Mobile Network Deployment Policy and Implementation of the Broadband Cost Reduction Directive in Europe

Key Concerns and Recommendations

GSMA Report
March 2021
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Introduction

The GSMA launched a survey in June 2020 concerning mobile network operator (MNO)’s experiences with respect to Mobile Network Deployment and the Broadband Cost Reduction Directive within their respective member states. The survey aimed to fulfil three distinct aims:

- Prepare input to the European Commission consultation on the Broadband Cost Reduction Directive (BCRD);
- Provide input on simplifying and streamlining siting policy;
- Provide updated input to update the GSMA’s interactive map on electromagnetic field (EMF) and antenna sitting policy.

As such, the survey covered a wide range of topics, which include the following:

- Planning authorities;
- Permit requirements;
- Permit timescales;
- Appeals process;
- Public consultation;
- Exemptions & existing site upgrade;
- Administrative fees;
- On-going taxes;
- Small cell policy;
- MIMO policy;
- EMF policy exposure guidelines;
- EMF policy exposure compliance.

By the final call for inputs in December 2020, the GSMA acquired information concerning 21 out of 27 European Union (EU) Member States, as well as Albania and Switzerland.

The following section provides a summary of the main takeaways from the survey inputs concerning each of the aforementioned topics.
Cross-Country Executive Summary

Permitting Authorities
In order to acquire a permit for deploying an antenna (be it a tower or on a building), MNOs have to approach a set of permitting authorities in order to receive their approval or documents pertaining to the requirements of a permit. While these varied across the Member States surveyed, the typical set of permitting authorities incorporated any of the following:

- Telecommunications national regulatory authority (NRA)
- Transport/Energy/Environmental/Public Health/Forestry/Culture/Mining authorities
- Archaeology Authorities
- Municipalities, local and/or city authorities
- Land/building owner
- Fire department and electricity distributor

Due to the number of authorities involved, most MNOs viewed the permitting process to be difficult. In order to improve the permitting process, MNOs recommended the following general improvements:

- Establishing deadlines for decisions to be made by a permitting authority;
- Reducing the number of authorities involved in the permit process, i.e. by creating a one-stop shop;
- Ensuring that rules for network deployment are harmonized across municipalities, thus avoiding fragmentation;
- Limiting special requirements or restrictions on mobile network deployment in general.

Permit Requirements & Timescales
MNOs are required to submit a range of documentation in an application for a permit. While the exact set of documents required varied across Member States, the typical application can include any of the following:

- Actual application document requesting the permit
- Site plan, including design plan, visual appearance etc.
- Evidence of a lease or right of way
- Construction plans and permits for construction
- Special approval from planning authorities for specific authorizations: i.e. if the site is close to water, agricultural land, monuments etc.
- EMF / Environmental impact study
- EMF certificate
- Protection certificates (fire/lightening/flooding etc.)
- Self-declaration by the MNO
Due to the number of documents involved, MNOs typically found the process of fulfilling the requirements of a permit application to be difficult, particularly if exacerbated by the amount of authorities involved in the permit process. As such, MNOs recommended a series of general improvement ideas to facilitate the process of fulfilling permit requirements.

- A simplified process for fulfilling permit requirements: a general call to digitalise, automate or require less documentation for permits.
- Create a centralised platform (i.e. one-stop shop) to handle permits and harmonise the requirements across the concerned authorities.
- Standardise building layouts for mobile base stations
- Create a simplified process or exemption for smaller sites, such as small cells and MIMO.

The number of authorities and the permit requirements have a significant impact of the timescales involved for mobile site deployment. MNOs generally faced either 3 – 6 months or 6 – 12 months to fulfil all of the administrative approvals for site deployment, with some outliers experiencing a more expedited process of less than 3 months. When it comes to general site deployment, as depicted in the pie chart to the right, MNOs generally faced either 6 – 12 months or 12 – 24+ months. As such, the time needed for administrative approvals is generally a fraction of the overall time for site deployment, as seen in the graph below.

<table>
<thead>
<tr>
<th>Member State</th>
<th>Time for Administrative Approvals</th>
<th>Time for Site Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>12 - 24+ months</td>
<td>12 - 24+ months</td>
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<tr>
<td>Austria</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
</tr>
<tr>
<td>Belgium</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
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<tr>
<td>Bulgaria</td>
<td>12 - 24+ months</td>
<td>12 - 24+ months</td>
</tr>
<tr>
<td>Croatia</td>
<td>3 - 6 months</td>
<td>6 - 12 months</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
</tr>
<tr>
<td>Denmark</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
</tr>
<tr>
<td>Estonia</td>
<td>3 months</td>
<td>6 - 12 months</td>
</tr>
<tr>
<td>Finland</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
</tr>
<tr>
<td>France</td>
<td>3 - 6 months</td>
<td>12 - 24+ months</td>
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<tr>
<td>Germany</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
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<tr>
<td>Greece</td>
<td>12 - 24+ months</td>
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<tr>
<td>Hungary</td>
<td>3 - 6 months</td>
<td>12 - 24+ months</td>
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<tr>
<td>Latvia</td>
<td>3 - 6 months</td>
<td>6 - 12 months</td>
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<tr>
<td>Lithuania</td>
<td>6 - 12 months</td>
<td>N/A</td>
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<tr>
<td>Netherlands</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Portugal</td>
<td>6 - 12 months</td>
<td>12 - 24+ months</td>
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<td>Romania</td>
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<td>12 - 24+ months</td>
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</table>
MNOs generally viewed the timescales involved for acquiring the administrative approvals for a permit, let alone the site deployment, as excessive. As such, some general improvement recommendations were provided, which could help reduce the duration of the process:

- Introduction of deadlines for administrative approvals or decisions;
- Reduction of the timescale for permit approval;
- Improved coordination between the authorities involved, as they each provide documentation necessary to receive a permit;
- Elimination of “double checks” i.e. mandating that an MNO must seek the approval of a planning authority twice before the permit is issued.

### Appeals Process & Public Consultations

All Member States except Albania have in place an appeals process through which an MNO can challenge the decision of a planning authority to deny the issuance of a permit for a mobile network deployment. While in some circumstances the planning authority concerned was able to first consider the appeal, most Member States generally had the appeal be considered by a local court. Should the appeal be denied at the local court, most Member States allowed the MNO to escalate the appeal to a regional if not federal/supreme court.

There was no consensus as to how long it could take for an appeal to be considered, as demonstrated in the pie chart to the right. However, MNOs did not that the appeals process was generally difficult and in some circumstances stated it was “easier” to simply redraft and resubmit the permit application.

