



19 December 2023

---

## Public consultation

regarding

**the allocation of mobile radio frequencies  
available from 2029 for the provision of  
telecommunication services in Switzerland**

---



**Contents**

- 1 Introduction ..... 3
- 2 Background ..... 4
  - 2.1 Overview of frequency spectrum of mobile telecommunication licence holders ..... 4
  - 2.2 Frequency usage rights expiring at the end of 2028 ..... 4
  - 2.3 Technology neutrality of mobile telecommunication licences ..... 5
- 3 Possible new frequency ranges for mobile telecommunication ..... 5
  - 3.1 Introduction ..... 5
  - 3.2 Frequencies in the 6GHz range ..... 6
  - 3.3 Frequencies in the millimetre wave range 26GHz and 40GHz ..... 6
- Questionnaire ..... 7
  - Publication information ..... 7
  - Administrative information ..... 7
  - Respondent's details ..... 8
  - General questions ..... 8
  - Questions about the planned frequency allocation procedure in 2027 ..... 13
  - Questions about mobile radio licences available from 2029 and conditions ..... 14
  - Detailed questions about available frequencies ..... 14
  - Detailed questions on possible new frequency bands ..... 18

# 1 Introduction

The Federal Communications Commission (ComCom) has instructed the Federal Office of Communications (OFCOM) to begin preparatory work on the allocation of frequencies available from 2029 for the provision of telecommunication services for third parties.

As a first step, OFCOM is conducting a public consultation in which it invites all interested parties to give feedback on the allocation of mobile radio frequencies which will be available from 2029 for the provision of telecommunication services in Switzerland. The consultation runs until 26 February 2024. The aim is to collect a list of the needs of interested parties regarding the use of mobile frequencies in order to establish whether sufficient frequencies will be available from 1 January 2029. This relates to current frequency usage rights allocated to mobile telecommunication licence holders in 2012, which expire at the end of 2028, and to additional frequencies that may be available for mobile telecommunication in the future.

The volume of data transmitted via mobile devices is constantly increasing. The reasons for this are the high market penetration of smartphones, increasing data use (primarily driven by video services) and the increase in devices and objects that are wirelessly connected to the internet. As a result of these developments, additional frequencies for mobile telecommunication systems (IMT<sup>1</sup>) are likely to be required. Interest in these frequencies has also increased owing to the wide availability of systems and devices. In addition to the mobile telecommunication licence holders who provide networks based on these frequencies, other potential users, such as transport companies and the emergency services, may also be interested in frequency usage rights.

If the present consultation shows that there may not be enough frequencies available to provide telecommunication services, ComCom generally issues a public call for tenders.<sup>2</sup>

---

<sup>1</sup> International Mobile Telecommunications (IMT), family of mobile radio systems: UMTS (3G), LTE (4G), New Radio (5G), WiMax (IEEE 802.16)

<sup>2</sup> Art. 22a TCA

## 2 Background

### 2.1 Overview of frequency spectrum of mobile telecommunication licence holders

The three mobile telecommunication licence holders Salt Mobile AG, Sunrise GmbH and Swisscom AG were able to acquire a broad range of frequency usage rights for the provision of public mobile telecommunication services in the award procedures carried out in 2012 and 2019. The duration of the mobile telecommunication licences was set at 15 years in both 2012 and 2019 and will expire on 31 December 2028 and 17 April 2034 respectively.

The licence holders are currently allocated 1020 MHz in the following frequency bands:

Frequency band	Salt	Sunrise	Swisscom
700 MHz FDD	20	10	30
700 MHz SDL	0	10	0
800 MHz FDD	20	20	20
900 MHz FDD	10	30	30
1400 MHz SDL	10	15	50
1800 MHz FDD	50	40	60
2.1 GHz FDD	40	20	60
2.6 GHz FDD	40	50	40
2.6 GHz TDD	0	0	45
3.5 - 3.8 GHz TDD	80	100	120
$\Sigma$ Auction 2012	160	160	255
$\Sigma$ Auction 2019	110	135	200
$\Sigma$ currently allocated	270	295	455

**Legend:**

Green background: Frequencies allocated in the 2012 auction, valid until 31 December 2028

Blue background: Frequencies allocated in the 2019 auction, valid until 17 April 2034

$\Sigma$ : Total

Figure 1: Bandwidths in MHz currently allocated to mobile telecommunication licence holders

### 2.2 Frequency usage rights expiring at the end of 2028

The following frequency usage rights will expire on 31 December 2028:

- 2 x 265 MHz for FDD<sup>3</sup> use, distributed across the five frequency bands 800, 900, 1800, 2100 and 2600 MHz;
- 1 x 45 MHz for TDD<sup>4</sup> use in the 2600 MHz frequency band.

