered for these productions doubled from 2 per cent to 4 per cent.

German television broadcasters participated in a total of 17 projects. Seven productions stated participations by European broadcasters (excluding Germany) from France, Great Britain, Italy, the Netherlands and Switzerland in their financing operations.

As in previous years, the majority of productions co-financed by European broadcasters were documentaries. Germany was the main European country whose broadcasters contributed to funding films or series. No participations by international television broadcasters were recorded for any projects.

Women's share in the funded projects

In terms of appointments to senior management positions – production, direction and screenplay – there was a shift in trends compared with the previous year. The percentage of women among producers increased from 23 to 24 per cent. The proportion of female directors increased from 29 to 38 per cent. The proportion of female screenwriters declined, from 40 to 39 per cent.

Table 10: Austrian Television Fund – gender statistics for funded projects

2020	Women		Men	
	Number	Percentage	Number	Percentage
Executive producers/producers	10	24%	32	76%
Directors	25	38%	41	62%
Screenwriters	31	39%	49	61%

4.2.2.2 Exploitation grants

To support the broader distribution of their film projects, producers received Austrian Television Fund grants to produce versions for the hearing and visually impaired, as well as versions in other languages and for submission to film festivals. As funding had been exhausted, only four grants were approved totalling EUR 31,037 in 2020.

Full details of the projects supported and the grant award guidelines are published on the websites of the Austrian Television Fund (www.fernsehfonds.at) and the film library (in German).

4.2.2.3 Notes on the 2020 annual accounts

Based on the statement for the trustee account as at 31 December 2019, and considering the credits and debits as well as the grants already approved but not yet disbursed, about EUR 162.254,14 was available in the fund as at 31 December 2020; see the table below for details.

Table 11: Austrian Television Fund: excerpt from the 2020 annual accounts

Austrian Television Fund	(EUR)	(EUR)
Income and expenditure statement		
Trustee account balance as at 31 December 2019		5,552,051.88
Credits		
Revenues received in 2020	13,500,000.00	
Administrative expenses carried over from 2019	49,759.49	
Grant repayments	43,750.00	13,593,509.49
Debits		
Interest/fees	-7,522.05	
Administrative expenses in 2019	-735,300.00	
Grant disbursements	-14,883,991.33	-15,626,813.38
Balance resulting from initial amount, credits and Debits in 2020		
= Trustee account balance as at 31 December 2020		3,518,747.99
Outstanding repayment in 2021 of administrative expenses from 2020		36,228.48
Balance of trustee obligations as at 31 December 2020		3,554,976.47
Approved grants pending disbursement Grants		
Committed funds from 2017	-45,995.00	
Committed funds from 2018	-37,100.00	
Committed funds from 2019	-678,424.51	
Committed funds from 2020	-2,631,202.82	-3,392,722.33
Funds available in 2021		162,254.14

4.3 Broadcasting funds

The Fund for the Promotion of Private Broadcasting (Private Broadcasting Fund) and the Fund for the Promotion of Non-Commercial Broadcasting (Non-Commercial Broadcasting Fund) were set up in 2009 with the amendment of the KommAustria Act (KOG). A total of EUR 6 million was originally allocated to the two funds. The funding was continually increased to EUR 18 million until 2013. This level was then maintained until 2018. In 2019 the Private Broadcasting Fund received an additional EUR 5 million, bringing the total available since 2019 to EUR 23 million.

Due to the COVID-19 crisis, the funding provided by the Private Broadcasting Fund was increased on a one-time basis by EUR 15 million, with that of the Non-Commercial Broadcasting Fund increasing by EUR 2 million. This resulted in EUR 35 million for the Private Broadcasting Fund and EUR 5 million for the Non-Commercial Broadcasting Fund, totalling EUR 40 million in 2020.

To offer broadcasters maximum support during the COVID-19 crisis, the remaining funds of the usual budget and the special funding were awarded in the second submission deadline in 2020. Special guidelines were adopted for this deadline. Although these did not establish a new award system, they did supplement the general guidelines. The grant applicants did not have to submit individual projects, only an application for the

entire programme that was produced in-house after the deadline of 13 March 2020, provided it was not yet funded within the first submission deadline.

All grants serve to promote the Austrian broadcasting system and help broadcasters deliver a diverse portfolio of high-quality programming. Broadcasters can apply for grants if their programmes require a licence or notification as defined in the Audiovisual Media Services Act (AMD-G) or Private Radio Act (PrR-G).

Funding is awarded on the basis of relevant legislation and approved guidelines.

4.3.1 Non-Commercial Broadcasting Fund

In 2020 a total of about EUR 5 million was available in the Non-Commercial Broadcasting Fund (including EUR 2 million for special COVID-19 funding).

4.3.1.1 Submission deadlines in 2020

In the first round of submissions (due by 31 October 2019), 73 requests were submitted by radio broadcasters, two by education and training initiatives, and 16 by television broadcasters. The fund awarded grants to 14 non-commercial radio stations, three community television stations and one educational institution in radio broadcasting.

A total of EUR 2,751,499.00 was awarded. Of the funding, 32.12 per cent (EUR 883,810.00) went to television, 65.15 per cent (EUR 1,792,689.00) went to radio and 2.73 per cent (EUR 75,000.00) was allocated to educational institutions.

In this round, grants of EUR 2,499,000.00 were awarded for content creation, EUR 247,149.00 for educational measures and EUR 5,350.00 to support studies.

The second submission period ended on 31 May 2020. As a result of the special COVID-19 guidelines, funding was granted amounting to EUR 2,100,900.00 (special COVID-19 funding plus the remainder of the usual budget). Of this, 61.78 per cent (EUR 1,297,900.00) went to radio, 34.27 per cent (EUR 720,000.00) to television, and 3.95 per cent (EUR 83,000.00) was awarded to educational institutions. The fund awarded grants to 14 radio stations, three television stations and two educational institutions.

Detailed information on the grant decisions can be found on the RTR website at <https://www.rtr.at/medien/aktuelles/entscheidungen/Uebersicht.de.html?l=de&q=&t=field%3Dnichtkommerziellerrundfunkfonds> (in German).

4.3.1.2 Notes on the 2020 annual accounts

EUR 5 million was allocated to the Non-Commercial Broadcasting Fund in 2020 (including a one-time COVID-19 increase of EUR 2 million).

Based on the statement for the trustee account as at 31 December 2019, and considering the credits and debits as well as the grants already approved but not yet disbursed, about EUR 1.271.698,53 was available in the fund as at 31 December 2020 (see table 12 below for details).

Table 12: Non-Commercial Broadcasting Fund – excerpt from the 2020 annual accounts

Non-Commercial Broadcasting Fund	(EUR)	(EUR)
Income and expenditure statement		
Trustee account balance as at 31 December 2019		922,404.19
Credits		
Revenues received in 2020	5,000,000.00	
Administrative expenses carried over from 2019	12,556.80	
Grant repayments	0.00	5,012,556.80
Debits		
Interest	-1,043.03	
Administrative expenses in 2020	-113,200.00	
Grant disbursements in 2020	-4,593,092.66	
Balance resulting from initial amount, credits and grant disbursements in 2019		-4,707,335.69
= Trustee account balance as at 31 December 2020		1,227,625.30
Outstanding administrative expenses in 2020 for repayment in 2021		7,733.51
Balance of trustee obligations as at 31 December 2020		1,235,358.81
Approved grants pending disbursement		
Committed funds from 2019	-69,364.00	
Committed funds from 2020	-990,547.00	-1,059,911.00
Funds available in 2021		175,447.81

4.3.2 Private Broadcasting Fund

4.3.2.1 Submission deadlines in 2020

In 2020, EUR 35 million (including EUR 15 million special COVID-19 funding) was available overall in the Private Broadcasting Fund.

In the first round (with a deadline of 25 October 2019), 229 requests were submitted for television grants, 247 for radio grants and two for the funding of educational institutions.

A total of EUR 18,827,249.90 was awarded to 53 private television broadcasters, 41 private radio broadcasters and two educational institutions during this first round. Of these funds, EUR 13,587,094.00 (72.17%) went to television broadcasters, EUR 4,944,052.90 (26.26%) to private radio broadcasters and EUR 296,103.00 (1.57%) to the educational institutions Privatsenderpraxis and Forum Journalismus TV/Radio.

A breakdown of grants according to the three grant categories reveals that 93.60 per cent of the total awarded in the first round of submissions went to supporting content, 4.86 per cent to education and training, and 1.54 per cent to reach surveys and quality studies.

The second submission period ended on 31 May 2020. Funding (COVID-19 special funding and the remainder of the usual budget) amounting to EUR 16,582,692.00 was awarded on the basis of the COVID-19 special guidelines. Of this, 74.03 per cent (EUR 12,275,559.00) went to television and 25.97 per cent (EUR 4,307,133.00) was allocated to radio. The fund awarded grants to 46 television broadcasters and 36 radio broadcasters.

More detailed information on the grant decisions can be found on the RTR website at <https://www.rtr.at/medien/aktuelles/entscheidungen/Uebersicht.de.html?l=de&q=&t=field%3Dprivatrundfunkfonds> (in German).

4.3.2.2 Notes on the 2020 annual accounts

EUR 35 million was allocated to the Private Broadcasting Fund in 2020.

Based on the statement for the trustee account as at 31 December 2019, and considering the credits and debits as well as the grants already approved but not yet disbursed, about EUR 1.271.698,53 was available in the fund as at 31 December 2020 (see table 13 below for details).

Table 13: Private Broadcasting Fund – excerpt from the 2020 annual accounts

Private Broadcasting Fund	(EUR)	(EUR)
Income and expenditure statement		
Trustee account balance as at 31 December 2019		12,381,155.88
Credits		
Revenues received in 2020	35,000,000.00	
Grant repayments	128,096.80	
Administrative expenses carried over from 2019	<u>62,783.98</u>	35,190,880.78
Debits		
Interest	-16,116.43	
Administrative expenses in 2020	-565,800.00	
Grant disbursements in 2020	-27,584,983.08	
Balance resulting from initial amount, credits and grant disbursements in 2020		<u>-28,166,899.51</u>
= Trustee account balance as at 31 December 2020		19,405,137.15
Repayment of erroneous transfers		
Outstanding administrative expenses in 2020 for repayment in 2021		<u>10,754.40</u>
Balance of trustee obligations as at 31 December 2020		19,415,891.55
Approved grants pending disbursement		
Committed funds from 2019	-766,433.12	
Committed funds from 2020	-17,377,759.90	<u>-18,144,193.02</u>
Funds available in 2021		1,271,698.53

4.4 Press and journalism subsidies

The federal press and journalism subsidies are direct support measures in the form of financial contributions. Decisions on the allocation of subsidies are made by the Austrian Communications Authority (KommAustria). The Press Subsidies Commission and the Journalism Subsidies Advisory Board have been set up as bodies to advise on these matters. One exception is the subsidies allocated to the Austrian Advertising Council under the terms of Art. 33 KOG, for which no advisory body is required. RTR GmbH provides specialist technical and administrative support for these subsidies.

The legal bases for the allocation of grants are the Austrian Press Subsidies Act 2004 (PresseFG 2004), the press subsidies guidelines published each year by KommAustria, Section II of the Journalism Subsidies Act 1984 (PubFG) as well as Art. 33 KOG and the guidelines published by KommAustria on the promotion of self-regulation in commercial communication.

4.4.1 Press subsidies

To cushion the impact of COVID-19, the following additional financial support within the scope of press subsidies was granted in 2020:

- Increase in distribution subsidies for daily and weekly newspapers under Art. 17 Par. 8a PresseFG 2004
- Contribution to printing costs for free and paid-for daily newspapers under Art 12b PresseFG 2004
- Extraordinary funding for free and paid-for weekly newspapers, paid-for magazines, regional newspapers and online newspapers under Art. 12c PresseFG 2004

The total funding was more than three times the amount in previous years with over twice as many applications.

Table 14: Press subsidies – grant amounts, applications and approval rates, 2018–2020

Year	Grant amount (EUR)	Requests	Approvals	Approval rate in %
2018	8,863,000.00	110	108	98.18
2019	8,863,000.00	115	111	96.52
2020	27,452,664.00	243	205	84.36

Note: This list includes grants for the Austrian Press Council that originate from the funds.

The following amounts and applications were allotted to the individual funding areas:

Table 15: Total press subsidies 2020 by funding areas

Total press subsidies in 2020	Funding (in EUR)	Requests	granted
Distribution subsidies under Section II PresseFG (including COVID-19 increase)	9,712,500.-	46	45
Special subsidies under Section III PresseFG	3,242,000.-	5	4
Promotion of quality and securing the future under Section IV PresseFG	1,560,000.-	53	52
Contribution to printing costs under Art. 12b PresseFG	9,742,164.-	18	15
Extraordinary press subsidies under Art. 12c PresseFG	3,000,000.-	120	88
Self-regulation in matters relating to the press / Austrian Press Council	196,000.-	1	1
TOTAL	27,452,664.-	243	205

Details of grant awards are published on the RTR website at www.rtr.at (in German).

4.4.1.1 Increase in funds budgeted to subsidise the distribution of daily and weekly newspapers (Art. 17 Par. 8A PresseFG)

In addition to the amount earmarked in the Federal Finance Act (BFG) 2020, EUR 5,827,500 was available from the COVID-19 fund under Section II PresseFG 2004. As a result, under Art. 17 Par. 8a PresseFG 2004, a total of EUR 5,244,750 was awarded in distribution subsidies for daily newspapers, instead of EUR 2,097,900. Weekly newspapers were granted a total of EUR 4,467,750 instead of the originally allocated EUR 1,787,100. The conditions for the allocation of the distribution subsidies remain unchanged.

Table 16: Comparison of distribution subsidies 2018-2020

Distribution subsidies under Section II PresseFG 2004	Result (in EUR)	Requests	Granted
2018	3,885,000.-	48	46
2019	3,885,000.-	49	48
2020	9,712,500.-	46	45

Details on grant awards have been published on the RTR website www.rtr.at.

4.4.1.2 Extraordinary funding measures under Art. 12b PresseFG 2004 (contribution to cover printing costs)

To cushion the economic effects of the COVID-19 crisis on the revenue situation in the print media segment, the Fourth COVID-19 Act, Federal Law Gazette (FLG) I No. 24/2020 created funding for 2020 in the form of a contribution to cover printing costs incurred to media owners of daily newspapers. This measure also benefited free daily newspapers. The amount of the grant was based on the average print run determined for 2019 while a one-time amount of EUR 3.25 was awarded for each printed copy. This amounted to EUR 9,742,164 being paid out in subsidies. The deadline for submissions was the beginning of May 2020. To guarantee swift assistance,

following consultation with the Press Subsidies Commission, the grant funds were awarded and disbursed by KommAustria within three weeks.

Fifteen daily newspapers and three weekly newspapers submitted applications for a contribution to cover printing costs under Art. 12b. The applications for the weekly newspapers had to be rejected because this measure was aimed only at media owners of daily newspapers.

Table 17: Special funding under Art. 12b PresseFG 2004

Special funding under Art. 12b PresseFG 2004	Result (in EUR)	Requests	Granted
2020	9,742,164	18	15

4.4.1.3 Extraordinary funding measure under Art. 12c PresseFG 2004

For media owners of free and paid weekly newspapers, paid-for magazines, regional newspapers and online newspapers, a one-time and extraordinary funding scheme was created by the Federal Act dated 24 July 2020, FLG I No. 82/2020. Its objective was also to cushion the economic impact of the COVID-19 crisis on the revenue situation. Funds totalling EUR 3,000,000 were available for this special funding. The amounts granted were calculated in proportion to the direct and indirect personnel costs that were incurred between the months of March and June 2020 for the content design, the production and the sale or distribution of the media qualifying for support. COVID-19 special funding amounts that had already been approved under the Press Subsidies Act were to be deducted; the funding was capped at EUR 200,000 per media owner or media association.

A total of 120 submissions were made within the deadline that was restricted to 30 days after the Federal Act was published, ending on 24 August 2020. The grant funds were awarded by KommAustria after consultation with the Press Subsidies Commission and disbursed at the end of September 2020. While 88 requests were granted, 32 were rejected. The reasons for their rejection included in particular the failure to comply with the share of sales for periodicals and with the partial sales revenues that are relevant to funding in the case of online newspapers.

Table 18: Special funding under Art. 12c PresseFG 2004

Special funding under Art. 12C PresseFG 2004	Result (in EUR)	Requests	Granted
2020	3,000,000.-	120	88

4.4.2 Funding for self-regulation of the press

In 2020 the Austrian Press Council dealt with 418 cases. A total of 409 cases were submitted from the outside, while in nine cases the body's senates reviewed cases resulting from their own observations. Of Austria's dailies, only Kronenzeitung and Heute have still refused to recognise the Press Council's status as arbitrator.

The Austrian Press Council requested from KommAustria a cost contribution of EUR 196,000 for 2020, which was subsequently approved.

Table 19: Press Council – number of cases handled and cost contributions, 2018–2020

Year	Cases	Cost contribution in EUR
2018	302	176,000.-
2019	297	196,000.-
2020	418	196,000.-

4.4.3 Funding for self-regulation of commercial communication

In 2020 the Austrian Advertising Council was again the only applicant for a subsidy from the fund for the promotion of self-regulation in commercial communication in media, once again receiving the entire amount allocated to the fund (EUR 50,000).

As defined in Art. 33 KOG, the goals of this form of financial assistance, existing since 2009, are as follows:

- Ensure the independence of the body in question
- Ensure that the body performs the duties set forth in its articles of association
- Ensure effective enforcement of the body's decisions and resolutions

4.4.4 Journalism subsidies – promotion of print periodicals

Section II of the Federal Act on Subsidies for Political Education and Journalism 1984 (PubFG) provides for the promotion of journalism that serves the purpose of educating citizens by contributing high-quality analysis of relevant issues stemming from the spheres of policymaking, culture and world views. Taken as a whole, the periodicals that receive funding represent a broad spectrum of content. The publications range from feminist periodicals to journals that are centred on religious topics or discuss political and scientific issues. Also included are periodicals by associations that are active in the fields mentioned above and are familiar with the topics through practical experience.

In 2020 KommAustria received 77 applications for funding of a print periodical under Section II PubFG 1984, complying with 72 requests while rejecting five due to failure to meet statutory funding requirements.

KommAustria decides the level of funding on a case-by-case basis, giving due consideration to recommendations made by the Journalism Subsidies Advisory Board as well as to the scope, circulation, resources and financial situation of the relevant print periodical. By law, grants may be no less than 0.4% and no more than 4% of the funds designated for this purpose in the Federal Finance Act (BFG). As in previous years, EUR 340,000 was available for this funding in 2020. The subsidy amounts ranged from EUR 1,360 to EUR 12,857.80.

Table 20: Journalism subsidies – grant amounts, applications and approval rates, 2018–2020

Year	Grant amount (EUR)	Requests	Approvals	Approval rate in %
2018	340,000.-	80	74	92,5%
2019	340,000.-	75	73	97,3%
2020	340,000.-	77	72	93,5%

Details of grant awards are published on the RTR website at www.rtr.at (in German).



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Activities of the TKK

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05 Activities of the TKK

The independent Telekom-Control-Kommission (TKK) has been responsible for regulating the telecommunications market in Austria since 1997. Its tasks and responsibilities are specified in detail by law. Among other things it is responsible for the regulation of competition, frequency award procedures and the approval of general terms of business as well as the fees charged by telecommunications companies. It is additionally empowered to serve as the supervisory body referred to the Signatures Act (SigG). An overview of the main areas of regulatory activity in the reporting year is presented below.

5.1 Spectrum – maximising efficient use of limited resources

5.1.1 Award of spectrum in the 700 MHz, 1500 MHz and 2100 MHz ranges

In terms of work on the subject of spectrum in 2020, no other topic attracted as much attention as the award of spectrum in the 700 MHz, 1500 MHz and 2100 MHz ranges. Owing to the ambitious coverage targets being pursued by policymakers, it was clear from the outset that this award would be a key project for future broadband coverage in Austria. Initially scheduled for April 2020, the auction was postponed because of measures adopted by the federal government for containing the coronavirus pandemic, and auction planning was adjusted to these difficult prevailing conditions. Looking back, and with the developments expected in autumn ('second wave'), the TKK made the right decision by starting the auction in late summer.

After four weeks and a total of 60 bidding rounds, the second 5G auction was complete by 11 September 2020, and all 700 MHz, 1500 MHz and 2100 MHz spectrum packages to be assigned for nationwide use were duly awarded. Hutchison Drei and T-Mobile acquired 90 MHz each, while A1 Telekom acquired 80 MHz. The net auction revenue totalled EUR 202 million. Thanks to an innovative auction design used for the first time in Europe, the ambitious political coverage objectives were indeed achieved. Austrian providers committed themselves unequivocally to the expansion and provision of coverage to the population in this auction.

Alongside the typical award objectives implied directly by a reading of the TKG, such as ensuring legal certainty, competition and the efficient use of spectrum, coverage was a key focus in this award procedure. Apart from meeting ambitious national and EU 5G coverage objectives – particularly continuous coverage to key transport routes (due in part to 'autonomous driving') – the federal government's broadband strategy also needed to be accommodated, with its highly enterprising goal of ensuring the provision of universal mobile broadband to the entire population of Austria in the near future. Investigations revealed that some 2,100 of Austria's roughly 7,800 cadastral municipalities had lacked universal coverage to date. To maximise the provision of coverage to these unprofitable municipalities, a separate bonus stage was designed, in which bidders could obtain discounts on spectrum prices for providing coverage to cadastral municipalities.

This new design ensured the achievement of the goals originally set. A total of 1,702 cadastral municipalities, namely more than 80 per cent of all municipalities in Austria lacking (adequate) coverage to date, now stand to benefit from a fast and universal fast mobile broadband service in the foreseeable future.

The procedure for selecting and exchanging cadastral municipalities was started in autumn, and is supported by a dedicated registration portal set up by the regulatory authority: the portal will assist providers over the next few years as they select and exchange cadastral municipalities.

5.1.2 Refarming of spectrum in the 3410–3800 MHz range

Article 57 Par. 1 of the Telecommunications Act 2003 (TKG 2003) authorises the competent authority to modify how and to what extent spectrum is allocated. This can be required, for example, by international developments and changes in international telecommunications law in particular or as a result of a need to adapt to modified frequency usage at an international level. The proportionality of the measure and the economic impact on affected parties must be considered when making any such changes. Where the modified technical conditions for frequency usage differ from those in the invitation to tender for usage rights, the Federal Minister for Agriculture, Regions and Tourism is to be consulted.

In the reporting year, the TTK initiated one procedure in response to modified technical terms and conditions of use relating to the 3410–3800 MHz range awarded in 2019. Commission Implementing Decision 2014/276/EU of 2 May 2014 was replaced by Commission Implementing Decision (EU) 2019/235 of 24 January 2019 to amend Commission Decision 2008/411/EC. In addition, the Agreement on 3400–3800 MHz (Austria, Germany, Liechtenstein and Switzerland) of 20 September 2017 was replaced by the revised Agreement on 3400–3800 MHz (Austria, Germany, Liechtenstein and Switzerland – Vaduz 2018) of 29 November 2018.

5.1.3 Review of coverage level in the 3410–3800 MHz frequency range

The first coverage obligations for the 3410–3800 MHz range entered into force at the end of 2020. Licence holders must operate a certain number of locations depending on the frequencies they have been awarded in each case. To be considered a location in the sense of the obligation, these locations must fulfil certain criteria (e.g. transmission power, transmitted bandwidth).

Table 21: Coverage obligations – locations to be operated by 31 December 2020

Locations to be operated per company	from 31 December 2020
A1 Telekom	151/152*
Hutchison Drei	151/152*
T-Mobile	151/152*
MASS Response	11
LIWEST	25
Salzburg AG	29
Holding Graz	15

* 151 locations nationwide, 152 locations distributed over 12 regions

To ensure the effectiveness of the verification process, the regulatory authority started preparatory work in summer and developed a number of options for the (empirical) verification of the coverage obligations, including the verification of the specified criteria. This work enabled the identification of data requirements for providers and data requests were duly sent out to the licensees at the end of 2020. The procedure was pending at the end of the period under review.

5.2 Net neutrality

Net neutrality refers to the equal treatment of all data transmitted via the internet. Such equal treatment is independent of the sender, recipient, location, content, service or application. Net neutrality is important because it allows every internet user to retrieve and share information, content as well as services and applications. This allows support for freedom of expression, economic growth and innovation through the internet.

Working to protect net neutrality, the Telecoms Single Market (TSM) Regulation has been in force at EU level since November 2015. The associated BEREC guidelines, which were adopted in August 2016 and amended in June 2020, aim to ensure uniform implementation of the Regulation across Europe. In 2020 net neutrality was also a key topic in the context of the coronavirus crisis and brought to light the gratifying insight that Austrian networks are inherently stable. Cases relating to the TSM Regulation were heard before Austria's Supreme Administrative Court (VwGH) and the European Court of Justice (ECJ) for the first time: while the ECJ was asked to rule on questions of zero-rating, the VwGH addressed the topic of network blocks.

Network blocks had also been a frequent issue for the regulatory authority in the previous year, not least because any such block touches on the core principle of net neutrality, and forces providers into the involuntary role of judges. The aim here must be to identify ways and means of maximising the legal protection and certainty enjoyed by all stakeholders. To this end, a detailed observation was made of legislative activities at national and European level, which were then applied actively to shape measures intended to transpose EU-level provisions into national law.

Ultimately, work in the field of net neutrality was, as ever, strongly informed by international cooperation, and by national procedures and advisory activities conducted in order to ensure the fulfilment of net neutrality standards.

5.2.1 National procedures

The TSM Regulation mandates national regulatory authorities with tasks including monitoring compliance with its provisions. Of the eight supervisory procedures pending in 2020, two concerned suspected breaches of the end-user right to provide own services as enshrined in the TSM Regulation, since the respective internet access service providers had not assigned the end users public IP4 addresses when requested to do so. The procedures have not yet been completed. The remaining six procedures, which related to the lawfulness of network blocks, have since been completed with final effect. The internet access service providers had set up the access blocks to certain websites addressed by these procedures while complying with relevant legislation, and were therefore not in contravention of the TSM Regulation. For further details on network blocks, see 5.2.2.

While legal proceedings concerning a cease order dating from 2017 prohibiting the use of traffic shaping were still pending before the Federal Administrative Court, the latter published a decision in April 2020 for a legal remedy sought against a cease order from the TKK concerning the prioritisation of an on-demand video service bundled with IPTV: the provider's complaint was rejected and the right to appeal the decision was granted.⁹ This ruling is not yet final.

Measures adopted by the regulatory authority are intended to ensure the continued availability of internet access services at a level of quality that properly reflects advances in technology. For this reason, regular dialogue was once again maintained with all market participants over the last year. Providers regularly seek the advice of experts from RTR before the introduction of new products that could affect aspects of net neutrality. This approach often enables any concerns in this context to be addressed beforehand.

As in previous years, the regulatory authority surveyed the most important indicators in relation to zero-rating pursuant to Art. 3(2) of the TSM Regulation by requesting information from providers.

⁹ BVwG 23 April 2020 W120 2183616-1/29E.

5.2.2 Network blocks from the perspective of net neutrality

To guarantee open internet access for all, the TSM Regulation stipulates that providers of internet access service (IAS) must not block access to certain kinds of online content – although the Regulation also allows for exceptions to this basic principle. One example is where installing an access block for certain websites may be permissible if a specific legal provision requires the IAS providers to take this action. Within the scope of copyright law, Art. 81 Par. 1a of the Copyright Act (UrhG) provides for situations where ISPs are obliged to block access to websites that are intentionally structured to breach copyright law. This is the case of websites that unlawfully impinge on the protected right of copyright holders to make their works available.

In 2020 a total of six supervisory procedures concerning internet access service providers suspected of denying access to particular websites were pending before the regulatory authority.

While copyright claims must be decided in an ordinary court of law, the national regulatory authority is required to ensure compliance with open internet rules as set out in the TSM Regulation. In the TKK's supervisory procedures, the decision as to whether the network blocks installed were legal therefore also depended on whether the copyright claim was admissible. In cases where the access blocks installed are based on court decisions (including injunctions) and the blocking measure adopted (such as a DNS block) represents the least severe measure available, this does not violate the terms of the TSM Regulation. Cases where the network blocks were installed as a result of legal or private settlements, or warnings from the rights holder, do not represent a violation if the copyright claim is legally justified and the least severe blocking measure has been adopted. In the latter cases mentioned, the regulatory authority was required to assess the actual copyright claim in order to be able to decide whether the access block was compatible with the TSM Regulation.