Given the difficulties most MNOs face with respect to the appeals process, several recommendations for improvement were made, including:

- Prevent “silent” administrative refusal (whereby the authority considering the appeal declines to make a decision on an appeal, thereby refusing it) by introducing deadlines for a decision;
- Enable a single authority to handle the process for appeals i.e. one-stop shop;
- Shorten the duration of the appeals process.
Alternatively, a little over half of the Member States required a public consultation to be issued before construction on a new site can begin. In such instances, the general format is that an MNO must inform the local municipality/administration of the incoming mobile network deployment, after which residents can log objections or appeal the deployment.

While MNOs generally had a neutral stance with respect to the difficulty posed by the public consultation process, they nonetheless recommended a simplified consultation procedure for facilitating deployment and that municipalities improve their activities to inform citizens about the deployment of networks in general.

**Exemptions & Existing Site Upgrades**

In most Member States, MNOs are granted exemptions to acquiring a permit for a new site or an upgrade to an existing site. The general conditions are that if the EMF exposure around the site does not change and the visual impact is minor, then only a simple declaration of intent from the MNO is needed. If these conditions are not met, then an MNO must go through the process of acquiring a permit for site deployment or upgrades.

For the most part, MNOs have a neutral stance towards Member State policies on exemptions. In those cases where a Member State does not have a policy towards exemptions, MNOs uniformly ask for the implementation of simplified procedures and exemptions in cases of site upgrades where there is no impact on EMF exposure. In general, MNOs also asked for clear government guidelines / statements on exemptions and existing site upgrades, so that there is no fragmentation in this regard at the municipal or regional levels.
Administrative Fees and Ongoing Taxes
When it comes to administrative fees for site deployment, almost all Member States charge fees to process the permit request, with the cost ranging from €150 to €10,000. MNOs have generally commented that the cost of fees should be standardised and a reduction in the cost and time spent processing said fees would be welcome.

In terms of ongoing taxes on deployed sites, Member States were evenly split. In those instances where a Member States did charge ongoing taxes, the costs usually ranged from €1,350 to €15,000, with some costs per annum. MNOs generally asked that the taxation of deployed sites should outright be eliminated or at least reduced in cost.

EMF Policy: Exposure Guidelines and Exposure Compliance
The majority of Member States adopt EMF limits that are consistent with the ICNIRP (1998) Guidelines. In those instances, where EMF limits were not consistent with the ICNIRP Guidelines, they were always more restrictive. These Member States include Belgium, Bulgaria, Croatia, Italy, Greece and Switzerland.

Currently, only a few Member States are having discussions on the topic of RF-EMF limit harmonisation.

MNOs which operated in Member States with EMF limits consistent with the ICNIRP (1998) Guidelines generally did not provide recommendations for improvement. Conversely, MNOs operating in Member States with restrictive EMF limits generally recommended for the EMF limits in Member States to be harmonised with ICNIRP across the EU. MNOs also recommended that periodic EMF measurements of existing sites should be abolished.

Concerning EMF exposure compliance, all MNOs were requested by their concerned authority to demonstrate that the new site (or upgrades to an existing site) does not breach the Member State’s EMF limits. Generally, MNOs demonstrated compliance through some of the following:

- Self-declaration of compliance by the MNO;
- EMF assessment (sometimes conducted by a third-party), submitted to the concerned authority;
- In some instances, on-going or post-modification measurements of EMF exposure.

MNOs generally viewed the process of exposure compliance as being neutral or slightly difficult and provided a few recommendations for improvement:

- Ensure EMF limits are harmonised across the regions/municipalities;
- Improve the calculation of EMF exposure compliance distances;
- Create simplified procedures for 5G, MIMO and small cells deployment.
**Policy for Small Cells and MIMO**

The distribution between Member States that have a small cell policy and those that do not is relatively even. In those cases where a small cell policy exists the general provision is that deployment is simplified (and in some cases, are exempt from permits) if the base station has EMF emissions below a certain threshold, such as between 1W – 10W EIRP\(^1\).

For those Member States with a small cell policy, there was no consensus as to whether said policy was more or less restrictive than the EU’s SAWAP regulation\(^2\). Furthermore, it is not clear what percentage of sites will benefit from the EU SAWAP regulation.

In addition, the policy for EMF compliance in most Member States did not include specific provisions for active (MIMO) antennas.

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\(^1\) **EIRP** = Effective Isotropic Radiated Power

Key Recommendations of MNOs on Mobile Network Deployment and the BCRD

- The creation of a “one-stop shop”, i.e. a single competent authority for permit process and appeals process, with a streamlined, nationally harmonised and fully digitalised permit approval process that, as much as possible, is automatised and reduces the amount of documentation that must be submitted;

- **Specific guidelines** for when approval for specific requirements are not necessary to be pursued or when simplified procedures may be pursued;

- **Simplified procedures for network deployment**, i.e. expedited “right of way” upon permit issuance or abolished need for permits or inspections for minor structural changes or no increase of EMF exposure;

- **Binding deadlines and timeframes** for response/decisions by planning authorities and local municipalities, which should be reduced to reasonable lengths of duration with clear deadlines;

- **Shortened timeframe** for appeals or public consultations concerning network deployments;

- **Harmonisation of EMF limits** with the ICNIRP Guidelines;

- **Simplified regime for EMF permits**, particularly for small cells deployment;

- **Administrative fees should be reduced** from beyond what is necessary to cover administrative expenses and **ongoing taxes should be eliminated** and if not eliminated taxes should be uniform and proportionate;

- **Information campaigns conducted by competent authority** informing citizens on the importance of future mobile network deployments.
Individual Member State Summaries

Country Summary – Albania

**EMF Limits**

RF-EMF exposure limits in Albania are calculated based on the ICNIRP Guidelines.

**Permitting Authorities**

Several planning authorities must be contacted in Albania in order to receive permits:
- Municipalities;
- Ministries of Infrastructure and of Environment;
- Agency for Territorial Development;
- Commission for Radiation Protection

**Permit Requirements and Timing**

Documentation for permit requirements are extensive in Albania, as 24 documents need to be submitted in order to receive a construction permit. These documents typically include, albeit not limited to, the following:
- Official request;
- Approval documents from the relevant authorities;
- Environmental impact assessment
- Certificate of ownership or contract for use of land;
- Project documentation: workplan, technical report, feasibility study of business plan, map of structure etc.

The process for administrative approvals and the time for site deployment is 12 to 24 months.

**Appeals Process, Exemptions and Public Consultations**

There is no appeals process, exemptions for site modification or requirement for public consultation in Albania.

**Small Cell and 5G Deployment Policies**

There is no policy in place concerning construction permits for small cells, MIMO or 5G deployment in Albania.

(Updated: December 2020)
Country Summary – Austria

EMF Limits
National guidelines OVE R23:1:2017 are based on ICNIRP.

