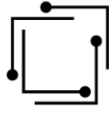


# Summary of the consultation inputs

on RTR's position paper on  
infrastructure sharing

Non-binding translation

Vienna, 18. September 2018



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## **1 Introduction**

### **1.1 General remarks**

The Telekom-Control Commission (TKK) intends to revise the position paper on infrastructure sharing from 2011. The position paper will be published at the same time as the tender for the allocation of spectrum usage rights in the 3410 - 3800 MHz band. The consultation documents were published on 15 February 2018. The position paper deals, in particular, with the cooperation between the three existing MNOs, as these could particularly have a significant impact on competition.

RTR has collected important inputs from stakeholders. This document contains a summary of key opinions.

The contents mentioned below are non-binding and therefore do not prejudice the future decisions of the Telekom-Control Commission.

### **1.2 Inputs**

In total, RTR received five inputs. With the exception of the inputs of the Lower Austrian Provincial Government and the opinion of Hutchison Drei Austria GmbH, all inputs were marked as confidential. In order not to allow conclusions to be drawn on individual statements of other statements, all statements are anonymized.

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## 2 General inputs

Several respondents emphasized the importance of infrastructure sharing for 5G expansion. The service competition will be more important in the future than the infrastructure competition. A single participant suggested a liberalization of active sharing, as long as each cooperation partner used its own spectrum, and in microcells. Active sharing (including spectrum pooling) should be possible for up to 30% of the traffic volume. For micro and indoor cells, joint use should not be restricted for all market participants. This means that there should neither be a regulatory restriction nor should third parties be excluded from sharing micro and indoor cells via cooperations of other MNOs.

Individual participants named additional issues of relevance. Frequency pooling should be facilitated. It should be possible that also external providers are able to operate data centres. For campus networks, it should be possible to connect them to the core network of MNOs. Telecom operators should be allowed to share electricity or pass on electricity to each other. One participant saw the need for a case-by-case assessment of sharing cooperations, but no legal basis for it.

The opinions expressed have been taken into account in the considerations. In particular, the following changes from the version consulted can be found in the final position paper: If two MNOs share non-replicable active parts of the access network for indoor supply from indoor, an access obligation to external MNOs should exist under certain conditions.

## 3 Answers to the questions

### 3.1 Passive sharing as well as backhaul sharing

The position paper intends to not give any indication of competition concerns regarding the future expansion of passive infrastructure. The position paper lists relevant points to be considered in the assessment of potential competition concerns.

*Question 1: Do you have any input or suggestions for improvement for the rules for passive and backhaul sharing? Please justify your proposal using competition-relevant arguments and substantiate your arguments with facts and figures.*

Several participants expressed the desire for no restriction on passive sharing. Individual participants rated the new rules for passive sharing and backhaul as positive. Individuals demanded to apply only general competition law. One participant called for a more precise definition for future rollouts - new 3G / 4G locations should also be included. One participant called for the promotion of site consolidation and more backhaul cooperation. One participant expressed the wish to also include active antennas into passive sharing and thus largely allow them. Regarding the lack of concern with respect to backhaul sharing, one participant

stated that the separate use of individual pairs of optical fibers should also be considered as passive sharing.

The arguments for passive sharing included economic reasons, the protection of the landscape, the town scenery and the environment, the need for a denser network of sites, statics, electromagnetic environmental compatibility and competitive safety. Furthermore, the responses included references to relevant legal requirements and the corresponding competition law practice.

The comments have been taken into account in the considerations on the final paper. The statements on passive sharing and backhaul sharing in the position paper have been revised. New 3G/4G sites are also a future rollout. Passive sharing continues to exclude sharing of active antennas.

### **3.2 Active sharing**

In the context of active sharing, the position paper distinguishes between Vienna, Linz and Graz and other areas. The possibility of active sharing in Vienna, Linz and Graz causes competitive concerns. It is therefore envisaged to prohibit active sharing in the ancillary provisions of the frequency allocation decision in these areas. Beyond this area, an active sharing agreement is solely subject to a (potential) ex-post case-by-case assessment in accordance with competition. However, under certain circumstances, active sharing shall be allowed in Vienna, Linz and Graz. In these cases, however, the shared active parts of the access network shall also be offered to third parties. The position paper lays down provisions which include a reporting and disclosure requirement on operators in order to allow the regulatory authority a competitive assessment.

*Frage 2: Do you share the assessment of the importance of the infrastructure competition in mobile communications? This assessment serves as a starting point for both the ancillary provisions in the context of frequency allocations and any competition law assessment that may be required. Please justify your proposal with competition-relevant arguments and substantiate your arguments with facts and figures, where appropriate.*

Several participants said that the competition would move away from infrastructure to services. The capacity is determined by the number of sites, the spectral efficiency and the spectrum. The importance of the access network in competition is decreasing. The differentiation in the core network is more important for competition than the access network. One participant said that too much infrastructure-based competition was not conducive to investment. The savings opportunities for infrastructure sharing should not be limited by barriers. It was also suggested that other sectors (energy, automobile, OTTs) could also offer connectivity in the context of 5G.