Between the spring and autumn of 2020, the TKK dropped six supervisory procedures, since no breach of the TSM Regulation could be identified.

The TKK also initiated six assessment procedures at the request providers of internet access service (IAS) in 2019. Unlike the supervisory procedures described above, these assessment procedures involve websites that have not yet been blocked. Specifically, these assessment procedures aim to evaluate whether an exception exists as defined by Art. 3 of the TSM Regulation and so to determine whether it would be legitimate to subsequently block the website.

The TKK welcomed the legal interest in the assessment procedures, ruling that the website blocks under investigation would be unlawful, as there were no grounds for claims against the IAS providers on the part of the copyright holder. The rights holder in the procedure responded by lodging a complaint with the Federal Administrative Court (BVwG). In the meantime, the content had subsequently been removed from the domain in question and the domain put up for sale. The BVwG nonetheless proceeded with the case and overturned the TKK's decisions. The TKK responded by lodging, as an authority, an appeal with the Supreme Administrative Court (VwGH) in six cases. This was the first time that the VwGH had been asked to rule on the TSM Regulation's net neutrality provisions.

The VwGH found in favour of the TKK in all six cases, overturning the decisions handed down by the BVwG. As regards the procedure heard before the BVwG, the risk of a repeat infringement of copyright interests was not (no longer) present because the domain had since been offered for sale and the content removed; the procedure should therefore have been dropped. According to current legislation, there is no specific legal interest in determining the lawfulness of a network block before this block is put in place. A future amendment to the TKG should enshrine such assessment procedures in law. The aforementioned assessment decisions from the TKK have since become final.

5.2.3 Net neutrality during the coronavirus crisis

In 2020 the Covid-19 pandemic not only highlighted issues relating to net neutrality but also emphasised the quality of the net neutrality legislation now in place. When drafting the TSM Regulation, EU legislators considered the eventuality of network congestion in cases of emergencies, with providers of IAS allowed in these cases to absorb such impending network congestion through appropriate traffic management measures. A proviso was also included for such cases, namely that equivalent categories of traffic must continue to be handled equally, even in exceptional circumstances.

RTR informed the various stakeholders about these general legal conditions shortly after the announcement of the confinement measures on 18 March 2020.¹⁰ In the event that such measures were to be implemented by IAS providers, RTR was to promptly, and in any case on the same day, inform them by appropriate means, including a specific description of the technical measures for traffic management, the expected impacts on services in general as well as the expected duration.

No IAS provider in Austria instigated such traffic management measures in accordance with this process. Despite huge network overload, the infrastructure was able to withstand the changed and increased use, also due to the quick reaction of the providers and the creation of additional capacities on short notice.

At both Austrian and European levels, a reporting system was quickly established with the aim of providing regulatory authorities and the interested public with an overview of the status of the internet and the implementation of any traffic management measures. Reports were subsequently published at regular intervals by both BEREC¹¹ and the European Commission¹². In the second half of 2020, a 'Corona Traffic Light' was introduced for the European internet – which stayed consistently 'green' for Austria.

To support end users in the best possible manner in the event of problems arising due to increased use of their own internet access, RTR published on its website a guideline with tips for internet and telephone use during the corona crisis¹³. At the same time, the RTR-NetTest remained continuously available to end users during the coronavirus crisis and was used extensively. Measurements taken at the time of the first lockdown revealed a moderate decline in download speeds, although this trend disappeared again soon after. The RTR has published a more detailed analysis as part of its 2020 Net Neutrality Report¹⁴.

With a view to the internet, the regulatory authority considers the crisis to have been well managed (to date) overall. This can also be attributed to the good communications between the authorities involved and the providers of IAS, and to their prompt response to the changed usage patterns as well as the creation of additional capacities on short notice.

¹⁰ Press release issued on 18 March 2020, <https://www.rtr.at/TKP/presse/pressemitteilungen/pressemitteilungen/pinfo18032020.de.html> (in German).

¹¹ For an example, refer to the BEREC report of 17 December 2020: https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/9737-berec-summary-report-on-the-status-of-internet-capacity-regulatory-and-other-measures-in-light-of-the-covid-19-crisis. Additional BEREC reports are available from the 'Reports' section on the BEREC website.

¹² European Commission 2020: Reports on the status of internet capacity during coronavirus confinement measures (<https://ec.europa.eu/digital-single-market/en/news/reports-status-internet-capacity-during-coronavirus-confinement-measures>).

¹³ RTR 2020: Tips for internet and telephone during the corona crisis (<https://www.rtr.at/de/tk/TippsfrInternetundTelefonwhrendderCoronakrise>; in German).

¹⁴ Net Neutrality Report 2020 <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/netzneutralitaetsbericht/NNBericht2020.de.html>

5.2.4 Net Neutrality Report 2020

The TSM Regulation additionally tasks national regulatory authorities with publishing an annual report on progress in implementing the Regulation. RTR published its fourth Net Neutrality Report in June 2020, describing progress in implementing net neutrality. The report presents the actions taken by the regulatory authority during the reporting period (1 May 2019 to 30 April 2020) towards enforcing the TSM Regulation in Austria. The focus topic 'Internet during the Corona crisis' details the steps taken by the regulatory authority to keep internet access service providers, end users and other interested parties as up-to-date as possible, and so help ensure the continuity of a well-functioning internet during lockdowns. The Net Neutrality Report is available for downloading from the RTR website.

In summary, the report once again attests a continued overall positive picture for the state of the open internet in Austria. Where there was a real risk of a breach, affected companies generally cooperated in finding constructive solutions, which were then agreed with the TKK and subsequently implemented or which are currently being implemented. In some cases, an initial suspicion was followed by the submission of plausible justifications or investigations that revealed blocks had not been imposed unreasonably; these cases were then dropped.

5.3 Measures to ensure competition

The regulatory authority has a number of measures at its disposal to ensure competition in the Austrian telecoms markets.

One of these measures is a requirement for the regulatory authority to conduct periodic market analyses, so as to determine:

- whether there is a relevant market subject to regulation;
- whether one or more companies active in such a market possess significant market power and what challenges to competition exist; and/or
- whether effective competition exists.

If effective competition is not present in the market, appropriate obligations are to be imposed on the company with significant market power.

5.3.1 Market analysis

In March 2020 the TKK initiated a new market analysis procedure. Following those in 2003, 2006, 2009, 2012 and 2015, this is now the fifth major round of market analyses based on the 2003 Telecommunications Act (TKG 2003). As in the past, the TKK once again commissioned official experts at the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) to prepare evaluation reports of the expected complexity and detail, serving as the basis for taking the decisions for the delineation and regulation of the telecommunications markets in the coming years. As requested by the TKK, many communications network operators and communications service providers have substantiated their party statuses in the market analysis procedure. In an initial evaluation report, the appointed experts have prepared a review for establishing the markets to be investigated. The procedure was ongoing at the end of the reporting period.

5.3.2 Arbitration between operators

As part of its role as an arbitrator, the regulatory authority ensures a fair balance of interests among operators of public communications networks. If a settlement under private law in the form of a network access or interconnection agreement is not reached, each participant has the option of applying to the regulatory authority for a decision in lieu of such an agreement.

In 2020 the TKK received two petitions requesting the definition of interconnection conditions. Both procedures concerned conditions for the reciprocal termination of text messages. Since the provision of text message termination services is not assigned to any market relevant for sector-specific regulation and no company here enjoys significant market power as defined by telecommunications law, an 'appropriate' scope of the conditions in dispute is to be set. A request submitted by T-Mobile Austria GmbH in June 2020 for a decision concerning the contractual conditions for the reciprocal termination of text messages in a dispute with Lycamobile Austria Ltd. was withdrawn by the complainant in September 2020 following an out-of-court settlement; the procedure was subsequently dropped. Another request submitted in November 2020 for a decision concerning the contractual conditions for the reciprocal termination of text messages involving another communications network operator was still pending at the end of the reporting period, following a failure to reach consensus during out-of-court settlement proceedings.

5.4 Infrastructure rights: wayleave rights and rights of joint use contribute to broadband rollout

When expanding communications networks, operators are often required to route their infrastructure across private and public property. Operators can claim wayleave rights in these circumstances. Yet another option is to jointly use existing infrastructure (masts, ducts, manholes or lines) owned by other companies, thereby reducing the costs of expanding fixed and mobile networks (rights of joint use). Parties unable to agree on such usage can request the TKK to take a decision. Prior to any TKK decision, RTR attempts to arbitrate (mediation). In the event that mediation is unsuccessful, the Telekom-Control-Kommission issues a decision in lieu of the contract.

During the reporting period, the TKK received 38 requests – some concerning the granting of wayleave rights, some regarding rights of joint use – resulting in the highest number of procedures initiated in a single year. The 280 odd completed cases involving queries that did not lead to a formal procedure also bear witness to the continued importance of infrastructure rights as set out in TKG 2003 Section 2. Decisions published by the TKK can be viewed (in German) at <https://www.rtr.at/TKP/aktuelles/entscheidungen/Uebersichtseite.de.html>.

5.5 Ensuring legally compliant terms of contract

One important task for the Telekom-Control-Kommission (TKK) is to ensure that the contract terms applied by providers and operators of telecommunications services and networks are in conformance with the law; such sets of terms include: general terms and conditions, service descriptions and fee provisions. These operators must draw up contract terms and notify them to the TKK in advance for review. The TKK can reject the application of these contract terms to business transactions if the terms breach the provisions of telecommunications law as well as certain aspects of civil or consumer protection law.

In 2020, 333 procedures were carried out. This represents a slight drop from 318 such cases in the previous year. Numerous enquiries from both customers and providers were also handled on the subject of notifying or reviewing contractual conditions.

Substantive reviews of terms and conditions focus not only on compliance with telecommunications law but also civil and consumer protection legislation. In 2020 such substantive reviews revealed a greater presence of both European and international companies as providers of communications networks and communications services on the Austrian market. In its work to ensure that contract terms comply with the law, this presents the TKK with a new set of challenges, since these operators occasionally have only limited knowledge of the relevant substantive and procedural provisions of Austrian and EU law, and may also not have an adequate command of German as Austria's official language. Furthermore, all three major mobile network operators now offer zero-rating, which must also be considered in procedures seeking to ensure the legal compliance of contract terms.

The TKK is primarily concerned with ensuring that telecoms make any necessary changes to contract terms as part of the procedure itself: this ensures that legal compliance is established as soon as possible. In 2020 the TKK once again achieved this goal in every procedure and thus avoided any need to issue an objection decision. For telecoms customers, checking through contract terms in advance reduces their risk of needing to go to court to clarify the legality of individual clauses once the contract has already been signed. Such legal proceedings also carry the risk of being very costly. At the same time, consumers are often unable to identify potentially unlawful clauses that are in fact unenforceable even though they have been agreed and included in the general terms of service. This practice of vetting contract conditions terms also makes an important contribution to fair competition between operators while also preventing them from gaining a competitive edge by introducing unlawful terms.

5.6 Electronic signatures and trust services

As set out in the Signature and Trust Services Act (SVG), the TKK is the supervisory body for those trust service providers (TSPs), as defined in the eIDAS Regulation (910/2014), who are established in Austria.

5.6.1 Procedures before the TKK

Five procedures initiated in 2019 or earlier were concluded in 2020. An additional 21 cases were initiated in 2020. Five of these had not yet been completed by the end of 2020.

In 2020 the Austrian market for providers of qualified certificates still included four providers for electronic signatures, three providers for electronic seals and two for website authentication. Qualified timestamps were also offered by one other provider. In December 2020, another provider was granted qualification status for the issuing of qualified timestamps (the associated entry on the trusted list was made only following the legal entry into force of the decision at year-end).

Qualified TSPs are required to undergo a conformity assessment by an accredited conformity assessment body every two years. The resulting conformity assessment reports are to be evaluated by the supervisory body. In compliance with this rule, one qualified TSP submitted in 2020 a new conformity assessment report for auditing by the supervisory body.

In two cases, the supervisory body took action ex officio as a result of reported security breaches or losses of integrity. In two further cases, the body addressed specific questions of interest in relation to PDF signatures.

In five cases, the supervisory body addressed the methods of identification used for the qualified certificate issuing procedure: in certain circumstances, a conformity assessment body must confirm the security of these methods (e.g. by video identification or an indirect identification process brokered by a bank). Four additional

procedures concerned other changes to qualified trust services, including the relocation of one provider's infrastructure to a different data centre.

In one procedure, the supervisory body issued a decision concerning a request for the entry of a non-qualified TSP onto the trusted list.

5.6.2 Infrastructure

In supervisory operations, the TKK works through RTR, with the latter separately responsible for certain tasks. This applies especially to the infrastructure required to verify certificates, electronic signatures, electronic seals and electronic time-stamps, all of which is operated by RTR.

This includes:

- the 'trusted list' made available at www.signatur.rtr.at/currenttl.xml (a list of information related to TSPs and the trust services they provide, which is required to be made available in a standardised format by each Member State);
- the signature verification service made available at www.signaturpruefung.gv.at, which allows verification of electronic signatures, electronic seals and electronic certificates from other EU and EEA countries, where these items are listed in the trusted list for the particular country;
- a 'trust infrastructure,' enabling the supervisory body to take over the certificate database of a TSP that discontinues service.



Activities of RTR

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06 Activities of RTR

In the area of telecommunications and postal services, the Regulatory Authority for Broadcasting and Telecommunications (RTR) serves as the administrative agency of the Telekom-Control-Kommission (TKK) and the Post-Control-Kommission (PCK). RTR additionally has separate responsibilities as a telecommunications authority. These include alternative dispute resolution, the administration of Austrian phone numbers and the issue of ordinances. Key focal points of work in the reporting year are presented below.

6.1 User protection: we give users the support they need

6.1.1 Conciliation procedures – an alternative to the courts

Internet access for homework and parcel services to help with Christmas shopping: both essential in 2020. Less surprisingly, coronavirus also affected the conciliation procedures conducted in relation to communications and postal services in 2020. Both industry sectors – telecommunications and postal services alike – made key contributions to managing the challenges of this exceptional year. The increased dependency on services from the telecommunications and postal sectors naturally impacts conciliation cases, for instance when distance learning or video conferencing is impeded by a failed internet connection. A rise in complaints about the quality of internet access was therefore entirely to be expected. Similar cases arose for postal services where distribution centre bottlenecks caused disproportionate delays to urgent orders placed with online shops.

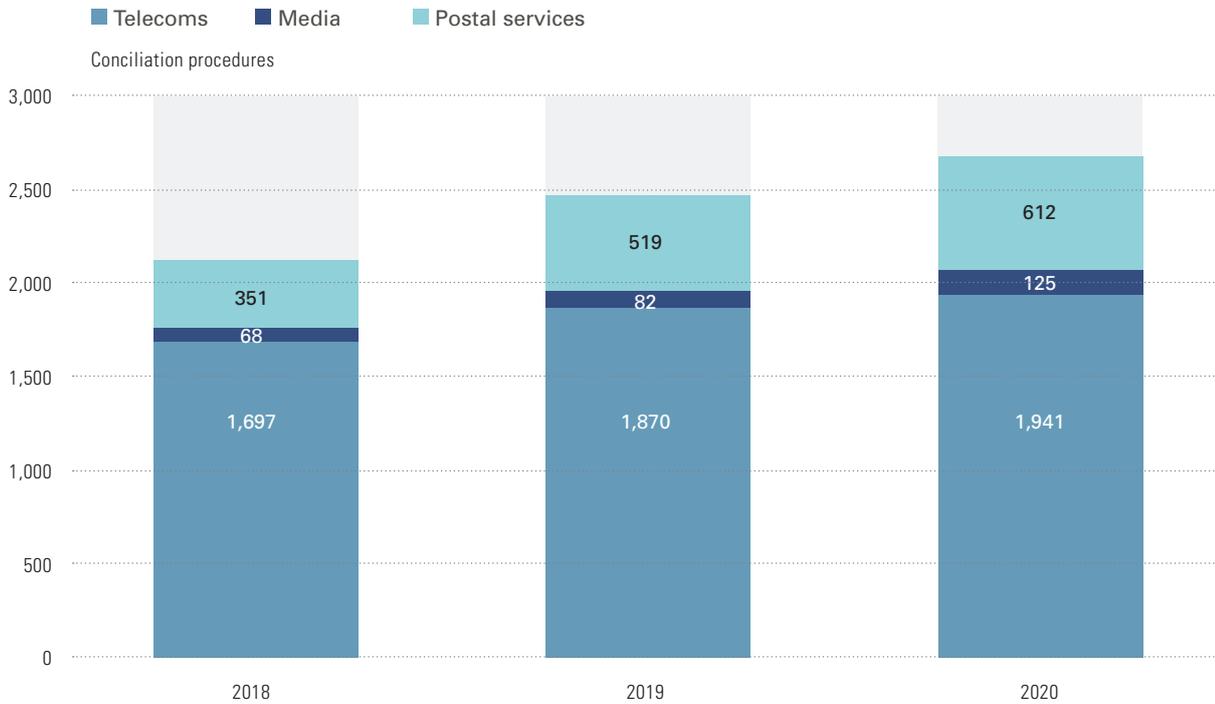
The three conciliation bodies at RTR –

- the conciliation body for telecommunications services
- the conciliation body for media
- and the conciliation body for postal services

– faced a major challenge in 2020: ensuring alternative legal protection within these many and varied conciliation procedures.

Indeed, the rise in conciliation cases could have been considerably steeper had it not been for the high quality of Austrian communications services and adroit capacity adjustments made within the postal services. As the figure below illustrates, the rise in complaints and conciliation cases was lastly moderate:

Figure 06: Conciliation procedures involving telecoms, media and postal services, 2018-2020



In terms of content, procedures in 2020 tended to focus on the quality of internet access and problems encountered with parcel deliveries – as was to be expected and as mentioned above. One positive aspect was the readiness on the part of providers to cooperate in full: as a result, the procedures in 2020 were processed just as quickly as those in previous years.

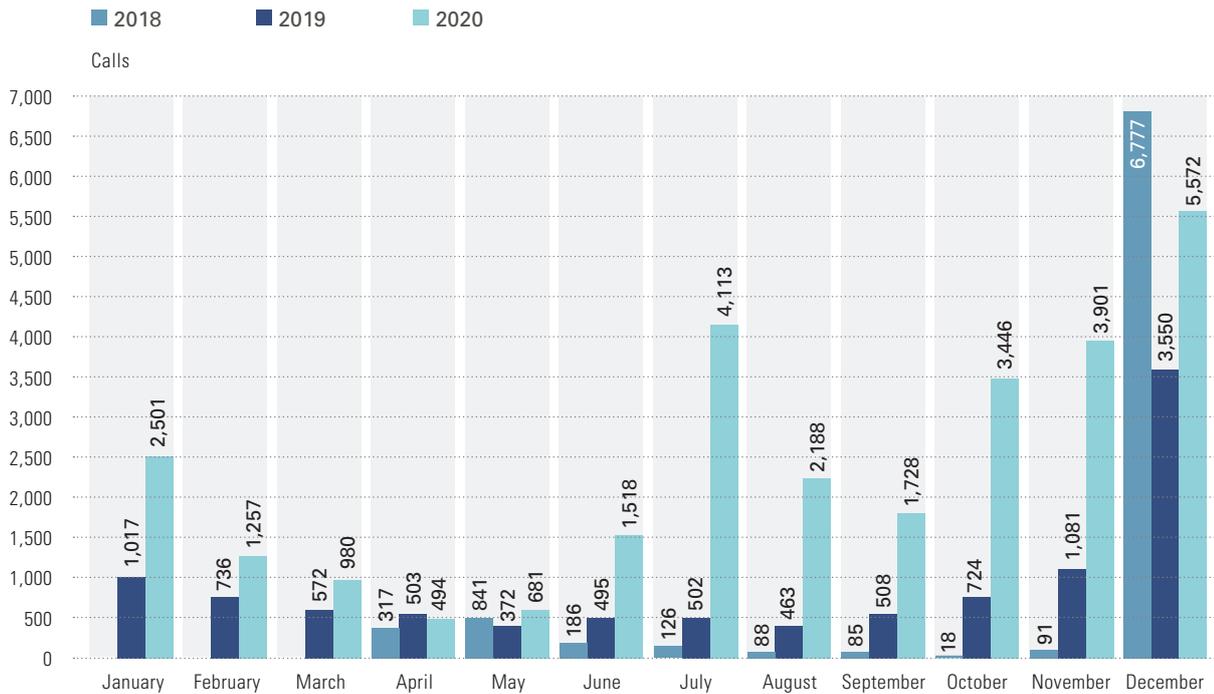
Conciliation body processes have been digitalised for many years – something that once again proved its worth in the coronavirus year: the ease with which the entire conciliation procedure could be handled online was particularly important for ensuring access to legal protection. As lockdowns and curfews made it difficult to pursue legal proceedings, the conciliation procedure was an alternative that ensured a continued semblance of normality.

In 2020 the conciliation procedures for communications services and postal services were consolidated in order to offer Austrian citizens a single, unified service. This was accompanied by the appointment of an arbitrator pursuant to the Alternative Dispute Resolution Act (AStG) for both divisions (Postal Services and Telecommunications).

6.1.2 Reporting phone number misuse

The rising trend towards phone number misuse continues to be a cause for concern. A huge rise in reports of fraudulent calls was recorded over the course of the year. To date, this rise has been exceeded only by the volume of one-ring calls recorded in December 2018.

Figure 07: One-ring and spam calls, 2018–2020



The creation of a legal framework for establishing countermeasures to at least some aspects of phone number misuse is therefore an important issue. The options as envisaged in the draft of the TKG 2020 will create this basis for one-ring calls in particular. As an initial step, call blocking and prohibitions on debt collection from affected users will be introduced.

In many areas, however, it must be accepted that simple one-size-fits-all solutions cannot be adopted in relation to specific problems. Number spoofing – faking the number that is shown on the recipient’s device – is one such issue: this is a long-term problem for which no ‘quick fix’ is likely to be available in legal or technical terms for the foreseeable future.

Prudence on the part of users themselves will therefore play an important part in working to counter the increased incidence of phone number misuse. As an established public service, the conciliation body will also continue to provide targeted help and advice here.

6.2 Value-added services

Art. 24 Par. 2 of the Telecommunications Act 2003 (TKG 2003) specifies the regulatory authority's duty to provide information on an annual basis on any unfair practices relating to value-added services and the action taken. The Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V 2009) plays a significant role here, as the provisions have resulted in a decline in complaints concerning value-added services.

In the reporting year, nine of the complaints RTR handled in connection with its duties as a conciliation body related to value-added voice telephony, with a single complaint relating to value-added text messaging. These ten complaints accounted for 0.48 per cent of all conciliation procedures. When viewed in the context of multi-year trends, complaints about value-added services have effectively become a marginal issue.

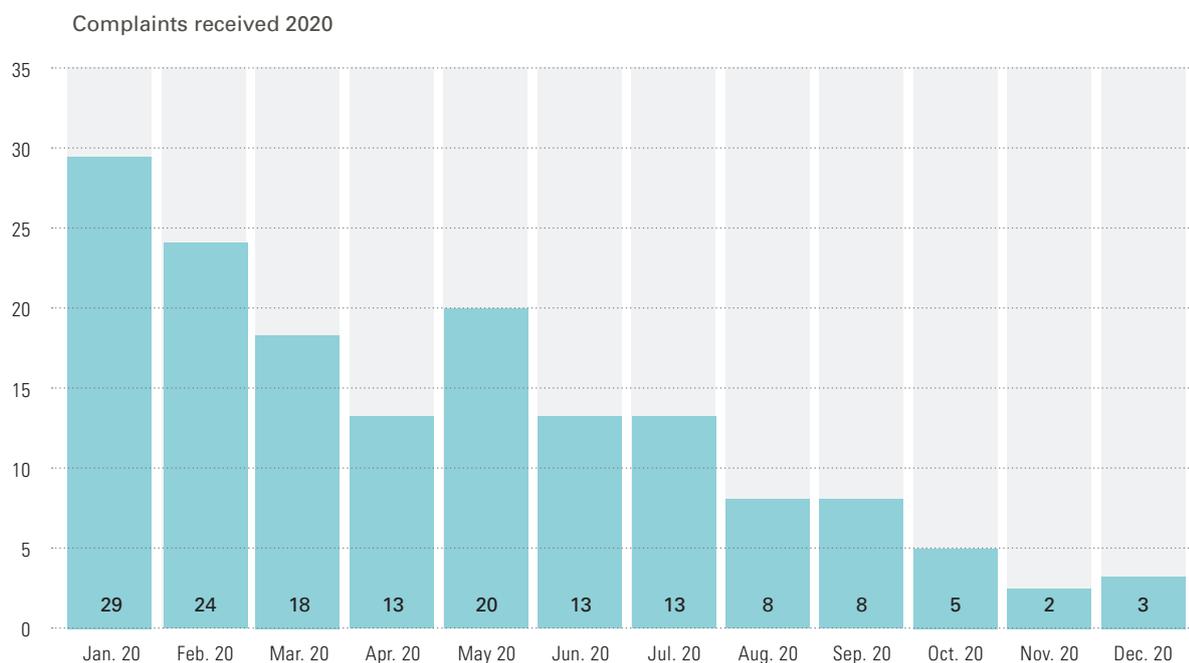
Table 22: Complaints received about value-added services, 2018–2020

	2018	2019	2020
Total number of conciliation procedures	1,766	1,952	2,066
Value-added text messaging	4	0	1
Value-added voice telephony	19	11	9
Third-party services	118	102	156

At the same time, complaints about number-independent services provided by third parties have been a particular point of focus for regulatory monitoring over the last few years. For these services, Austrian operators have adopted a policy of self-regulation combined with the accommodation of user concerns in relation to complaints to produce a situation where regulatory involvement is not currently seen as necessary.

Although complaints about third-party services seemed set to rise in early 2020, operators were fortunately able to counter this trend successfully and the level of complaints had returned to normal by the end of the year (see figure 08).

Figure 08: Complaints received about third-party services during 2020



6.3 Services subject to notification requirements

Under Art. 15 TKG 2003, providers must notify the regulatory authority in advance of their intention to provide public communications networks or services, and of any modification to or termination of such networks or services.¹⁵

Table 23: Notified active services 2016–2020

Service category	2016-12-31	2017-12-31	2018-12-31	2019-12-31	2020-12-31
Public telephone services at fixed locations	326	390	391	387	443
Call shops	67	43	38	33	27
Internet cafés	76	50	48	42	35
Public internet communications services	415	418	421	413	419
Public communications networks	429	511	532	564	582
Public leased-line services	83	79	82	80	82
Other public communications services	27	30	31	34	42
TOTAL services notified	1,423	1,521	1,543	1,553	1,630

As of 31 December 2020, notifications for 1,630 active services had been given by a total of 1,819 operators, of which 62 were operators of call shops and/or internet cafés. Based on a 2011 amendment to the TKG 2003, such operators are exempt from a large number of obligations arising from the TKG 2003 that apply in general to businesses required to provide notification as defined in Art. 15 TKG 2003 (including the notification of general terms and conditions).

¹⁵ For further information on notification procedures, please refer to the Communications Reports of the previous years.

With the transposition into Austrian law of Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, RTR is required to submit to GEREK, by an electronic communications channel, every report received for services subject to notification requirements. In 2020 a number of related preparatory activities – organised as video conferences – were completed together with international working groups. Internal measures focusing on the implementation of new service categories were also completed. As a result, the new system will handle all such reports, subsequently forwarding them to GEREK, by the date when the new Telecommunications Act (TKG 2021) comes into force. Any amendments or updates to existing reports will be submitted to GEREK during the course of 2021.

6.4 Communications parameters: administration of the Austrian number range

6.4.1 Central reference database (ZR-DB)

The creation of a central database (central reference database, ZR-DB), as a legal entity for the collection and provisioning of data in the context of number assignment and use, will not only simplify regulatory activities in relation to number portability (porting) and changes of ownership to a significant degree: access to this database will also be made available to market participants and the general public.

Implementation work on the ZR-DB, particularly in relation to the web interface, was unable to be completed as planned in 2020 because of essential internal IT restructuring work at RTR related to the COVID-19 pandemic, which had to be prioritised as a matter of urgency.

The go-live date for the ZR-DB has therefore been postponed to 15 September 2021. Since programming work on the database was drawing to a close at the end of 2020, a phased release of the database to operators for test purposes will therefore be possible at the beginning of 2021. The operation of a 'shadow' database with real data (parallel handling via old and new systems) is planned for Q2 2021.