Permitting Authorities
Several layers of authorities are involved in the permit process:
- Local authorities: town planning permits and building permits.
- District authorities: nature and landscape protection permits and forestry protection;
- Federal authorities: aviation permits, heritage permits.

Permit Requirements and Timing
Documentation for permit requirements include the application, site plan, evidence of lease, fire/lightening protection and sometimes a list of all neighbouring properties.

The process for administrative approvals can take 6-12 months to complete, with total time for antenna deployment coming up to 12-24+ months.

Appeals Process
The appeals process involves the administrative court in each federal state and can involve the administrative supreme court or the constitutional court. The process for appeals can take 6-12 months.

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<thead>
<tr>
<th>Austria – GSMA Survey Results</th>
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<tbody>
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Public consultations & Exemptions
There is no requirement for public consultation.
Exemptions are easier to acquire for existing sites or collocated sites.

Small Cell and 5G Deployment Policies
The new telecommunications law includes provisions to exempt small cells up to a certain size from planning permissions and generally provide easier access to public property and property held by companies owned by the government [e.g. Austrian Rail, Austrian motorways, Austrian Forests, ...].

(Updated: December 2020)
Country Summary – Belgium

EMF Limits

Each region has its own EMF limits, each more restrictive than ICNIRP.

- **Brussels-Capital**: 6 V/m @ 900 MHz (one-third share for each of three operators) at locations accessible to the public including balconies.
- **Wallonia**: 3 V/m per antenna per operator and interpreted as summed per technology per operator at residential locations.
- **Flanders**: overall limit of 20.6 V/m @ 900 MHz at all locations accessible to the public, combined with 3 V/m @ 900 MHz per antenna per operator at residential locations.

In Brussels, the norm is under review to go to 14.5 V/m outside and 9.1 V/m inside, with broadcasters included. In parallel, a charter would be put in place. However, as there was no vote before the elections (26/05/2019), it will not be put in place before the networks are commercially ready for the 5G.

Permit Requirements and Timing

In Brussels, the town planning regulation is under review and it is currently very difficult to obtain approvals with lead time of 8 to 12 months. An EMF certificate is required from the environmental authorities.

In Wallonia, the new town planning code is allowing more flexibility, for example, 80% of site upgrades and about 15% of new sites no longer need a building permit.

In Flanders, a building permit is not necessary for 60% of the cases.

Both Flanders and Wallonia require an EMF certificate from the regional authority as part of the building permit. Municipality publish notices on sites and make information available at their offices.

Appeals Process

Regarding building permits, appeals go directly to the relevant Ministry or Council of State. The appeal process takes 3 to 24 months. Regarding environmental permits in Brussels, appeals go first to Environmental Council, then to the relevant Ministry, and finally to Council of State. Overall, it typically takes 12-24+ months from commencing the site acquisition process to having the site on air.

Exemptions

There is a limited amount of exemptions in Brussels. For Flanders and Wallonia, see previous section on permit requirements.

Small Cell and 5G Deployment Policies

Small cell rules vary by region and are generally more restrictive than the SAWAP Implementing Regulation.

Discussions are underway on the incompatibility of the current EMF limits with 5G deployments. For example, Flanders allows 6 dB attenuation for MIMO antennas.

(Updated: October 2020)
Country Summary – Bulgaria

EMF Limits
EMF limits are stricter (x40 to 100 times) than ICNIRP. The current public exposure limit is 0.1 W/m² for all frequencies from 300 MHz to 30 GHz.

Permitting Authorities
Numerous authorities are involved in the issuance of permits, including: Municipalities, Construction Control Authority, Health Authorities, Cadaster, Fire Department Authorities, Telecom Regulator, Forest Agency, Ministry of Agriculture, Food and Forestry, Road Agency.

Permit Requirements and Timing
In Bulgaria, the typical time taken for all administrative approvals is typically 12 to 24 months, and the process of commencing the site acquisition to having the site on air takes even longer.

To acquire a permit, operators are required to submit the following documents: Lease contract, Sketch, Design, Design approvals - Regional Inspectorate of Environment and Water statement, Fire department statement, Preliminary Sanitary Control statement, Report of Supervision company for compliance of the design with the legislation, Building permit, Order book, Protocols during construction, EMF protocol, Electrical measurement protocols, Final report of Supervision company, Protocol of State Acceptance Committee, and Permit for use.

Appeals Process
The Bulgarian court considers any appeals, the process of which can last 12 to 24 months in duration.

Public Consultations & Exemptions
There is no requirement for public consultation for antenna sitting.

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<tr>
<th>Bulgaria – GSMA Survey Results</th>
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<td>Typical antenna permit time (months)</td>
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<td>Is there a Small cell deployment policy in place?</td>
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Exemptions are allowed for upgrades to existing sites, are subject to a registration procedure (still under introduction) before the NRA. Provided EMF norms and requirements are followed, upgrades which do not change the type of technology, equipment or frequency range are exempt. In other instances,

Small Cell and 5G Deployment Policies
Small cell rules are defined in the Draft Bill of the Telecom Law implementing SAWAP and is generally viewed as less restrictive.

There are no specific provisions for MIMO or 5G deployment in Bulgaria.

(Updated: December 2020)
**Country Summary – Croatia**

**EMF Limits**
EMF limits in Croatia are not consistent with ICNIRP limits. In fact, the exposure limits for power density are 16% of the ICNIRP public guidelines.

**Permitting Authorities**
Approval from the following planning authorities is needed: municipality units of regional and local government, the public body responsible for civil aviation, the national regulatory agency (HAKOM), the Ministry of Health and the Office for the Protection of Cultural and Natural Values (if the site is located in protected zones).

**Permit Requirements and Timing**
The documents required for a permit can be extensive, including spatial plans and building/construction designs, EMF assessment and certificate, geodetic studies and usage permits.

While the timing to grant a permit through the ePermit application process should take up to 50 days, public authorities typically do not act within the prescribed limits and as such, the process for administrative approvals can take 3-6 months. The total time for site deployment is usually 6-12 months.

**Appeals Process & Public Consultation**
The administrative construction body of second instance considers the appeal. After decision is made by the second instance administrative body, lawsuit can be filed before competent Administrative court. The process can take 6-12 months.

There is no public consultation for individual antenna locations. Antennas should not be planned by spatial planning documents as prescribed by EOI deployment regulations (the Government’s Decision).

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**Croatia – GSMA Survey Results**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are EMF limits consistent with ICNIRP limits?</td>
<td>Non-ICNIRP</td>
</tr>
<tr>
<td>Typical antenna permit time (months)</td>
<td>12 – 24</td>
</tr>
<tr>
<td>Is there a 5G deployment policy in place?</td>
<td>No</td>
</tr>
<tr>
<td>Is there a small cell deployment policy in place?</td>
<td>No</td>
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</tbody>
</table>

**Exemptions**
Reconstruction projects undergo the same process of obtaining permit as new locations.

For collocations, regulations are vague and inconsistent, so different practices may apply regarding site location and the competent body concerned.