*Question 3: Do you have comments and suggestions for improvement regarding the area of Vienna, Linz and Graz and the reasoning of this rule? Should this area and the*

*corresponding rule be expanded or reduced? Please justify your proposal with competition-relevant arguments and substantiate your arguments with facts and figures, where appropriate.*

All participants oppose a prohibition of active sharing in Vienna, Graz and Linz. The prohibition would not have any pro-competitive effect, nationwide uniform rules would be better. The 5G expansion requires increased cooperation, especially in urban areas, to save costs. The negotiation power of the property owners of the sites would improve because of such prohibition at the expense of mobile operators. Also, the supply requirement from the multiband auction in 2013 caused high costs because the property owner was able to demand a higher location rent due to the requirements. The infrastructure competition was already secured in Vienna, Graz and Linz. Active massive MIMO antennas should be considered as passive parts and should not fall under the prohibition. Cooperation would facilitate the expansion. The prohibition could slow down the rollout in Vienna, Graz and Linz. Cooperation within MORAN should be possible everywhere. A prohibition was also not in the interest of the affected communities. For microcells (such as indoor) there should be no restrictions. One participant also saw limited regulatory options within the framework of § 55 TKG. One participant stated that in sparsely populated areas, the expansion could be uneconomical and administrative boundaries were not a meaningful way of distinction. At the same time, active sharing in cities does not make sense anyway due to the high demand.

The comments were taken into account in the considerations on the final position paper. The final position paper prohibits active sharing in Vienna, Graz and Linz exclusively outdoors.

*Question 4: Do you have comments and suggestions for the derogation from the prohibition of active sharing and the obligation to offer infrastructure, which is subject to derogation, to third parties, and the justification of these rules? Should this rule be further or narrower? Should the mandatory offer to third parties be defined in more detail? Please justify your proposal with competition-relevant arguments and substantiate your arguments with facts and figures, where appropriate.*

Individual participants fear the emergence of legal uncertainty. It is possible that, because of the rules, the sites have to be removed later on. Several participants called for an extended exemption for indoor solutions (such as hotels, shopping centres, event halls), subsidized infrastructure and transport facilities. Especially property owners would often demand a uniform infrastructure and thus sharing. One participant requested an exception for elements connected to system technologies (BTS / NodeB), such as Master Unit and Optical Remote Units.

In the final position paper, the prohibition on active sharing applies outdoors in Vienna, Graz and Linz.

*Question 5: Do you have any input or suggestions for improvement regarding the information and reporting obligations? Please explain your suggestion.*

One participant requested a reporting obligation only every 24 months. One participant pointed out the additional costs and the missing need. One participant cited the legal uncertainty in case of subsequent examination. One participant expressed a desire to get access to the reporting data.

In the final position paper, no change was made in this regard.

### **3.3 Sharing in case of legacy technologies**

The position paper lists relevant points to be considered in the assessment of potential competition concerns. Thresholds of 10% or 3% share of legacy devices in the relevant service are referred to as thresholds for a 3 to 2 and 2 to 1 reduction, respectively.

*Question 6: In your view, are there any other issues to be regarding legacy technologies? Do you have inputs or suggestions for improvement regarding the thresholds (percentage and relevant service as a basis)? Please justify your proposal with competition-relevant arguments and substantiate your arguments with facts and figures.*

Several participants stated that traffic volume was easier to measure than the number of terminals. One participant stated that the relative proportion of traffic, which could only be handled by a particular technology, should be used as a measure. One participant called for the thresholds to be increased to 15% for 2 participants and 10% for 1 participant. Sensors and M2M cards should be excluded. Pooling should also be facilitated in the case of legacy cooperations. One participant argued that pooling could be done in rural areas in order to sustain legacy technologies.

Thus, the final position paper refers to the traffic volume for the unit values of 3 and 10% respectively.

### **3.4 Promotion of new entrants or MVNOs**

The position paper, which will form the basis of the awards according to the current Spectrum Release Plan, states that TTK reserves the right to promote new entrants or MVNOs, and that co-operation with new entrants may not be subject to the rules of the Position Paper. New entrants would usually lead to more competition.

*Question 7: Do you see the promotion of new entrants, as expressed in the sharing options, as sufficiently addressed? Please justify your arguments with competition-relevant arguments and substantiate your arguments with facts and figures, where appropriate.*

Several participants saw no need to promote new entrants or MVNOs. One participant questioned how to define a new entrant and referred to the complexity of an access obligation. A restriction regarding the number of authorized users, the

duration and the band is necessary. Regionally, there should exist a minimum amount of infrastructure.

The final position paper clearly distinguishes between entrants and MVNOs.

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