The following chart shows a breakdown of the frequency usage rights of the respective mobile communication licence holders expiring at the end of 2028:

<sup>3</sup> FDD: Frequency division duplex

<sup>4</sup> TDD: Time division duplex

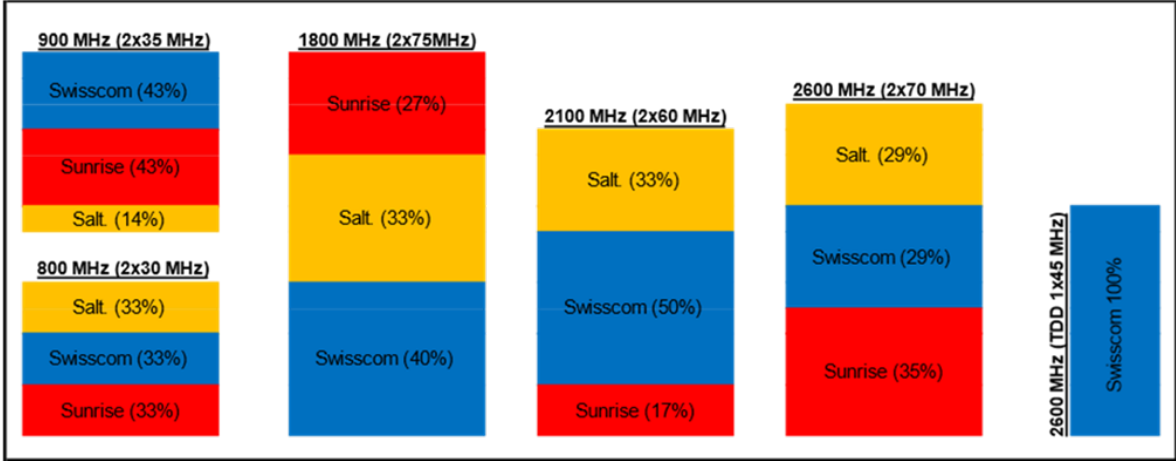


Figure 2: Shares of operators Salt, Sunrise and Swisscom in the frequency usage rights due to expire in 2028

### 2.3 Technology neutrality of mobile telecommunication licences

The frequency usage rights allow the free choice of mobile communication technology subject to the harmonised standards.<sup>5</sup> This means that mobile telecommunication licence holders have the freedom to use the technologies that best meet their individual needs, e.g. 2G, 3G, 4G, 5G, 6G (technology neutrality). This encourages the efficient use of the spectrum and also emphasises the importance to the national economy of an advanced mobile communication infrastructure.

Technology neutrality makes it easier for licence holders to switch technologies in the existing mobile networks during the term of the mobile telecommunication licences. The replacement of 2G operations during the period of the current mobile telecommunication licences is practically complete and 3G is currently being replaced. Innovative approaches such as network slicing or non-terrestrial networks (NTN) are leading to the replacement of older technologies. With network slicing, virtual mobile networks can be operated within a physical network. NTN allows coverage to be improved in more remote areas. However, the use of NTN in Europe is currently not possible due to a lack of international and national radio regulations.

## 3 Possible new frequency ranges for mobile telecommunication

### 3.1 Introduction

New developments and digitalisation mean that additional frequencies are likely to be required for mobile telecommunications (IMT<sup>6</sup>). New frequency ranges may therefore become available in Switzerland in the next few years.

Any allocation of frequencies for mobile telecommunications in the national frequency allocation plan (NFAP)<sup>7</sup> does not necessarily mean that these frequencies will be available to licence holders or service providers. OFCOM manages the frequency spectrum and must ensure equal access to it.<sup>8</sup> It

<sup>5</sup> ETSI EN 301 908; IMT cellular networks; Harmonised standard for access to radio spectrum;

<sup>6</sup> International Mobile Telecommunications (IMT), family of mobile radio systems: UMTS (3G), LTE (4G), New Radio (5G), WiMax (IEEE 802.16)

<sup>7</sup> In the NFAP, frequency ranges for mobile telecommunications are labelled MOBILE and MFCN/IMT.

<sup>8</sup> Art. 25 TCA.

may segment the frequency allocations in the mobile telecommunication sector according to need and make them available for use by interested parties.

It is therefore not yet clear whether any new frequency ranges for mobile communications in Switzerland can be made available in the next allocation. Nonetheless, the interested parties are already being asked in this consultation what their frequency needs are.