**Small Cell and 5G Deployment Policies**
There is no 5G deployment policy or small cell deployment policy in place.

*(Updated: December 2020)*
Country Summary – Czech Republic

**EMF Limits**
EMF limits are consistent with ICNIRP.

**Permitting Authorities**
The authorities involved depends on the type of deployment:
- Rooftop: regional health office and City Hall Heritage Department;
- Tower: Regional/local authorities for environment, heritage, property management, crisis management, health, transportation, mining, labour, law enforcement and fire protection.

**Permit Requirements and Timing**
Permits for towers require complete documentation of city works for zoning permission, which includes statements from the relevant authorities, “rights of way” from property owners and project documentation. Rooftop deployments require only an antenna plan.

Acquiring the administrative approvals for a permit can take 6-12 months (less than 3 months for rooftops), the total time for tower deployment is about 2 years.

**Appeals Process**
If a permit is not granted, an appeal can be made within 15 days to the local administration or within 60 days to the administrative court. For land zoning and building permits, the regional building and construction authority considers the appeal. This process can take 3-6 months but it is considered easier to redraft and resubmit the project instead.

**Public Consultations & Exemptions**
There is no requirement for public consultation for antenna sitting.

No permits are necessary for access networks up to 100m.

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</table>

**Small Cell and 5G Deployment Policies**
Small cell rules are less restrictive than the SAWAP Implementing Act and small cells are exempt from permits if the height is under 4 meters (including the support structure).

There is no 5G deployment policy in place.

*(Updated: December 2020)*
Country Summary – Denmark

EMF Limits

EMF limits are consistent with ICNIRP. There are ongoing discussions on RF-EMF limits with respect to the ICNIRP (2020) guidelines.

Permitting Authorities

Most responsibility on permits for town planning, building or rights of way have been delegated to the sub-national level, resulting in fragmented and different approaches in the 98 municipalities.

Permits near coastlines or preservation areas involve a subset of additional authorities.

Permit Requirements and Timing

Permits require extensive documentation covering the project design, building rights and overall assessment, intended use of the building, construction/fire projection class and technical provisions. Documentation detailing the completion of construction are also required.

Acquiring the administrative approvals for a permit can take 6-12 months whereas the total time for tower deployment is about 12-24+ months. This is particularly the case for required, specific sites stipulated in a frequency permit as a result of a frequency auction.

Appeals Process

Appeals for most permits are managed by the national Board of Planning Committees, whereas rights of way or permit concerning excavation issues are handled by the Danish Road Directorate. The appeal process can take 12-24+ months.

### Denmark – GSMA Survey Results

<table>
<thead>
<tr>
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Public Consultations & Exemptions

Rural permits have a public consultation period of 4 weeks. Urban zones only require a public consultation when dispensation is required.

Exemptions are allowed for antenna systems fixed to a high structure or for technical upgrades that do not impact a site's size or visual appearance.

Small Cell and 5G Deployment Policies

Small cell rules are mentioned in the Danish Act of Masts and in the Planning Act, and are similar to the SAWAP Implementing Act.

There is no 5G deployment policy in place.

(Updated: December 2020)
Country Summary – Estonia

EMF Limits

EMF limits in Estonia are consistent with ICNIRP and there are ongoing discussion on the harmonisation of the limits.

In terms of compliance to EMF limits, the requirement is that a safe distance from the antenna is respected, with EMF being based on calculations based on output power and used equipment.

Permitting Authorities

The local government must be contacted for planning/building/usage permits whereas EMF certificates are provided by the Health Board of Estonia.

Permit Requirements and Timing

To acquire a permit, operators must provide CE certificates for the equipment and mast to be used. The process for administrative approvals takes less than 3 months, whereas the typical time taken from commencing the site acquisition process to having the site on air is 6 to 12 months.

Exemptions

Exemptions exist for modifications to existing sites or for collocation at an existing site.

(Updated: October 2020)

<table>
<thead>
<tr>
<th>Estonia – GSMA Survey Results</th>
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<tbody>
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<td>6 – 12</td>
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<tr>
<td>Is there a 5G deployment policy in place?</td>
<td>No Response</td>
</tr>
<tr>
<td>Is there a small cell deployment policy in place?</td>
<td>No Response</td>
</tr>
</tbody>
</table>
Country Summary - Finland

EMF Limits
EMF limits are based on ICNIRP.

Permitting Authority
The procedure for permits is defined by the regulator (FICORA).

Permit Requirements and Timing
A building permit is required to deploy an antenna, in addition to the following:

- An impact analysis has to be attached to the application, along with an evaluation of options such as the usage of existing sites;
- For base stations higher than 15 metres, permission from the civil aviation authority is also required;
- Special permissions have to be granted for a building permit in instances where a town plan is not in place.

Alternatively, base stations inside buildings only require the approval of the landlord.

The operator has to inform the community and make information available at the local municipality offices. The overall timing of the deploying an antenna, takes 12 to 24 months.

Appeals Process
Appeals can be made within 15 days to the local administration or within 30 days to the Provincial Administrative Court. This can lead to delays of two years in the worst case.

Finland – GSMA Survey Results

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<thead>
<tr>
<th>Are EMF limits consistent with ICNIRP limits?</th>
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<td>Yes</td>
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</table>

Small Cell and 5G Deployment Policies

For small cells, STUK has issued EMF exposure instructions, with compliance achieved by limiting total output power of an indoor antenna to 2 W, 1 W or 250 mW depending on the location of antenna or via an assessment of the exclusion zone.

Small cell rules vary by municipality and are generally less restrictive than the SAWAP Implementing Regulation. It is estimated that between 25% and 75% of sites will benefit from the SAWAP rules.

There are simplified rules for the assessment of 5G beam forming antennas.

(Updated: October 2020)
Country Summary – France

EMF Limits

EMF exposure limits in France are consistent with ICNIRP. There is also an “attention limit” at 6V/m.

Permitting Authorities

Priority documents need to be addressed to the Mayor, but the French building authority (ABF) and the National Forestry Office may be also consulted on issues concerning backhaul/electric connections or if the construction is based in a specific area respectively.

Permit Requirements and Timing

Operators must submit a Mayor Information Document (DIM) in order to receive a town planning permit. This includes providing a project description and plan, photographs (for new sites), the required frequencies and the EMF estimates of specific buildings around the antenna. The DIM takes one month to acquire.