Duties of cooperation on the part of providers and operators are standardised in the 'Central Number Database Ordinance 2020' (<https://www.rtr.at/zr-dbv>), which (partially) entered into force on 1 December 2020. From this date, data required for database operation must therefore be submitted by law by providers and operators, and can be requested in cases of non-compliance. A phased entry into force of other duties (such as notices of use, routing requirements) will be complete by 1 July 2022.

The database also facilitates the querying of location and subscriber data when responding to emergency calls and providing information in other cases as required by law. The database is being designed for use by operators as the basis for the 'direct routing' of phone calls.

6.4.2 Reports detailing statistics on telephone number administration

In total, 709 applications for the assignment of phone numbers were submitted in the 2020 reporting year. A total of 667 decisions were issued. Applications were either withdrawn or received a negative decision in 35 cases. In the 2020 reporting year, 699 applications were processed and completed overall.

Table 24: Issued decisions 2016-2020

	2016	2017	2018	2019	2020
Number of affirmative decisions	585	558	566	648	664
Geographic numbers	323	318	332	402	422
Non-geographic numbers	262	240	234	246	242
Number of negative decisions	9	7	15	6	3
TOTAL	594	565	581	654	667

In 2020 RTR issued a total of nine decisions, one of them a rejection, in the context of administrating special communications parameters, which include mobile network codes, a basic and essential addressing element for mobile networks.

6.4.3 Emergency calls:

In relation to emergency calls, RTR again fielded enquiries from call handling centres, operators and ministries, providing legal and technical expertise to these entities. Involving the RTR in its capacity as a mediator between several parties, this work once again proved challenging, not least because it is frequently difficult to apply here the tool set used in conventional regulatory activities to ensure legal compliance.

Considering the importance of emergency call services for the population at large and the enduring complexity of associated issues, this is a topic that needs to be addressed comprehensively with an appropriate level of resources and attention.

6.5 RTR ordinances

6.5.1 Telecommunications Network Security Ordinance 2020 (TK-NSiV 2020)

According to the powers of issuing ordinances granted it by TKG 2003, the RTR is tasked with specifying detailed provisions to ensure network security in telecommunications. The Telecommunications Network Security Ordinance, which contains a comprehensive set of rules for ensuring network security, entered into force on 4 July 2020 (Federal Law Gazette II No. 301/2020) and has been published on the RTR website (link: https://www.rtr.at/de/tk/TK_NSiV_2020). For a detailed overview, see section 6.6.3.

6.5.2 Central Number Database Ordinance (ZR-DBV)

The Central Number Database Ordinance (ZR-DBV) facilitates the creation of a central reference database for all Austrian phone numbers. The ordinance therefore enables the regulatory authority to migrate previous number administration activities – in particular the steps involved in number porting and forwarding – to an advanced digital platform, which in turn is to be made available to market participants and the general public. Alongside ensuring the efficient management of numbering resources, this database also serves the purpose of representing the usage relationships for phone numbers. This helps to improve and simplify routing while also supporting directory services for master data/geo-data for emergency services pursuant to section 98 of TKG 2003.

The Central Number Database Ordinance (ZR-DBV) (FLG II No. 535/2020) was promulgated on 1 December 2020 and has been published (in German) on the RTR website at www.rtr.at/zr-dbv (see also section 6.4.1).

6.6 Security of networks and services

Since November 2011, operators of public communications networks or services have been required to report to RTR, according to a format specified by RTR, any security violation or impairment of integrity that has a considerable impact on network operations or the provision of services. RTR is in turn required to submit an annual report to the European Commission and to the European Network and Information Security Agency (ENISA), describing the notifications received and the measures taken. RTR can also inform regulatory authorities in other Member States, ENISA or the public about certain notifications on an ad hoc basis. Here the goal of transparency nonetheless always needs to be seen in the context of requirements for protecting the privacy of provider data.

6.6.1 Reports of network failures

In 2020 RTR received twelve notifications of security violations or impairments to the integrity of electronic communications networks or services.

- In January 2020, a hardware error caused the mobile network telephone service operated by one provider to become unavailable for a period of around 90 minutes for approximately 500,000 subscribers with prepaid plans.
- In April 2020, maintenance work performed on the mobile network of another operator caused a system error that interrupted IP connections: this interruption caused outages of up to four hours for the mobile internet access used by 2.4 million network subscribers.
- Later on in the same month, a defect originating with an upstream international interconnection partner of an Austrian fixed network operator took internet access offline for about an hour for around 600,000 of this operator's subscribers.
- Again in April 2020, maintenance work on a system component at a mobile network operator caused a software error that prevented 3.8 million of this operator's subscribers from placing any phone calls for a period of four minutes.
- In May 2020, services from one mobile network operator became unavailable to around 350,000 subscribers in Upper Austria for around five hours as a result of the isolation of an aggregation facility, which occurred during work on cabling.
- In June 2020, data connectivity provided by mobile and hybrid internet access at a fixed and mobile network operator was disrupted for around 960,000 subscribers over a period of more than three hours as a result of a hardware defect that initially went undetected.
- Later on in the same month, a synchronisation error affecting a switch rendered some emergency telephone numbers in several local networks unavailable for a period lasting 26 minutes.
- Also in June 2020, a misconfiguration error led to a DNS resolver at a fixed network operator becoming unavailable to around 1.5 million subscribers, who experienced corresponding problems when they attempted to access the internet.
- In September 2020, 2.7 million subscribers at one mobile network operator suffered a loss of internet access lasting three hours as a result of a software error in a core routing component at this operator.

- Again in September 2020, water damage to local cabling took the call handling centre at the Salzburg municipal fire service offline for one hour and again for six hours (immediate call forwarding meant that the emergency call service itself was largely unaffected).
- In October 2020, 1.2 million subscribers at a fixed network operator lost internet access for one hour as a result of a router misconfiguration.

6.6.2 Risk assessments

In 2020 the regulatory authority once again performed a risk assessment for the telecommunications sector, as required by the Austrian Cyber Security Strategy (ACSS) and the Austrian Programme for Critical Infrastructure Protection (APCIP). This re-evaluation of the security landscape in the telecoms sector became necessary in order to update the risks identified initially in 2017 and the measures deployed to counter them, so as to maintain a high level of protection. Accounting for the security aspects of the new 5G rollout is one key topic addressed by this risk assessment, whose significance is further reflected in the checklist of measures on 5G network security ('5G Toolbox') that was published in January 2020.

The 2020 telecoms sector risk assessment was again conducted as a public-private partnership process with security officers from the Federal Chancellery, Federal Ministry of the Interior, Federal Ministry of Defence and Sports, and the Federal Ministry of Transport, Innovation and Technology, with operators and their interest groups, and with internet community stakeholders. Assessment results will be published in a report in early 2021.

6.6.3 Telecommunications Network Security Ordinance

A key resource for implementing the Toolbox is the Telecommunications Network Security Ordinance 2020. Although RTR initiated a procedure for issuing this ordinance in 2019, delays at EU level affected its publication, which had originally been planned for the end of the same year. Work on the ordinance was therefore not resumed until January 2020. One of the powers granted to RTR by TKG 2003 entitles it to specify more detailed provisions for the implementation of measures intended to ensure network security in the telecoms sector. In terms of subject matter, the ordinance aims to address three key aspects:

- Regulation of reporting requirements for network operators and service providers in the event of security incidents with a 'substantial impact'
- Specifying the details of requirements in terms of the prescribed minimum security measures to be adopted by these operators and providers
- Implementation of Toolbox measures in relation to 5G networks

The regulations in the ordinance on the reporting requirements for security incidents and minimum security measures essentially reflect the current state of play; one new addition is a legal basis for the voluntary submission of 'warning notices' to RTR in the case of critical situations that are not strictly speaking security incidents according to official definitions. A set of new regulations has been added to implement the Toolbox measures: these apply only to operators of 5G networks with more than 100,000 subscribers in total in all of the mobile networks they operate.

These 5G network operators must provide evidence of an operational information security management system by submitting audit reports by 31 December 2021 (and then every three years) for example, and must prove the fulfilment of certain 5G-specific standards by presenting an operator declaration of conformity (first by 30 June 2021 and then every three years). Operators must also prove compliance with certain security requirements when asked to do so by the regulatory authority, and submit a half-yearly overview of the equipment deployed to operate the 5G network in terms of component function and manufacturer.

Following extensive talks with contributing ministries and telecoms sector companies (network operators, equipment manufacturers etc.), a corresponding draft ordinance was released for public consultation in May/June 2020: stakeholder feedback from this consultation procedure was accounted for as far as possible in the final ordinance. After securing the agreement of the Federal Minister for Agriculture, Regions and Tourism and the Federal Minister of the Interior, the Telecommunications Network Security Ordinance 2020 entered into force on 4 July 2020.

6.7 Single Information Point for Infrastructure Data: an information hub for telecommunications network operators

The TKG 2003 was amended to add a package of measures that have been designed to reduce the costs of rolling out high-speed networks. These measures include the ZIS and the ZIB, single information points that are operated by RTR.

Full details and background information on the two information points have been published in the Communications Report 2019 (https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/kommunikationsbericht/Kommunikationsbericht_2019.de.html) and on our website: https://www.rtr.at/TKP/was_wir_tun/telekommunikation/zentrale_informationsstellen/ZIB_ZIS.en.html.

6.7.1 Single Information Point for Infrastructure Data (ZIS):

The Single Information Point for Infrastructure Data (ZIS) was established at RTR in 2016 and since manages a directory of all existing and planned infrastructure expansion that can be used for telecommunications purposes. The ZIS permits the efficient exchange of information about existing infrastructure and planned construction work, and consequently facilitates the efficient shared use and installation of infrastructure.

What kinds of data are stored in the ZIS?

The requirement to report geodata applies to all Austrian municipalities as well as other public bodies that are responsible for transmission infrastructure or planning construction work. Information must also be reported by providers of public communications networks, who are subsequently permitted to query the data collected. Companies operating physical infrastructure for oil, gas, electricity, district heating, water, funicular railways or transport must also report data. The group of organisations obliged to report data is referred to as 'network providers.'

For network providers who are obliged to report ZIS data but do not have this data available in an electronic format, the option to submit zero reports expires at the end of 2020. From December 2020, existing infrastructure data must be digitised and reported to ZIS together with planned construction projects. To support network providers in this process, the ZIS portal has been extended to include an application supporting online digitisation of both transmission infrastructure and planned construction projects. To ensure the continued improvement of the quality and completeness of reported data, the two-stage reporting process was implemented in mid-2020. Since then, all new data reported by companies and public bodies are checked thoroughly before being released for use by RTR.

The ZIS is not a public directory. Only providers of public communications networks are entitled to query infrastructure data, since only they have shared use entitlements granted by the Telecommunications Act (TKG). For the purpose of administering earmarked funding (for broadband), the Federal Minister for Agriculture, Regions and Tourism has exercised the legal option of designating authorised parties at RTR who are entitled to consult data about existing and planned infrastructures. Currently about 60 individuals from the provinces and the Ministry are so entitled.

Legal background

In late 2015, the EU Directive on reducing the costs of broadband expansion was implemented in Austria through an amendment to the Austrian Telecommunications Act (TKG 2003). In addition to assigning RTR the task of technical implementation as well as a support role for the ZIS, the TKG 2003 also authorises RTR to issue ordinances in this context. RTR most recently exercised this power to promulgate the Ordinance on the Single Information Point for Infrastructure Data 2019 (ZIS-V) on 21 February 2019. The ordinance sets out all of the provisions for querying data.

ZIS Portal use as of 31 December 2020

Since June 2016, some 10 million data records have been supplied by the potential group of roughly 3,200 organisations required to report – including 2,095 Austrian municipalities.

As of 31 December 2020, 227 of the companies required to report had applied to RTR and received authorisation to query the ZIS Portal. A total of 1,765 query requests were made in 2020 by authorised telecoms companies using the 661 user accounts authorised to access the database.

Requests were processed on average within 1 day 21 hours and 34 minutes in 2020, whereby this figure refers to the entire turnaround time.

More detailed information is published on the RTR website at <https://www.rtr.at/zis> (in German).

6.7.2 Single Information Point for Broadband Coverage (ZIB)

Established at RTR in July 2019, the Single Information Point for Broadband Coverage (ZIB) manages data relating to current and planned future coverage with connectivity to telecommunications networks, both fixed and mobile. Information on bandwidths, technologies and active connections is also stored in the database. Besides ensuring that data are made available, RTR is tasked with data verification and organisation, with the goal of providing an up-to-date picture of broadband coverage in Austria.

Providers of public communications networks and services are required to supply data. Every year, the companies are requested by RTR to report their most recent data to the ZIB. The ZIB Portal offers a map editor: this allows coverage areas to be selected and the corresponding data to be stored in CSV files for later uploading. Some companies do not work with a geographic information system or maps. For these entities, RTR provides support in the form of an Excel-based data-editing tool that converts address data into the 100 metre grid used by Statistics Austria and matches these data with municipalities, with all required CSV files prepared for uploading to the ZIB Portal.

Apart from doing all it can to help businesses meet their responsibilities here, RTR also makes information about the ZIB available as downloads and responds to individual queries (zib@rtr.at).

Some of the data (current and planning data) are made available to the Federal Ministry of Agriculture, Regions and Tourism to enable revisions of the broadband atlas. This means entities required to report information need only supply data once.

Legal background

The ZIB is based on the legal framework provided by Art. 13d Par. 1 of the Telecommunications Act 2003 (TKG), a paragraph added by the December 2018 amendment to the TKG. Based on this provision, an Ordinance on Submission of Information to RTR as Single Information Point for Broadband Coverage (ZIB-V; FLG II 202/2019) entered into force on 5 July 2019.

ZIB Portal use as of 31 December 2020

Work here in 2020 focused on providing support to companies for data preparation and reporting, as well as ensuring the quality and comprehensiveness of these data. The data preparation tool provided to these companies was improved and extended based on feedback from users.

After passing quality checks, the data were used for analysis in relation to market monitoring, to create funding maps, and exchanged with the Federal Ministry of Agriculture, Regions and Tourism for publication in the broadband atlas.

In 2021 the focus will be on further development of the ZIB Portal. Improvements will be made to the reporting process and tools for data preparation, and operators will also be offered the option of a preliminary quality check for data prior to reporting. Alongside these developments for the ZIB Portal itself, an emphasis will also be placed on data quality and completeness by expanding the data quality assurance process.

Where applicable, any contextual or technical changes resulting from the amended Telecommunications Act will also be implemented in the ZIS and ZIB.

6.8 RTR's international commitments

As the world becomes increasingly interconnected, so too does the regulation of electronic communications and postal services. To properly account for this, the Telecommunications and Postal Services Division is responsible for handling international activities in relation to electronic communications and postal services. The division has the declared aim of responding better to trends and ensuring more effective international cooperation – both of which benefit Austria and the single market as a whole.

The 'International' section on the RTR website (see https://www.rtr.at/TKP/was_wir_tun/internationales/Institutionen/Institutions.en.html) provides a brief introduction to the various institutions.

6.8.1 RTR and BEREC: electronic communications

The Body of European Regulators for Electronic Communications (BEREC) acquired an important role at the beginning of the COVID-19 pandemic. Virtually overnight, the volumes of data in use rose rapidly as a result of people working from home, home schooling and streaming. Widespread concerns were raised about network overloading. As a result, BEREC decided to publish regular reports during the pandemic about internet capacities and any regulatory measures that had become necessary. RTR supplied the Austrian component to this European reporting mechanism. As it transpired, networks remained stable throughout the EU and maintained adequate capacity.

Another important part of BEREC's work in 2020 was the new European Electronic Communications Code. BEREC was tasked with drawing up eleven guidelines for deriving technical specifications from the legal text, with the aim of ensuring their EU-wide harmonisation and effective application. As co-chair of the working groups¹⁶ for 'roaming' and 'fixed network evolution', RTR was able to take a leading role in the development of these guidelines. Although RTR's work here focused on the update to intra-EU communication and very high capacity networks, the symmetrical access guidelines and the criteria for assessing co-investments (working group for 'market and economic analysis') are other examples of documents prepared with the active involvement of our experts. Indeed, we ultimately provided valuable input for each and every one of these guidelines, on behalf of the EU and Austria. An overview of all eleven guidelines¹⁷ can be found on our website.

6.8.1.1 'Roaming' working group

This group publishes interpretations of data collected on roaming within and outside the EU as regular 'benchmark reports'. In this way, the group was able to confirm the success of 'roam like at home' and intra-EU communication. At the same time, the group also meets the needs for regulatory adjustments. One such adjustment occurred in the reporting year with the updated BEREC Guidelines for intra-EU communications. These guidelines define general conditions and specific rules for parameters in order to assess the long-term effectiveness of this system and to ensure its uniform application in Member States.

The working group also advises the European Commission regularly on its legislative proposals addressing roaming and intra-EU communication. In the reporting year, BEREC authored input for the European Commission on a review of the Roaming Regulation. The Commission took a number of these suggestions into account when drafting its updated Regulation.

6.8.1.2 'Fixed network evolution' working group

From mobile telephony to wired communication, transmission standards and technologies continue to evolve unabated. This working group focuses on advances made in relation to fixed networks and the significance of these developments for regulatory matters. In the BEREC Guidelines on Very High Capacity Networks, the working group has set out the requirements a network must fulfil to be classified as a very high capacity network within the EU. This is true for optical fibre, for example, although other technologies may also qualify depending on data transfer speeds. The Guidelines define four criteria to test for, with various thresholds to be met.

The BEREC Guidelines on the Criteria for a Consistent Application of Article 61 (3) EEC focus on symmetrical network access and the regulations applicable to this subject area. Communications network expansion is an

¹⁶ https://www.rtr.at/TKP/was_wir_tun/internationales/BEREC/BEREC.de.html#heading_Arbeitsgruppen_2

¹⁷ https://www.rtr.at/TKP/was_wir_tun/internationales/BEREC/BEREC_EECC_Guidelines.de.html

expensive business and infrastructure redundancy is not always expedient. To ensure competition despite this, the regulatory authorities have drawn up requirements that aim to guarantee access for co-competitors. The term 'symmetrical' here means that the regulations do not solely apply to operators with significant market power but also to alternative network operators and energy utilities or homeowners, for example, with their fibre lines. The relevant BEREC Guidelines specify the corresponding criteria to use when determining the points in the network at which access must be guaranteed to fulfil the requirements of Article 61(3). The Guidelines also specify criteria that the regulatory authorities must take into account when assessing exemptions for small or regional networks, as well as the circumstances in which barriers to the establishment of parallel infrastructure can be considered as both high and permanent.

The next Guidelines go a step further in the network. The location of the network termination point is a factor that determines whether a device at a customer is part of the public network or part of the telecommunications terminal equipment. The BEREC Guidelines on Common Approaches to the Identification of the Network Termination Point (NTP) in Different Network Topologies support national regulatory authorities by defining a consistent approach to the identification of network termination points in a range of network topologies.

6.8.1.3 'Market and economic analysis' working group

This group focuses on regulation at the macroeconomic level, and addresses the subjects of markets and economic analyses. As two examples, the group prepared a BEREC Opinion for the European Commission on the revision of the recommendation for relevant markets and also authored a report on digital platforms.

In terms of work on the EECC, the market and economic analysis working group submitted a set of guidelines on the criteria for co-investments (BEREC Guidelines to foster the consistent application of the conditions and criteria for assessing new very high capacity network elements (Article 76 (1) and Annex IV EECC)). Companies classified as having significant market power in one or more relevant markets can sign statements of undertaking to open up for co-investments the provisioning of a new network with very high capacity, if the network concerned consists of optical fibre elements up to the end user or the base station.

Pursuant to Art. 76 EECC, networks set up with the aid of co-investment are not subject to regulatory requirements in cases where the co-investment offer fulfils a number of conditions as set out in Par. 1. The aim of the BEREC Guidelines is to promote the harmonised application of these conditions set out in the EECC by the regulatory authorities.

6.8.2 RTR and ENISA: cybersecurity

One major topic last year was the awarding of frequency usage rights for the new 5G mobile telephony standard throughout Europe. The European Commission is keen to ensure 5G security as part of this process. A workshop on the topic was jointly organised by BEREC and the EU Agency for Cybersecurity (ENISA). Discussions focused on the (now finalised) EU-wide 5G Cybersecurity Toolbox from the point of view of the Commission and ENISA, with BEREC presenting the perspectives of the regulatory authorities and their stakeholders. Over the last few years, RTR has made significant contributions to the advancement of the topic at both national and EU level in its work with the federal departments tasked with addressing the subject of security. Last year, RTR's preparation and publication of the Telecommunications Network Security Ordinance 2020 (TK-NSiV 2020) in particular constituted the first significant measure adopted to implement the 5G Cybersecurity Toolbox at national level (see also section 6.6.2).

RTR also enjoys an excellent international reputation in the field of trusted services. Since 2018, RTR heads the ENISA working group on Article 19 of the eIDAS Regulation, which regulates the requirement to notify security incidents. RTR's tenure of this role was recently extended by a further two years to the end of 2022.

RTR is also an active member of FESA, the Forum of European Supervisory Authorities for Electronic Signatures, which strongly emphasises international cooperation and information transfer as part of its work. As one example, the forum is seeking consensus on the use of best-practice methods to ensure the efficient deployment of trust services in Member States.

6.8.3 RTR and ERGP: postal services

Much of the impact of the pandemic on electronics communications was also felt by postal services. Challenges for postal service providers not only resulted from the very high volumes of parcel deliveries from online shopping or the temporary cancellation of international air freight shipments but also from the new hygiene measures required by law.

A two-pronged approach was taken to identify prompt solutions. First, the regulatory authorities worked together at international level: they kept a close watch on the markets and provided advice to postal service providers and their customers alike. A second source of help was the flexibility of the legal framework regarding universal service in cases of vis major.

This same legal framework is also now due for evaluation. In the reporting year, the ERGP therefore began evaluating the targets achieved, to ensure proposals for improvement could be used as input in negotiations for the new Postal Services Directive. This work generated a number of reports on existing definitions, on quality assurance and consumer protection, on postal market indicators (as a comprehensive overview) and on potential regulatory instruments.

RTR views the consultation on the fourth Postal Services Directive as a green light for contributing further to the ERGP. The pandemic has highlighted the importance of international collaboration on postal services for Austria and the EU alike.

6.8.4 RTR and OECD: economic cooperation and development

Within the OECD, RTR represents Austria in the 'Working Party on Communication Infrastructures and Services Policy' (WP-CISP). The OECD pursues the goals of promoting economic prosperity, equality, opportunities and well-being, and serves as a clearing house for the exchange of knowledge, data and analyses, as well as insights and the sharing of best-practice examples.

In 2020 a key focus of the group's activities was the Recommendation on Broadband Connectivity, which aims to ensure equal access to internet connectivity of an appropriate quality for all people, companies and organisations. In this way, everyone can participate in and benefit from the digital transformation. This global recommendation is due to be submitted to the OECD Council for approval and publication.

A knowledge transfer workshop entitled 'Bridging Connectivity Divides' was held to further broadband expansion and improved universal connectivity. Here, RTR contributed its insights from the second 5G auction in relation to coverage obligations.



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Regulatory activities in the postal sector

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07 Regulatory activities in the postal sector

The Post-Control-Kommission (PCK) and the Regulatory Authority for Broadcasting and Telecommunications (RTR) are jointly responsible for safeguarding competition in the postal services market. In addition to providing operational support to the PCK, RTR has separate regulatory duties relating to the notification of services, dispute resolution and arbitration in end user disputes. The most significant regulatory activities undertaken by the two authorities in 2020 are presented briefly below.

7.1 Procedures before the PCK

7.1.1 Closure and discontinuation of postal service points

In the context of the closure or discontinuation of postal service points (PSPs), a distinction must be made between PSPs operated by Österreichische Post AG (Post AG) and PSPs operated by third parties.

Post AG must report directly to the Post-Control-Kommission (PCK) each intended closure of a PSP operates and may only proceed with closure once certain preconditions set out in the Postal Market Act (PMG) have been met.

In such cases, the obligation to provide the universal service can also be fulfilled by other PSPs, such as existing PSPs operated by Post AG or a Post AG partner (a third-party operated PSP).

The PCK may conclude the procedure by prohibiting closure if it believes that closure preconditions have not been met. The PCK may make authorisation of the closure contingent on another specified PSP providing replacement service. Alternatively, the PCK may drop proceedings and allow closure to go ahead if it believes that the preconditions under the PMG have been met. More information on procedures relating to the closure of PSPs operated by Post AG can be found by referring to the communications reports for previous years. Post AG notified the regulatory authority of the planned closure of a total of 20 directly operated PSPs in 2020.

In addition to the planned closure of the directly operated PSPs, the PCK also conducts supervisory procedures to review any discontinuation of third-party operated PSPs, for instance resulting from the insolvency of postal service partners or the termination of contracts.

Under the PMG, Post AG is also required in such closure cases to ensure the provision of universal service as well as full geographic coverage with PSPs. Under certain conditions, alternative service supply solutions such as rural delivery personnel can be implemented in such situations.

In 2020 procedures conducted by the PCK involved closures of third-party operated PSPs as well as directly operated PSPs. All of the supervisory procedures initiated were concluded without a decision being issued, since the provision of the universal service and the comprehensive provision of coverage by PSPs was verified in each case.

The total number of PSPs in Austria fell during the reporting year, from 1,755 (as of 31 December 2019) to 1,752 (as of 31 December 2020). As of 31 December 2020, rural delivery personnel were additionally deployed in seven cases as an alternative service supply solution.

Table 25: Postal service points operated by Post AG and by third parties, 2017-2020

	2017	2018	2019	2020
Post AG-operated PSPs	430	424	413	402
Third party-operated PSPs	1,347	1,352	1,342	1,350
Total PSPs	1,777	1,776	1,755	1,752

Source: RTR

7.1.2 Payment orders for the financing contribution under Art. 34a KOG

In relation to the postal sector regulation, the provisions of the KommAustria Act (KOG) require the federal government to cover from its budget one portion of expenses and the postal service industry to contribute the remaining share.

Where postal service providers fail to meet their obligation to pay financing contributions, the Post-Control-Kommission (PCK) is obliged to issue an official decision ordering payment of the contribution. In 2020 all obligations were met and the PCK therefore issued no decisions of this kind.

7.1.3 Issue of licences

A licence issued by the PCK is required in order to operate a business for conveying letters weighing 50 g or less. In 2020 corresponding licences were issued to Wien IT GmbH and Russmedia Service GmbH.

This brought the number of licence holders to seven by the end of 2020:

- feibra GmbH
- Medienvertrieb OÖ GmbH
- RS Zustellservice Rudolf Sommer
- noebote GmbH
- hpc DUAL Österreich GmbH
- Wien IT GmbH
- Russmedia Service GmbH

7.1.4 General terms of service and tariffs

With regard to services in the universal service sector, the universal service provider (Post AG) is required to issue general terms and conditions specifying conditions for the services offered and their associated tariffs, with the general terms and conditions being notified to the PCK. Within two months, the PCK can object to any notified general terms of service that contradict certain provisions of law. Seven procedures concerning modifications of Post AG's terms and conditions were conducted in 2020.

In a decision dated 7 September 2020, the PCK issued its first-ever objection to tariff increases notified by Post AG. This objection affected all clauses relating to tariffs in the general terms and conditions for domestic parcels, international parcels and domestic letters as notified by Post AG on 8 July 2020.

The PCK's decision was preceded by an expert evaluation. The relevant tariffs within the scope of the universal service were assessed in relation to general affordability, cost-related pricing, transparency and non-discrimination, in accordance with PMG Art. 21 Par. 1.

As compliance with the criterion of affordability was found to be lacking, an objection was raised to these tariffs and all other tariff-related clauses in the affected general terms and conditions.

7.2 Procedures before RTR

7.2.1 Notification of provision of postal services

Postal service providers are required to notify RTR in advance of the intended provision of a postal service as well as any change to or discontinuation of such a service. The list of reported postal services, including the name of the postal service provider, is to be published on the internet by RTR. In 2020, 94 companies reported the provision of postal services to RTR. As a result, the list of postal service providers maintained by RTR comprises of a total of 125 companies at the end of 2020.

7.2.2 Review of Post AG's cost accounting system

One of the regulatory authority's remits is to periodically review the cost accounting system used by universal service provider Post AG. Within its internal cost accounting systems, the universal service provider is obliged to maintain separate accounts for services classified as universal services and for those not considered universal services. The internal cost accounting systems must be based on uniformly applied and objectively justifiable principles of cost accounting. As in previous years, the review carried out in the reporting year revealed that the cost accounting system used in 2019 complied with the criteria listed.