### **3.2 Frequencies in the 6GHz range**

At the World Radiocommunication Conference (WRC-23), it was decided to allocate the 6 GHz band (6425 - 7125 MHz) to mobile radio (IMT) and RLAN<sup>9</sup> in addition to the existing radio services. There is no corresponding allocation in the USA, India and China. The technical and regulatory conditions are now being worked out at European level. It should be noted that this frequency range in Switzerland is currently assigned to radio relay links and partly to satellite communication, and has already been partially allocated. The joint use of this frequency range will mean that restrictions (e.g. in geographical terms, restriction to conurbations, indoor use) will be necessary in the event of any future use for mobile communications.

### **3.3 Frequencies in the millimetre wave range 26GHz and 40GHz**

The 24.25–27.50GHz and 40.5–43.5GHz frequency ranges are referred to in telecommunications as the 26GHz band and 40GHz band respectively and are generally categorised as millimetre waves. Both frequency bands are already harmonised at European level. However, before these frequencies can be made available in Switzerland, the necessary conditions must first be created at national level (e.g. changes to the NFAP, RIR, NIRO and associated guidelines). These frequency ranges in Switzerland are currently allocated and partially assigned to radio relay links, satellite communication and other telecom services.

---

<sup>9</sup> Radio Local Area Network

# Questionnaire

## Publication information

The statements submitted will be published on OFCOM's website. OFCOM endeavours to publish documents barrier-free in accordance with the Disability Discrimination Act (DDA; SR 151.3). Please therefore submit your statements both as a Word file and PDF.

Should your statements contain confidential information, please also submit a version without this information. The content covered must be clearly described and reasons given as to why the information is confidential. Confidentiality interests must be kept to a minimum. The non-confidential version will be published on the website.

## Administrative information

Please answer the questions below and give reasons for your answers.

Please send the completed questionnaire until **26 February 2024** to the following address (electronic version):

Email: [tp-nd@bakom.admin.ch](mailto:tp-nd@bakom.admin.ch)

Federal Office of Communications  
Networks and Services Section  
Zukunftsstrasse 44  
2501 Biel/Bienne

### Respondent's details

Name of the company: Ericsson AG, Switzerland  
Contact person: Martin Buerki  
Street: Schanzenstrasse 4b  
Postcode, city: 3008 Bern  
Tel.: 079 424 96 77  
Email: [martin.buerki@ericsson.com](mailto:martin.buerki@ericsson.com)

### General questions

- 1. How do you think the market will develop long term (mobile technology / applications / end devices / mobile traffic volume etc.)?

Ericsson answer:

#### Outlook on mobile subscriptions

By the end of 2029, we forecast that the number mobile subscriptions in Western Europe to reach 560 million. Over the period 2024-2029, the growth of mobile subscriptions will be marginal – on the order of few percent.

The penetration of 5G will reach 85% by 2029. We passed the peak of 4G subscriptions during 2021 and is now projected to decline to around 81 million by the end of 2029, as subscribers migrate to 5G. GSM/EDGE and 3G-only subscriptions will be marginal at the end of the time period.

### Mobile subscriptions

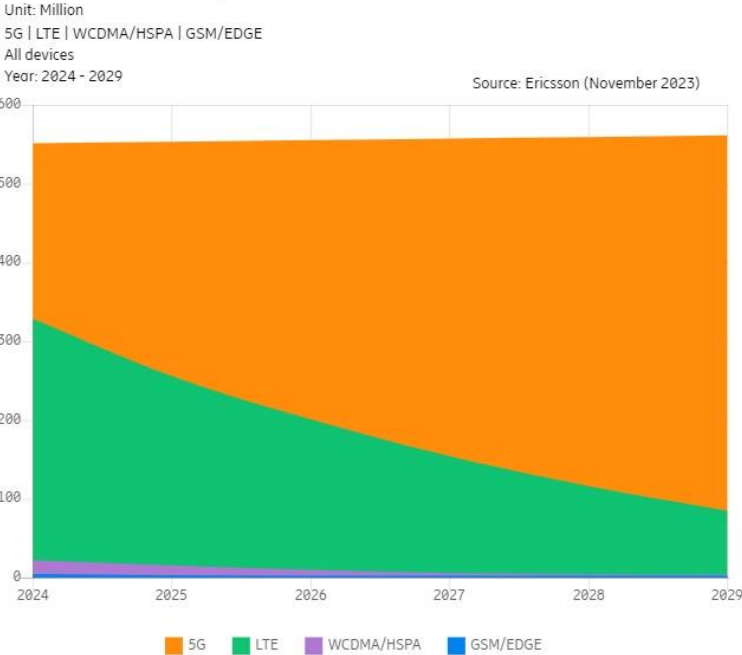


Figure 1 Outlook on Mobile Subscriptions in Western Europe 2024-2029.