In instances where a building is less than 12 m high and the surface does not exceed 5m², operators can pursue a simplified procedure by submitting a Déclaration Préalable (DP) instead. The DP takes 1-2 months to acquire. No evidence of a lease is required for a DP. Otherwise, operators must present the Mayor with a building permit (PC).

To receive a PC, operators must submit a site plan, ground plan, a section plan of the construction and ground, the plans of the facades and roof, a representation of the exterior appearance, photographs and a notice of the material used. It takes 3-5 months to acquire the building permit.

Approval from the sites and easements committee (COMSIS) requires submission of descriptions of the frequencies plan, site’s engineering and EMF limits. This approval process takes 1 month.

Appeals Process

Operators may appeal to the Administrative Court if the antenna’s deployment was forbidden. This process takes 6-12 months to conclude.

Exemptions

Simplified procedures or exemptions for modifications to existing sites do not exist except in cases of “light” evolutions to the site in which no DIM must be delivered.

Small Cell and 5G Deployment Policies

For small cells, the French Code states that if a base station’s EIRP is less than 5 Watts, operators must only issue a declaration for information to COMSIS and hence don’t need to go through the consultation process.

The 5G Roadmap includes EMF assessment of trial sites.

(Updated: October 2020)

France – GSMA Survey Results

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</table>
EMF Limits

EMF exposure limits in Germany are based on ICNIRP.

Permitting Authorities

A variety of authorities may be involved in the deployment process:

- Federal regulator (BNetzA)
- Exposure authorities
- Local authorities (monument protection and nature conservation authorities)

Permit Requirements and Timing

A site certificate is required for all sites with 10 W EIRP or more, which includes a site plan. Permissions from local planning authorities are required for monument protection and nature conservation. BNetzA and exposure authorities need to be notified within 2 weeks of completion of construction.

The approval process for permits is typically less than 6 weeks but can take 6 - 12 months in worst case scenarios. The total time for tower deployment is usually 12-24+ months.

Appeals Process

Legal proceedings to appeal against the local authority can take up to three years, but these occur in rare cases if the operator fulfills all the requirements for the process of site acquisition. Appeals are handled by the planning authorities involved in the permit approval process.

If the appeal goes to court, the process can take 3-12 months.

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Public consultations & Exemptions

Public consultation of the concerned local authority is mandatory and has to start before an operator applies for a site certificate.

In all Federal States, the installation of poles/masts below 10 m and shelters up to 10 m\(^3\) does not require a building permit, whereas upgrades of existing sites have to follow the same process as new sites. Exemptions are also possible for negligible changes to sites.

Small Cell and 5G Deployment Policies

No permit is required for sites with <10 W EIRP but the operator must notify BNetzA of a small cell installation. The small cell policy is generally more restrictive than the SAWAP Implementing Regulation.

(Updated: December 2020)
EMF Limits

Telecom Law 4070/2012 specifies that the maximum exposure limits equal to 60% of ICNIRP guidelines for base stations located less than 300 m from kindergartens, schools, hospitals or nursing homes for the elderly (base stations cannot be located at any of the said premises). Limits up to 70% of ICNIRP apply in all other areas but in practice the more restrictive limits are applied.

Permitting Authorities

The national regulatory agency (NRA) assumes the role of a one-stop-shop licensing agency. The NRA contacts the following competent authorities through an Electronic Application Filling System (EAFS – under construction) for the concurrent issuance of authorisations.

- The Hellenic Civil Aviation Authority (HCAA – airway safety);
- the GAEC (exposure limits);
- the competent Prefecture Office (Standard Environmental Commitment for most base stations or Environmental Impact Study in cases of nodal base stations or base stations requiring road work);
- the NRA (frequency allocation)
- the town planning authorities and the local Forestry Authority (for rural base stations);
- the competent Archaeology Agency (cases related to sights of historic relevance);
- the local Building Authority (construction approval - not a Permit).

Permit Requirements and Timing

For applications filed using the electronic process, base station construction is allowed four months after the filing of the application with the NRA provided that the specified approvals have been received. For existing base stations, the process takes 24 months and additional extensions were given.

Appeals Process

An appeal can be filed with the Administrative Court of Appeal regarding individual administrative NRA Decisions or NRA Decisions pertaining to penalties. Against NRA Regulatory Decisions, appeals can be filed with the Council of State. Disputes regarding construction approvals are resolved at the Administrative Court of Appeals. Appeals regarding decisions of the Administrative Courts are filed with the Council of State.

All initial appeals should be filed within sixty days as of Decision notification date. Indicative timescales for appeal hearings vary considerably between twenty-four months to five years.

Exemptions

Simplified procedures apply when modifications involve only antenna changes and/or minor structural changes in short masts (the resulting mast height is below 10 m for rooftop installations and below 15 m for ground based installations), then a simplified Declaration will suffice.

Small Cell and 5G Deployment Policies

Small cell deployment in Greece is implemented according to the provisions of the Joint Ministerial Decision (1442/B/14-6-2013) and is generally similar to the SAWAP Implementing Act and less than 25% will benefit from the rules.

(Updated: October 2020)
Country Summary - Hungary

EMF Limits

Hungary adopted the ICNIRP public limits in 2004.

Permitting Authorities

The competent government authorities responsible for antenna deployment are the National Public Health and Medical Officer Service and the National Communications Authority (NRA).

Permit Requirements and Timing

A building permit is required for new sites when the complete size of the antenna is bigger than 4 m or the complete size (including antenna) of the mast is bigger than 6 m. Furthermore, a permit is required for new sites if it is located in/on a national monument independently from the size of antenna or mast.

The general technical requirements are set by the National Construction Constitution. The official timescale available for the authority to issue the permission is 60 days. On average, the permissions in practice last 8-10 weeks to receive.

The length of a process mainly depends on how many specialised authorities are involved as the time spent acquiring their opinions does not count to the 60-day deadline of the permission process. If the local municipality does not give permission, the operators can put a request to the regional authority. At the third stage, the administrative court intervenes. This may lead to a more than 1-year delay.

Site upgrades follow the same process as new sites. In addition, a building permit is needed to reinforce the existing foundation of the mast or the mast itself. Overall, it typically takes 12-24 months from commencing the site acquisition process to having the site on air.

Appeals Process

Appeals are handled by the President of the National Media and Infocommunications Authority, Budapest-Capital Regional Court.

Exemptions

Government Decree classifies extensions and upgrades directly necessary for 4G or 5G as special development projects. In this case, the deadline set for the authorities to express their opinion is shorter and certain authorities are not be consulted. The greatest barrier to deployment could be that in densely populated cities where sites are already shared and it is difficult to obtain new sites.

(Updated: October 2020)
Country Summary - Ireland

EMF Limits
Ireland’s EMF limits are consistent with ICNIRP.

