

Tilgin

Services Description Customer Support Portfolio

2012

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1. The Service

Tilgin’s new Support Service portfolio enables increased flexibility in service levels which give the customer a possibility to choose higher or lower service levels depending on their need.

The three different service packages, **SILVER**, **GOLD** and **PLATINUM**, start from the most basic support to a support level where Tilgin take over a large part of the customer responsibility for the support obligations and by that to a large extent reduces the customer risk.

In addition to the above three (3) different support levels, Tilgin has also created a separate support package, Stretch Support, to address products and software that normally has gone end of life or end of support.

Looking at the full range of Support options Tilgin can tailor the elements of the service portfolio to fit each and every specific customer need and requirement.

Tilgin’s Support Service portfolio gives a flexible and reliable set-up, which will be delivered by the persons who designed and developed the products included. The service package consists of a wide range of basic elements and in addition optional parts can be included as you see fit.



The below documentation is structured to describe the total four (4) support packages, SILVER, GOLD, PLATINUM and STRETCH to give information and understanding of the services and how they can be contracted.

1.1 SILVER support level

The Silver service package is designed for customers who has limited support needs or is feeling that the right competence is situated in-house. This type of customer is willing to assume the majority of the operational risk and by that must possess the correct competence in the organization themselves to be able to handle required actions.

With this service package, Tilgin provide access to our knowledge base (web support via FTP access), access to our trouble reporting tool JIRA, as well as providing new software (SW) maintenance releases over a web interface.

The customer can access and report trouble-tickets via the JIRA system, but Tilgin does not include any commitments upon service lead-times.

A customer selecting this service package intends to handle most maintenance and troubleshooting activities by themselves and with in-house competence.

The SILVER support service provides fundamental support and is designed to meet this type of demand. The service level requires that the customer's own support organization has to be more proactive and competent compared to the later described service levels (GOLD & PLATINUM).

1.2 GOLD support level

The GOLD support level relates to what most customers have today. The customer is responsible for e.g. fault identification, initial trouble shooting and error reporting in JIRA.

This support level has the same content as SILVER but with the addition of remedy/resolution lead-times, support 8/5 (office hours, Monday to Friday), TAC mail option and access to Tilgin's SW feature releases.

Increasing the service level from SILVER to GOLD will add a significant value to the customer by

- Improved lead-times in all deliverables.
- Increased Tilgin responsibility in which Tilgin assume more risk.

- Adds another communication dimension with the Technical Assistance Center (TAC) on top of already provided JIRA tool.

1.3 PLATINUM support level

This is Tilgin's most extensive support service level which is intended for customers who have higher requirements on supplier support or that have taken a decision to outsource the responsibility for the support in general and the ACS performance in specific.

The PLATINUM service level contains and delivers, in addition to the GOLD level,

- faster recovery lead-times
- 24/7 phone support
- ACS Health Check (normally a separate service element)
- assigned PS engineer for closer business relation
- limited on-site support
- yearly support re-view on customer premises (locally)

In the PLATINUM support package Tilgin give the customer the option to focus more on other parts of the overall support need, while Tilgin take on the full responsibility for the ACS Health Check Service.

Increasing the service level from GOLD to PLATINUM adds significant value to the customer by

- Tilgin providing dedicated PS engineer.
- Possible OPEX savings in internal support organization by Tilgin taking on a larger scope of service (e.g. via the ACS Health Check service element).
- Significantly increasing the Support commitments via the 24/7 phone support option.
- Shorter resolution lead-times which will generate higher end-user satisfaction

1.4 Stretch support

Tilgin's Stretch support service is a package that extends support beyond a product or a software End-of-Support date. The Stretch support service is offered in combination to a limited selection of Tilgin's products or SW levels. In comparison to the rest of the support portfolio the Stretch service is limited in scope and obligations.

Stretch support can be considered either if a product has reached End-of-Support state or if an existing product has an existing SW release that is older than two (2) versions behind the latest deployed and released version. E.g. SW version 1.9 is the latest released and deployed version, but the customer has version 1.6 installed. This means the installed version is three releases behind the latest one and by that could be considered for Stretch support.

Please note that it will be on a case-to-case basis that Tilgin judge if it is possible to support a product which has gone End-of-Support.