RTR's activities as a competence centre and in general public relations

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08 RTR's activities as a competence centre and in general public relations

RTR is tasked with serving as a competence centre for broadcasting and telecommunications industry¹⁸ affairs while complying with the general principles of economy, efficiency and expediency.

This competence centre role involves completing analyses on matters relating to the activities of KommAustria, TKK and RTR. Examples here include the commissioning of study reports and the preparation of expert reviews. The findings from such evaluations are to be appropriately prepared for public disclosure.

The following chapter presents examples of activities falling under the competence centre remit (cf. Art. 20 KommAustria Act, KOG), as well as general public relations activities.

8.1 Selected activities of the Media Division

8.1.1 Studies

8.1.1.1 Public value of non-commercial broadcasting

The study on the "Public value of non-commercial broadcasting" was carried out jointly by the Institute for Comparative Media and Communication Research (CMC) of the Austrian Academy of Sciences (ÖAW) and the University of Klagenfurt in partnership with the Community Media Institute for Training, Research and Consulting (COMMIT) and funded by the Media Division of the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR Media).

The 17 non-commercial radio and television broadcasters in Austria share a clearly defined, democratic objective and a coherent image of their role in society. The study shows that the people who are responsible for community media and their employees throughout all of Austria share a consistent "mission statement" against which they are measured and also measure themselves. The 'free' media show similarities in terms of content – a fact now scientifically proven – that strengthen toward the outside world their self-image as a third broadcasting type in addition to commercial programmes and the public ORF. The investigation thus makes an important contribution to media policy discourse.

The authors of the study, Josef Seethaler, Deputy Director at the Institute for Comparative Media and Communication Research (CMC), and Helmut Peissl, Chairman of the Community Media Institute for Training (COMMIT), presented the study at the beginning of July 2020. The status and future of the free media was subsequently discussed by Eva Blimlinger, media policy spokesperson for the Greens, Stefan Schennach, Vienna Member of Parliament for the Social Democratic Party of Austria (SPÖ) and Reporter General of the Council of Europe for Media Freedom, Helga Schwarzwald, CEO of the Austrian Association of Independent Radio Broadcasters (VFRÖ), and Otto Tremetzberger, CEO of Freies Radio Freistadt, moderated by Alexander Warzilek, CEO of the Press Council. Oliver Stirbl represented the RTR Media Division, while the KommAustria media authority was represented by chairperson Michael Ogris.

The study is available (in German) on the RTR website at <https://www.rtr.at/medien/aktuelles/publikationen/Publikationen/StudiePublicValue-2020.de.html>.

¹⁸ RTR does not act as a competence centre for postal service regulation.

8.1.1.2 2020 Video Survey

The Video Survey by the RTR Media Division and the Teletest Working Group has been published annually since 2016 and provides charts and tables showing developments in the population's usage patterns for all video offerings, from conventional television to broadcaster media libraries right up to alternative online services or video use on social media.

To this end, market research institute GfK Austria carried out a representative survey on behalf of the RTR Media Division and the Teletest Working Group, completing over 4,000 computer-assisted web interviews (CAWI) to investigate how the Austrian population consumes video. The survey is traditionally held in February. For the Video Survey 2020 presented here, the survey was carried out in the period between 4 February and 3 March 2020, prior to the COVID-19 measures in 2020.

The study is available (in German) on the RTR website at <https://www.rtr.at/medien/aktuelles/publikationen/Publikationen/Bewegtstudie2020.de.html>.

8.1.2 Research Institute for Electronic Mass Media Law

The Research Institute for Electronic Mass Media Law, abbreviated REM, was founded in 2005 and is established as a not-for-profit association with headquarters at the RTR offices. REM focuses on academic research into legal issues relating to electronic mass media.

In 2020 the members of the REM management board were as follows: Prof. Barbara Leitl-Staudinger (University of Linz, Austrian Constitutional Court, REM chair), Prof. Hans Peter Lehofer (Austrian Administrative Court, deputy chair), Prof. Walter Berka (University of Salzburg), Alfred Grinschgl, Prof. Michael Holoubek (Vienna University of Economics and Business, Austrian Constitutional Court), Michael Ogris (KommAustria), Oliver Stribl (RTR) and Matthias Traimer (Austrian Federal Chancellery).

Austrian Broadcasting Forum

REM's Austrian Broadcasting Forum (Österreichisches Rundfunkforum), which facilitates an exchange of views among researchers and practitioners on issues affecting broadcasting law, was not able to take place in the reporting year due to measures to contain the spread of the COVID-19 pandemic.

8.2 Selected activities of the Telecommunications and Postal Services Division

8.2.1 Studies

8.2.1.1 Demand-side survey in 2020 (NASE)

How and why do Austrians use the internet? To find out more about internet users in Austria, the RTR Telecommunications and Postal Services Division commissioned 'market' – a market research institute – with carrying out a survey. Around 2,500 households and 1,100 companies were surveyed online and via telephone interviews in the period between January and May 2020 regarding their internet usage patterns. The objective of the survey was to obtain a better understanding of demand as well as input for a competitive analysis of the telecommunications markets.

Some of the important findings include:

- Fixed network internet continues to be the preferred option among both households and companies in Austria. A total of 66 per cent of households and 74 per cent of companies use fixed network internet access exclusively.
- However, mobile broadband has increased significantly compared with the NASE survey from 2015. Exclusively mobile broadband via a cube or stick is accessed by 26 per cent of households, while this figure is still 11 per cent for companies.
- Bandwidth-intensive services are used most frequently by younger Austrians. The group aged 29 and under continues to top the list in the categories of downloading larger data volumes, cloud services, online games, streaming and internet telephony.
- Teleworking: even before lockdown, 24 per cent of those surveyed teleworked at least once a week.

The demand-side survey in 2020 (including questionnaires) is available (in German) on RTR's website at <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/BerichtNASE2020.de.html>.

8.2.1.2 Monitoring Interpersonal Communications Services with a Focus on Instant Messaging Services

The RTR Telecommunications and Postal Services Division investigated the competitive aspects of instant messaging services with the involvement of the BWB, and published a comprehensive study on "Monitoring: Interpersonal Communications Services with a Focus on Instant Messaging Services". The investigation focuses on communications services and, in particular, on instant messaging services. Below are some highlights of the study that was published in December 2020.

- Instant messaging plays a key role in our social interactions in digital space. People who are online spend an average of over ten minutes a day using instant messaging services.
- A network of existing users is a decisive factor for maintaining a competitive edge. The number of people that can be contacted via the messaging service is critical for the choice of service. This largest network of existing users is thus often critical for individual users and market power is often based on this.
- WhatsApp is the clear market leader: WhatsApp has the widest coverage, followed by Facebook Messenger. Snapchat, Skype, iMessage and Telegram are less significant in Austria.
- Large digital ecosystems finance the cost-free use of instant messaging services for strategic reasons or for the purposes of observing behaviour and collecting data. From a strategic viewpoint, daily and widespread use of the leading messaging service enables it to penetrate extensive ecosystems. Instant Messenger is thus 'free' only in virtual terms.

The study is available (in German) on RTR's website at www.rtr.at/plattformen/instantmessaging.

8.2.2 The 21st Salzburg Telecom Forum

Entitled “What remains from the crisis – electronic communication in a changing world,” the 21st Salzburg Telecom Forum was held by RTR, the University of Salzburg and the European Commission. Legal regulations to stem the coronavirus pandemic meant that the Telecom Forum took place virtually and was limited to an afternoon.

After a greeting from Federal Minister Elisabeth Köstinger and keynote speeches from Roberto Viola, Director General of GD Connect in the EU Commission, and Hannes Ametsreiter, CEO of Vodafone Germany, a discussion took place of the challenges and opportunities presented by electronic communications. The participants were: Gertraud Leimüller, Managing Director of winnovation consulting gmbh and Deputy Chairperson of Kreativwirtschaft Austria, Andreas Reichhardt, Director General, Federal Ministry of Agriculture, Regions and Tourism, and Klaus M. Steinmaurer, Managing Director of the RTR Telecommunications and Postal Services Division. The new Telecommunications Act and the associated expectations were the focus of the second panel. Helmut Spudich moderated the discussion between Andreas Ney (Austria Federal Economics Chamber), Fjodor Gütermann (Federal Ministry of Agriculture, Regions and Tourism), Natalie Harsdorf (Federal Competition Authority), Florian Schnurer (Association of Alternative Telecom Providers, VAT), Maximilian Schubert (Internet Service Providers Austria, ISPA) and Daniela Zimmer (Vienna Chamber of Labour).

8.3 Public relations: information and transparency

A series of public relations activities in 2020 was aimed at familiarising the general public with the specific work of regulatory bodies KommAustria, TKK, PCK and RTR, as well as promoting transparency.

Media relations and enquiry management

By way of press releases and press conferences, RTR informed the public of regulatory decisions, issues relating to regulation and grant decisions. RTR also responded to numerous media enquiries and held interviews with media representatives.

RTR deals with a large number of enquiries daily, both by phone and in writing, often concerning extremely complex problems. In 2020 written enquiries submitted via rtr@rtr.at increased from 2,859 in the previous year, to a total of 3,286. As in the previous years, the majority of enquiries concerned end-user issues. Responses to written enquiries usually took about 1.5 working days.

For initial enquiries relating to user protection and conciliation procedures, consumers can obtain advice from experts on weekdays by calling 01 58058 888.

Table 26: Volume of enquiries, 2018-2020

	2018	2019	2020
Number of enquiries to rtr@rtr.at	2,497	2,859	3,286

Source: RTR

New website www.rtr.at

The websites for RTR and the national regulatory authorities of KommAustria, TKK and PCK were updated in December (see section 1.1).

Publications

The Communications Report, the annual report of the conciliation bodies for telecommunications, media and postal services, the Net Neutrality Report, and the quarterlies RTR Telekom Monitor, RTR Post Monitor and RTR Internet Monitor were published in the reporting year. Another addition is the RTR Roaming Monitor which will be published twice a year in future. A brief description of the studies that were published by the Media Division and the Telecommunications and Postal Services Division in the reporting year is provided in sections 8.1 and 8.2.

Information events

Workshops and information events for distributing information that is relevant for market participants and the general public were exclusively held virtually in the reporting year.



www.rtr.at

Market developments from a regulatory viewpoint

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09 Market developments from a regulatory viewpoint

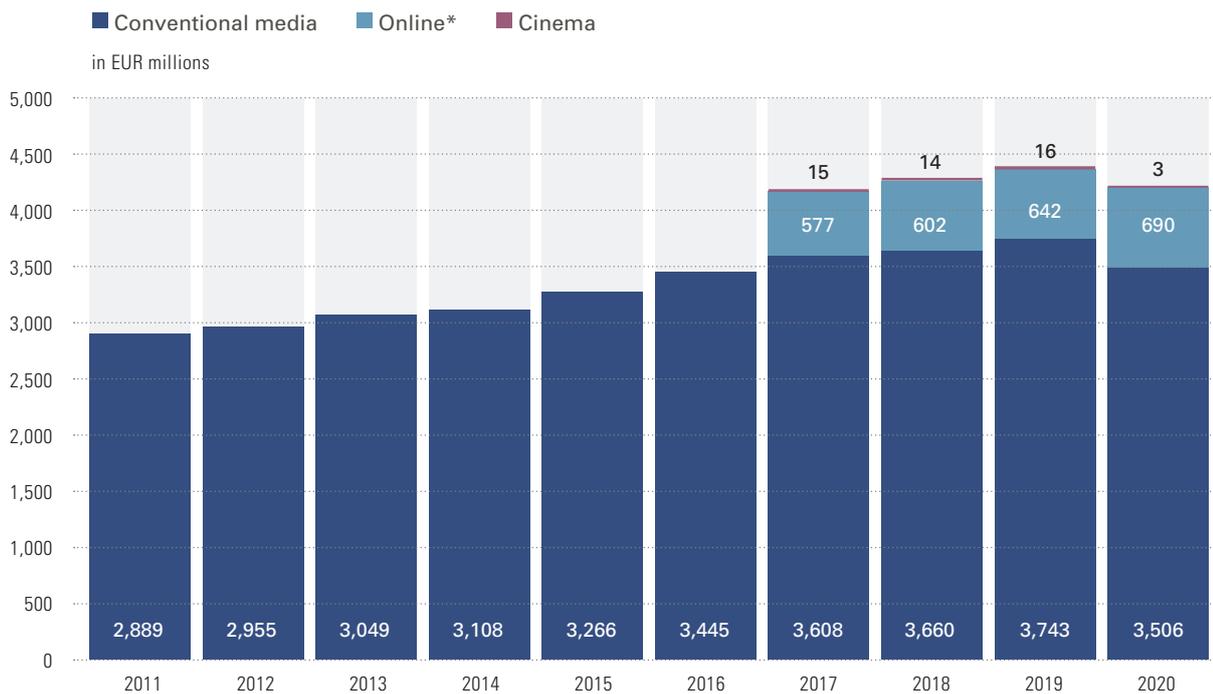
9.1 The Austrian communications and advertising markets

9.1.1 Changes in the advertising market

Conventional advertising media in Austria – print, television, radio and outdoor advertising – earned EUR 3.506 billion in gross revenues in 2020, the year of the pandemic.¹⁹ This equates to a decline of around 6.4 per cent (EUR 237 million) compared with the previous year.²⁰

Taken together with online²¹ and cinema advertising, the annual result was more moderate, thanks to strong growth in the online segment, even if 2020 proved to be just as disastrous as expected for cinemas in particular.

Figure 09: Gross advertising expenditure for conventional media including online and cinema advertising, from 2011



Source: FOCUS Media Research

¹⁹ All figures for gross advertising sales in Austria: FOCUS Media Research.

²⁰ Statistical analysis based on the advertising price lists of the media channels in each case.

²¹ As reported by FOCUS Media Research, extrapolation based on 359 interviews with experts in advertising firms.

Conventional media, online media and cinema generated total gross advertising revenues of EUR 4.2 billion in 2020 (2019: 4.4 billion; 2018: 4.28 billion; 2017: 4.2 billion). This corresponds to a year-on-year decline of 4.5 per cent.

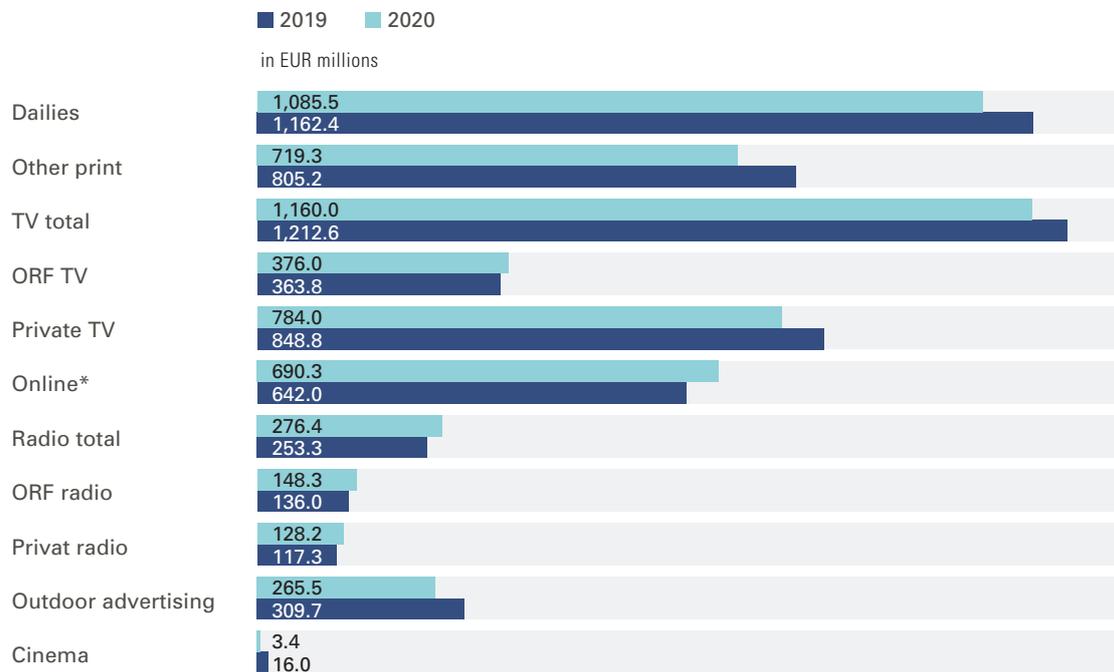
By mid-year 2020, the gross advertising spend had fallen further – by 10.7 per cent – but, after the shock of the first lockdown, the advertising market then recovered somewhat during the second half of the year.

All media advertising income is given in gross figures according to official price lists. Details of any potential discounts are obviously not disclosed and are therefore unaccounted for.

A positive result for online and radio advertising in 2020

As expected, advertising clients tightened the purse-strings in response to the Covid-related economic downturn in 2020, with companies ultimately spending 4.5 per cent less on conventional media, online and cinema advertising year on year. At the same time, however, the introduction of working from home and home schooling caused a reallocation of ad budgets. Gross income from outdoor advertising dropped 14.5 per cent to EUR 265 million, with gross income from print media also falling overall by 8.2 per cent to EUR 1.805 billion. This situation benefited online media, however, which experienced growth of 7.6 per cent to EUR 690 million, while radio earnings rose by 9.1 per cent to EUR 276 million. Although television posted an overall loss of 4.3 per cent to EUR 1.16 billion, with TV viewers normally shifting to public broadcasters in times of crisis, advertising budgets followed the shift as the crisis continued. While private sector gross advertising income fell by 7.6 per cent, the ORF's television division posted gains of 3.3 per cent.

And cinema, which had closed 2019 with 'best-in-class' growth of 14.3 per cent, was effectively able to generate advertising income only in the first two-and-a-half months of 2020. Unsurprisingly, cinema's gross advertising income slumped by 78.7 per cent to just EUR 3.4 million.

Figure 10: Gross advertising expenditure in Austria by category in 2019 and 2020


Data source: FOCUS Media Research

*Projection based on 359 interviews with advertising industry and media agency representatives in 2020.

Until 2016, FOCUS Media Research provided figures only for the gross amounts spent by businesses on conventional online advertising (mostly banner ads and direct response advertising on websites,²² with some mobile marketing and in-stream video ads, including pre-rolls but excluding YouTube). In 2017 FOCUS then switched its survey methodology to a projection based on the results of interviews with representatives of businesses purchasing advertising and with media agencies. As a result of this change, a valid estimate of the overall online advertising market is now possible, so that keyword advertising and spending on social media advertising can also be reported. In the case of conventional media, gross volume continues to be assessed by a quantitative assessment of the placement of newspaper ads, TV, radio and cinema commercials, and billboard advertising.

A total of EUR 690 million was spent on online advertising in 2020, some EUR 48 million or 7.6 per cent more than in 2019 (642 million or +6.6%). Within the online category, advertising expenditure for social media saw the highest growth rate at 11.9 per cent (2019: 14.9%). This also makes social media advertising the format with the strongest growth in 2020. Expenditure on online advertising specifically designed for mobile user devices (online mobile) flattened noticeably but still posted gains of 3.8 per cent (2019: 10.5%). Gross advertising spending on online video rose by 6.1 per cent (2019: 8.2%) while search engine advertising also posted year-on-year growth of 8.2 per cent in 2020. This figure for search engine ad growth is actually higher than for 2019 (6%). Traditional online advertising, such as website banners, outstripped even the return to growth in 2019 (+3% compared with -0.5% in 2018) by recording gains of 7.3 per cent for 2020.

The positive trend in radio advertising (9.1%) benefited both ORF and private broadcasters alike. ORF radio saw its gross advertising income rise by around EUR 12 million (9%) to EUR 148.3 million (2019: 7.4% to EUR 136 million).

²² Direct response advertising: interactive banners with direct links to an online shop.

Private broadcasters also increased earnings, finishing 2020 with another solid plus of 9.2 per cent, which is also above average. This compares with the 6.9 per cent gains posted by the private sector in 2019, continuing a multi-year trend (2016: 6.2%; 2015: 6.7%; 2014: 6.3%). In the recent past, private broadcasters had recorded a comparable figure for growth only in 2017, when earnings rose by 9.3 per cent.

Television generated higher gross advertising revenues than daily newspapers for the first time in 2017 and has since consolidated its lead. This remained the case in 2020, albeit both figures were negative. Gross advertising income for television declined by 4.3 per cent to EUR 1.16 billion, a shortfall of EUR 53 million compared with 2019. Newspapers also saw their gross advertising earnings drop by 6.5 per cent (EUR 76 million) year on year to EUR 1.085 billion. In terms of gross advertising income, this means that newspapers trailed television by no less than EUR 74 million in 2020. This gap has been widening since 2017 (2019: EUR 51 million; 2018: EUR 31 million; 2017: EUR 14 million).

Slipping 4.3 per cent in 2020 year on year, television still closed the year two tenths of a percentage point higher than the loss of 4.5 per cent for the overall market (conventional media plus online and cinema). The results look a little different when broken down into ORF and private broadcasters, however.

Compared with the previous year, ORF television advertising actually managed to increase its gross advertising earnings for 2020 by 3.3 per cent (EUR 12 million) to some EUR 376 million (2019: EUR 363.8 million (-0.5%); 2018: EUR 365.6 million (-0.7%)).

In contrast, total gross advertising income for private broadcasters fell by 7.6 per cent (almost EUR 64.8 million) to around EUR 784 million (2019: some EUR 849 million). Broken down further in this sector, fortunes varied among individual private broadcasters. In the case of IP Österreich (primary focus: marketing slots for the RTL Group), income actually rose year on year by 4.5 per cent.²³ Overall, private broadcasters accounted for a share of 67.6 per cent of gross advertising revenue earned from television in 2020.

In the case of newspapers, gross advertising revenues fell by 6.5 per cent in 2020 (roughly EUR 76 million) to around EUR 1.1 billion. This contrasts with the growth regularly posted for newspaper ad revenue in recent years, although following a clear downward trend (2019: 0.8%; 2018: 1.3%; 2017: 3.8%; 2016: 5.6%; 2015: 4.8%). Newspaper daily reach also fell again. The daily reach achieved by newspapers fell by another 2.4 percentage points²⁴ to 58.3 per cent of the Austrian population aged 14 and older (2019: 60.7%; 2018: 62.3%; 2017: 64.6%; 2016: 66.7%).

Print media in the 'other' category (regional weeklies, magazines/general interest magazines and trade magazines) saw their gross advertising revenues fall by 10.7 per cent in 2020 (EUR 86 million) to EUR 719.3 million. Within the group, regional weeklies once again proved the strongest segment, losing 'merely' 6.6 per cent year on year to post gross advertising income of just under EUR 410 million. This contrasts with advertising volumes for (general interest) magazines, which fell by 13.9 per cent to some EUR 233 million. Trade magazines suffered even worse losses in 2020 and saw their gross advertising income shrink by 20.3 per cent to EUR 76 million.

As expected, outdoor advertising was especially hard hit by the lockdown rules in force during 2020. In this segment, gross advertising earnings fell 14.3 per cent (EUR 44.2 million) to around EUR 265.5 million. Transport (advertising in and on public transport, stops and stations) proved to be the least-affected segment and saw its earnings tick down by just 0.9 per cent. Not so for ambient media – a heterogeneous segment that includes adverts placed on beer mats or posters in restaurant, hotel or museum bathrooms, on admission tickets or across taxi headrests. Businesses spent 28 per cent less on this kind of advertising in 2020 than in 2019, with conventional billboard bookings falling 14 per cent year on year. Although the strongest growth segment in recent years, digital out-of-home (i.e. digital advertising on any kind of public screen) weakened by no less than 16.8 per cent.

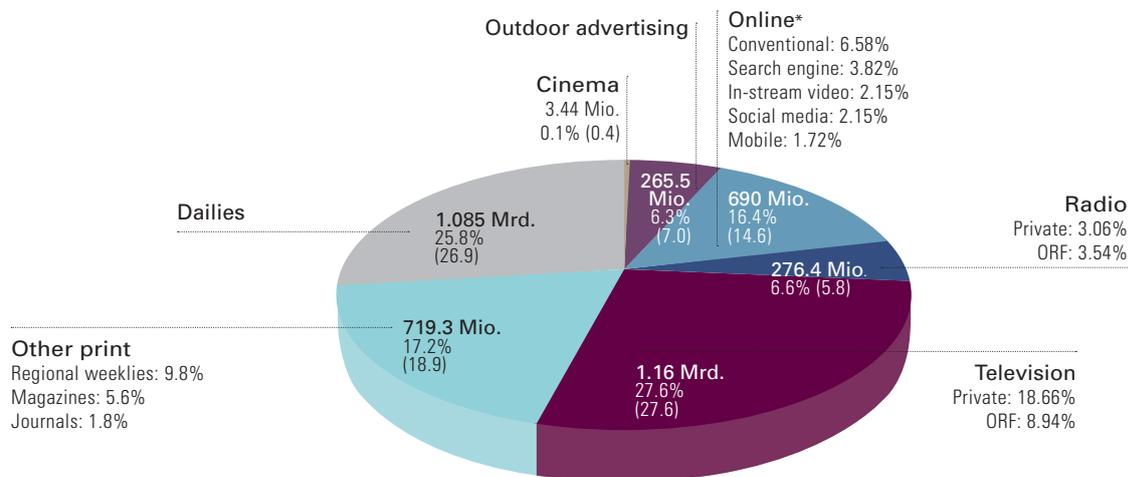
²³ HORIZONT online, "TV one of the top drivers for e-commerce", Jürgen Hofer, 2 March 2021

²⁴ 2020 Media Analysis, Verein Arge Media-Analysen.

Distribution of gross advertising expenditure by category

Looking at the distribution of gross advertising expenditure across media formats, online advertising achieved the strongest growth in its share in 2020, rising 1.8 percentage points to take 16.4 per cent of the EUR 4.2 billion that was spent in 2020 on advertising in conventional media, cinema and online overall. Radio advertising also achieved a positive result, seeing its share of this expenditure rise by eight tenths of a percentage point to 6.6 per cent. Nor did these two formats merely increase their percentage share of gross advertising spending. Despite the year-on-year shortfall of some EUR 200 million in absolute expenditure, online advertising increased its gross advertising income in 2020 by EUR 48 million while radio took in roughly an extra EUR 23 million.

Figure 11: Shares of gross advertising expenditure in 2020 (2019) – conventional media, online and cinema



Data source: FOCUS Media Research, 2020 Advertising Report; * projection based on 359 expert interviews; figures in euros and as percentages.

Although television maintained its share of the pot from the previous year at 27.6 per cent, everyone else had to be content with a smaller share of the takings.

Within print media's overall share of 43 per cent (1.7 percentage points less than in the previous year), newspapers lost six tenths of a percentage point to close the year with 25.8 per cent. Other print media shed 1.1 percentage points to end with 17.2 per cent. Most affected here were (general interest) magazines and trade magazines in particular. While regional weeklies managed to retain their share of 10 per cent from the previous year, the overall decline in advertising spending translated this respectable percentage into a loss of EUR 20 million.

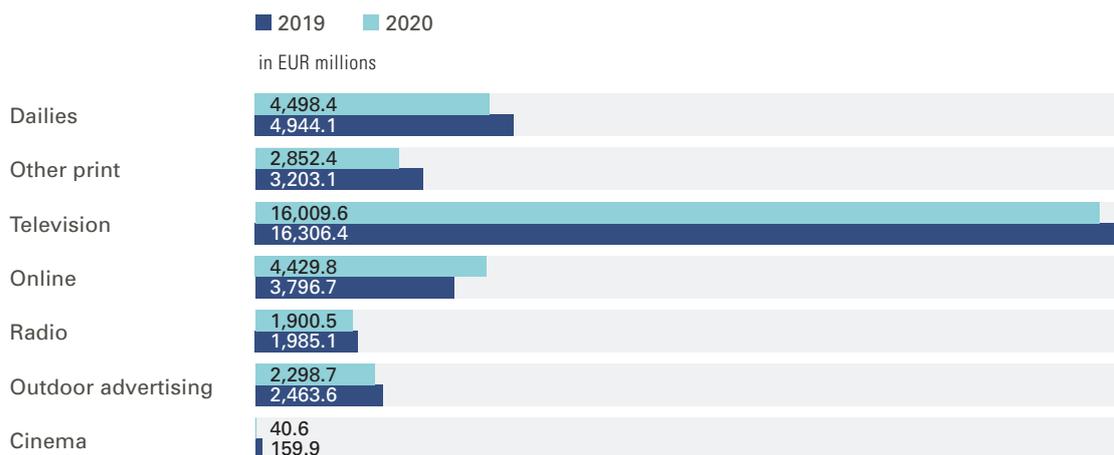
Outdoor advertising accrued 6.3 per cent of gross ad spending – a decline of seven tenths of a percentage point from 2019. The share for cinema collapsed, shrinking by more than three-quarters to 0.1 per cent of gross spending in 2020.