Permitting Authorities
A planning application for a new site must be lodged with the local county council which has the authority to approve or reject the application. In the event of a rejection the application can move to the National Planning Authority. They can overrule the local council and approve or reject the application. A number of tower sites have limited planning approved for a set period of time, such as 5-years. After this period, operators must apply for planning retention.

Permit Requirements and Timing
Planning permission is required for masts and tower sites/greenfield sites or residential/mixed use rooftop sites. There is a minimum statutory period of 12 weeks for a decision but this period can be extended up to 40 weeks depending on requests for additional information from the local authority. Additionally, a planning notice must be displayed onsite and in local papers.

Appeals Process
The current decision time for an appeal to the national planning board is 18 weeks. However, this time can be extended depending on the volume of appeals.

Exemptions
There are exemptions for antennas that are less than 2m above the highest point mounted on commercial buildings. Existing sites can also be upgraded.

<table>
<thead>
<tr>
<th>Ireland – GSMA Survey Results</th>
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<tbody>
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<td>Is there a 5G deployment policy in place?</td>
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<tr>
<td>Is there a small cell deployment policy in place?</td>
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</table>

Small Cell and 5G Deployment Policies
Existing small cell rules in Ireland are generally more restrictive than the SAWAP Implementing Act. As such, 75% of installations would benefit from the rules.

Planning conditions for 5G have not changed.

(Updated: October 2020)
Country Summary – Italy

EMF Limits

Law 36/2001 introduced two different limits:
- 20 V/m as a general limit in open areas;
- 6 V/m as a specific limit inside buildings used for more than four hours a day and in their external premises.
The lower limit is 1% of ICNIRP at frequencies greater than 2 GHz.

Permitting Authorities

Authorities involved include municipalities, ARPA (Regional agencies for the environmental protection) and the superintendence for the areas with landscape constraints.

Permit Requirements and Timing

Planning permission is required in order to construct a new site or modify an existing site. The major obstacles in the permit granting are:
- several authorisations have to be requested to different bodies;
- different timings to the granting of permits according to the different planning authorities;
- application of procedures at local level are different from the procedure set at national level;
- some municipalities identify community sensitive sites where they do not grant the permit in the site. In addition, there is not at national level a common definition of community sensitive site.

Compliance with the national EMF exposure limits, specific urban planning and building rules, is required. For small and low power antennas, self-certification is sufficient. The timescale for permission is 30 days for activities on existing sites and 90 days for new sites.

Italy – GSMA Survey Results

<table>
<thead>
<tr>
<th>Are EMF limits consistent with ICNIRP limits?</th>
<th>Non-ICNIRP</th>
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</thead>
<tbody>
<tr>
<td>Typical antenna permit time (months)</td>
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<tr>
<td>Is there a Small cell deployment policy in place?</td>
<td>No</td>
</tr>
</tbody>
</table>

Appeals Process

Decree no. 259/2003 has established that if local authorities do not oppose an authorization request within the time limit, the authorization is considered to be effective (i.e. silent approval). Appeal decisions are assigned to regional administrative courts, which can result in a three years delay in the approval process.

Public consultation is not mandatory.

Exemptions

A simplified procedure (SCIA) has been defined for existing sites upgrades, which applies to the installation and activation of equipment with a Downlink Power less than 5 W, an Uplink Power less than or equal to 100 mW and a volume less than 20 litres (art. 35 comma 4bis, Stability Law 2014).

Small Cell and 5G Deployment Policies

There is no specific legislation for 5G, however, simplified schemes for small and low power equipment exist.

Small cell rules are generally less restrictive than the SAWAP Implementing Regulation.

(Updated: October 2020)
Country Summary – Latvia

EMF Limits
Latvia’s EMF limits are consistent with ICNIRP.

Permitting Authorities
The permitting authorities in Latvia consist of the following:
- The State Joint-Stock Company Electronic Communications Office of Latvia (ECO)
- The National Cultural Heritage Board
- Municipal construction boards

Permit Requirements and Timing
The following documents must be submitted in order to acquire a permit: Lease agreement, design blueprint, opinion on the technical condition of the building, approvals from owners of engineering network, EMF permit and health inspectorate opinion on possible EMF levels.

The typical time taken for all administrative approvals is 3-6 months, with a total time for tower deployment of around 6-12 months.

Appeals Process & Public Consultation
The appeal is considered by either the government body that issued the permit or by a court. The appeals process usually takes less than three months to complete.

There is a requirement for public consultation, during which the construction plan detailing the visual impact, reasoning and environmental impact must be shared.

Exemptions
Exemptions are possible for reconstruction carried out in one’s own property. Otherwise, reconstruction must be carried out in accordance with the work plan agreed with the owner.

Small Cell and 5G Deployment Policies
There are no special arrangements regarding small cells in Latvia.

(Updated: December 2020)

Latvia – GSMA Survey Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
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</tbody>
</table>
Country Summary - Lithuania

**EMF Limits**

Lithuania’s EMF limits are consistent with ICNIRP.

**Permitting Authorities**

The concerned planning authority includes the NRA as well as others depending on the nature of the site:

- Roof-top sites: building owners, the regional public health centre, the regional centre of the Department of Cultural Heritage under the Ministry of Culture (sites in cultural heritage zones);
- Tower sites: the aforementioned listed authorities as well as the regional municipality.

**Permit Requirements and Timing**

Site construction is not allowed on kindergartens and medical institutions.

For roof-top sites, the typically permit approval timing is 2 months whereas tower sites have a timescale of 12 months due to stricter procedures for issuing building permits. In few cases, obtaining site permits may take up to two to three years.

**Appeals Process**

There are no appeals for roof-top sites as decisions concerning the property as at the owner’s discretion. Reaplications are allowed if permissions are not granted.

As a standard, court procedures involve three levels of courts (parish court, district court, supreme court).

Public consultation is mandatory for tower sites.

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**Exemptions**

There are exemptions for in-building sites and repeaters. The formal procedure for upgrades are the same as a new site but the task is easier as initial application can be reused.

**Small Cell and 5G Deployment Policies**

There are no special arrangements regarding 5G.

Current regulations exempt small cells if the EIRP is less than 46 dBm. The intention is to develop a framework based on the IEC 62232 classification.

(Updated: October 2020)
Country Summary – Netherlands

EMF Limits

EMF limits in the Netherlands are consistent with ICNIRP.

Permitting Authorities

The permit system for the placement of antennas in the Netherlands, which is based on the National Antenna Policy, allows every municipality to draw up its own policy concerning antennas, thus making them the competent authority.

Permit Requirements and Timing

While municipalities can draw up their own policy concerning antennas, the Ministry of Economic Affairs and the Dutch NRA has drawn up an example antenna policy which municipalities can follow.

