

## Top Range Group Better buildings for tomorrow





TRP

## Our promise to you. Anticipating the most challenging customer requirements.

# Your high-rise building as a complete organism.

## **Experience**

Your travel becomes pure pleasure.

### People

The human factor makes the difference.

Reliability A ride you can trust.

## Efficiency

Pioneering efficiency for every step you take.

## Iconic Achievements

Over 20 years of knowledge, experience and accomplishments.

## Customization

Tailored to your needs.

## Transit Management

The smart way through the building.

## About TRP Group Overview

The TRP Group is a leading expert and provider of related services for elevators, escalators, and moving walkways. It was founded in Moscow and has been operating successfully for more than 20 years. Until September 2022 the company was known as Schindler Rus.

Our company is at the forefront of industry innovation, working on pushing the boundaries of technological engineering, while having a strong focus on safety, comfort, efficiency and reliability in Russia.

We're a leading employer in the industry, with hundreds engaged employees enabling mobility within the urban environment.

We have proven network in all regions of Russian Federation, as well as solid maintenance team and research and development center.



## About TRP Group Overview

Our installations can be found in many well-known buildings throughout Russia, including office and residential buildings, airports, shopping centers/retail establishments and specialty buildings.

The GTP Group installed with full service cycle of elevator equipment design, delivery, installation, modernization and maintenance for more than 8000 units in Moscow, St. Petersburg and other regions.

We have solid partnerships with largest actors of construction market in Russia. Own warehouse of spare parts and rigging equipment for scaffold less installation

We ensure adapted approach, for equipment of leading Chinese manufacturers and its warranty and post-warranty service via our Top Range Excellence process

## About TRP Group Principal partners and customers





**AB** Development









#### **Trusted and Reliable**

https://www.mr-group.ru/ https://capitalgroup.ru/ https://donstroy.moscow/ https://abdevelopment.com/ https://stonehedge.ru/ https://www.lsr.ru/ https://www.etalongroup.ru/ https://www.pik.ru/ https://pioneer.ru/



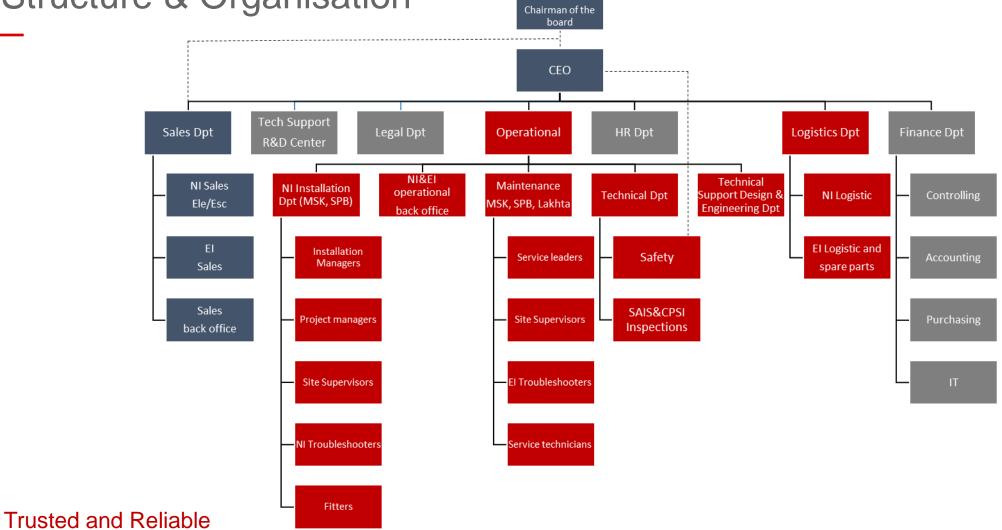
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#### **Trusted and Reliable**

## About TRP Group

## Structure & Organisation



Board of directors

## Markets The Potential

Russian market has potential of 35000 of Elevators and 1100 Escalators per year and is by far the largest market in Europe. To compare German market is 14000 and French 11000.

The TRP Group is proven leader of High Rise market in Russia and Europe. Two of Europe's tallest towers are located in Russia. Both projects were successfully completed by experienced TRP teams.