9.1.1.1 Comparison with the German advertising market

The coronavirus pandemic and the countermeasures adopted in the public sphere naturally had a knock-on effect on the German advertising market in 2020 as well. In the final analysis, however, overall market results were less negative than in Austria. In Germany, conventional media (print, TV, radio, outdoor advertising) plus online and cinemas posted gross advertising income totalling EUR 32.03 billion in 2020, which represents a loss of 2.5 per cent compared with 2019 (Austria: -4.5%).²⁵ This difference can be largely attributed to the varying influence of the 'heavyweights' of TV and print on each country's overall advertising markets. Also relevant is the extraordinary jump in online advertising earnings in Germany of 16.7 per cent.

In print media, gross advertising income in Germany posted negative growth of 9.8 per cent – a result even worse than the figure for Austria (-8.2%). Yet print media makes up only around 30 per cent of the overall German advertising result (Austria: around 50%). Conversely, television's share of the overall advertising market is more than 50 per cent in Germany – the same as for print media in Austria. Since the German television market posted a year-on-year loss of only 1.8 per cent, this had less effect on the overall market result than the Austrian television market, which shrank by 4.3 per cent.

Figure 12: Gross advertising expenditure in Germany by category in 2019 and 2020



Source: The Nielsen Company (Germany); figures in EUR million.

²⁵ All figures for Germany's advertising market: The Nielsen Company, 2020 ad trends for Germany, adjusted.

In terms of percentages, the gross advertising losses suffered by German television were very unequally shared among the three segments of private, public and pay TV. After a number of ups and downs, the private sector closed the year at EUR 14.89 billion and therefore just one percentage point shy of its 2019 result. In contrast, total earnings for ARD and ZDF fell by 2 per cent to EUR 570 million, while pay TV posted gross income of just EUR 550 million – a year-on-year loss of 12 per cent. Nielsen points to cancellations of league and tournament games as the primary cause here. German television had seen advertising revenues grow by 0.6 per cent in 2019, and by 1.4 per cent and 1.3 per cent in 2017 and 2018, respectively.

In 2020 gross spending on online advertising in Germany rose by 16.7 per cent (some EUR 630 million), in sharp contrast to the 7.9 per cent growth achieved in 2019. Nielsen's figures for Germany include only mobile and desktop advertising, however. This fact, together with differences in data collection methods, makes a direct comparison with Austria (2020: 7.6%) impossible. It is nonetheless clear that the market has seen shifts to online formats in both countries in 2020. Even desktop advertising, until recently a loss-maker in Germany (2018: -6%; 2019: -3%), turned things around to post significant gains of 8 per cent. Desktop in-stream even managed 12 per cent, with desktop in-page achieving 8 per cent. Only pre-roll advertising is now seemingly out of favour on desktop, posting a loss of 18 per cent. Bookings for mobile advertising rose by 36 per cent year on year, with in-page rising 56 per cent, in-stream 16 per cent and pre-roll by no less than 24 per cent.

Unlike in Austria, radio in Germany was unable to benefit from people working from home and home schoolers, and instead closed the year with a loss of 4.3 per cent (Austria: +9.1%). Initially, however, its trajectory seemed to be very similar to that in Austria. By the end of April, German gross advertising revenue for radio had shrunk by 42 per cent: this was followed by a countertrend that peaked with year-on-year gains of 9 per cent in the month of October. Business over the Christmas period was then again below average as a result of lockdown rules and economic uncertainty, penalising German radio with a loss of 9 per cent compared with December 2019.

While business was more brisk for outdoor advertising in Germany than in Austria, the year still closed firmly in the red with a drop in gross income of 6.7 per cent (Austria: -14.3%). As in Austria, 2020 was a veritable disaster for German cinemas, with gross advertising income falling by a staggering 74.7 per cent (Austria: -78.7%).

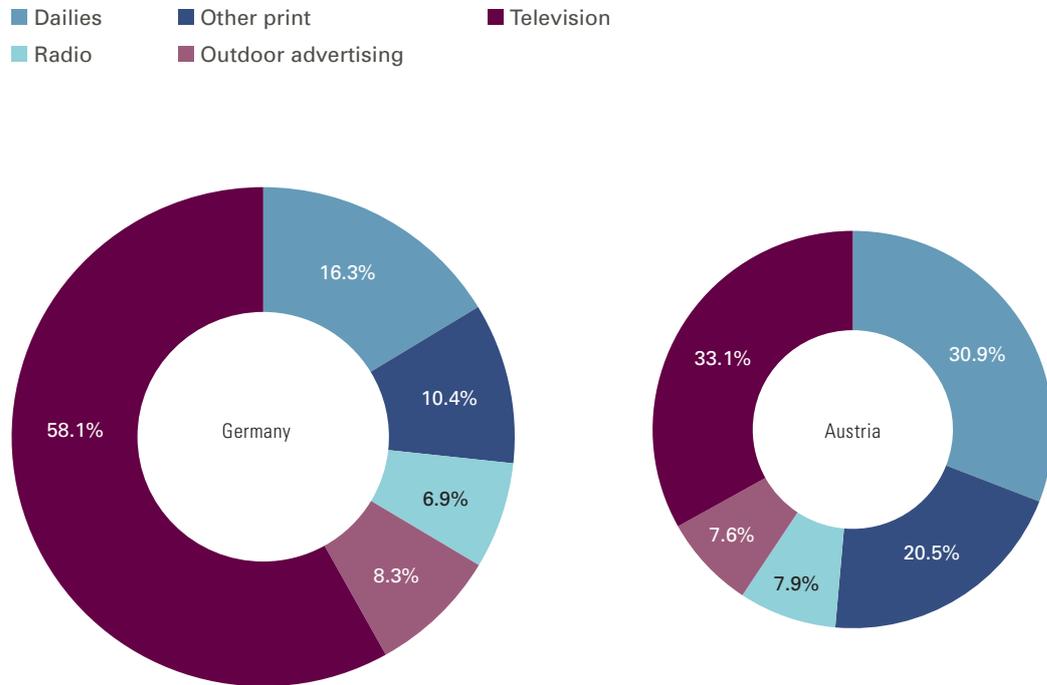
9.1.1.2 Gross advertising spending by category in Germany and Austria

In terms of the percentage share of gross advertising spending in Germany (EUR 27.56 billion excluding cinema and online), German television once again maintained its dominant position in 2020, even managing to expand its lion's share of the takings by 1.8 percentage points to 58.1 per cent (2019: 56.3%). Austrian TV was also able to improve its share of total gross ad expenditure (Austria excl. cinema and online: EUR 3.51 billion) by seven tenths of a percentage point to 33.1 per cent.

Print advertising in general, including daily newspapers and other print media, was the recipient of 26.7 per cent of gross advertising expenditure in Germany in 2020. This represents a loss of 4.8 percentage points from the previous year. Yet in Austria, 51.5 per cent of total gross advertising spending went to print media (2019: 52.6%). Austrian newspapers alone accounted for some 30.1 per cent of takings (2019: 31.1%).

Outdoor ads and radio spots traditionally account for a similar share in both countries, although the former generally earn a slightly higher percentage in Austria than in Germany. This was not the case for outdoor ads in 2020, however. In Germany, outdoor advertising achieved a share of 8.3 per cent of gross advertising expenditure in 2020 – a year-on-year increase of 2.5 percentage points.

Figure 13: Share of gross advertising expenditure of conventional media in Germany and Austria 2020



Source: The Nielsen Company (DE); FOCUS Media Research (AT), given in percentages.

In Austria, outdoor advertising took 7.9 per cent and therefore shed four tenths of a percentage point from its share. The situation was reversed for radio in Germany and Austria. Although 7.2 per cent of Germany's gross advertising spend on conventional media had gone to radio in 2019, this figure was 6.9 per cent in 2020. In Austria, radio cut itself a slightly larger slice of the advertising cake in 2020, although the cake itself was smaller overall than in 2019. Radio's share of the takings was 7.6 per cent in Austria, compared with 6.8 per cent in 2019.

9.1.2 The Austrian television market

9.1.2.1 Television viewing

The average daily reach for television in 2020 climbed to 70.3 per cent of the population aged twelve and older. This means that during the first year of coronavirus daily reach increased from the previous year by an above-average 3.9 percentage points (2019: 66.4%; 2018: 65.1%; 2017: 65.3%).

With information and entertainment needs increasing during lockdowns, viewing time similarly rose to an unusual extent, by 13 minutes to a daily average of 209 minutes (2019: +4 minutes; 2018: +6; 2017: +8; 2016: +7).²⁶

Seasonal changes in daily viewing time and reach followed familiar patterns in 2020, with more people watching television for longer periods during the colder months of the year. Yet in both indicators 2020 saw new record highs during the two lockdown periods, in March/April and November/December. While 75.4 per cent of the population aged twelve and above watched TV in March, the figure was 74.4 per cent in April, 74.7 per cent in November and 72.6 per cent in December. During travel restrictions in July, the figure was 64.8 per cent, followed by 64 per cent in August. People also watched TV for significantly longer periods each day during lockdowns than the yearly average. Daily average viewing time in March was 245 minutes, 232 in April, 239 in November and 231 minutes in December. An average of 175 minutes was recorded in each of July and August.

Far greater need for information during the pandemic

The statistics for the 30 ORF programmes reaching the largest shares of the population in 2020 reveal a significantly stronger need for information, in particular relating to coronavirus – a major reason for watching TV in 2020. Of the 30 ORF programmes with the widest reach, 17 were news broadcasts. The most widely viewed programme was the early-evening news edition (Zeit im Bild, ZiB 1) on 15 March 2020, one day before the first lockdown. Another 11 of the 17 most popular news broadcasts were special coronavirus editions of ZiB. Also falling within this category were the Bundesland heute regional news broadcasts on 15 and 16 of March – also focused on coronavirus – which ranked second and fourth as measured by population reach. Other topics presented in the most popular news broadcasts were the terrorist attack in Vienna, featured in a ZiB special edition on 2 November and ranking third, and the Vienna election on 11 October (ranking twenty-fifth). The Vienna Philharmonic New Year's Concert, normally one of the most popular programmes, ranked a mere twenty-first among the top 30 in 2020 – and that only in the second half.

For all Austrian TV channels with a high level of national information content, the daily reach figure rose discernibly from the previous year.

Overall daily reach of the ORF TV network saw highly unusual improvement, rising on average by 4.1 percentage points year on year to achieve 53.8 per cent of all viewers aged twelve and over. ORF 2 in particular moved up in terms of average daily reach, with a significant 4.6 percentage-point increase to 43.7 per cent. While ORF 1 improved its share of daily reach by 1.7 percentage points to 26.1 per cent, 11.8 per cent (+1.5%) of TV viewers aged twelve and over tuned into ORF III every day on average. ORF Sport+, in contrast, lost a marginal four tenths of a percentage point of its share and achieved a 3.5 per cent daily reach.

Among private broadcasters, those TV channels that are mostly – or at least more than averagely – devoted to information bettered their daily reach, principally due to lockdowns and home working. Examples here include Puls 24: after airing for the first time in September 2019, this channel took off and, during the first full year of daily reach and market share observation, achieved an average reach figure of 3.2 per cent, only three tenths of

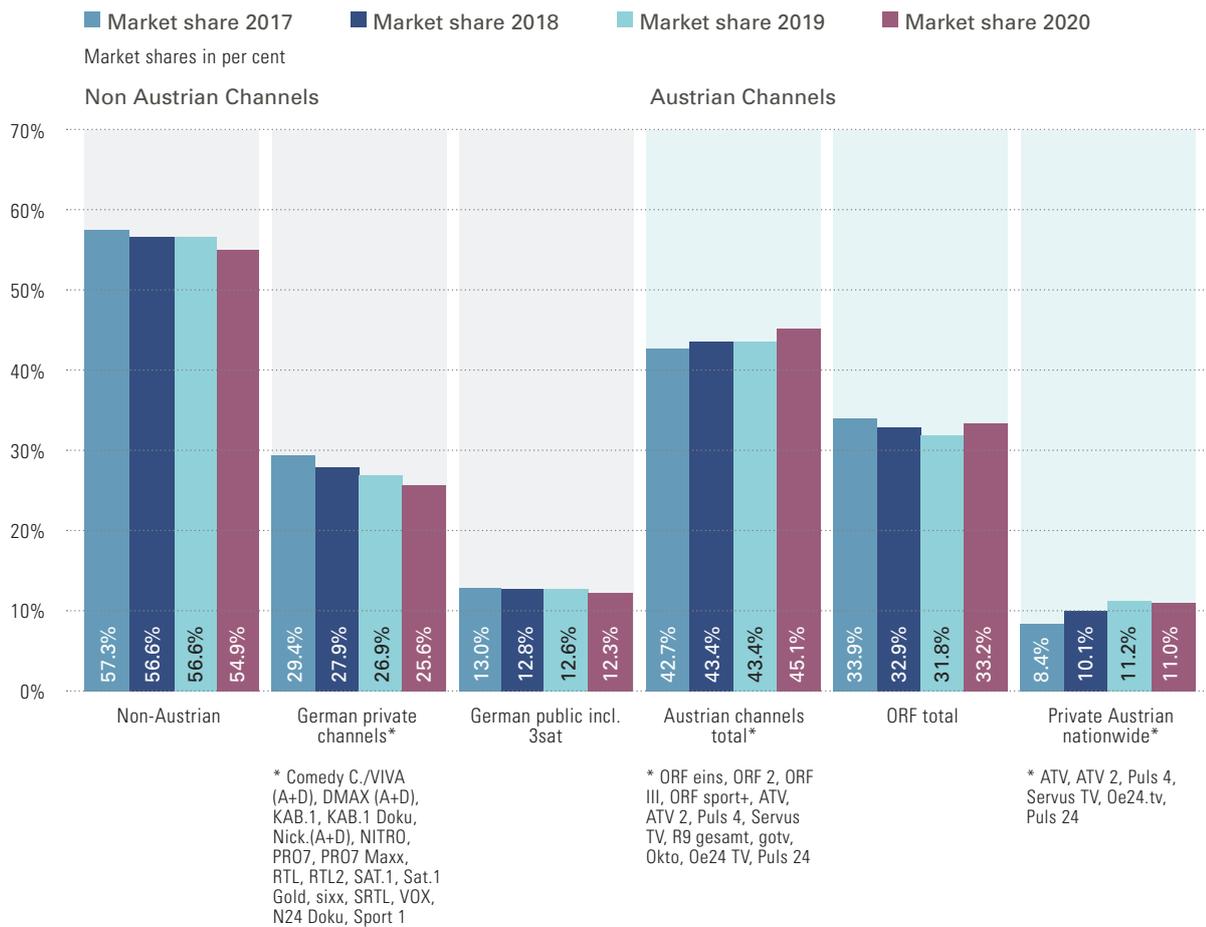
²⁶ All figures for TV: GfK Austria/TELETEST working group 2020 (representative survey of 1,659 Austrian households) and ORF media research.

a percentage point behind competitor Oe24 TV, which at 3.5 per cent had moved up by almost 60 per cent or 1.5 percentage points from 2019. Krone.tv achieved an average daily reach of 0.3 per cent. ServusTV also made a successful bid for more viewer attention in 2020, improving its standing by 2 percentage points to a 15.8 per cent daily reach. This clearly placed ServusTV at the top of the list of private channels with the widest reach in 2020 – 4 percentage points in fact above ORF III. ATV gained seven tenths of a percentage point to record a 13 per cent daily reach, while Puls 4 climbed six tenths of a point to reach 12.6 per cent, and ATV 2 and Go TV each moved up two tenths of a percentage point (to a daily reach of 5% and 0.8% respectively). Okto TV (0.1%) and regional network R9 (2.2%) retained their previous standings.

9.1.2.2 Market shares of Austrian and non-Austrian television channels

The relative amount of time spent viewing Austrian and non-Austrian TV channels does not directly reflect the notable gains in daily reach made by Austrian channels.

Figure 14: Market shares of Austrian and non-Austrian TV channels among individuals aged 12+, 2017-2020



Source: AGTT/GfK TELETEST; Evogenius Reporting; weighted by person; including VOSDAL/Timeshift.

Nonetheless, compared with the previous year, market shares did in fact shift by 1.7 percentage points in favour of Austrian channels, which averaged a collective share of 45.1 per cent for the year. This means that, in 2020 as well, Austrians viewed their own channels less often than non-Austrian TV, which achieved 54.9 per cent market share. But Austrian viewers' sustained interest in domestic developments caused by the pandemic crisis led them to make more frequent use of information supplied by Austrian channels, which in turn were able to improve their overall market share in the end.

Among non-Austrian channels, those broadcast in German and especially those originating from Germany are naturally the most popular in Austria. These channels achieved a total market share of 37.9 per cent among viewers aged twelve and over in 2020 (2019: 39.5%; 2018: 40.7%). This figure equals the market share of German private channels featuring Austrian advertising slots added to the shares held by private channels with German advertising (viewed via satellite) and by public channels from Germany.

9.1.2.3 Market shares of German television channels

As in previous years, new and existing special-interest channels from Germany further fragmented the share of the Austrian market held by German private broadcasters, resulting ultimately in a net loss of market share among German TV channels overall. Taking German programming as a whole, a trend persists whereby major channels especially have been relinquishing market share while minor and/or special-interest channels have expanded theirs marginally, without being able to offset the overall losses suffered by the major channels.

The market shares lost by German private channels in 2020 range in magnitude between one tenth and three tenths of a percentage point, with RTL (3.7% market share) and SAT.1 (3.0%) leading in losses, surrendering three tenths of a percentage point each. They are followed by VOX (3.4%) and ProSieben (3.2%), which each relinquished two tenths of a percentage point. Channels each losing one tenth of a point market share were: Kabel 1 (2.2%), RTL 2 (1.8%), Super RTL (1.0%), Sixx (0.9%), Kabel 1 Doku (0.6%) and ProSieben Maxx (0.6%).

Three private niche or special-interest channels from Germany were able to improve their shares, as previously in 2019. RTL plus, launched in 2018, moved up by two tenths of a percentage point to a market share of 1.2 per cent, while RTL NITRO (1.4%) and Discovery offshoot TLC (0.7) each gained one tenth of a point.

ARD network and 3sat with stable shares but ZDF suffers losses

Despite having to give up three tenths of a percentage point, RTL, with a market share of 3.7 per cent, continued to lead the group of German private channels available in Austria. Yet, among all German channels, RTL lagged behind public broadcaster ZDF for the third successive year, the latter's 3.9 per cent market share (0.3 points less than the previous year) again making it the most widely viewed German channel in Austria. Das Erste (ARD) continues to maintain a 3.0 per cent market share. ARD network regional channels including NDR and WDR held on to the previous year's total share of 3.9 per cent, as did three-country public cooperation 3sat, again claiming 1.5 per cent. Overall and also counting 3sat, German public channels achieved a 12.3 per cent share of the Austrian market in 2020, representing a year-on-year loss of three tenths of a percentage point.

The group of non-Austrian channels claimed a collective market share of 54.9 per cent in 2020 (-1.7 points). Besides the channels originating from Germany that have already been mentioned, this category comprises other German-language channels, including Swiss public television, and shopping channels such as QVC or HSE 24, as well as of course channels broadcast in other languages.

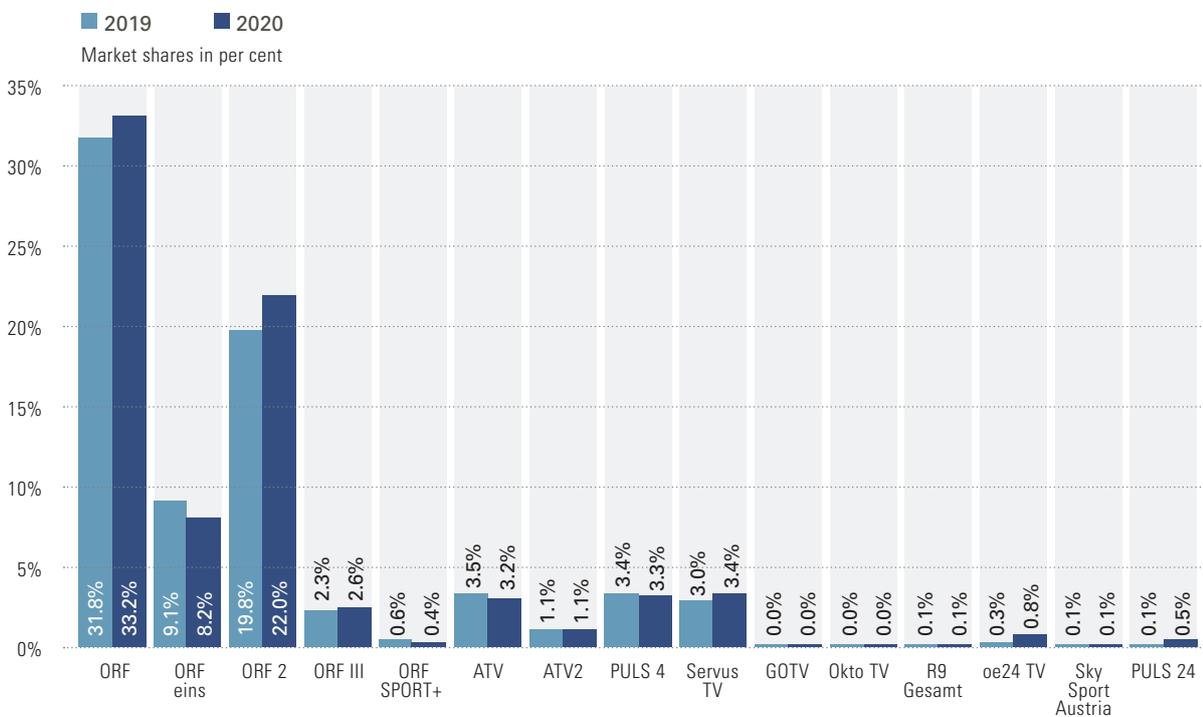
9.1.2.4 Market shares of Austrian television channels

As with daily reach, Austrian television channels were also able to improve their market shares in 2020 due to their providing more information about Austria. Yet, a channel's market share depends on how long that channel was viewed, unlike daily reach, which merely represents how many more people tuned into the channel once a day – possibly only for a few minutes. In order for the market share to increase, a channel must actually have been viewed for a longer period than in the previous year, meaning a higher percentage of the total television minutes viewed in Austria is attributed to the channel. Due to the situation arising from the pandemic, information was especially in demand, yet news broadcasts are on average not as long as other programmes, such as films or game shows. This means that market share gains by information channels are usually not proportional in magnitude to increases in daily reach.

The channel that in absolute figures increased its market share the most in 2020 was ORF 2, gaining 2.2 percentage points to record a 22 per cent share. Several private channels nonetheless made a very good showing in relation to the previous year's shares. One example is Oe24 TV, expanding its share by roughly 160 per cent or 5 tenths of a percentage point to 0.8 per cent (2019: 0.3%). Information channel Puls 24, first airing in September 2019, achieved a 0.5 per cent market share during only its first full year of viewing time monitoring. Growing by six tenths of a percentage point to 3 per cent, Servus TV had achieved the largest increase in market share of any Austrian TV channel in 2019. The channel gained another four tenths of a percentage point in 2020, to record a market share of 3.4 per cent, putting it in first place among Austrian private channels.

ATV had held this position in 2019 by gaining a 3.5 per cent share, but in 2020 moved down to third place at 3.2 per cent, to rank behind Puls 4, which also lost one tenth of a percentage point with a final share of 3.3 per cent. The market shares of the other private channels remained stable (ATV2: 1.1%, R9: 0.1%, Sky Sport AT: 0.1%, GO TV: 0.0%, Okto TV 0.0%).

Figure 15: Market share of Austrian television channels, 2019 and 2020



Source: AGTT/GfK TELETEST; Evogenius Reporting; new data survey in 2020; individuals aged 12+; market shares as percentages.

ORF's overall market share larger in 2020

The market share of the ORF channel portfolio grew by 1.4 points to a share of 33.2 per cent in 2020. This means that the ORF bucked the downward trend seen in many years except for 2012 and 2015. The main factor in the channel group's good performance was ORF2, whose information broadcasts proved highly popular in the pandemic crisis, a fact reflected in a gain in market share of 2.2 percentage points to 33.2 per cent in total. After losing 1.8 percentage points to 9.1 per cent in 2019, ORF 1's market share shrank again in 2020 by almost 1 percentage point, to finish the year with 8.2 per cent. ORF III also made the best of the pandemic crisis, marking a relatively significant gain of three-tenths of a point to achieve a 2.6 per cent share, thanks to additional information broadcasts as well as to showing cultural events presented despite theatres being closed. This contrasts with ORF Sport+, which, feeling the effects of widespread sporting event cancellations, dropped by two tenths of a percentage point to finish with a share of 0.4 per cent.

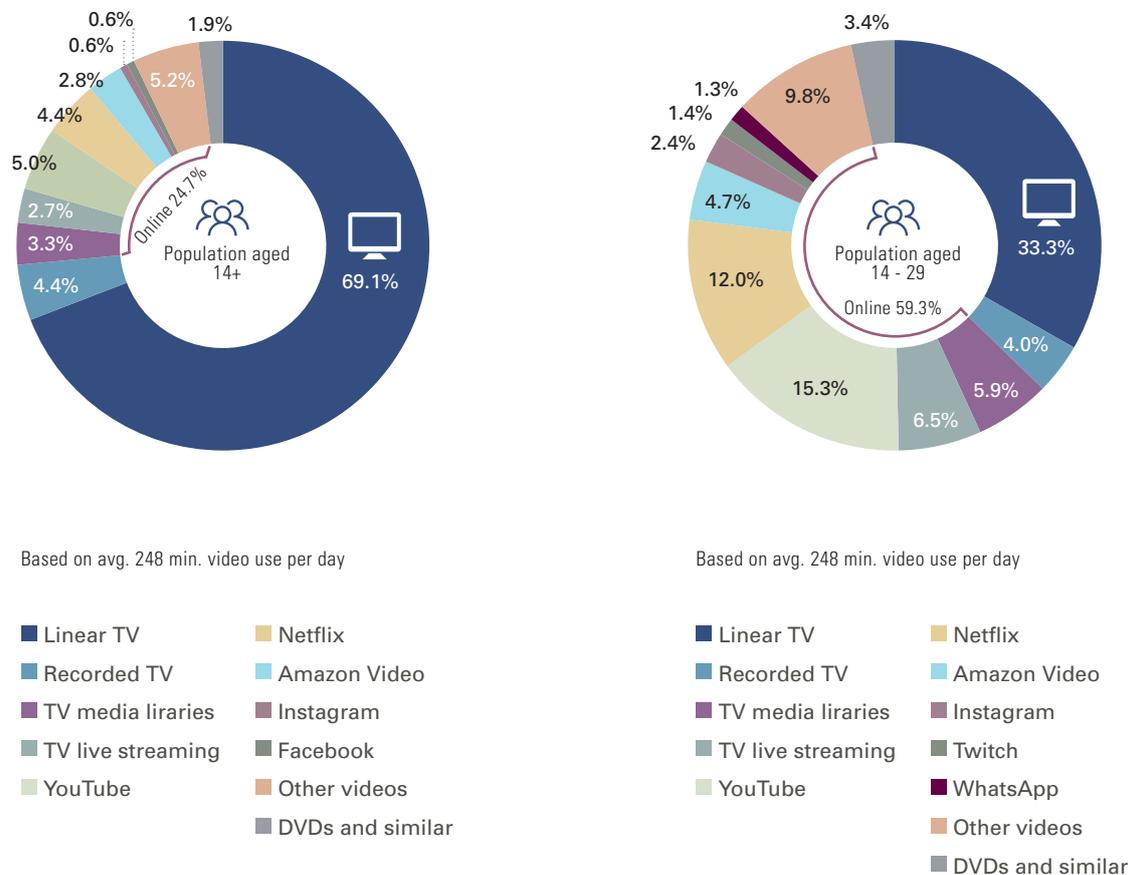
9.1.2.5 Video viewing: linear broadcasting in relation to online services

Online video viewing increased again in 2020, even more than in previous years, both within the general population aged 14 and above and among young viewers aged between 14 and 29. Such internet offerings include: media libraries run by TV channels and live streams of linear TV broadcasts, as well as alternative content provided by Netflix, Amazon Prime Video, YouTube and other platforms including social media.

