

Professional Supervision of Persons Authorized to Perform Measurements and Tests



Tijana Glišić, RATEL

A New Legal Framework

Legal basis

Law on Electronic Communications, "Official Gazette of the RS" No. 35/2023 — introduced professional supervision as a new instrument in Serbian electronic communications regulation.

Who supervises

RATEL (the Regulator) — through authorized persons employed by the Regulator.

Scope of authority

RATEL performs professional supervision over the application of Law. RATEL may request data and documentation from operators and other parties, and conduct measurements and tests of networks, services, equipment, radio equipment and terminal equipment.

Advantage

Proactive role of the Regulator, efficient implementation of Law on Electronic Communications, clear and transparent procedures for professional supervision.



**NEW
CONCEPT**

Types of Professional Supervision

REGULAR

vs.

UNPLANNED

Carried out according to the Professional Supervision Plan

Plan is drawn up by the head of the competent unit, based on risk assessment

Timing: defined period (depending on the risk assessment, usually annual plan of professional supervision)

Done officially (*ex officio*)

At the request of the electronic communications inspector (Ministry of Information and Telecommunications of the Republic of Serbia)

Upon other requests, complaint or initiative

Who Performs Supervision — and Under What Authority?

AUTHORIZED PERSONS

- › Employed by RATEL — the Regulator
- › Carry out both regular and unplanned supervision
- › Document findings in Official Notes and Professional Supervision Reports

RATEL IS EMPOWERED TO:

- › Request data and documentation from any operator or party
- › Conduct measurements and tests of networks and services
- › Inspect electronic communication, radio and terminal equipment

Legal basis: Law on Electronic Communications, "Official Gazette of the RS" No. 35/2023 | Procedure for Implementation of Professional Supervision over Authorized Persons

Scope of Supervision — What Is Controlled?

1 Compliance

General conditions, special obligations on business entities with significant market power (SMP), universal service, numbering and individual permits

2 Network parameters

Conformity of network element parameters with applicable regulations

3 Service quality

Prescribed quality parameters for universal service and other electronic communication services

4 Equipment requirements

Technical requirements for communication and radio equipment, including lawful interception

5 Network security

Security and integrity of public communication networks and services

6 Measurement operations

Performance of measurement and testing operations per Article 167 of the Law (Persons Authorized to Perform Measurements and Tests)



Who May Perform Measurements and Tests?

AUTHORIZATION required

Issued by the Ministry of Information and
Telecommunications

5 Criteria
Must Be Met

Joint Commission
Verifies



Criteria for Authorization:

1. Headquarters in the Republic of Serbia

2. Personnel: Min. 2 employees, 1 with university degree (electronic engineering)

3. Appropriate measurement equipment: calibrated in accordance with the SRPS ISO/IEC 17025 standard

4. Adequate space for the operation of equipment and for post-processing measurement results and reporting

5. Implementation of measurement and calculation methods in accordance with valid Serbian, European and international standards

Verification of Conditions — Administrative vs. Field Check

Authorization Process: *The Joint Commission (Ministry + RATEL) verifies that the criteria are met.*

ADMINISTRATIVE CHECK

Where

At the Regulator's premises

How

Review of acts, data, and documentation submitted by the company

FIELD CHECK

Where

At the company's locations, branch offices and other facilities and measurement and test locations

How

Direct inspection of equipment, systems, premises, measurement methods and personnel

If the company or other legal entity meets all the criteria, it is authorized to perform measurements and tests.

The authorization holder must notify the Ministry immediately of any change that may affect the fulfilment of the conditions.

Issued Authorizations



Measurements and Tests during radio station inspection

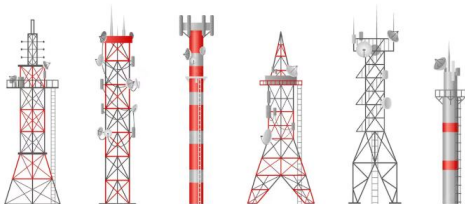
Total 9 authorizations from August 2025 when implementation started

- › **Sound broadcasting station** (VHF up to 1 kW and over 1 kW)
- › **Digital television radio station** according to DVB-T2 standard (up to 1kW and over 1 kW) harmonics and spurious
- › **Base station in a public telecommunication network** (GSM /UMTS/LTE, 800/900/1800/2100 MHz) until March 2025

Authorization for Measurement and Test of following radio stations:

- › **Radionavigation station** (aeronautical, land and maritime)
- › **Land mobile station** (HF, VHF, UHF) with frequency modulated emissions in private mobile radio (**PMR**) networks
- › **Land mobile station** (HF, VHF, UHF) in digital private networks
- › **Radiodetermination station** - radar
- › **Radio station in the satellite service**
- › **Radio relay stations**

Issued Authorizations: Measurements and Tests - Technical inspection of radio stations



Technical part of inspection of radio station include:

- › location of the radio station
- › frequency and toleration
- › harmonics and spurious
- › transmitter power
- › occupied bandwidth or frequency deviation
- › type of antenna, height of the antenna, etc.