### Connected devices

The growth of connected devices in 2024-2029 will mainly happen in the IoT segment. Connected IoT devices include connected cars, machines, meters, sensors, point-of-sale terminals, consumer electronics and wearables. At the beginning 2024, we estimate that there is around 3 billion IoT devices with cellular connections globally. This number is projected to reach around 6 billion in 2029. At this time, almost 60 percent of cellular IoT connections will be broadband IoT, with 4G connecting the majority. As 5G New Radio (NR) is being introduced in old and new spectrum, throughput data rates will also increase substantially for this segment.

The wide-area segment (included in Figure 2) consists of devices using cellular connections, as well as unlicensed low-power technologies. Comparing Figure 2 and Figure 3, we can conclude that the share of Cellular IoT devices exceeds 90% of Wide-Area IoT segment.

### Connected devices

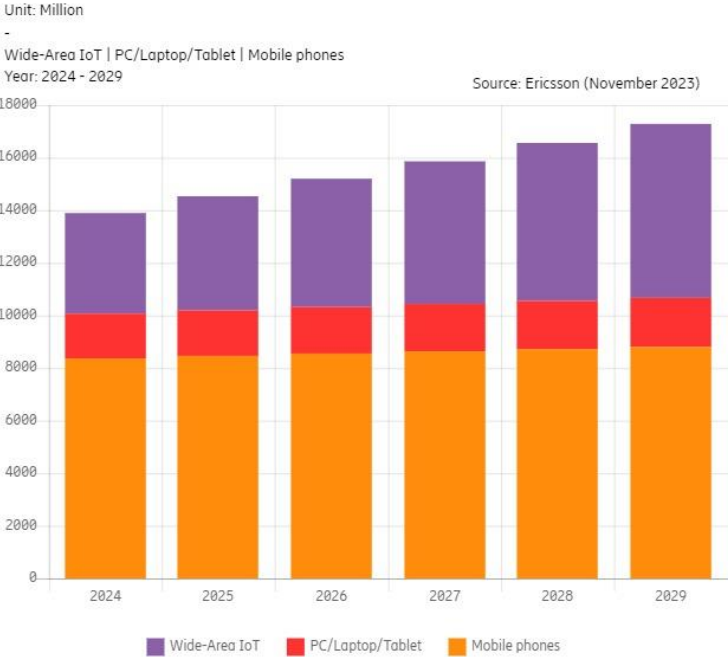


Figure 2 Projected global growth of connected devices in 2024-2029.

### Cellular IoT

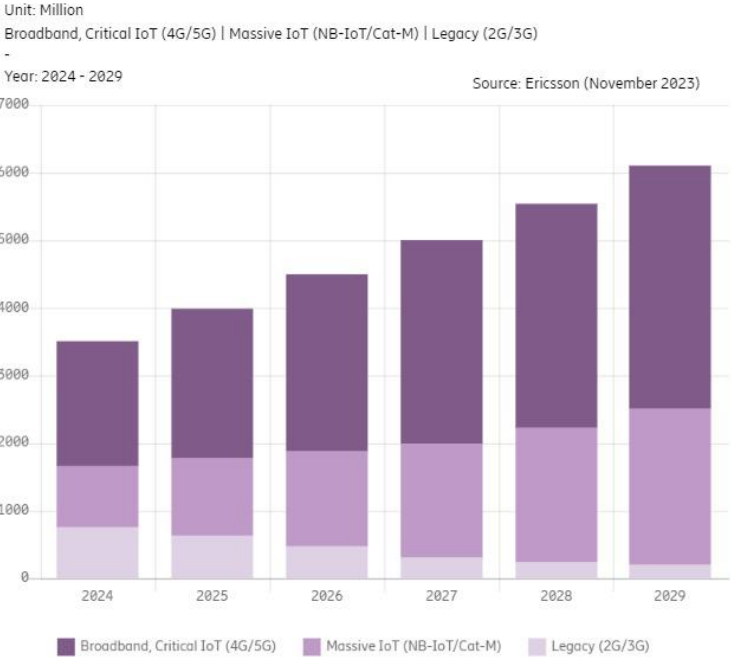


Figure 3 Projected global growth of Cellular IoT devices in 2024-2029.

### Global outlook on Fixed Wireless Access (FWA) connections

Globally, there were around 130 million FWA connections at the end of 2023. This number is projected to grow by 150% by 2029, reaching around 330 million. (This represents 18 percent of fixed broadband connections.) Of these 330 million connections, the number of 5G FWA connections are expected to grow to around 280 million by 2029, representing around 85 percent of the total FWA connections.