Within the overall population, 25 per cent of daily video viewing was via the internet. Conventional, linear broadcasts – meaning live TV via satellite, cable or antenna, and including recorded programmes – continued to account for by far the largest share of video viewing within the overall population, despite this share shrinking by 6.6 percentage points to an average of 73.4 per cent of daily viewing time (2019: 80%).

Young viewers aged between 14 and 29, meanwhile, were already spending over 59 per cent of their daily video viewing time online on average in 2020 (2019: 46%). Conventional video via linear broadcast and recorded TV programmes were consumed by young viewers 37.3 per cent of the time on average in 2020 (2019: 50%).

Figure 16: Daily viewing of video broadcasts and online video, individuals aged 14+ and 14-29-year-olds, 2020



Source: RTR/AGTT 2020 Video Survey; shares as percentages; individuals in all of Austria.

Since 2017, the Media Division at RTR and the TELETTEST Working Group (AGTT) have been jointly conducting a representative survey of roughly 4,000 Austrians. The aim is to discover the extent to which, on a daily average, the viewing population uses conventional linear television for video consumption compared with online services. The study, carried out by GfK Austria each year, appears under the title of Video Survey (Bewegtbildstudie), suffixed by the year when the survey was taken.

Share of online video viewing increased sharply in 2020

In 2017 and 2018, the percentage of video that the overall population aged 14 and above viewed online had risen by 3 percentage points each year from the year before, whereas this rate increased by 1 percentage point in 2019. In 2020 the online video share grew by 6.8 points to reach 24.7 per cent. Programmes provided by conventional TV broadcasters (including live streams and media libraries) accounted for almost one quarter of online viewing. Counting video broadcasts and online video, programmes originating from conventional TV broadcasters made up 79.5 per cent of the video viewed daily on average by the overall population aged 14 and over (2019: 85%). YouTube was the online platform most widely used in 2020, accounting for an average

share of 5 per cent of the overall population's daily video viewing (2019: 4%). Ranking farther down were: TV broadcaster media libraries at 3.3 per cent collectively (2019: 3%), Netflix at 3 per cent (2019: 3%) and Amazon Prime Video at 2.8 per cent (2019: 2%). Other sources ranked below 1 per cent, including Facebook and Instagram with the largest shares at 0.6 per cent each.

Young people aged 14–29 also made significantly more use of online video in 2020 than in the previous year. Within the group of young viewers, video made available by TV broadcaster media libraries, YouTube, Netflix or Amazon Prime Video or via social media platforms accounted for over 59 per cent of daily video viewing time (2019: 46%; 2018: 44%; 2017: 35%). Online programmes provided by conventional TV broadcasters (including live streams and broadcaster media libraries) accounted for almost one fifth of online viewing. While programmes broadcast by conventional TV channels still enjoy strong popularity among young people, this interest is dwindling. Either viewed online or via conventional broadcasting, programmes originating from conventional TV broadcasters made up 49.7 per cent of the video viewed daily on average by young viewers (2019: 61%). As in the overall population, YouTube was the online platform most widely used by the young in 2020. Even so, it accounted for an average share of only 15.3 per cent of this group's daily video viewing, followed by Netflix at 12 per cent and the live streams broadcast by all TV channels at 6.5 per cent collectively, as well as the content provided via TV broadcaster media libraries at 5.9 per cent in total. Ranking fifth, Amazon Prime Video represented only 3 per cent of the video viewed daily by young people in this age group, no more than the share consumed by the general population. Instagram, a social media platform, improved its standing considerably in 2020 compared with 2019. Instagram videos accounted for 2.4 per cent of young people's viewing time (2019: 1%), with streaming platform Twitch at 1.4 per cent and WhatsApp with a 1.3 per cent share ranking farther below. Other sources ranked below 1 per cent, including Facebook and Snapchat with the largest shares at 0.8 per cent each, followed by TikTok, which achieved a 0.7 per cent share of the video consumed daily by 14–29-year-olds.

Physical storage devices with purchased content, meaning DVDs and Blu-ray discs, were able to maintain their roughly 2 per cent share of video viewing time among the overall population. The comparable share among young people, 3.3 per cent, had decreased slightly from 2019 (4%).

9.1.3 The Austrian radio market

9.1.3.1 National listening figures in 2020

Compared with the previous year, the daily reach of Austria's radio stations declined in 2020, despite lockdowns and working from home. In 2019 radio's daily reach within the general population (aged ten and over) had actually grown again for the first time in eight years, making gains of just under 2 percentage points to reach an average of 77.3 per cent of listeners per day. This positive figure from 2019 was apparently a short-lived recovery within a lengthy downward trend, with daily reach again falling in 2020, by 1.6 percentage points to 75.7 per cent. A comparable picture is revealed in 2020 within the core target group of 14–49-year-olds. An average of 69.5 per cent of this group listened to a radio station every day, which in fact constitutes a year-on-year drop of 3.7 percentage points (2019: 73.2%).

Average daily listening time also declined in 2020 in the general population, slipping by 5 minutes to 196 minutes. In 2019, however, there had been an atypical and significant gain in listening time, which rose by 18 minutes to 201 minutes. By way of comparison, average listening times in 2017 and 2018 were 179 minutes and 183 minutes, respectively. Seen in this light, the figure of 196 minutes for 2020 is a perfectly respectable result for the radio sector.

In the target group of 14–49-year-olds, the average listening time in 2020 actually fell year on year, shedding 15 minutes to end at 170 minutes. However, this was another group that had recorded an unusual rise in listening time in 2019, gaining 14 minutes for a total of 185 minutes. This bucked what had been a long-term downward trend. In 2016 average daily listening time for the 14–49-year-old core target group had been 180 minutes, then

falling to 172 and 171 minutes in 2017 and 2018 prior to the outlier figure of 185 minutes for 2019. In this context, the 170 minutes of listening time in 2020 should rather be seen as a course correction within a long-term trajectory than as a major loss.

Austria-wide market shares and daily reach for ORF and private radio

The daily reach of a radio station expresses the percentage of people within a target age group who tuned into that station 'yesterday' and listened for at least 15 minutes. When for example a listener tunes into three stations for at least 15 minutes each, the amount of positive impact that listener has on daily reach is the same for all three stations, even if she perhaps listened to two of the stations for only 15 minutes each and the third for two hours.

Thus, daily reach expresses only the size of a target group that turned on the radio or listened to a station once a day at all. This contrasts with market share, which refers to the average number of minutes of daily listening time that are devoted to a given radio station. If people listen to a radio station for an extended period each day, its market share and consequently its value for marketing advertising rises.

Radiotest determines market share based on respondents' activities during the previous day. The day is divided up into quarter-hour periods, with respondents allowed to name up to three radio stations listened to each quarter of an hour. This, as well as rounding effects, can lead to overlapping among the results for the various radio stations, so that the total individual market share held by radio stations may be greater than the adjusted (net) figure for all stations in total, for example, for the ORF station network as a whole or private stations in total. This effect was observed again in 2020. Although the individual shares of the market for listeners aged between 14 and 49, as held by ORF, national private radio broadcasters and other radio broadcasters (such as foreign broadcasters), should add up to 100 per cent, these shares in fact total 103 per cent.

The following analyses concentrate on the 14–49-year-old core target group, which is especially relevant for marketing.

Daily reach totals for ORF and private radio stations both in decline

The ORF radio network as a whole achieved a daily reach figure of 51.2 per cent among the target group of 14–49-year-olds in 2020, representing a year-on-year loss of 3.4 percentage points. This more than eliminates the gains made by the ORF radio network in 2019 (2019: 54.6%; 2018: 51.6%).

The greatest share of these daily reach losses among ORF stations was suffered by Ö3, whose daily reach fell by 3 percentage points to 36 per cent.

Ö1, the culture and news station, slipped one tenth of a percentage point to 5.7 per cent and so strayed only marginally from its trend towards growing daily reach, which has now persisted for a number of years.

The ORF regional radio stations (Ö2) collectively lost nine tenths of a percentage point to achieve a daily reach of 14.8 per cent. As recently as 2019, these stations had risen by 1.1 percentage points to 15.7 per cent, nearly matching the most recent peak figure of 16 per cent daily reach recorded in 2015 and 2016.

FM4, the only ORF radio station to record a loss (of two tenths of a percentage point) in 2019, was once again an outlier compared with its siblings in 2020 as it in fact returned to growth, gaining five tenths of a percentage point to achieve a reach of 5.5 per cent.

Like public station Ö3, private stations in Austria also reached fewer individuals within the 14–49-year-old category in 2020 than in the year before. Their daily reach dropped by 2.2 percentage points to 33.6 per cent of this key target group for marketing.

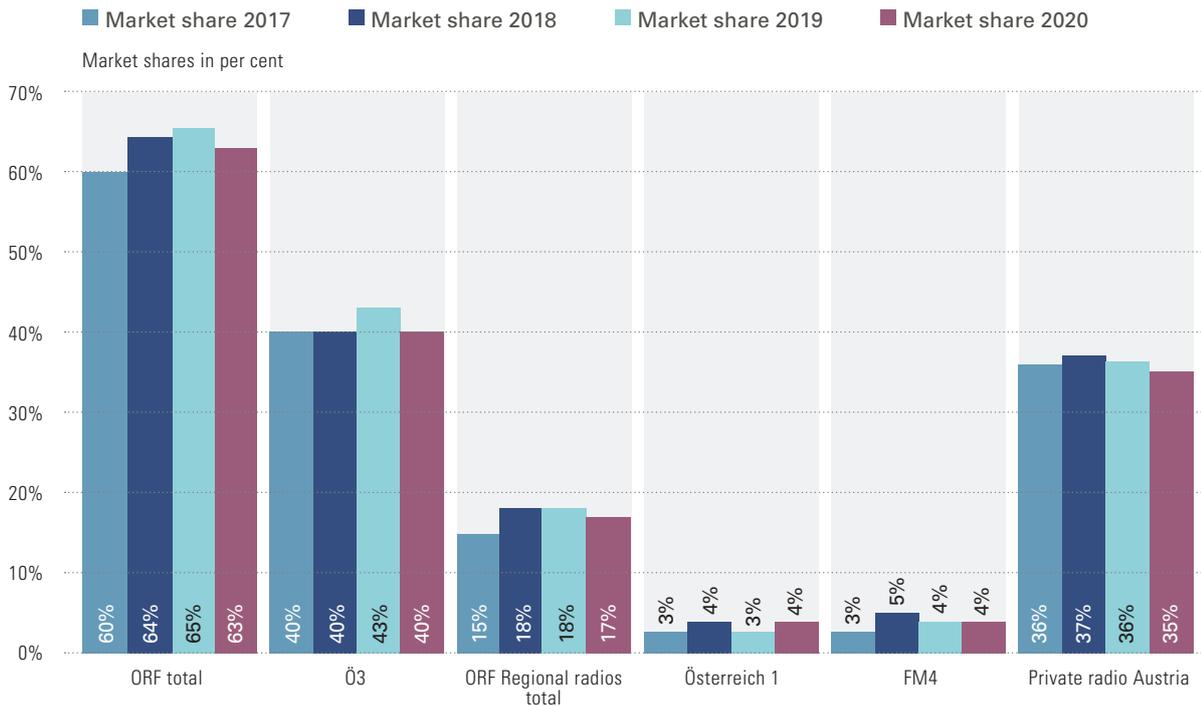
Overall losses in market share for ORF and private radio stations

Although the ORF radio network had been able in 2018 and 2019 to expand their overall national market share among 14–49-year-old listeners (2019: +1 point, 2018: +4 points), the network lost 2 percentage points in 2020 and slipped to a market share of 63 per cent of minutes of daily listening time. Here, Ö3 was again the trendsetter for ORF radio overall, with its market share falling to 40 per cent after a loss of around 3 percentage points. This effectively eliminated all of the growth Ö3 had achieved in 2019. As recently as 2017, Ö3 had secured a hard-won 40 per cent share of the 14–49-year-olds target group and had managed to hold this share in 2018. In 2019 Ö3 extended this share again to 43 per cent, finally recovering the losses sustained in the first half of the 2010s to return to its 2010 position.

The nine ORF regional stations (Ö2), which in 2019 had managed to hold on to the sizable growth of 3 percentage points achieved in 2018, saw their overall market share slip by 1 percentage point in 2020 to give them a 17 per cent market share in the 14–49-year-old category.

Ö1, which in 2019 had experienced a hiatus in its otherwise longstanding upward trend, won back the lost percentage point in 2020 to finish the year with a market share of 4 per cent. This left Ö1 level pegging with the FM4 youth station, which in 2020 held onto its 4 per cent market share from 2019.

Figure 17: Shares of the national radio market among the 14–49 target group, 2017–2020



Source: Radiotest; percentages; all of Austria.

The cumulative market share for private radio stations in Austria's provinces plus the national stations Radio KRONEHIT and Radio Austria shrunk by 1 percentage point for the second year running for a total of 35 per cent. Overall market share for private radio stations had last been at this level at the end of 2014. With the exception of the outlier year of 2018, when the share rose to 37 per cent, these stations had grown used to an annual share figure of 36 per cent since 2015.

9.1.3.2 Radio listening in Vienna in 2020

The trends for daily reach and market share at a national level, both for radio overall and for ORF radio and private stations, are reflected in figures for Vienna, a fiercely competitive radio market nonetheless dominated by distinctive local conditions. One of these is that the daily average reach for radio in the national capital tends to be significantly lower than for the country as a whole.

In 2020, 64.5 per cent of Vienna's total population (aged 10+) listened to the radio on a daily basis (2019: 63.9%). Nationwide, radio reaches 77.3 per cent of the total population on a daily average. In the group of Vienna residents aged between 14 and 49, radio achieved a daily reach of 55.6 per cent in 2020 (2019: 56.8%), while the nationwide figure for this age group was 69.5 per cent.

As a result, radio in Vienna managed to improve its daily reach slightly by 6 tenths of a percentage point in the overall population, although it shed 1.2 percentage points in the core category to continue what is now a long-term trend.

Market shares and daily reach among radio listeners in Vienna aged 14–49

In recent years, Radiotest results have revealed significant variations in performance for the ORF radio stations in Vienna.

Figure 18: Radio market shares in Vienna among the 14–49 target group, 2017–2020



Source: Radiotest; percentages; Viennese market.

The trajectory taken by results for ORF radio stations in Vienna in 2020 was virtually the opposite of the one seen in 2019. In that year, the share of the Viennese market held by the ORF radio network among 14–49-year-olds had risen by an above-average 4 percentage points to 57 per cent, with daily reach climbing 2.3 percentage points to 37.4 per cent. At the time, the sole driver behind ORF radio's substantial increase was Ö3, which had moved up an unprecedented 6 percentage points to take a 33 per cent share of the market. In 2020 the overall market share held by the ORF radio network dropped to 54 per cent, with daily reach sliding 1.5 percentage points down to 35.9 per cent. Ö3 was once again the prime mover in this development, losing no less than 5 percentage points to see its market share shrink to 28 per cent. In Vienna, Ö3's daily reach decreased from 21.5 per cent to 20.2 per cent (2018: 20.1%; 2017: 24.3%).

Another station bucking the 2019–2020 trend – but in the other direction – was Radio Wien (Ö2), whose market share rose by 3 percentage points year on year to 10 per cent. In 2019 Radio Wien had shed 2 percentage points, falling back to a market share of 7 per cent. Radio Wien increased its daily reach by five tenths of a percentage point to 6.5 per cent.

Ö1 had also lost 2 percentage points of market share in 2019, dropping to 7 per cent, but recovered in 2020 to achieve an annual market share of 8 per cent. In contrast, daily reach for Radio Wien shed six tenths of a percentage point to end at 7.9 per cent.

In 2020 FM4 added 1 percentage point of market share in the 14–49-year-old category to take it to 7 per cent, but also lost four tenths of a percentage point of daily reach for a final figure of 6 per cent.

The overall market share for private radio in Vienna continued its prolonged trend of sideways movement around an average of 40 per cent in 2020, to end at 41 per cent – the same as in 2019. This is further evidence for the figure of 46 per cent market share in 2018 being an outlier rather than any indication of a trend turnaround for private radio. Daily reach for private radio lost 7 tenths of a percentage point in 2020 to end at 27.9 per cent.

Figure 19: Private radio shares in the Vienna market among the 14–49 target group, 2017–2020



Source: Radiotest; percentages.

While year-on-year developments in the overall market share for private radio in 2020 in Vienna initially seem fairly unspectacular when compared with 2019, a number of unusual shifts can nonetheless be identified within the group.

The national station Kronehit and Radio Arabella each lost three percentage points in Vienna. For Kronehit, which fell back to 14 per cent market share (2019: 17%; 2018: 19%), this was the second notable loss within two years. For Radio Arabella, the loss of 3 percentage points translated to relinquishing 50 per cent of its total market share, which is now just 3 per cent.

In contrast, the station called '88.6 – so rockt das Leben' was the major beneficiary of sector competition: the 3 percentage points of market share it added in 2020 took it to a record high of 11 per cent.

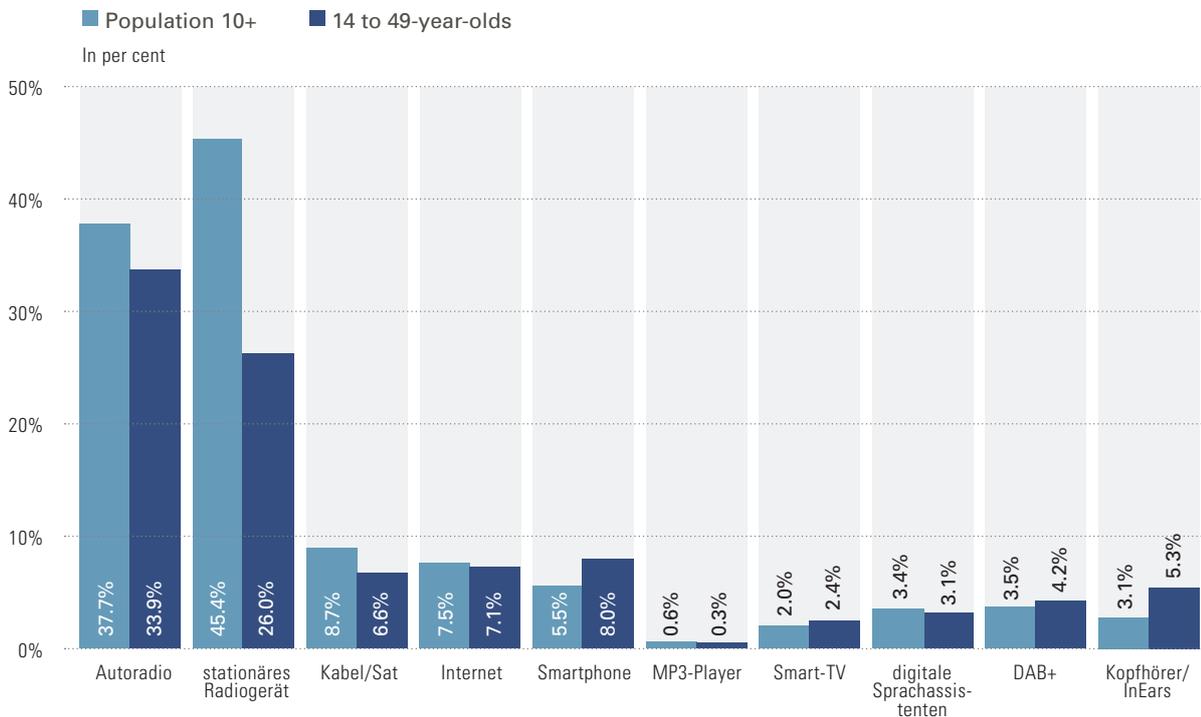
Radio Energy lost 1 percentage point, dropping to 7 per cent market share, while 98.3 Superfly continued its oscillation between 2 and 3 per cent to return to 3 per cent in 2020. The nationwide Radio Austria was the only exception, holding steady at its 2018/2019 market share of 2 per cent in the 14–49-year-old category in Vienna.

9.1.3.3 Radio listening: sources and devices by age group

In 2020 the long-term trend away from the use of conventional stationary radio receivers gained new momentum, after a brief interruption of this downward trend in 2019. The loss in reach for car radio accelerated even more strongly, although the magnitude can probably be attributed to the general restrictions on movement introduced to protect against coronavirus. Significant losses in reach for car radio have been recorded since at least 2018, however. The extent of the losses in reach experienced by stationary receivers and car radios is similar both in the general population (aged 10+) and among the youngest listeners surveyed, aged 14–29.

Nevertheless, other sources and types of devices play only a very minor role in daily radio reception when compared with car radios and stationary receivers. This holds even though a few of these alternative reception methods and devices did grow significantly for the first time in 2020 (i.e. not only by less than 1%).

Figure 20: Sources and devices for daily radio listening in 2020, individuals 10+ and 14-29



Source: Radiotest

Car radios were used on a daily basis by 37.7 per cent of the overall population in 2020 (2019: 43.5%; 2018: 44.9%; 2017: 46.7%) and by 33.9 per cent of young people aged 14-29 (2019: 41.1%; 2018: 44.3%; 2017: 45.1%). In the space of just one year, car radio use in the overall population therefore fell by about 6 percentage points, and by some 7 percentage points in the 14-29 age group, with at least some of these losses being driven by the pandemic.

Even so, conventional, stationary radio receivers were not only unable to capitalise on lockdowns and working from home but even surrendered some of their reach – especially to smart TVs and virtual assistants. Of the total population aged ten and above, 45.4 per cent still switched on a kitchen radio, stereo tuner or similar stationary device for their daily radio listening in 2020. Compared with 2019, this is a loss in reach of 3.3 percentage points (2019: 48.7%; 2018: 48.5%; 2017: 51.9%; 2016: 54.3%). The change in the young listeners group, in which stationary radio receivers achieved a reach of 26 per cent in 2020, was even more significant, falling no less than 6 percentage points compared with the previous year (2019: 31.1%; 2018: 30.7%; 2017: 33.8%; 2016: 37.5%). Expressed another way, this means that around three-quarters of 14-29-year-olds did not use a stationary receiver as part of their daily mix of devices and reception methods in 2020.

The proportion of the overall population aged ten and over that picked cable or satellite as an option for consuming radio station content remained virtually unchanged at 8.7 per cent in 2020 (2019: 8.4%). In the young listeners group, interest in this type of radio reception had dropped 2 percentage points to a daily reach of 4.8 per cent in 2019, but recovered to a reach of 6.6 per cent in 2020.

The internet made the largest gains for any radio reception format in 2019, and added daily reach of around 2 percentage points in both the overall population aged ten and above and those aged 14-29, to finish at 7.9 per

cent and 8.9 per cent respectively. The percentage of the overall population that listens to radio via the internet using a laptop, Wi-Fi radio or tablet fell again slightly in 2020, slipping by four tenths of a percentage point to 7.5 per cent. For young people, this decline was more pronounced, with only 7.1 per cent using the internet for radio in 2020 compared with 8.9 per cent in 2019.

For the fourth year running, the reach of smartphones as radio receivers in the overall population (10+) rose again in 2020, climbing by five tenths of a percentage point to 5.5 per cent. No change was seen in the use of smartphones to consume radio content by young people, however, with 2020 repeating the previous year's figure of 8 per cent (2018: 8.3%).

In 2020 smart TVs fell back to a reach figure last seen in 2018. Among the overall population and young people alike, the already negligible number of people using smart TVs as radio receivers halved, with figures falling from 0.9 to 2 per cent for the general population (2018: 1.9%) and from 1.1 to 2.2 per cent for the 14–29 group (2018: 2.2%).

Although the use of virtual assistants or a smart speaker for radio reception indeed rose by over 50 per cent in 2020, this usage still plays a minor role in overall listening behaviour. The proportion of the overall population using a smart speaker in the household as a radio receiver rose by 1.4 percentage points in 2020 to 3.4 per cent (2019: 2%; 2018: 1.5%). Although an interest in using smart speakers as a radio is slightly less pronounced among young people (14–29) than in the overall population, significant growth was also seen here in 2020, with daily reach gaining eight tenths of a percentage point and rising to 3.1 per cent (2019 and 2018: 2.3%).

The Austria-wide launch of digital radio based on the DAB+ transmission standard began only in May 2019 and has since been completed. DAB+ was already being used daily by 2 per cent of the overall population and 2 per cent of young people in 2019. In the course of 2020, daily reach for DAB+ rose in the overall population by another 1.5 percentage points to 3.5 per cent, even achieving another 2.2 percentage points among young listeners for a total of 4.2 per cent in this group.

MP3 players were still being used for radio reception by 0.6 per cent of the overall population in 2020; the figure for young people was 0.3 per cent.

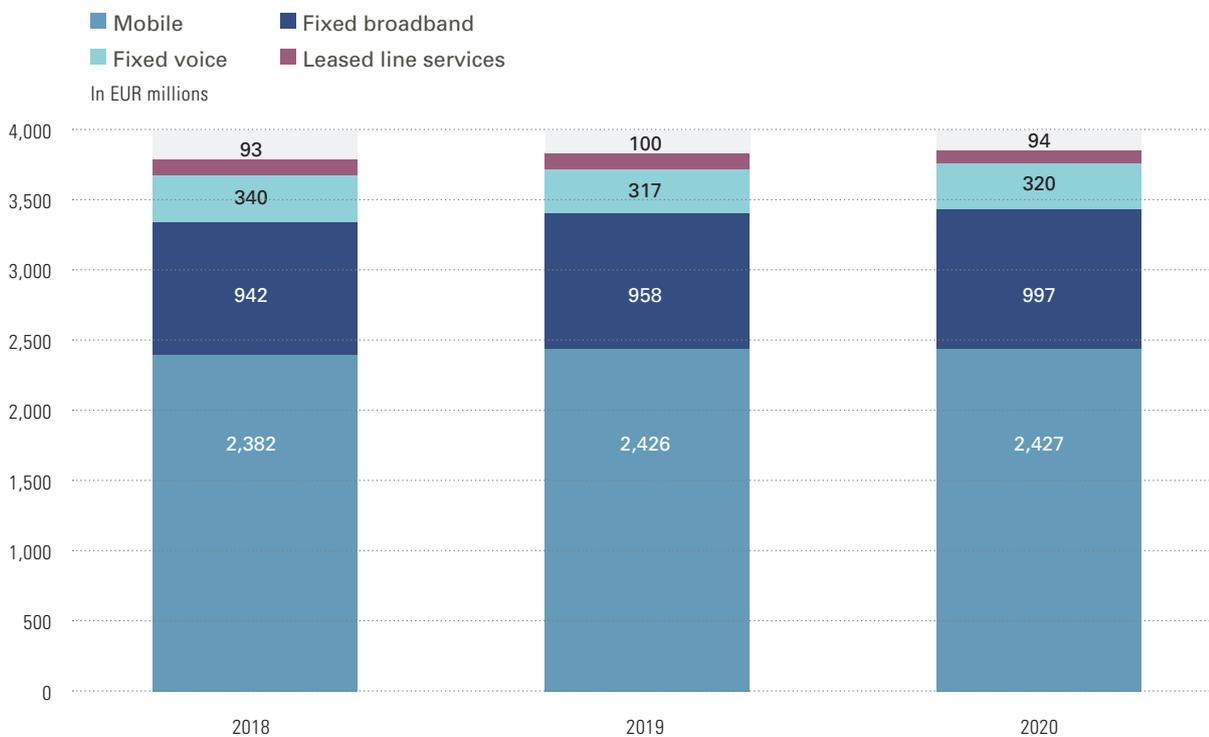
The proportion of the overall population using headphones for daily radio listening in 2020 remained almost unchanged at 3.1 per cent (2019: 3.2%), while headphone use for radio further declined marginally in popularity among those aged 14–29, dropping to 5.3 per cent (2019: 5.8%; 2018: 6.6%).

9.2 Development of the Austrian telecommunications markets

This section provides a summary of the most significant market developments in mobile telecommunications, broadband and fixed network services.

In 2020 retail revenues in the telecommunications sector rose 1 per cent from EUR 3.801 billion to EUR 3.838 billion. The highest growth in this sector was achieved by broadband (+4.1%), while fixed voice services once again recorded positive revenue growth for the first time in many years. Minimal growth was recorded in the mobile telephony segment (including data-only subscriptions), which accounted for 63.2 per cent of retail revenues in 2020. Retail revenues for leased lines and Ethernet services fell by 6 per cent, ultimately making up just 2.4 per cent of total revenue.