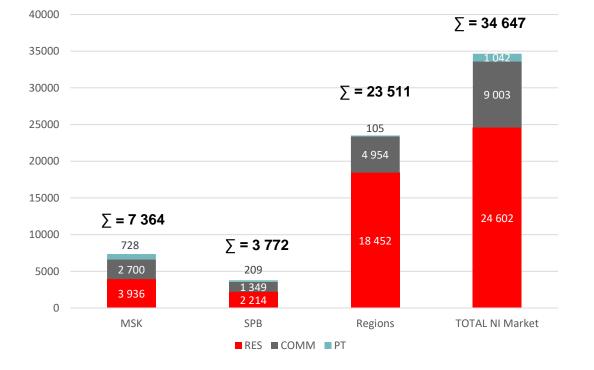
**Lakhta Center** in Saint Petersburg https://lakhta.center/en/ Europe's tallest skyscraper and the world's northernmost high-rise. The multifunctional complex housing Gazprom's headquarters and public areas is based in St. Petersburg on the coast of the Gulf of Finland.

**Federation Tower** in Moscow http://fedtower.ru/presentations/Federation%20Tower.pdf The highest peak in Moscow. The second highest peak in Europe.

#### General Introduction | External Communication | November 2022

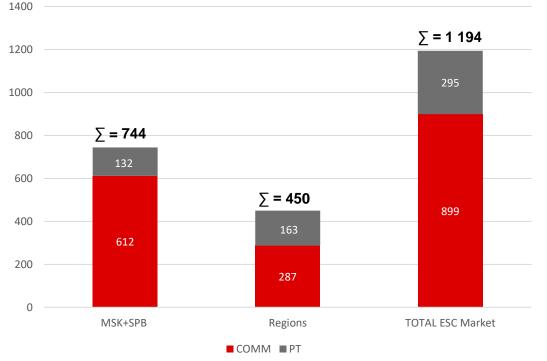


## New Installation



Elevator market volume by region, units

#### Escalator market volume by regions, units



source: European Lift Association

Escalator market in Russian reached 1,194 units. The commercial segment is about of 75% of total escalator market. 

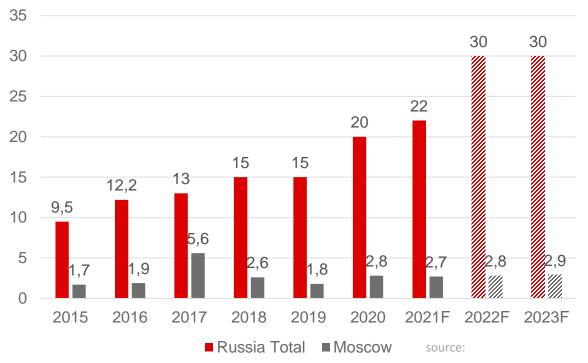
At the end of 2021 elevator market in Russia (new installation) is estimated about 35 000 units