### Fixed Wireless Access (FWA) connections

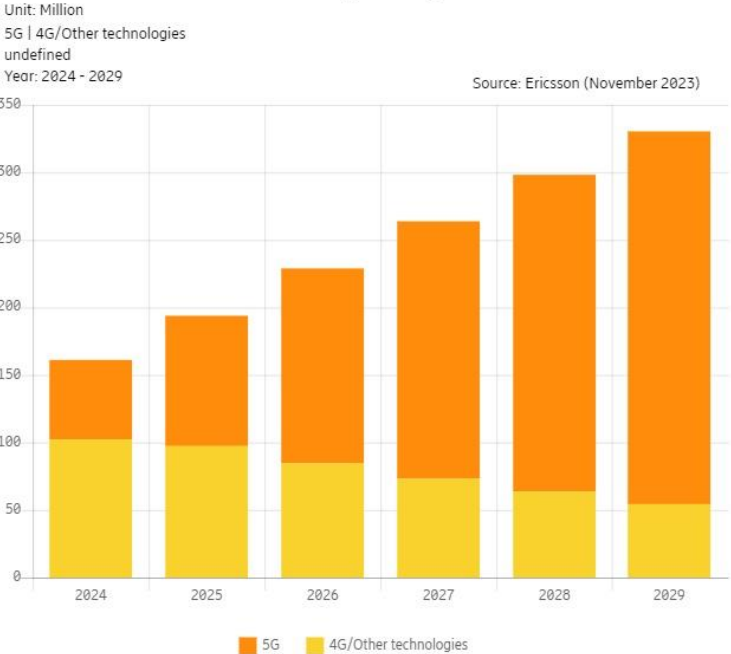


Figure 4 Global view of the growth of Fixed Wireless Access connections from 2024-2029.

**Mobile data traffic and traffic mix**

Total mobile data traffic in Western Europe – excluding traffic generated by Fixed Wireless Access (FWA) – is at the beginning of 2024 around 11 EB per month. This is projected to grow around 150% and to reach 28 EB per month in 2029.

**Mobile data traffic**

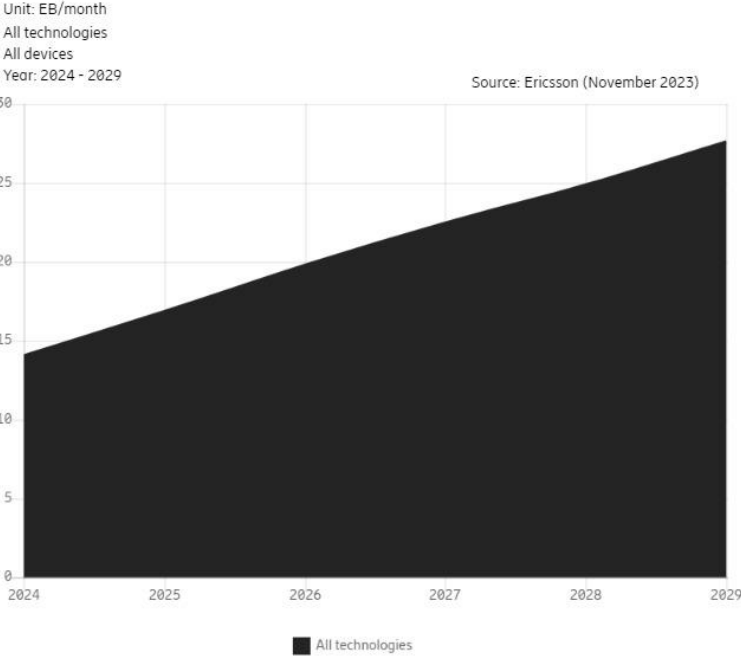


Figure 5 Projected mobile data growth in Western Europe between 2024-2029.

Predicted traffic growth up to 2029 includes an assumption that an initial uptake of XR-type services, including AR, VR and mixed reality (MR), will happen in the latter part of the forecast period. Currently, video traffic is estimated to account for 73 percent of all mobile data traffic at the end of 2023, a share that is forecast to increase to around 80 percent in 2029.

