



# Service Level Agreement to the Service Order for Wavelength

- 1. Service Level Guarantees
- 1.1. Neterra complies with the guaranteed levels of the technical parameters specified in the relevant Service Description calculated on a monthly basis (Service Availability Time).
- 1.2. Service Availability Time (Availability Coefficient) is expressed as a percentage and is calculated according to the following formula:

$$L = \frac{TT - dT}{TT}$$

where:

L – availability coefficient (100% in case of uninterrupted service availability over a period);

TT - total time for the calculated period;

dT - total downtime, during which the Service was not available for use over the calculated period.

1.3. Mean Time To Restore (MTTR) is a monthly average time taken to restore the service. The length of each service outage on a specific service is totaled at the end of each billing month and divided by the corresponding number of service outages for that service for which a Trouble Ticket was opened during that billing month).

$$MTTR within amonth = \frac{\sum (TroubleTicketResolvedTimestamp - TroubleTicketOpenedTimestamp)}{\sum (TroubleTicketS)}$$

MTTR is calculated by dividing the aggregate time to restore the service in a calendar month by the total number of outages identified by the Neterra's Trouble Ticket system in that calendar month...

- 2. Service Activation and Support
- 2.1. "Services Support" Department of Neterra consists of two teams:
- a) Network Operation Center (NOC) monitoring, operational management and resolving of problems in Neterra's network and with Neterra's Services;
- b) Network Management Team (NMT) activation and change of Services, in-depth analysis and resolving of specific problems, changes in the Network architecture, aiming at improvement of Service quality.
- 2.2. Customers can contact Neterra's NOC and NMT teams at the phone numbers in the Escalation table given below.
- 3. Service Request and Opening of Trouble Tickets
- 3.1. In case of problem identification, Customer is obliged to inform Neterra's engineer on duty immediately.
- 3.2. Upon receipt of Service Request the engineer on duty opens a trouble ticket and collects the following information:





- a) the exact time at which the request was made;
- b) the name of the requesting Customer's representative;
- c) the nature of the request.
- 3.3. Customer is entitled to receive adequate information (in direct call or via e-mail) for the restoration works and problem resolution activities.
- 3.4. For maximum efficiency in problem localization and problem resolution Neterra's NOC and NMT engineers may request pro-active assistance by Customer's technical team monitoring and announcing of results from actions, performing of testing configurations, etc. Customer is obliged to assist in such matters.
- 4. Preventative Network Maintenance
- 4.1. Neterra performs planned preventative Network maintenances, which are announced to Customer in written 5 calendar days in advance.
- 4.2. Preventative maintenances as per this Article cannot be more than 2 service-affecting events per month and 3 non-service affecting events per month.
- 4.3. Preventative maintenances cannot exceed 6 hours duration and service interruption is limited to 1 hour maximum.

Provided the Customer is informed according to the terms and conditions in this Article, Customer may not claim penalties for such events.

### 5. Procedures for Problem Escalation

In case particular problem is not resolved in a satisfactory, or timely manner, Customer may contact and seek assistance by a higher management level in Neterra's company structure, as follows:

Level	Problem	Level of Responsibility	Contact Information as per date of Contract signature
1	Critical, major, partial or warning problems, as well as all other types of requests	Engineer on Duty	24-hour telephone: Mobile: +359 888 929 966 Fix: +359 2 974 3311
2	Critical or major problems, that cannot be resolved by the engineer on duty	Head of NOC	managernoc@neterra.net Mobile: +359 887 523 158
3	Critical problems, that cannot be resolved by the Head of NOC	Head of Technical Department	headofoperations@neterra.net Mobile: +359 882 793 986
4	Critical problems, that cannot be resolved by the Head of Technical Department	Managing Director	mdirector@neterra.net Working hours: +359 2 975 1616

#### 6. Access to Information

Customer has full and unrestricted access to information, concerning Customer's Services, via access to automatic systems for Service monitoring or directly by Neterra's





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- 7. Table for Service Credits
- 7.1. Wavelength Service Credits
- 7.1.1. Services for Bulgaria
- a) SLA metric for Protected Services 99.9%.
- b) SLA metric for Unprotected Services 99.7%.

Service Credits in case of deviation from the guaranteed technical availability parameters as a % from the monthly Service (and related Services) fee according to the Service Protection Class

Availability Protected Services		Availability Unprotected Services	
Availability >= 99.9%	n/a	Availability >= 99.9%	n/a
99.9% > Availability >= 99.7%	5%	99.9% > Availability >= 99.7%	n/a
99.7% > Availability >= 99.3%	10%	99.7% > Availability >= 99.3%	5%
99.3% > Availability >= 98.8%	15%	99.3% > Availability >= 98.8%	10%
98.8% > Availability >= 98.3%	25%	98.8% > Availability >= 98.3%	15%
98.3% > Availability	50%	98.3% > Availability	25%

### 7.1.2. Services for rest of countries

- a) SLA metric for Protected Services 99.8%.
- b) SLA metric for Unprotected Services 99.5%.

Service Credits in case of deviation from the guaranteed technical availability parameters as a % from the monthly Service (and related Services) fee according to the Service Protection Class

Availability Protected Services		Availability Unprotected Se	ervices
Availability >= 99.8%	n/a	Availability >= 99.5%	n/a
99.8% > Availability >= 99.3%	5%	99.5% > Availability >= 99.3%	3%
99.3% > Availability >= 98.8%	10%	99.3% > Availability >= 98.8%	8%
98.8% > Availability	15%	98.8% > Availability	12%





## 7.2. MTTR Credits

SLA	MTTR
Unprotected services, Metro area	6 hours
Unprotected services, National network and Crossborder lines	8 hours
Protected services, Metro area	2 hours
Protected services, National network and Crossborder lines	4 hours

MTTR	Credit per service
MTTR >= SLA Metric for the respective service	No Credit
MTTR < SLA Metric for the respective service	10% of the MRC for each service that experienced an outage (as documented in the Neterra's Trouble Ticket System)

### 8. Other Conditions

- 8.1. Neterra is responsible for the quality and the reliability of the Services up to the specified demarcation point (handover point). In case it is not explicitly specified in the Service Description, or in the Service Order, the Service is provisioned at edge port in Neterra's network.
- 8.2. Neterra does not bear responsibility for Service quality degradation caused by problems in the networks of third parties, including partnering carriers (subcontractors of the Customer), local loop operators or the Customer.

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