Figure 21: Retail revenues from mobile, fixed broadband, fixed voice and leased line services, 2018–2020



Source: RTR

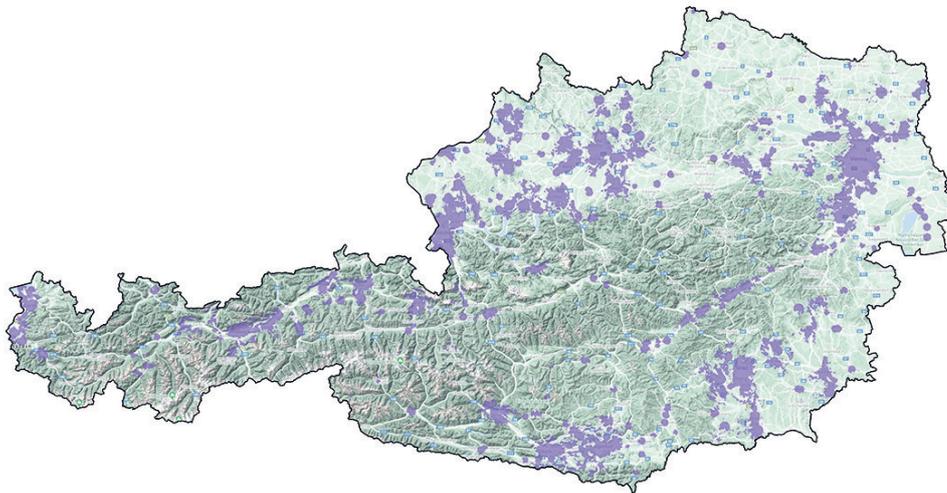
Key market developments in 2020 are listed below and described in detail in the section that follows:

- 5G: urban coverage soon to be matched in rural areas
- Covid-19: call volumes rise once again
- Internet access: mobile broadband enjoys unbroken strong popularity
- Marked increase in availability of high fixed-network bandwidths
- Strong growth in >100 Mbps products yet supply–demand gap persists
- Covid-19: home instead of roam
- Broadband wholesale services: migration to virtual unbundling continues
- Termination: European Commission publishes future fee schedule

5G: urban coverage soon to be matched in rural areas

The first set of frequencies that can be deployed for fifth-generation mobile telephony (5G) was awarded by the Telekom-Control-Kommission (TKK) back in early 2019. This spectrum in the 3.4 to 3.8 GHz range is especially suitable for providing urban coverage. This is also the area operators focused on for 5G network rollout in 2020. Figures published by RTR's Single Information Point for Broadband Coverage (ZIB) claim 55 per cent 5G network coverage for the population in Q4 2020. Regions covered by 5G by the end of 2020 are presented in Figure 17.

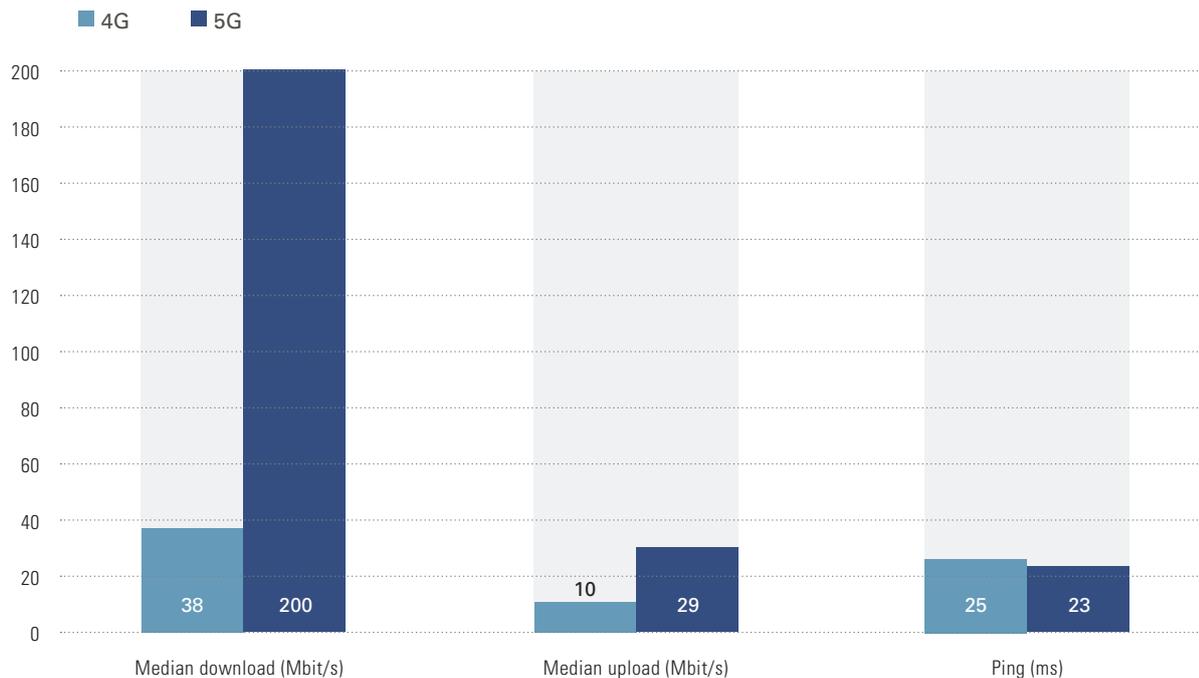
Figure 22: 5G coverage, Q4 2020



Source: RTR

The significantly higher speeds achieved by 5G have been demonstrated by the RTR-NetTest. At 200 Mbps, the median²⁷ download speed recorded in 5G measurements in Q1 2021 was more than five times faster than that measured for 4G. The median upload speed was also almost three times faster. In interpreting these figures, however, one should note that the customer base for 5G is still small (fewer consumers with 5G devices and tariff plans) and network load is therefore much lower than for 4G. Values for latency (ping)²⁸ are similar.

Figure 23: RTR-NetTest comparison of 4G with 5G, Q1 2021



Source: RTR-NetTest

In autumn 2020, the TKK awarded another set of frequencies that could be used for 5G, namely spectrum in the 700, 1500 and 2100 MHz bands.²⁹ Spectrum in the 700 MHz band in particular has good propagation characteristics and is therefore especially suited to use in providing 5G coverage for rural areas. Coverage obligations were also imposed as part of the spectrum auction. A new feature of this process – not limited to Austria but also used in the wider EU – was that operators could reduce payments for frequency packages acquired in proportion to the extent of coverage obligations accepted. Ultimately, coverage commitments were made for 1,702 cadastral municipalities who currently have poor coverage. A further obligation, which accommodates certain national and EU 5G targets, requires coverage for all important transport routes and urban areas. In the next few years, further expansion of 5G towards comprehensive coverage is therefore to be expected.

²⁷ The median is the value at the exact midpoint when the measurements are sorted by magnitude (i.e. 50% of measurements lie above this value and 50% below).

²⁸ The value for 'ping' (or 'latency', to use the correct technical term) is the time needed by a small data packet to make the round trip from your device to a server located in the internet. Ping time is measured in milliseconds (ms).

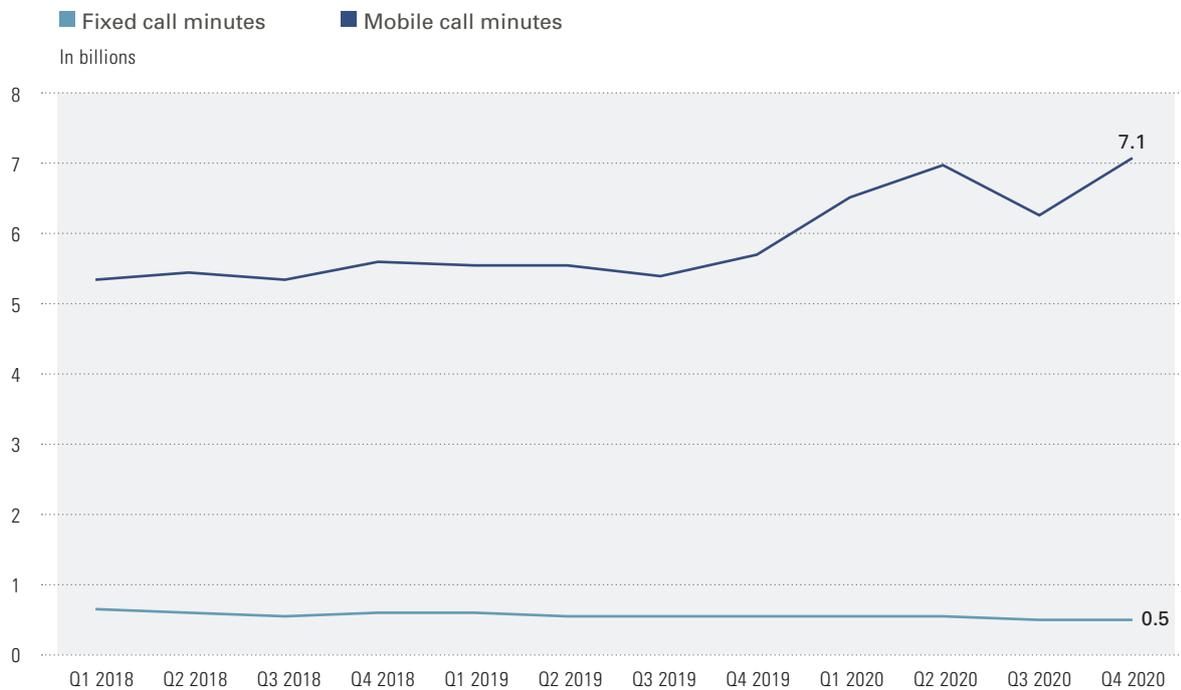
²⁹ Refer to https://www.rtr.at/TKP/was_wir_tun/telekommunikation/spectrum/procedures/Multibandauktion_700-1500-2100MHz_2020/FRQ5G_2020.en.html

Covid-19: call volumes rise once again

Covid-19 also left its mark on the telecommunications markets. During lockdowns in particular, a significantly higher volume of voice service and instant messaging use was observable.

Figure 24 shows fixed and mobile call minute trend lines from 2018 to 2020. A significant growth in mobile call minutes can already be seen in the first quarter of 2020. A further rise was recorded in the second quarter, resulting in growth of 26 per cent from Q2/19 to Q2/20. Following a decline in the third quarter, mobile figures rose again in the fourth quarter to top 7 billion call minutes. In the second quarter of 2020, an increase was even recorded for the fixed network segment, where voice minutes have been in decline for many years, although the rise was less steep than for mobile (+6% compared with Q2 2019). By the fourth quarter of 2020, however, fixed minutes had again dropped below the figure for the same quarter in 2019.

Figure 24: Fixed and mobile call minutes, 2018–2020



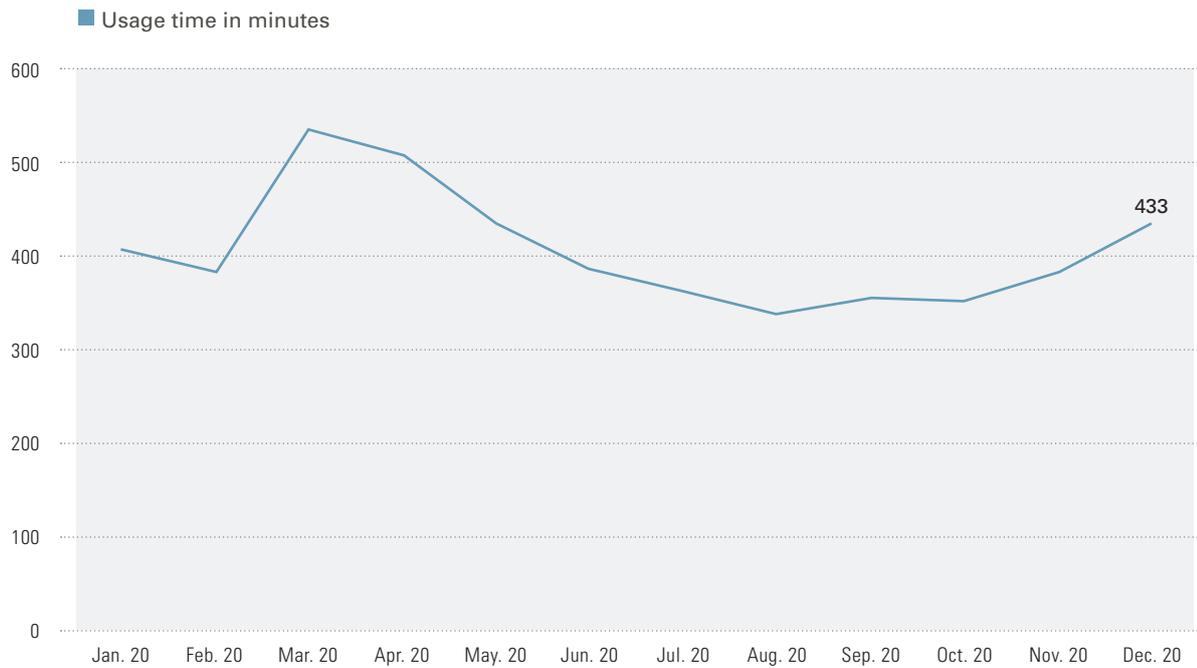
Source: RTR

No increase was seen for the SMS text service, however, which continued its slow decline in 2020. As smartphone use has risen over the years, the sending of texts has become supplanted by instant messaging services such as WhatsApp and Facebook Messenger.³⁰ RTR has been able to draw on data provided by Repubblica that provides information about the average time spent using the leading instant messaging

³⁰ See also RTR Telecommunications and Postal Services Division (2020): Monitoring of interpersonal communication services with a focus on Instant Messaging, <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/monitoring-instantmessaging.en.html> (report in German).

services (see Figure 25). A significant rise in average usage time can be seen, especially in the initial stages of the first lockdown in March and April 2020. Another substantial up-tick is clearly visible for the second lockdown (November–December 2020).

Figure 25: Average usage time for instant messaging services in 2020
(Total average monthly usage time of selected instant messaging services by the Austrian online population (representative sample) in 2020)

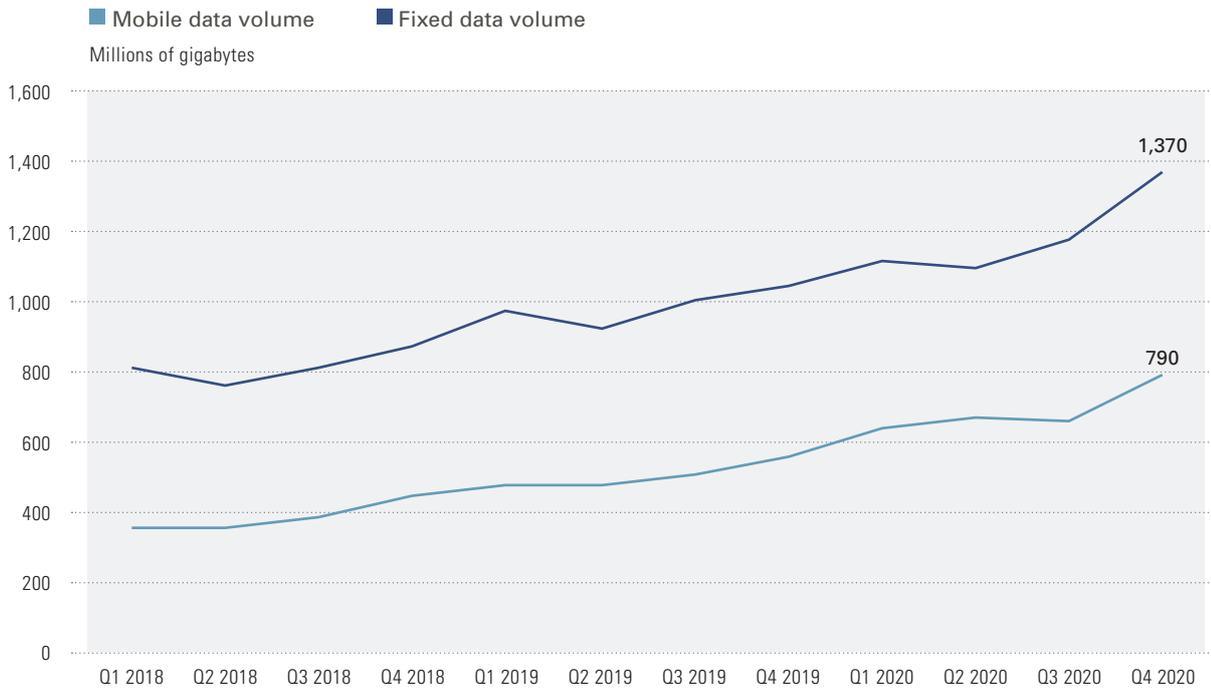


Source: Reppublika

Services covered: WhatsApp, Telegram, Snapchat, Facebook Messenger, Google Hangouts

Internet traffic (data volume transferred) also continued to grow in 2020, although Covid-19 did not significantly affect traffic during the first six months of 2020. A major increase in traffic occurred only in the fourth quarter of 2020 (see figure 26).

Figure 26: Fixed and mobile data volume, 2018-2020

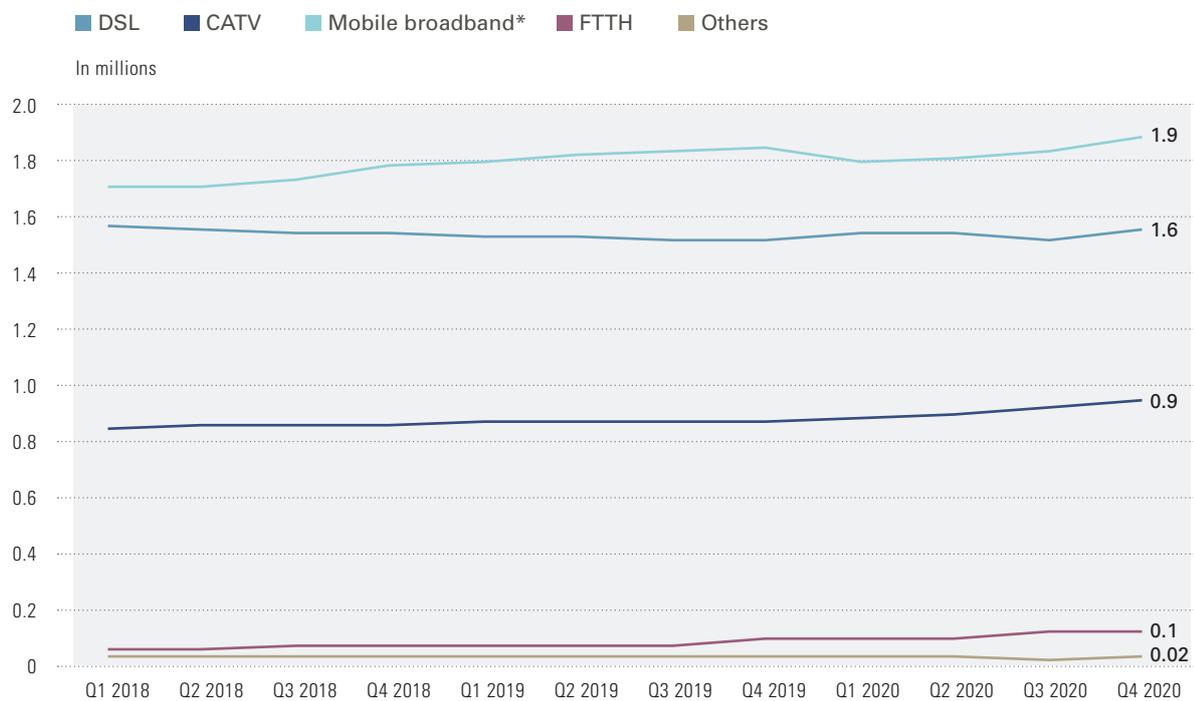


Source: RTR

Internet access: mobile broadband enjoys unbroken strong popularity

Mobile broadband use continues to be very popular in Austria – whether with a standard smartphone connection or at home with a ‘Web Cube’ or Wi-Fi modem. As is clear from figure 27, mobile broadband (predominantly 4G in 2020) is the connection technology most commonly used, accounting for some 42 per cent of active connections at the end of 2020. The figure shows data-only subscriptions with a fixed monthly fee including either limited or unlimited data. Data from RTR’s Single Information Point for Broadband Coverage (ZIB) indicates that most of these tariff plans are those featuring a Web Cube or Wi-Fi modem, with around 1.3 million of these plans recorded for the second quarter of 2020. As revealed by a household survey conducted by RTR in the first quarter of 2020³¹, most of these plans are used instead of a fixed broadband connection.

Figure 27: Broadband connections by technology



Source: RTR

* Mobile broadband: mobile data subscriptions with set monthly rate

In the fixed network segment, continued growth was seen with cable broadband (CATV) and FTTH in particular in 2020. The figure for DSL connections remained largely constant. As before, other technologies such as fixed wireless or satellite play only a minor role here.

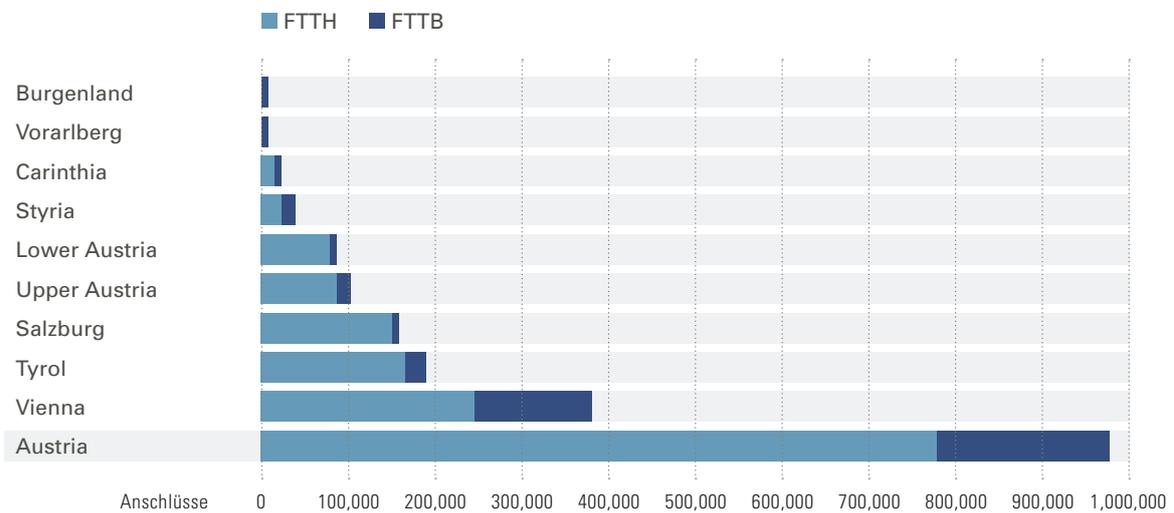
³¹ See RTR (2020): ‘Demand-side survey of telecommunications markets in Austria (NASE 2020); <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/BerichtNASE2021.en.html> (report in German).

Marked increase in availability of high fixed-network bandwidths

The availability of high bandwidths rose significantly in Austria during 2020. This largely resulted from the rollout of the DOCSIS 3.1³² telecommunication standard by Austrian cable network operators. DOCSIS 3.1 supports data transmission rates of up to 10 Gbps downstream and 1 Gbps upstream, although this total bandwidth is in fact shared among several households. Around 28 per cent of households had DOCSIS 3.1 coverage by the third quarter of 2020.

Rollout also continued apace with fibre to the home (FTTH) connections. By the third quarter of 2020, almost 800,000 households or businesses now had the option of utilising a fibre broadband connection. This figure is supplemented by another 200,000 potential connections where a fibre line now exists to the building (Fibre to the Building, FTTB). In terms of province rankings, Vienna leads the way, followed by Tyrol and Salzburg (see Figure 28).³³ As is clear from Figure 27, however, demand for FTTH connections remains substantially outstripped by supply – at least for the moment.

Figure 28: FTTH and FTTB coverage, Q3 2020



Source: RTR

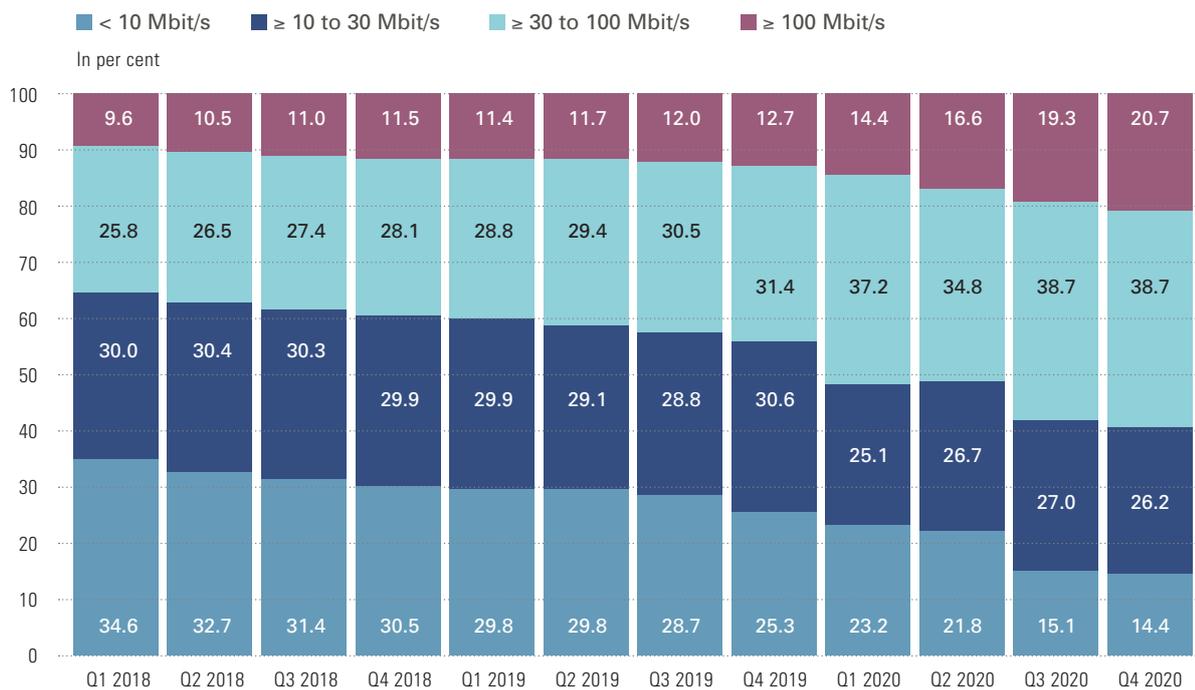
³² DOCSIS stands for Data Over Cable Service Interface Specification.

³³ These and other analyses can also be found in the RTR Internet Monitor: <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/Datenvisualisierung/internet-monitor-q32020-daten.de.html> (in German).

Strong growth in >100 Mbps products yet supply–demand gap persists

The demand for high bandwidths continued to rise in 2020. Possibly amplified by the effects of Covid-19 and the higher speeds needed when working from home or for home schooling, particularly strong growth was seen in the 30 to 100 Mbps and 100 Mbps or higher categories. The share of 100 Mbps or higher connections rose from 12.7 per cent (Q4 2019) to 20.7 per cent (Q4 2020), with the 30 to 100 Mbps category rising similarly from 31.4 to 38.7 per cent.