## Mobile traffic by application category

Unit: EB/month

Video | Social Networking | Audio | Web Browsing | Software Update | File Sharing | Other

All devices

Year: 2024 - 2029

Source: Ericsson (November 2023)

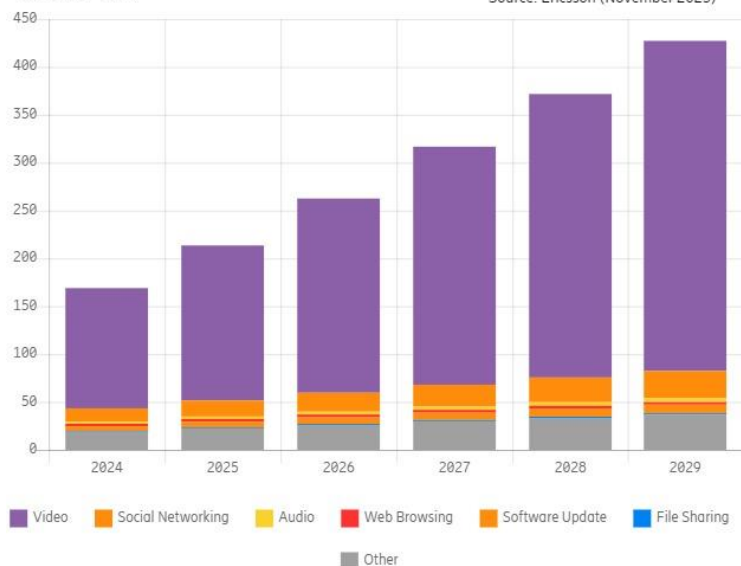


Figure 6 Break-down of traffic growth into application categories - global view spanning 2024-2029.

### Sources

- Ericsson Mobility Report<sup>10</sup>
  - Ericsson Mobility Visualizer<sup>11</sup>
  - Database updated in November 2023.
2. The issue of integrating non-terrestrial (satellite-based) networks into mobile networks (direct connection between terminal device and satellite) will be addressed at the next World Radiocommunication Conference in 2027. How do you envisage developments and the possible integration of such networks, and what effect will they have?

### Ericsson answer:

Ericsson will follow this work towards WRC-27. Studies will need to consider the complementary role of NTN and terrestrial networks and understand how this could be implemented without disturbing terrestrial networks.

<sup>10</sup> <https://www.ericsson.com/en/reports-and-papers/mobility-report>

<sup>11</sup> <https://www.ericsson.com/en/reports-and-papers/mobility-report/mobility-visualizer>.

3. How do you envisage the use of certain mobile radio frequency bands<sup>12</sup> in airspace (e.g. for drones) going forward, and what will its impact be?

Ericsson answer:

Drones could be implemented on existing MNO spectrum holding already today and we believe that the market will decide when and in what bands these are most attractive. The technical conditions included in the reference included in the question was derived to ensure protection of existing services when these are included in the networks.

4. What is your view on the use of Fixed Wireless Access (FWA)<sup>13</sup> and which frequencies do you consider to be fundamentally appropriate? And which one are particularly well suited?

Ericsson answer:

FWA re-use MNO frequencies, in particular, where spectrum is not being used for mobile usage. From that perspective, mmW and mid-bands can be used outside city areas (usually low bands are the basic nationwide coverage layer).

## Questions about the planned frequency allocation procedure in 2027

5. What type of allocation procedure (auction, criteria-based allocation, direct allocation) should be used to allocate the frequency bands? Should all frequency bands be allocated using the same type of procedure?

Ericsson answer:

### **Extend spectrum licenses by trading off fees for buildout commitments**

Spectrum continues to be released and licensed on a national basis, with widely different timelines and conditions across Member States, creating further barriers to the provision of cross border services and the realization of the telecoms single market. Despite the European Electronic Communication Code calling for all 5G pioneer bands to be released by the end of 2020, only 71% had been assigned by October 2023. The problem is compounded by a high variance in spectrum pricing with some governments choosing to prioritize high financial returns above network quality and coverage.

Auctions of 5G spectrum in low and midbands (700 MHz and 3400-3800 MHz) took EUR 25bn out of the industry between 2016 and 2022. Annualized spectrum fees in Europe equal around 30% of total mobile capital expenditure, reducing capital returns by around 20%.

With renewals approaching, there is an increasing understanding of the trade-off between raising spectrum fees and incentivizing telecoms operators to build out. Governments and regulators should replace high fees with appropriate 5G SA build-out coverage commitments from operators.

---

<sup>12</sup> See [ECC Decision \(22\)07 \(cept.org\)](#)

<sup>13</sup> Wireless broadband coverage of households via the stationary use of outdoor antennas on buildings, from which signals are brought into the buildings via cable.

6. If an award procedure is organised, do you intend to participate?

Ericsson answer:

No.

7. An initial award procedure is planned for 2027 and a second one will probably be held in 2032. What is your position on the intended procedure?

Ericsson answer:

No opinion on how the award procedure is executed.