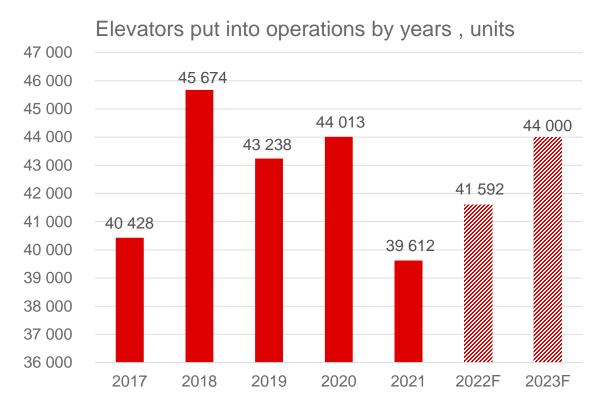
#### **Trusted and Reliable**



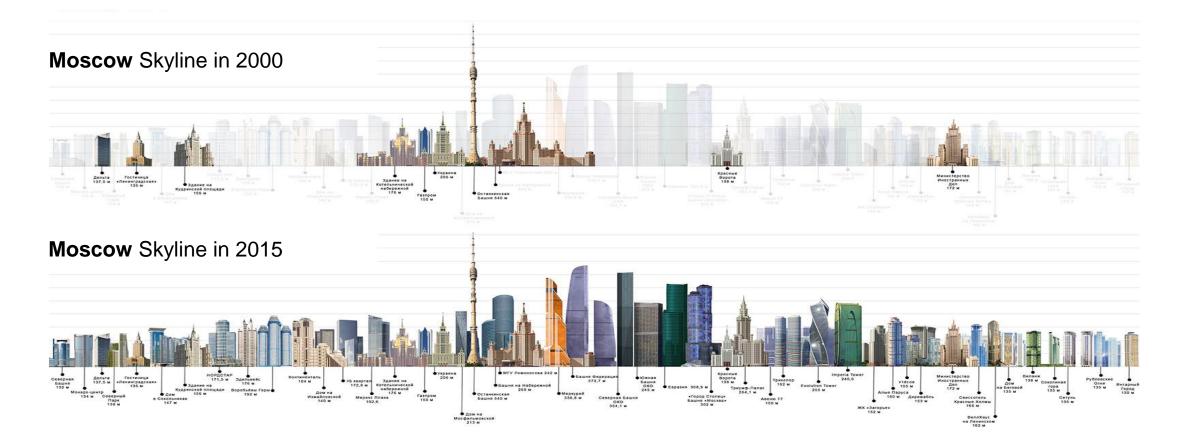
## Target Markets Replacement and modernization

Planned number of elevators for replacement and modernization, thousand units





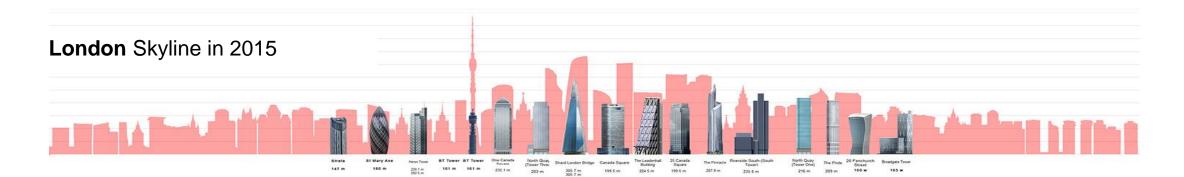
## High-Rise Market Development from 2000 to 2015



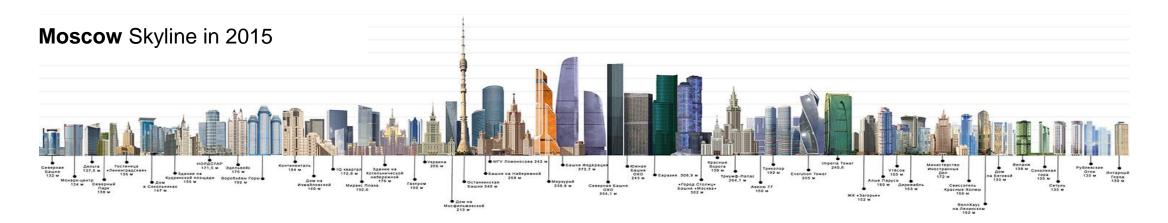
#### **Trusted and Reliable**

## High-Rise Market

## Competition between London and Moscow



TRP



#### Trusted and Reliable

## Our high-rise expertise. Your vision, our passion.

We start by listening to you, to understand your vision, your imagination and then marry this with our passion to provide you with the most effective solution for your future building

#### Excellence

 Everything we do is to the highest quality and safety standards, honoring the long tradition of excellent Swiss craftsmanship.

#### Environments

Tomorrow's green buildings and efficient transportation systems are key to developing harmonious urban environments.