In each case when Tilgin need to dimension and plan for a Stretch service level a customers' specific needs and requirements will always play an important role. That input together with both technical possibilities and commercial aspects will be taken into considerations before coming to a conclusion. In each case it will be a separate discussion around customer requirements vs. Tilgin's possibility to support and based upon that a decision is taken.

A life cycle of a product is typically determined by the vendor, Tilgin, but such decision may not match with operator's requirement and needs. The Stretch support service will provide an option of extending Tilgin's support obligation beyond the End-of-Support date. The level of service will be more limited than available in the other support service packages (SILVER, GOLD and PLATINUM), but it can represent a short term cost effective gap filler service before investing in new infrastructure (equipment).

Introducing the Stretch support service into the operation adds the following benefits and values to a customer by

- Extend the life of a product.
- The customer can maintain performance upon products passed End-of-Support. Extend the product life cycle.
- Push CAPEX investments ahead of time and make use of already existing infrastructure in a better way.

2. Customer benefits & value

The telecom arena in general and the broad-band area in particular have changed dramatically over the last few years. For operators, new end-user demands as well as the technology shift which require an increased internet connections are putting pressure upon the operator to deliver more, faster and better services and that to lowest possible cost with the most reliable products and infrastructure.

Operators need to find new ways to secure revenues streams, reduce churn and in addition reduce operating costs.

For maintaining existing customer stock as well as to attract new potential end-users, customers need to develop its portfolio of internet services. And by that also make sure the right products are installed and integrated to cater for such need.

To succeed according to the above customers need to

- Providing a full range of modern infrastructure and attractive offers (reduce churn)
- Providing a faster and better end-user support organization to handle and service the end-user demands on technical support (secure revenue streams and reduce churn)
- Make sure that existing infrastructure and equipment are up to speed in comparisons with today's demands and that both quality and service keep a high standard throughout the product life cycle.

Faced with the changing technology and business demands, operators need to make strategic choices to address the challenges of:

- maintaining high network quality
- managing network complexity
- improving operational efficiency
- acquiring the right competence

The challenges are similar for most operators but the way to meet them differs depending on customer environment and maturity. Tilgin's support service portfolio is built in a modular way to meet different customer demand.

2.1 Reduced operational cost – cost efficiency

By access to Tilgin's support organization means that customers always have a place to turn to if a problem should occur. By partnering with Tilgin, the customer can examine the efficiency of its own organization and thus reduce the costs of in-house support. Tilgin can offer various levels of service to match each specific need.

2.2 Risk mitigation

Introducing new technologies, elements, products and SW into the network can affect overall network performance. With Tilgin's full service portfolio, customers can benefit from remote technical support to on-site engineers that will help and support the smooth transition into a functional and more stable network where Tilgin products are playing a major role.

Tilgin's highly skilled support engineers have typically been involved in the project implementation/integration phase and will by that have the required knowledge about the products and interconnection point that is needed for delivering the needed product support on a continuous basis. With this knowledge, they will handle support issues and related fault handling to ensure the fastest possible response and resolutions.

By signing up for a Tilgin support service the customer reduces the risk of not being able to take care of an emergency situation. If an emergency should occur, its impact is minimized due to Tilgin's dedicated personnel that are ready to step in and support. The financial risk is also greatly reduced, since the customer know the cost of support from the outset. Support service is an insurance policy.

Building a secure and stable broad-band solution requires large investments. With a Tilgin support service in place, the customer safeguards the investment of both products and related SW.

2.3 Improved network performance

To keep products performing to their full potential, operators need to ensure new features and market adaptations are fully utilized in relation to end-user demands. However, changes to the products and its inter-connection points can impact its performance.

With the support service portfolio and optional elements Tilgin can assist and help customers introduce new technologies (through Tilgin's Integration services) to the existing environment. The support engineers, which normally is doing support remotely, can also be located at customer's premises to identify and react quickly to upcoming faults which will keep the network stable.

The support experts can also assist in implementing new software updates/releases to ensure correct loading and levels. Having consistent software releases in the products contributes to attaining the best possible network performance.

2.4 Access to competence

New end-user demand, technologies and products require new skills, but it can take time for operators to acquire the necessary competence and experience. With the Support service portfolio, Tilgin can offer support to bridge the gap.