## Questions about mobile radio licences available from 2029 and conditions

8. How long should the new mobile radio licences be valid for?

Ericsson answer:

Spectrum should be licensed for at least a 15-year period and with a presumption of renewal to maximize the level of infrastructure investments. However, longer periods of licenses are recommended (e.g., minimum 20 years) to provide investors with higher business predictability and longer periods for ROI (aligned with GSMA "Mobile Spectrum Licensing Best Practice"<sup>14</sup>)

9. What is your opinion about conditions of use such as service coverage, cybersecurity, safety communication? Should the current conditions be supplemented with further conditions and if so, which ones?

Ericsson answer:

Coverage obligations should be connected to the operator and not to specific bands, then the MNO can be given the possibility to achieve these accordingly. One way to incentivize coverage obligations is to offer operators to accept them in exchange for discounts on license fees which are part of spectrum auctions rules.

We recommend that regulations encourage voluntary network sharing, which can help to fulfil the license obligations.

## Detailed questions about available frequencies

### 800MHz (Band 20)

10. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low-band frequencies are essential to fulfil coverage obligations.

---

<sup>14</sup> GSMA: [Mobile Spectrum Licensing Best Practice](#)

11. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.

12. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

13. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **900MHz (Band 8)**

14. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low-band frequencies are essential to fulfil coverage obligations.

15. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.

16. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

17. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **1800MHz (Band 3)**

18. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low bands are the basic coverage layer nationwide and deep indoors and mid-band frequencies complement low-band by providing a capacity layer although deliver less coverage (balance between capacity and coverage). In the future the mid-band frequencies will also serve as anchors to even higher spectrum bands.

19. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.

20. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

21. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **2100MHz (Band 1)**

22. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low bands are the basic coverage layer nationwide and deep indoors and mid-band frequencies complement low-band by providing a capacity layer although deliver less coverage (balance between capacity and coverage). In the future the mid-band frequencies will also serve as anchors to even higher spectrum bands.

23. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.



24. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

25. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **2600MHz (Band 7)**

26. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low bands are the basic coverage layer nationwide and deep indoors and mid-band frequencies complement low-band by providing a capacity layer although deliver less coverage (balance between capacity and coverage). In the future the mid-band frequencies will also serve as anchors to even higher spectrum bands.

27. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.

28. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

29. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **2600MHz TDD (Band 38)**

30. How great do you think your demand for frequencies in this bandwidth will be from 2029?

Ericsson answer:

Please see the answer to Question 1 regarding projected traffic growth. In general, the low bands are the basic coverage layer nationwide and deep indoors and mid-band frequencies complement low-band by providing a capacity layer although deliver less coverage (balance between capacity and coverage). In the future the mid-band frequencies will also serve as anchors to even higher spectrum bands.

31. If you were already allocated frequencies in this bandwidth in the 2012 allocation procedure, would you like to continue using them to the same extent? What effect would it have if you were no longer allocated the same frequencies or received fewer in this bandwidth?

Ericsson answer:

We were not allocated licenses.

32. In your opinion, is there a minimum requirement and if so, how great is it?

Ericsson answer:

Not applicable.

33. What else should be taken into account when allocating this frequency band?

Ericsson answer:

No further comments.

### **Detailed questions on possible new frequency bands**

It is not yet known to what extent these frequency bands will be available in Switzerland in the future.

#### **6GHz (Band 104)**

34. How do you rate the attractiveness and the economic and social benefits of this frequency band?

Ericsson answer:

6 GHz is a key band and the only available mid-band in Switzerland (and Europe) for operators' network evolution. Failure to license this band will imply degradation of QoS towards 2030 and inability for MNOs to deliver new use cases, putting Swiss citizens and industry behind on technological evolution.

According to GSMA<sup>15</sup>, allocating this band in Europe to licensed usage will bring the highest socio-economic benefits contrary to allocating the band for license-exempt.

35. Are you interested in usage rights in this frequency range? If so, what are your requirements?

Ericsson answer:

No.

36. For which application and coverage scenarios are these frequencies suitable?

Ericsson answer:

6 GHz is the only remaining mid-band spectrum in Switzerland. Ericsson envisions this band as capacity expansion to 3.5 GHz both indoors and outdoors. The band will be deployed

---

<sup>15</sup> [The socioeconomic benefits of the 6 GHz band \(gsmaintelligence.com\)](https://www.gsma.com/intelligence/2019/03/15/the-socioeconomic-benefits-of-the-6-ghz-band/)

across urban areas to address mobile broadband growth as well as new use cases (e.g. XR). Outside the city, the band can be used for FWA as well as to add capacity in the roads.

37. Do network equipment and terminal devices that can be used in this frequency range already exist? If not, when can they be expected?

Ericsson answer:

The 6 GHz band is a core band for 5G Advanced.