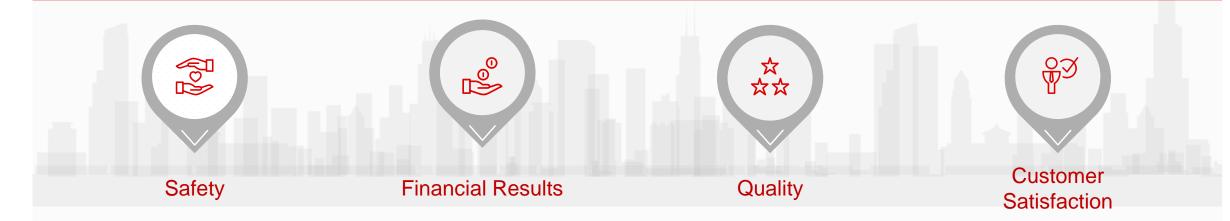
#### **Evolution**

We continuously invest in and develop new, innovative and smart solutions so as the cities and buildings develop, so do we.



## Top Range Excellence Objective

Enable People & Organizations to manage Large projects according to best demonstrated practice in order to improve:





Successful management of large projects to strengthen TRP Group's market position in Large Project Business and increase profitability

Continuously improve TRP Group's capabilities to delight customers and grow TRP Group's Large Project business

## Top Range Excellence Successful management of Large Project



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## Top Range Excellence

Environment and coverage of TRP Group Large Project Business

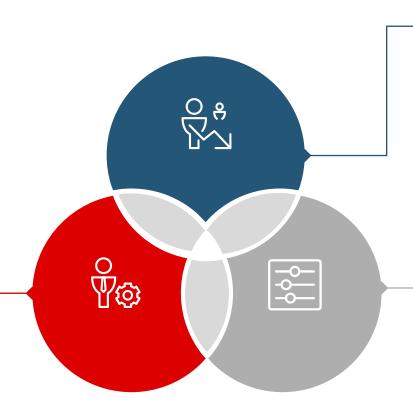
#### **Business Process**

- >> Master Process for Large Projects
- Project Planning
- >>> Task allocation (who is in charge)
- >>> Definition of Hold points (sign offs)

#### >> Work instructions

- >>> Checklists, Templates
- >>> Sample Letters
- >>> Training and Certification