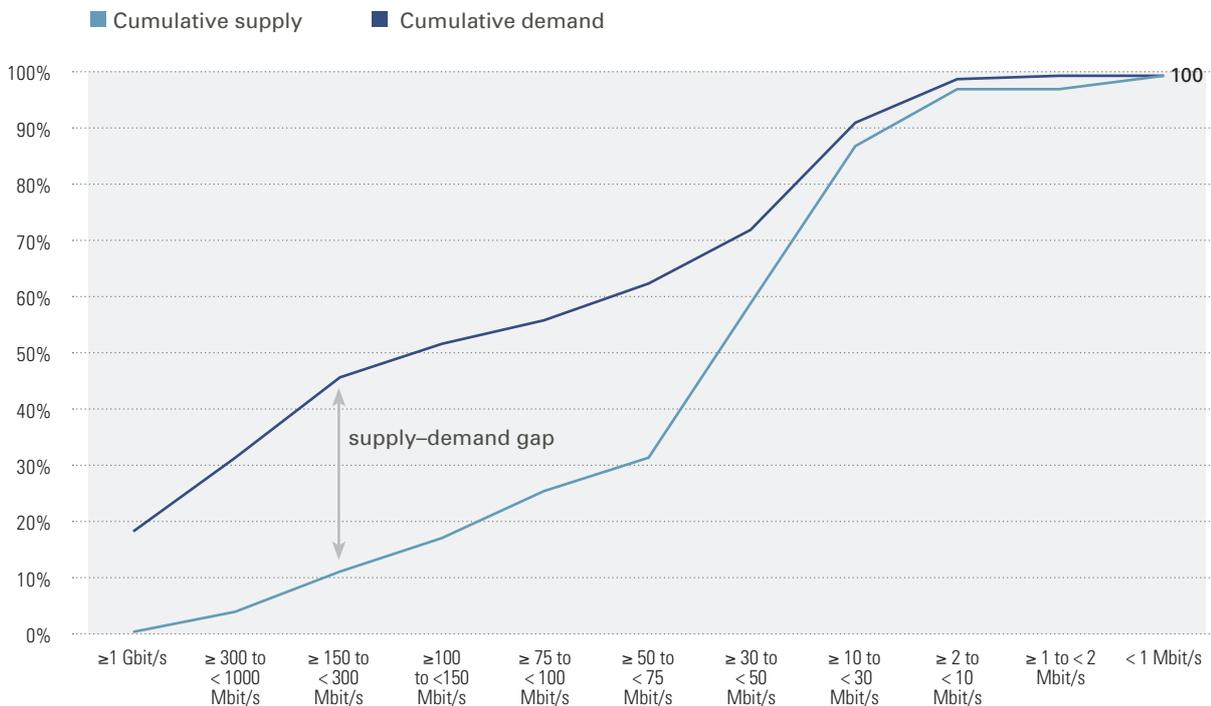
Figure 29: Fixed bandwidth connections – share by bandwidth category, 2018–2020



Source: RTR

Even despite these trends, a significant supply-demand gap still exists for high bandwidth products. A 'supply-demand gap' refers to the difference between availability and actual product usage. As Figure 30 makes very clear, a significant supply-demand gap continues to persist for bandwidths over 50 Mbps in particular.

Figure 30: Difference between supply and demand (supply–demand gap), Q3 2020



Source: RTR

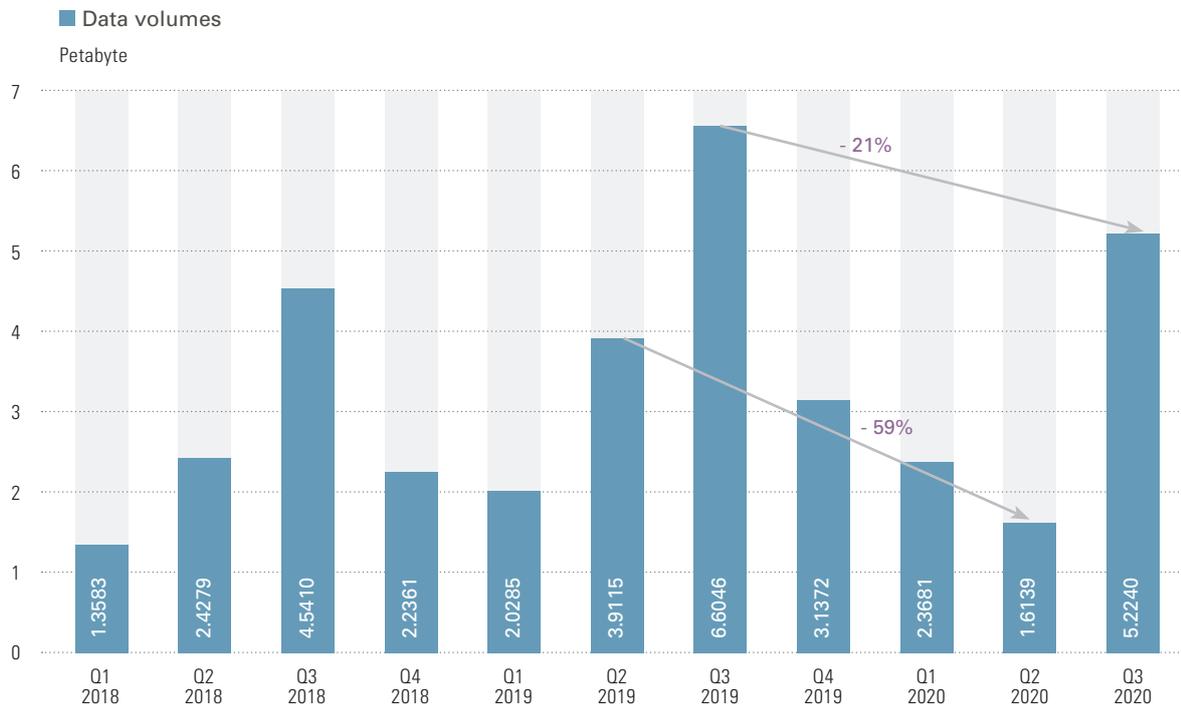
Covid-19: home instead of roam

The severe restrictions Covid-19 placed on travel activities during the year resulted in a sharp fall in the use of roaming services. ‘Roaming’ refers to mobile phone use while abroad. Figure 31 presents the trends for roaming data consumption for the reporting year by Austrian consumers both inside and outside the EU. Seasonal variation in usage means that a comparison of annual roaming figures is more meaningful than comparing quarter-on-quarter changes. While figures for the previous year showed a year-on-year rise for consumption, figures for Q2/20 compared with Q2/19 revealed a decline of 59 per cent. Even a comparison of Q3/19 with Q3/20, when travel restrictions were largely relaxed, shows a decline of 21 per cent.

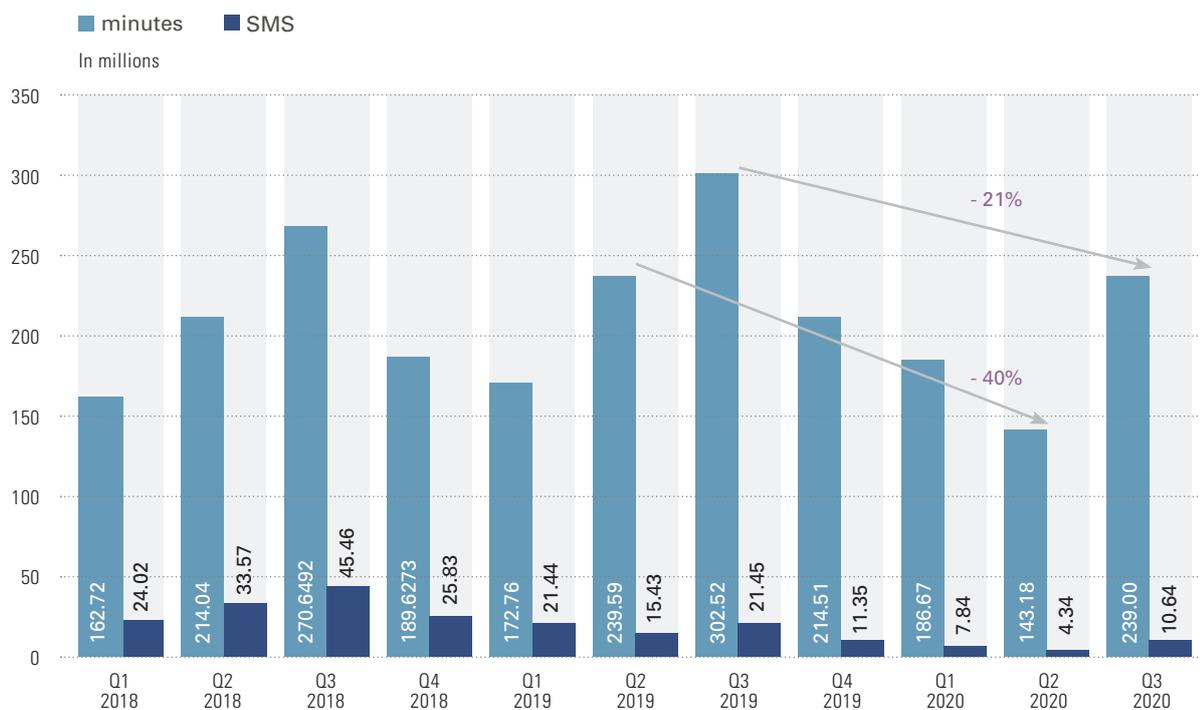
A steep decline was also seen in minutes and texts. Voice minutes consumed abroad (inside and outside the EU) fell by 40 per cent from Q2/19 to Q2/20 and by 21 per cent from Q3/19 to Q3/20. Text use had already been declining in the years before 2020, since instant messaging services are now increasingly being used instead of sending texts while roaming (as within Austria itself).

In May 2020, RTR issued its first Roaming Monitor, a biannual report that provides a detailed analysis of roaming consumption data, both from a retail and wholesale perspective.³⁴

³⁴ See <https://www.rtr.at/TKP/aktuelles/publikationen/publikationen/m/rm/roaming-monitor-2020-2.de.html> (in German).

Figure 31: Retail roaming data volumes Q1 2018 to Q3 2020 (inside and outside the EU)


Source: RTR

Figure 32: Retail roaming minutes and texts Q1 2018 to Q3 2020 (inside and outside the EU)


Source: RTR

Broadband wholesale services: migration to virtual unbundling continues

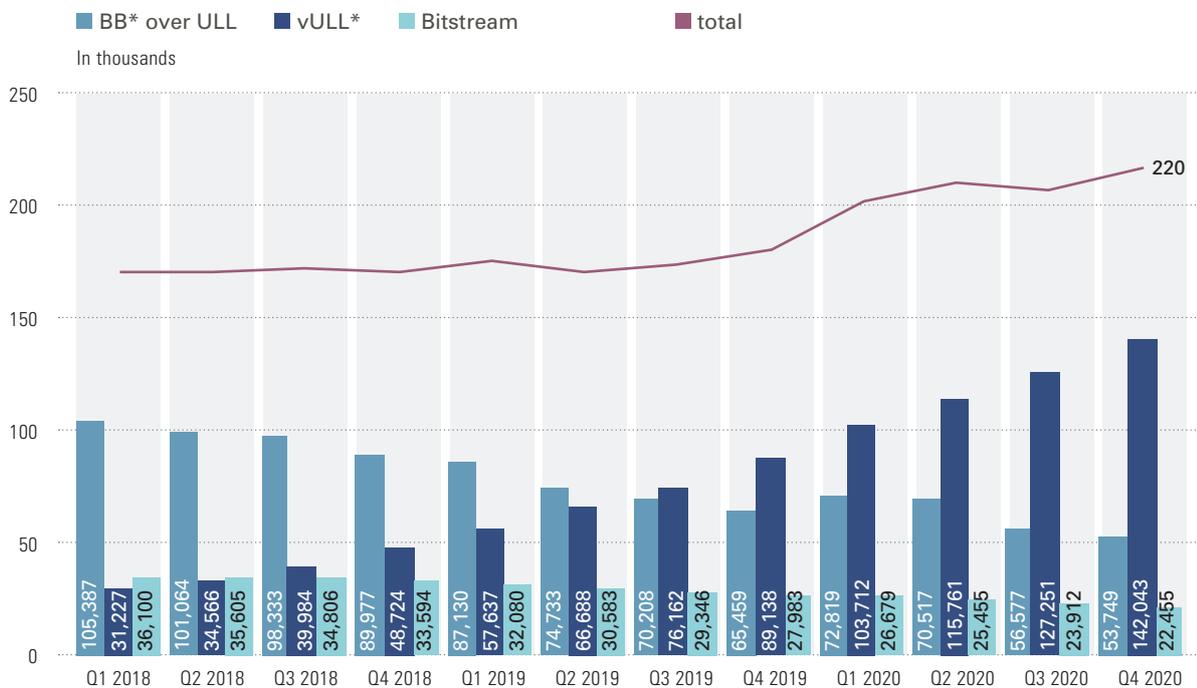
At the wholesale level, A1 has undertaken to provide access to its fixed network so that alternative network operators may offer broadband connection, fixed voice telephony or IPTV services to retail consumers. Until mid-2019, this access was driven by demand for physical unbundling (also known as ‘unbundled local loop,’ ULL), in which the alternative network operator connects the copper local loop directly to their network (see figure 33).

Rolling out next generation access (NGA) involves installing optical fibre in closer proximity to end users, and deploying advanced technologies such as VDSL vectoring and G.fast. To meet regulatory rollout requirements, A1 has been obliged to offer ‘virtual unbundling’ as a wholesale service for a number of years. In contrast to physical unbundling, virtual unbundling involves a handover to an Ethernet-based service. Traffic transfer can occur at A1’s main distribution frame or in the nine provincial capitals, or even, as in Vienna, at just a single handover point. Under certain conditions, A1 can also migrate physically unbundled lines to a virtually unbundled service.

The restructuring of the A1 access network in recent years has led to the gradual replacement of physical unbundling by virtual unbundling. At the end of 2019, broadband connections based on virtual unbundling exceeded those based on physical unbundling for the first time. This trend was seen to continue in 2020. By the fourth quarter of 2020, more than 140,000 virtually unbundled connections were in use, with only some 54,000 broadband connections still using physically unbundled lines.

The volume of bitstream connections shrank further, totalling around 22,000 by the end of 2020. Overall, 2020 was marked by a significant rise in the consumption of broadband wholesale services from A1.

Figure 33: A1 broadband wholesale services, 2018–2020



Source: RTR

*BB over ULL: Broadband over (physical) unbundling; vULL: virtual unbundling

³⁵ See the TTK decisions issued in July 2017, available at https://www.rtr.at/de/tk/M_1_5_15 and https://www.rtr.at/de/tk/M1_6_15 (in German).

Termination: European Commission publishes future fee schedule

Termination services are provided reciprocally between telecommunication network operators (i.e. at the wholesale level). When a caller places a call from network A to network B, network operator A pays network operator B a fee, known as the termination fee, in order to connect this call. As network operator B is the only one who can connect the call, and therefore enjoys a de facto 'termination monopoly', very high fees could be demanded in an unregulated market. Accordingly, the TTK has long been tasked with setting the fees for call termination in fixed and mobile networks in Austria. Corresponding fee schedules have also been drawn up by other regulatory authorities within EU Member States. While the methods used are similar, there has been considerable variation in the results obtained to date.

Responding to these differences in termination fees, the European Commission recently adopted a uniform termination fee schedule that is now binding on all Member States. The European Commission's Commission Implementing Regulation was published on 18 December 2020, and establishes the new fees as being 0.2 euro cents for mobile termination and 0.07 euro cents for fixed network termination. Accordingly, future fees will be considerably lower than the fee rate currently applied in Austria (0.8049 euro cents for mobile and 0.137/0.085 (peak/off-peak) euro cents for fixed networks).

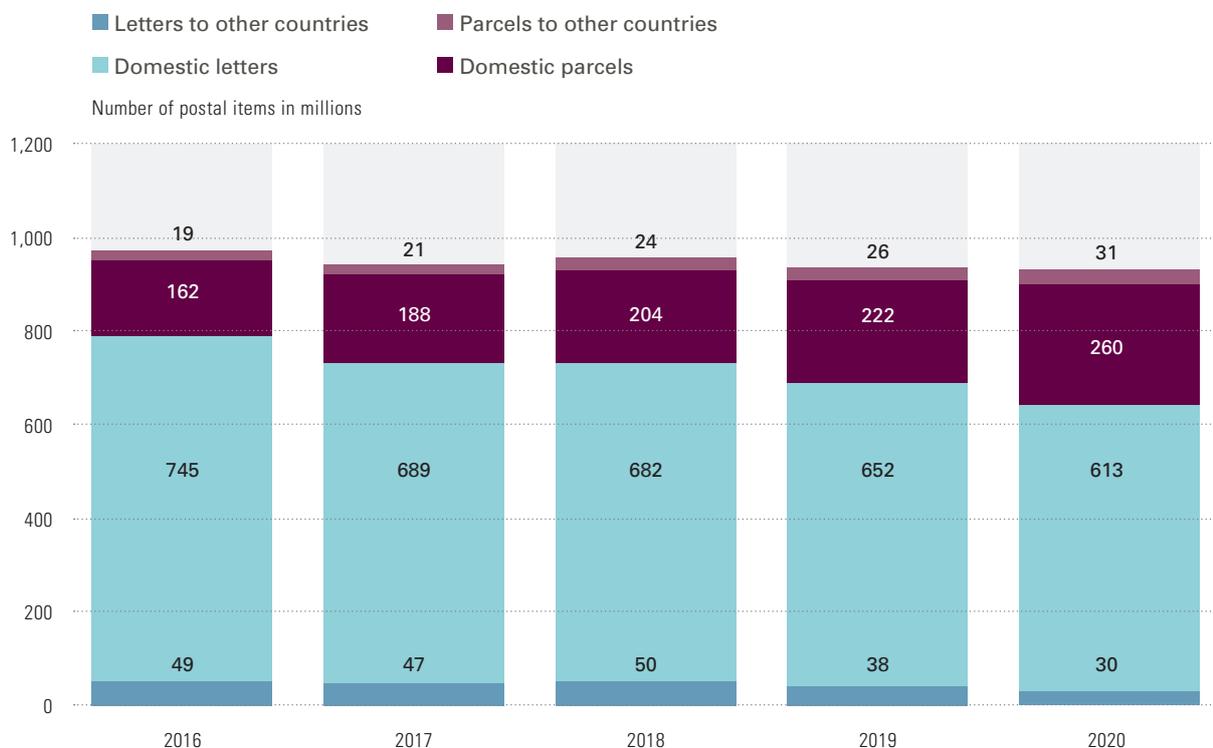
9.3 Developments in the Austrian postal market

To monitor developments in the Austrian postal market, RTR has been collecting quarterly data in accordance with the Postal Services Survey Ordinance (PEV) since 2013. Specifically, the revised provisions set out in the PEV 2019 amendment to the ordinance have been applied since Q1 2019. Current changes in the postal market as revealed by the survey data are presented in the quarterly RTR Post Monitor.

Due to the Covid-19 pandemic, 2020 brought with it special challenges, also for postal service providers. Letter volumes dropped year-on-year at an even faster rate, with the volume of letters delivered within Austria declining by 5.9 per cent and letters addressed to foreign destinations by 22.5 per cent. This contrasts with the parcel delivery market, which was further fuelled by more intensive online shopping during the pandemic. In 2020 about 17 per cent more parcels were delivered within Austria than in 2019, and roughly 19 per cent more sent to other countries. Numerous parcels stemming from online purchases in Austria are actually sent from neighbouring countries. A portion of such parcels are directly sent from these countries, while other parcels are first delivered to the Austrian postal service and cannot be distinguished from 'genuine' domestic parcels. Since suppliers sometimes switch between these two types of delivery involving different points of origin, all parcels delivered to domestic destinations are shown in a single category.

In addition to gigantic volume surges, parcel deliveries were periodically hampered by the occurrence of coronavirus clusters at the distribution centres of some postal service providers. Solutions were also introduced to enable contact-free delivery, and hygiene and safety plans were devised for drop-off points. As part of restrictions, some drop-off points had to temporarily close doors for business.

Figure 34: Total letter and parcel volumes³⁶

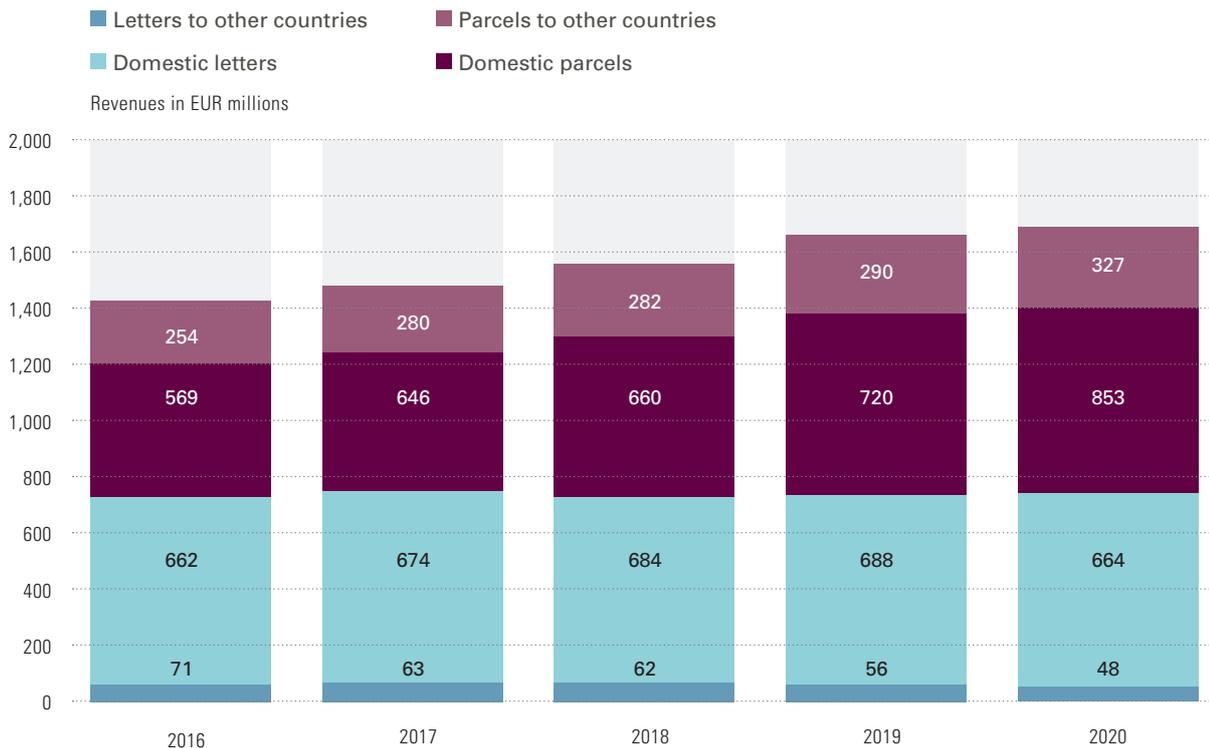


³⁶ The chart shows total mail volumes beginning in 2016, disaggregated according to letters destined for other countries, letters delivered within Austria (domestic and in-bound letters), parcels destined for other countries and parcels delivered within Austria.

The sharp drop in volumes also had significant impact on revenues from letter services. Revenues from letter services dropped from the previous year, by 3.6 per cent for domestic deliveries and by 13.5 per cent for out-bound letters.

In step with volumes, revenues from parcel services similarly increased: by 18.5 per cent for domestic deliveries and by 12.5 per cent for out-bound parcels.

Figure 35: Total revenues from letters and parcels³⁷



³⁷ The chart shows total revenues beginning in 2016, disaggregated according to letters destined for other countries, letters delivered within Austria (domestic and in-bound letters), parcels destined for other countries and parcels delivered within Austria.

As seen in the charts below, the various postal service providers play a greater or lesser role in delivering parcels within Austria and in conveying parcels to other countries. In the case of domestic parcel deliveries, one major provider holds a 63 per cent market share based on revenue and 61 per cent by volume, while three providers have between 7 per cent and 19 per cent, and several minor providers also compete. This contrasts with foreign parcel deliveries, where several providers hold market shares ranging from 6 per cent to 27 per cent while the remaining 15 per cent is shared by a number of minor providers.

Figure 36: Shares of postal service providers in the market for parcels delivered to domestic destinations, broken down by revenues and volumes

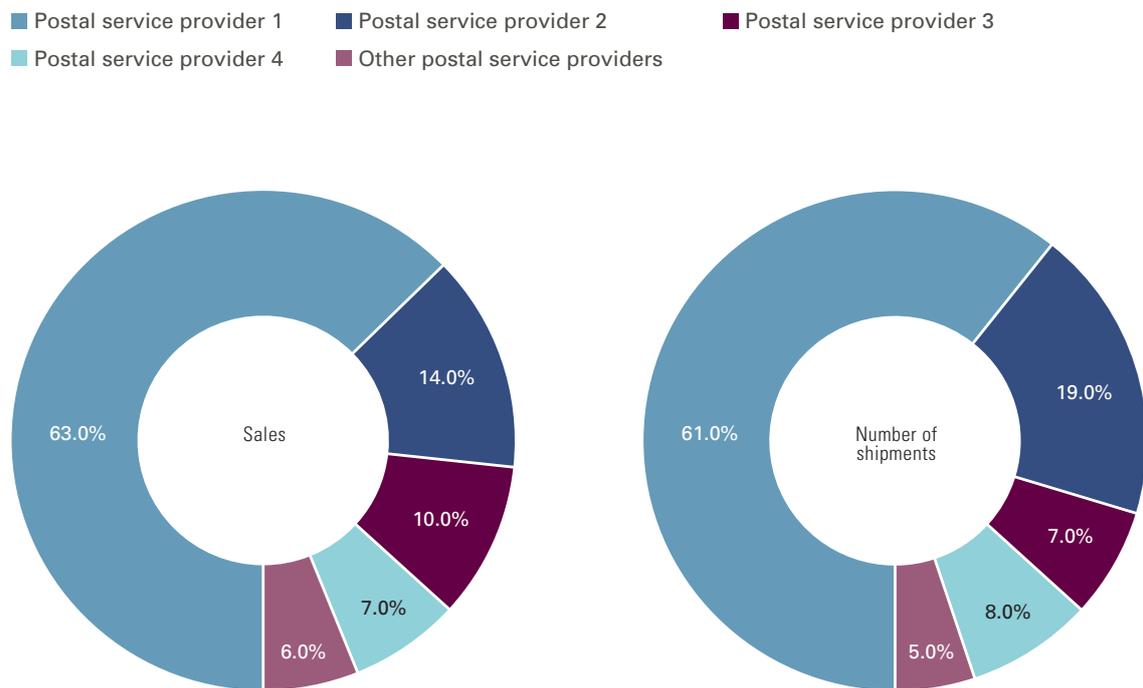
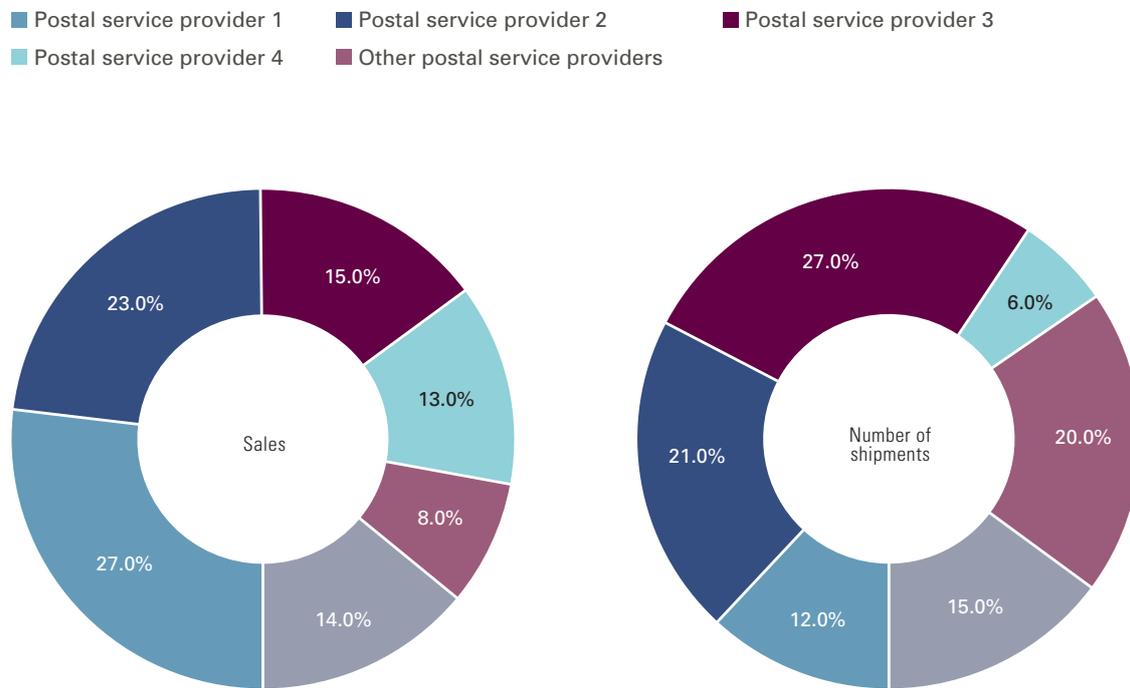


Figure 37: Shares of postal service providers in the market for parcels sent to other countries, broken down by revenues and volumes



The RTR Post Monitor describes the Austrian postal market in detail, including quarterly evaluations. It is available (in German) from the RTR website at <https://www.rtr.at/TKP/aktuelles/publikationen/Uebersichtseite.de.html?l=de&q=&t=category%3Dpostmonitor>.



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