The National Antenna Policy sets tiers of requirements according to mast size:

- full building permit (more than 40 m)
- light building permit (5 to 40 m).

An exception is made for antenna systems for mobile telecommunications that are not higher than 5 meters (measured from the base of the plant) but requirements are adjusted with a pre-planning meeting with municipalities.

For residential buildings with tenants, the residents are involved in the building process for antennas below 5 meters.

No environmental permit is required for construction activity and the use planning activity. These include antennas for 2G, 3G, 4G and 5G. To permit freedom of some of these antennas additional conditions are set and listed in the Antenna Covenant, which obliges the operators to send every municipality each year a placement plan and includes an assent procedure prior to placement of antenna on a residential building with tenants.

Permissions with light requirements normally take 3 – 5 months. Full requirements permissions take 9 - 15 months to be granted.

Netherlands – GSMA Survey Results

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Appeals Process

Appeal processes go through civil courts and this can add up to five-months delay.

Exemptions

As long as there are no extra poles with antennas, sites can be upgraded without extra procedures.

Small Cell and 5G Deployment Policies

The government Digital Connectivity Action Plan aims to promote and stimulate digital connectivity and to enable the roll-out of 5G and small cells. The industry association of mobile operators (MONET) has developed small cell EMF safety guidelines that are based on EN 50401 and IEC 62232.

At this moment, however, small cells are placed under the same set of rules as macro cells. Dutch legislation is almost ready for implementing the Telecom code. The draft legislation is publicly consulted, but has not been implemented yet.

(Updated: October 2020)
Country Summary – Portugal

EMF Limits
EMF limits in Portugal are consistent with ICNIRP.

Permitting Authorities
The permission of the relevant municipality authority is needed for all new sites. Additionally, the Ministry of Telecommunications & Transports, the NRA and the National Municipalities Association are also involved in the approval process.

Permit Requirements and Timing
In all cases, compliance with EMF limits and specific urban planning and building rules must be met.

If the technical process is compliant with the aforementioned, administrative authorities have a time frame of 30 business days / 45 calendar days to answer the process request.

Overall, it typically takes 12-24 months from commencing the site acquisition process to having the site on air.

Appeals Process
Appeals through administrative courts can add delay of up to two years.

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(Updated: October 2020)
Country Summary - Romania

EMF Limits

Romania’s EMF limits are consistent with ICNIRP.

Permit Requirements and Timing

Construction works are subject to general authorization procedures; only a few of Construction Law provisions refer to construction works for telecommunications infrastructure, without regulating a tailored procedure for such works.

Building permits require various prerequisite endorsements, permits or approvals, which are to be issued by central or local authorities:

- endorsements from other utility networks operators’
- location approvals for construction works to be located in the area of existing physical infrastructure;
- decisions regarding change of land designation;
- decision of Environmental Protection Agency regarding potential environmental impact of the works;
- water management approval in the case of constructions to be performed on or in the vicinity of water bodies;
- endorsement from Ministry of Culture territorial services, in the case of immovable assets located in protected building areas;
- endorsement from the State Inspectorate for Construction when building works are to be performed on an existing construction.
- Notification of approval from the Public Health Authority (PHA), predicated on a technical report issued by the National Institute for Public Health (NIPH) deeming the base station’s compliance to the EMF limits.

Endorsements, permits and approvals that are prerequisite for building permit are subject to distinct procedures; in some cases, deadlines for issuing such endorsements are not provided; in practice, even when provided, legal deadlines are not observed; If the existing town planning documentation (urban plan) does not contain specific rules for telecom infrastructure, the amendment of the urban plan is a prerequisite for receiving a building permit.

There are inconsistent legal provisions:

- building permits may be issued only to titleholders of real rights on immovable assets; telecom providers’ right to obtain building permits on the basis of rights of way, or of right of access to existing physical infrastructure, is not properly and consistently reflected;
- inconsistent wording regarding physical infrastructure for telecom networks and telecom networks; consequently, some authorities construe that building permits are required also for deployment of telecom networks, irrespective whether existing physical infrastructure is concerned;
- concerning changes of the initial designation of a part of a building, the neighbours’ approval is a prerequisite for issuance of the building permit; “neighbour” is not defined (inconsistent practice of courts of law and of local authorities)

Small Cell and 5G Deployment Policies

There is no policy to enable 5G or small cell deployment.

(Updated: October 2020)

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Country Summary - Slovakia

EMF Limits

EMF limits in Slovakia are consistent with ICNIRP.

Permitting Authorities

Permitting authorities include the concerned municipality, regional authorities (i.e. health, monuments, transport etc.), the regulatory authority for electronic communications and postal services and national ministries (health and transport and construction).

Permit Requirements and Timing

Permits typically require a lease agreement with the property owner, a design of the technical solution and in the case of a building permit, an implementation project documentation and opinions from the aforementioned planning authorities.

The typical time taken to acquire a permit is 3-6 months, whereas the total time for tower deployment is usually 6-12 months.

Appeals Process & Public Consultation

Appeals can be made to the regional government office and the process can take 3-6 months.

Public consultation is not mandatory. In some cases, a public announcement of the planned construction of a network at a local office may take part of a territorial proceeding that precedes the construction process. The local authority ultimately decides if the construction is subject to both territorial and construction proceedings.

Exemptions

If a site upgrade qualifies for a “minor construction”, the process for obtaining a building permit is shortened. Otherwise, the regular construction permit process applies. In case of antenna or technology upgrade, a new EMF measurement is mandatory.

Small Cell and 5G Deployment Policies

The government is committed to the timely preparation of the 5G implementation legislation in order to build the foundations for a successful commercial deployment of the technology in the coming year. No special national policy has been adopted to enable efficient 5G deployment, yet. The current policies are/have to be applied in the permit process without any simplification.

In addition, there is no small cell deployment policy in place.

(Updated: December 2020)
EMF Limits

EMF limits in Spain are consistent with ICNIRP.

Permit Requirements and Timing

Although the General Telecommunications Law of 2014 (LGTEL) established the adaptation of the local norms within a year, this has not occurred in most cases, with some city councils remaining unaware of the general regulation and thus still requiring approval and installation permission.

The LGTEL modified the permits procedure for most licenses to ex-post control: approval from the Administration before constructing a base station has been replaced by Statements of Responsibility (DRs), in which the Administration controls the base station post-construction.

However, before operators present the DR to the administration, it is in some cases mandatory to obtain the approval of the Mobile Network Deployment Plan from the municipality. The documentation accompanying the notification, though varying across municipalities/local administrations, is generally the following:

- Mobile network deployment plan (technically optional document but some municipalities force to present it in their norms);
- Building/technical projects certificated by an architect;
- Environmental impact study (not including anything regarding EMF);
- EMF project /certificates.