#### **Trusted and Reliable**





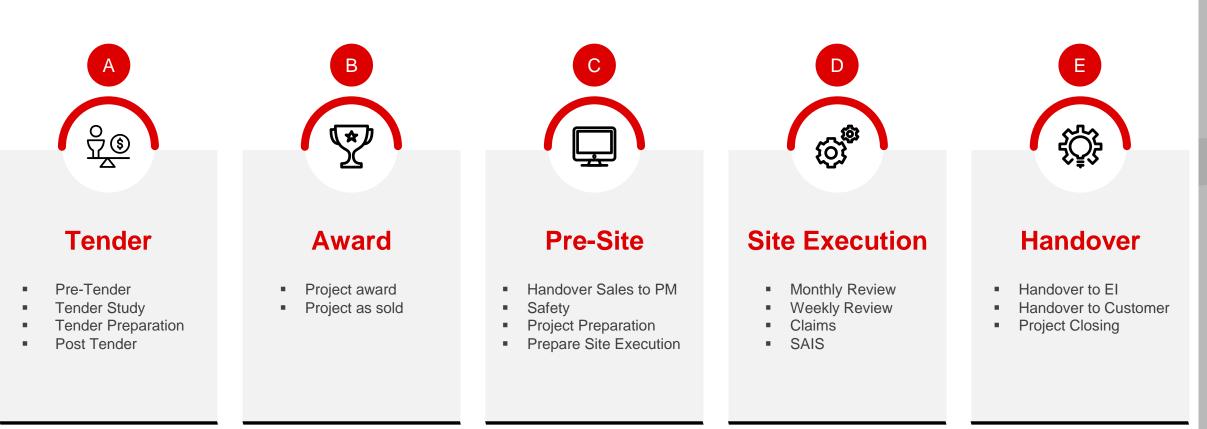
Quality Assurance

## Top Range Excellence Areas of Intervention

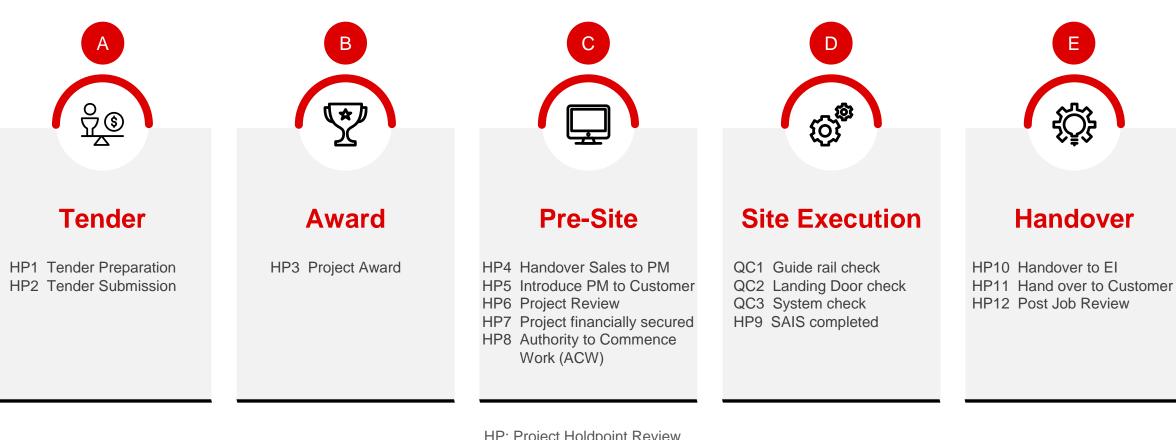


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## Top Range Excellence 1st Dimension – Business Process



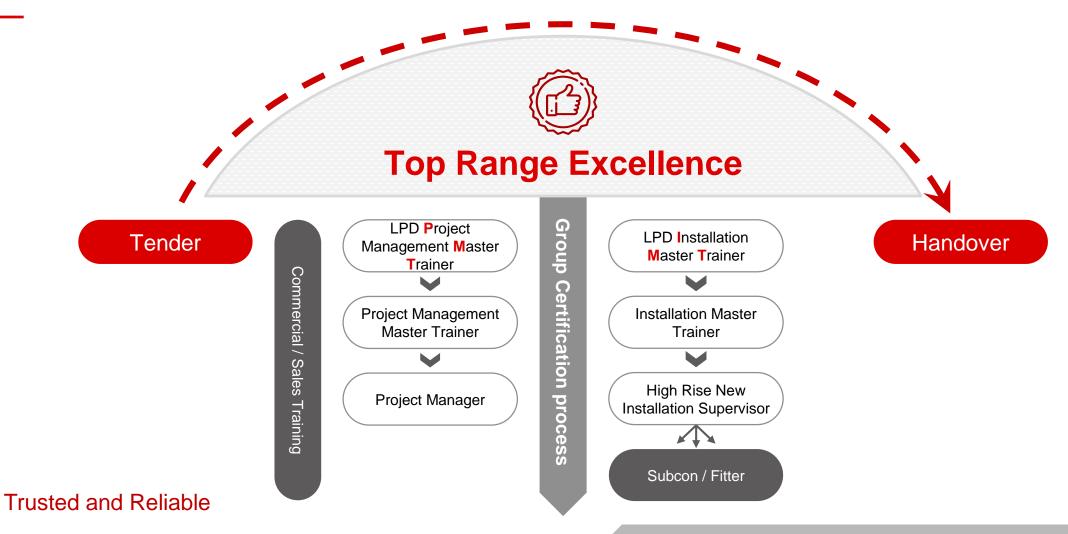
## Markets 2nd Dimension – Quality Assurance



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HP: Project Holdpoint Review QC: Technical Holdpoint Review

## Top Range Excellence 3rd Dimension: Global Training & Certification Cascade



## Top Range Excellence Global HCR Development Objective

Assure Fulfillment HCR (Human Capital Readiness) for Large Projects according to Top Range Excellence:



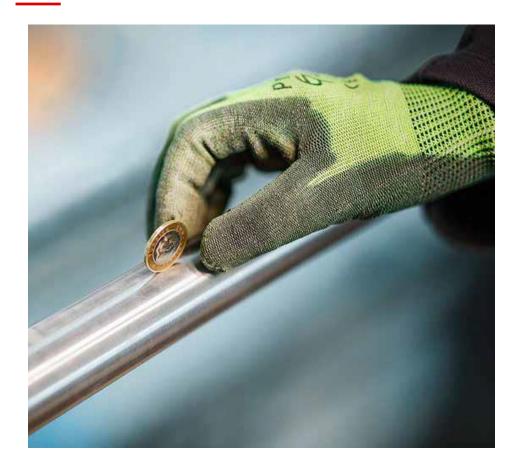
#### Trusted and Reliable

## The scaffold-less installation methodology for High-Rise A global standard of installation excellence



#### **Trusted and Reliable**

## Ride Quality What is "Ride Quality"?



Ride quality, as defined by ISO 18738-1, refers to sound levels in the car and vibration of the car floor in an elevator system relevant to passenger perception.

The ISO ride quality specifications quantify an otherwise subjective experience of comfort, providing measurable standards of sound and vibration in an elevator system.

Vibration is measured in mg, and it is equal to the physical value «acceleration» which has the dimension of vertical and horizontal, while noise is the physical value of «sound» which is measured in dB.

"Ride quality is not a mystery; it is a technology that lies in the design and installation of every bolt and nut in an elevator."

Jonathan Huang, Master Trainer of Installation

## **Ride Quality** Noise and vibration

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Ride quality refers to the perception of the elevator travel by the passenger and by other persons in the building. Ride quality is defined by the level of acceleration and noise acting on the passenger as well as on the noise caused by the elevator movement in the building.



#### ISO 18738-1

## Sound Level in Car Sound pressure level measured

ISO 18738-1 (measurement of ride quality lifts) specifies requirements and methodology for the measurement and reporting of lift ride quality during lift motion. It does not specify acceptable or unacceptable ride quality.





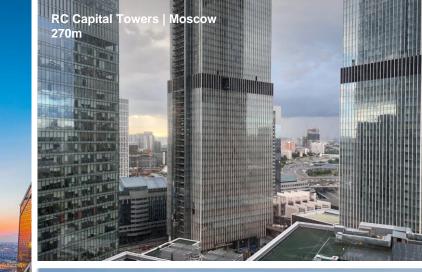
Lakhta Center | Saint Peterburg

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BC Oruzheyniy | Moscow 165m BC Federation Tower | Moscow 370m

Moscow University | Moscow



BC Nordstar | Moscow 172m







## **Proven Expertise** Landmark Projects in Russia





#### Height: **Elevators:**

10 x S7000 (8 m/s) 4 x S5400 14 x S3300 PORT traffic control E-Vision

370m, 95 stops



#### BC Lakhta Centre, 2018

462m, 87 stops 26 x S7000 (incl DD) 10 x S5500 4 x S3300 PORT traffic control Lobby Vision E-Vision

172m, 41 stops 12 x S7000 (DD) 5 x S5400 PORT traffic control Lobby Vision E-Vision

**Escalators:** 2 x S9300

BC Nordstar, 2009

Height:

Elevators:

ROSNEFT



#### **BC Oruzheyniy 2015**

Height: Elevators: 165m, 28 stops 27 x S7000 9 x S5400 2 x S2600 PORT traffic control Lobby Vision E-Vision



#### **RC Capital Towers**, 2022

Height:

Elevators:

270m, 65 stops 18 x S7000 27 x S5500 PORT traffic control

**Escalators:** 16 x S9300

Escalators:

Height:

Elevators:

4 x S9300

General Introduction | External Communication | November 2022



## Proven Expertise Landmark Projects in Russia



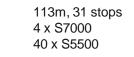
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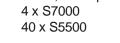
#### RC Fili Grad-1, 2014

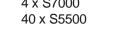
Height: Elevators:	101m, 28 stops 13 x S7000 5 x S5400 6 x S3300
Escalators:	14 x S9300
Moving walks:	6 x S9500

BC Vodniy, 2014











#### Mall Solaris, 2020

**Elevators:** 36 x S5500 **Escalators:** 32 x S9300 Moving walks: 12 x S9500



#### Moscow University 2019

182m, 36 stops Height: 22 x S6500 (MOD) Elevators:



#### BC Arcus IV, 2022

Height: 50m, 14 stops Elevators: 5 x S7000 2 x S5500 PORT traffic control Lobby Vision E-Vision Turnstile integration