In 2023 Ericsson made a product demonstration together with a technology partner over 6 GHz using pre-commercial 3GPP radio solutions. Additionally, Ericsson has commercial 3GPP radio solutions in the pipeline, ready to be deployed once the licensed spectrum is made available, based on market demand.

The global ecosystem is continuously growing and in particular after the successful IMT identification reached at WRC-23.

38. What other aspects need to be considered in this frequency band?

Ericsson answer:

CEPT is currently looking at the potential use of the band by both IMT and RLAN (sharing the same spectrum). Ericsson is actively taking part in these discussions, and we are of the opinion that any potential sharing framework needs to secure spectrum availability for MNOs and enable macro coverage of the same characteristics as 3.5 GHz (including indoors coverage). These are key for MNO investments.

## **26GHz (Band 258)**

39. How do you rate the attractiveness and the economic and social benefits of this frequency band?

Ericsson answer:

There is a significant net economic benefit<sup>16</sup> to deploying 5G mmW primarily together with 3.5 GHz but also standalone (e.g. FWA).

40. Are you interested in usage rights in this frequency range? If so, what are your requirements?

Ericsson answer:

No.

41. For which application and coverage scenarios are these frequencies suitable?

Ericsson answer:

We see that mmW products has a particular good fit in the following scenarios:

- High traffic areas / crowded locations – due to the high bandwidth providing huge capacity.

---

<sup>16</sup> Analysis Mason: [Status, costs and benefits of 5G 26GHz deployments in Europe](#)

- Fixed Wireless Access – fiber-like capacity, where the option of external antennas at the customer can offset some of the coverage constraints inherent to the frequency band.

42. Do network equipment and terminal devices that can be used in this frequency range already exist? If not, when can they be expected?

Ericsson answer:

Ericsson has supplied network equipment for n258 to customers in North America, Europe, and Australia. These networks are in commercial operation as of January 2024. Looking forward, we expect additional countries to launch services on this band (e.g., both China and India), enlarging the device ecosystem.

Terminal devices (smartphone) from all leading suppliers exist today. There are also modems and Customer Premises Equipment (CPE) for Fixed Wireless Access available.

43. What other aspects need to be considered in this frequency band?

Ericsson answer:

No specific comments.

#### **40GHz (Band 259)**

44. How do you rate the attractiveness and the economic and social benefits of this frequency band?

Ericsson answer:

We recommend allocations on 26 GHz as a first step on mmW and looking at 40 GHz as a follow-up.

45. Are you interested in usage rights in this frequency range? If so, what are your requirements?

Ericsson answer:

No.

46. For which application and coverage scenarios are these frequencies suitable?

Ericsson answer:

These are very similar to those of 26 GHz.

47. Do network equipment and terminal devices that can be used in this frequency range already exist? If not, when can they be expected?

Ericsson answer:

We do not have any products supporting n259 today. Availability is pending license being made available and market demand.

48. What other aspects need to be considered in this frequency band?

Ericsson answer:

No specific comments.

## Further remarks

49. Do you have other remarks, suggestions, etc.?

Ericsson answer:

We assume that all frequency bands currently allocated will be renewed. With the projected mobile network traffic growth and new use cases arising from technology evolution, more spectrum needs to be made available for MNO:s.

The strict EMF regulations in Switzerland are concerning as it severely limits the possibility to deploy new spectrum. In the end this will have an impact on future services (i.e., 5G Advanced and 6G) and hamper Switzerland's competitiveness in digitalization. Ericsson would recommend that the science-based limits specified in the ICNIRP 2020 guidelines<sup>17</sup> are adopted. This would help ensure the protection of the Swiss population against exposure to radiofrequency electromagnetic fields in the range 100 kHz to 300 GHz, while allowing mobile networks to be deployed in an optimal way. The ICNIRP Guidelines have been adopted in most countries around the world and are endorsed by the World Health Organization (WHO).

Ericsson recommends Switzerland to focus on the release of 6 GHz for mobile operators' expansion in the timeframe 2025-2030. This will be an efficient capacity layer to 3.5 GHz. Not allocating this band to mobile operators will have a strong impact on mobile evolution, impacting citizens, industries and ultimately Swiss economy. Ericsson also recommends Switzerland to allocate 26 GHz as a high-capacity complement to the growth in mid-bands required, allowing MNOs to offload high traffic areas to this spectrum.

We also invite Switzerland to shape the spectrum debate around spectrum for the 6G timeframe (2030+), which will require special attention to spectrum within 7.125-8.4 GHz (as per AI for WRC-27) to add as wide-area capacity as possible to existing grids.

---

<sup>17</sup> ICNIRP: [RF EMF Guidelines 2020](#)