Образац ИТП-1
(Ревизија 201207)
РАТЕЛ, ЈБ:

ИЗВЕШТАЈ СА ТЕХНИЧКОГ ПРЕГЛЕДА
ДИФУЗНЕ РАДИО-СТАНИЦЕ ЗА ФРЕКВЕНЦИЈСКИ
МОДУЛИСАНЕ ЕМИСИЈЕ

Број дозволе (02): [redacted]

Број: [redacted]

[redacted] [redacted]

(Ималац радио станице)

(Матични број)

Број дозволе: [redacted], издата [redacted], а која важи до [redacted]

Место техничког прегледа: [redacted]

Датум техничког прегледа: [redacted]

На основу техничког прегледа радио станице утврђено је следеће:

Шифра	Елементи техничког прегледа	Утврђено стање	Јединица
90216	Предајна фреквенција	[redacted]	MHz
90421	Излазна РФ снага предајника	[redacted]	kW ▾
	Ефективно израчена снага предајника	[redacted]	kW ▾
90407	Ширина опсега заузетог емисијом	[redacted]	kHz
	Врста емисије	[redacted]	
	Максимална девијација фреквенције	[redacted]	kHz
	Фреквенције нежељених зрачења	[redacted]	MHz
	Однос снага нежељеног и жељеног зрачења	[redacted]	-dBc
	Фреквенције ИМ производа емисије са емисијама других станица	[redacted]	MHz
	Релативни интензитет ИМ производа	[redacted]	-dBc
	Ниво нејонизујућег ЕМ зрачења	[redacted]	V/m
90345	Знак идентификације	[redacted]	

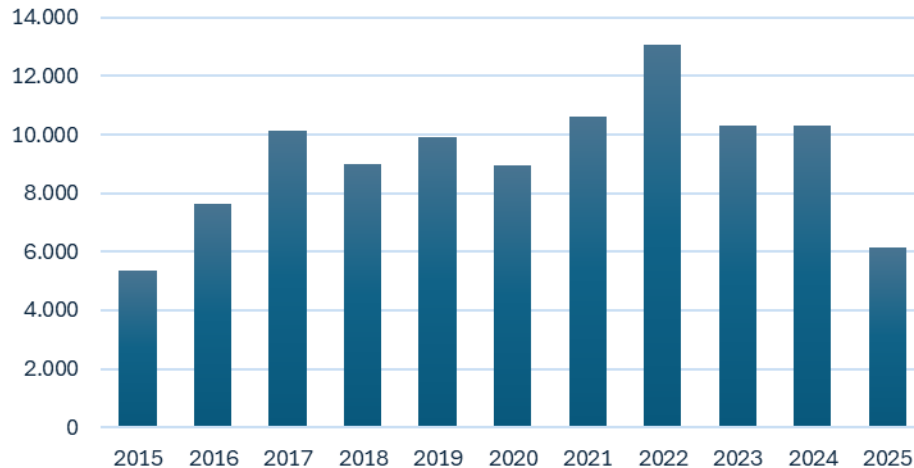
**TOTAL
> 100 000**

Technical inspection of radio stations

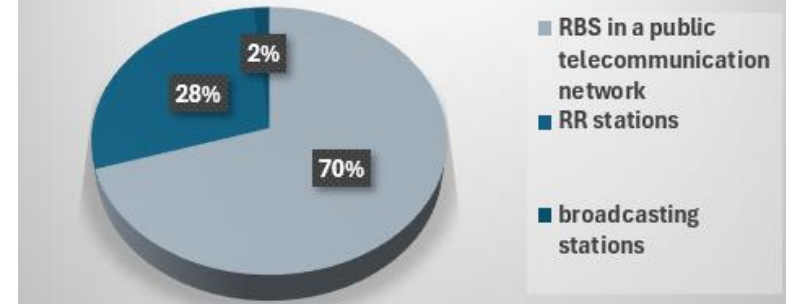
2015 - 2025



Number of technical inspection by year



Number of technical inspection in relation to the type of radio station



Therefore, professional supervision of measurement and test are crucial and necessary.