If the local administration does not provide a response within three months, the plan is considered approved. Base stations located in public domains are not affected and the timescales remain 18 months to 36 months.

Overall, it typically takes from 12 to 24 months from commencing the site acquisition process to having the site on air.

Appeals Process

The first appeal can be made against the local administration that issued the ordinance or permit. If the process has not ended, the standard judicial procedure has to be followed (Juzgado Contencioso-Administrativo). In the second instance, if it goes further, the Justice Superior Court (Regional) or Supreme Court (National) is involved.

Appeals typically last 1 to 3 years or 8 to 10 years in extreme cases.

Exemptions

There are exemptions or simplified procedures for changes to existing sites. The LGTEL indicates that technological innovation actions (changing equipment and antennas) that do not involve civil construction (replacement or enlargement tower for example) will not need additional permission.

Small Cell and 5G Deployment Policies

Regarding EMF, there is a simplified procedure with base stations below 1 W EIRP.

Small cell rules vary and are similar or more restrictive than the SAWAP Implementing Act and less than 25% of base stations will benefit from the rules. There are no specific EMF rules for MIMO antennas.

The National Plan 5G 2018-2020 aims to make Spain ready to maximize the opportunities 5G offers, once the new technology is completely defined from the technical and commercial point of view.

(Updated: October 2020)
**Country Summary - Switzerland**

**EMF Limits**

The overall EMF limits for all locations accessible to the public are consistent with ICNIRP.

There is a precautionary limit of 4 V/m (installations with only 900 MHz and lower frequencies), 6 V/m (for 1800 MHz and higher frequencies), and 5V/m for mixed installations for locations of sensitive use, i.e. apartments, offices where people stay over longer periods of time.

**Planning Authorities**

Each base station undergoes a public authorisation process, of which the local authority of the concerned town or village is responsible for the building permit process.

**Permit Requirements and Timing**

In order to receive a permit for site deployment, an operator must provide full documentation of the project, including exposure calculations and construction plans.

The time needed for administrative approvals and full site deployment is 12 – 24+ months.

**Appeals Process**

Operators may appeal a planning authority’s decision, which is first considered by the local authority and may be escalated to the regional and federal courts.

**Public Consultation**

People in the vicinity of the upcoming site can appeal against said site during the public authorisation process.

In some communes there are defined processes for the involvement of the local government, estate owners and neighbouring persons. In case of opposition to the proposed construction, the authorities can invite the concerned parties for a conciliation meeting before reaching a decision.

**Exemptions**

If the exposure around the site does not change and the visual impact is minor (i.e. antenna change), operators do not need to obtain a new building permit.

---

**Switzerland – GSMA Survey Results**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are EMF limits consistent with ICNIRP limits?</td>
<td>Non-ICNIRP</td>
</tr>
<tr>
<td>Typical antenna permit time (months)</td>
<td>12 – 24</td>
</tr>
<tr>
<td>Is there a 5G deployment policy in place?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is there a small cell deployment policy in place?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Small Cell and 5G Deployment Policies**

There is no active policy for small cells, MIMO or 5G deployment in Switzerland.

*(Updated: October 2020)*
Annex: Cross-European summary graphs

Permitting Authorities Process

![Bar graph showing responses to the permitting authorities process.](image)

- **Very Difficult**: 6 responses
- **Difficult**: 12 responses
- **Neutral**: 4 responses
- **Easy**: 0 responses
- **Very Easy**: 0 responses
- **No Response**: 1 response

![Map of Europe showing different levels of difficulty for the permitting authorities process.](image)

- Very Difficult
- Difficult
- Neutral
- No Response
Permit Requirements

Permit Requirements Difficulty Rating

![Bar chart showing permit requirements difficulty rating with responses ranging from Very Difficult to No Responses.]

Map of Europe showing permit requirements with color coding:
- Very Difficult: Red
- Difficult: Orange
- Neutral: Yellow
- No Response: Dark Grey
Appeals Process Difficulty Rating

- Very Difficult: 5 responses
- Difficult: 8 responses
- Neutral: 6 responses
- Easy: 0 responses
- Very Easy: 0 responses
- No Responses: 4 responses

Map showing the distribution of difficulty ratings across different regions of Europe.
Public Consultations

Public Consultation - Requirement?

- Yes: 39%
- No: 57%
- No Response: 4%

Is there a requirement for public consultation?

- Yes
- No
- No Response
Public Consultations Difficulty Rating

Responses

<table>
<thead>
<tr>
<th>Frequency</th>
<th>VERY DIFFICULT</th>
<th>DIFFICULT</th>
<th>NEUTRAL</th>
<th>EASY</th>
<th>VERY EASY</th>
<th>NO RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

Public Consultations Difficulty Rating

- **Very Difficult**
- **Difficult**
- **Neutral**
- **Easy**
- **Very Easy**
- **No Response**
Exemptions & Existing Site Upgrade

Are there permit exceptions?

- Yes: 61%
- No: 35%
- No Response: 4%

Map of Europe showing the distribution of permit exemptions.
Small Cell Deployment Policy

Percentage of sites benefiting from SAWAP

- <25%: 56%
- 25 - 50%: 22%
- 50 - 75%: 13%
- >75%: 9%
- No responses

Percentage of sites benefiting from SAWAP

- Greater than 75%
- 50 - 75%
- Less than 25%
- No Response
Small Cell Policy: Comparison to SAWAP

- More restrictive: 4 responses
- Similar: 5 responses
- Less restrictive: 4 responses
- Don't know: 2 responses
- No response: 8 responses

Map showing the distribution of responses across different countries in Europe, color-coded to indicate the level of restriction compared to SAWAP.

Key:
- Red: More restrictive
- Yellow: Similar
- Green: Less restrictive
- Orange: Don't know
- Grey: No Response
EMF Policy: Exposure Guidelines

Member State EMF Limits: Consistency with ICNIRP

- 30% ICNIRP
- 70% Non-ICNIRP

Member State EMF Limits:
Consistency with ICNIRP

ICNIRP
Non-ICNIRP
EMF Policy: Exposure Compliance

EMF Exposure Compliance Difficulty Rating

![EMF Exposure Compliance Difficulty Rating Chart](chart.png)

EMF Exposure Compliance Difficulty Rating
- Very Difficult
- Difficult
- Neutral
- Easy
- Very Easy No Responses

![EMF Exposure Compliance Map](map.png)
MIMO Antenna Deployment Policy

The bar chart shows the responses to the MIMO Antenna Deployment Policy. The chart indicates that 15 countries responded with Yes, 4 are Underway, and 0 responded with No, No Data, or No Response.

The map visually represents the deployment status across European countries. Countries in green indicate Yes, yellow for Underway, red for No, and gray for No Response.