RATEL's Ongoing Supervision of Authorized Persons

Based on: Procedure for Implementation of Professional Supervision over Persons Authorized to Perform Measurements and Tests

OFFICE SUPERVISION

- › Documentation review
- › Conducted at RATEL's premises
- › Covers records, reports, and compliance files

FIELD SUPERVISION

- › On-site check at the authorized company
- › Check of equipment, facilities and processes
- › Includes direct observation and statements

Frequency: Regular: 3–9 months after authorization granted, afterwards annually
Unplanned: upon inspection request, complaint or official initiative

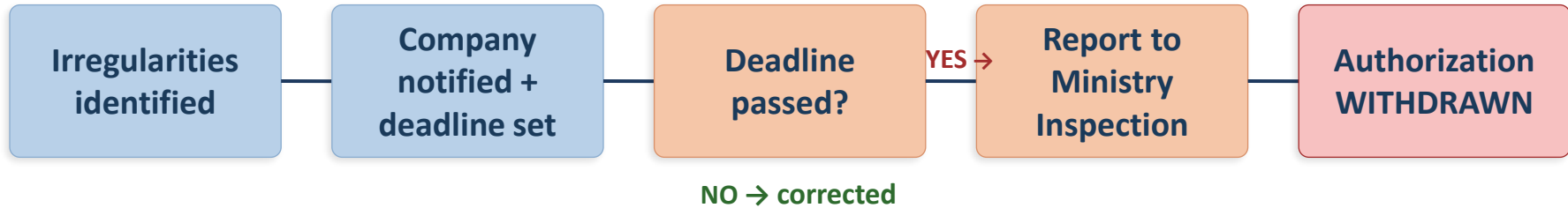
Documentation produced during supervision:

Checklist

Professional Supervision Report

Official Note

When Irregularities Are Found — Process and Consequences



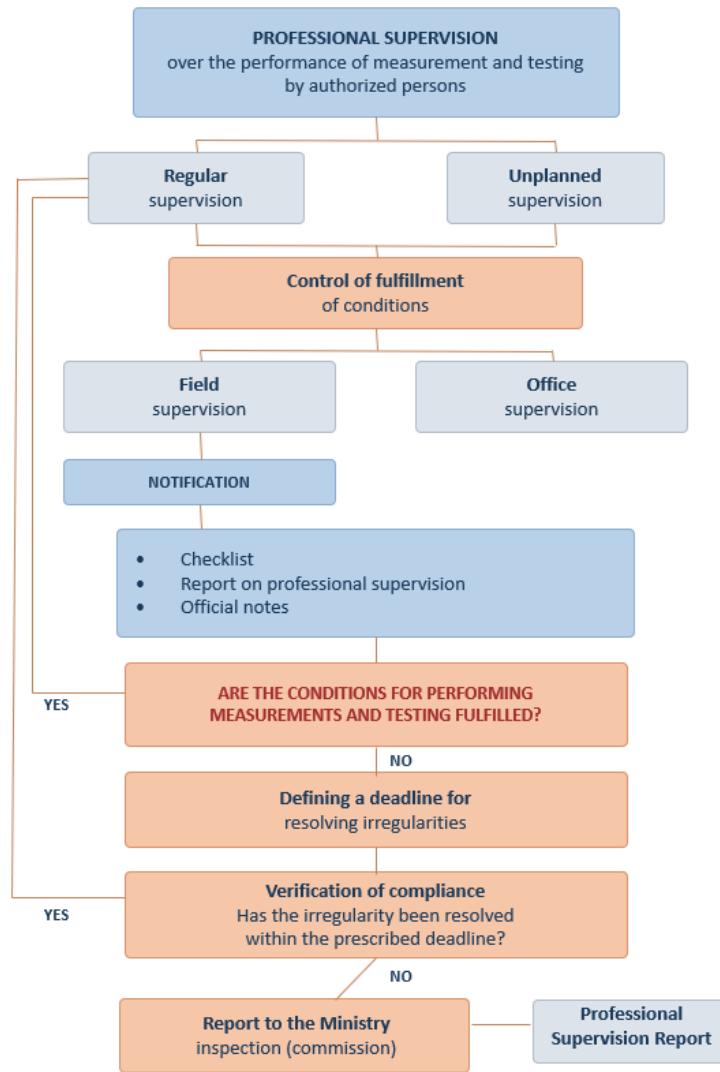
Documentation (always required)

Checklist + Official Note + Professional Supervision Report

Ministry may also withdraw authorization if...

Company no longer meets prescribed conditions | OR | Authorization was granted based on incorrect or false data

Until the introduction of professional supervision in August 2025, most common identified irregularity was non-compliance with the prescribed deadlines for submitting Technical Inspection Reports.



Conclusion

Professional supervision is the key instrument for ensuring the reliability and quality of measurements and tests conducted on electronic communication networks, services and equipment.

› *New, legally grounded framework — Law on Electronic Communications, "Official Gazette of the RS,, No. 35/2023*

› *Clear roles: RATEL supervises / Ministry authorizes & sanctions*

› *Standards: equipment calibration ISO/IEC 17025 | Serbian, European & international norms*

Thank you!

Tijana Glišić,

Regulatory Authority for Electronic Communications and Postal Services

www.ratel.rs

Palmoćeva 2, Belgrade - Serbia