Depending upon the agreed support level, customers has various options for accessing Tilgin's expertise. In addition to this (included in PLATINUM support package) Tilgin can assist on-site and thus ensure face-to-face that the customer's immediate competence needs are covered.

3. Services content

As can be seen from the below, Tilgin's support service portfolio consists of a number of service elements that complement each other during the delivery. All depending upon what product(s) the service is related to (CPE or ACS)

Please note that some optional add-on elements only are applicable and can be combined with some of the base packages (SILVER, GOLD or PLATINUM).

SERVICE ACTIVITY	SILVER (S)	GOLD (G)	PLATINUM (P)	STRETCH
GENERAL SUPPORT ELEMENTS				
JIRA System Access 24/7	X	X	X	X
Bug Reporting & Issues Tracking	X	X	X	X
Knowledge Base Access (SW & Tech Documents)	X	X	X	X
Suppliers Support Portal (SELF HELP)	X	X	X	X
TAC Mail Access		X	X	X
E-Mail Support (08.00-17.00 CET)		X	X	X
Phone Support 24/7			X	
SW Maintenance Releases (CPE/VCM)	X	X	X	
SW Feature Releases (CPE/VCM)		X	X	
SW Upgrades & Implemenataion (VCM)			X	
SERVICE LEVEL LEADTIMES (SLA) per Service Level				
Service Level Leadtimes (SILVER)	X			
Service Level Leadtimes (GOLD)		X		
Service Level Leadtimes (PLATINUM)			X	
Service Level Leadtimes (Stretch)				X
PREMIUM SERVICE ELEMENTS (incl. only in Platinum package)				
VCM Health Check Service			X	
Assigned PS Engineer			X	
On-Site Support (Limited / Year)			X	
Yearly Support Re-View (On Site)			X	
OPTIONAL ADD-ON ELEMENTS, ADDITIONAL FEES APPLY				
Hosted VCM Solution	X	X	X	X
Training (Product & Best Practice)	X	X	X	X
Migration Services	X	X	X	X
Integration Services	X	X	X	X
RMA Screening Equipment		X	X	X
SW Customizations		X	X	X
Fast Track Service		X	X	X
Local Support (On Site)		X	X	X
VCM Upgrading Service		X		X
VCM Health Check		X	(incl. (P))	X

3.1 JIRA Tool & Access

JIRA is Tilgin's tool and interface regarding registration and follow-up on generated trouble tickets. JIRA provide a single interface through which all customer service requests are handled. This is done via a Web-based interface and is part of all three

(3) base packages. When a customer has signed a support agreement with Tilgin, Tilgin will create a user account and access credentials for that specific customer.

Working through and via JIRA, Tilgin guarantees fast assistance from its engineers, regardless of their location.

3.2 Self Help / Supply Portal

When entering into a support service agreement a customer will receive access to Tilgin's Self Help module, a location where information like guidelines, processes and released SW are stored for customer usage.

Please note that depending upon service package signed (SILVER, GOLD or PLATINUM) the information at the storage place might differ depending upon service levels and obligations set out in each of the agreements.

3.3 Software Maintenance Releases

The software maintenance releases (SW updates) provide the customer with continuous updates from the product line development organization with purpose to proactively prevent software faults from affecting the customer products. The service also delivers the customer with software corrections and bug fixes that might be necessary as a result of a reported trouble ticket in JIRA.

The right maintenance releases is important to keep products updated and running at their best performance. Software updating - software bug fixes – is thus important for the continuous quality of the products. The corrections are packaged and ready to be rolled out at customer products and stored at the Self Help location provided at the time of signing an agreement.

3.4 TAC Mail

TAC mail is a complementary communication channel that can be used by GOLD and PLATINUM customers. In short it is an e-mail address that goes straight into the

technical support organization and by that addresses all relevant experts at the same time.

Please note that TAC mail is just a complement to JIRA as mentioned above. TAC mail will never be used to follow up an issue, this must be done through JIRA.

3.5 Phone Support (24/7)

For PLATINUM customers Tilgin has created an additional way of communicating. This time a customer can use a direct phone number directly addressing a personal interface within Tilgin's support organization. This number can be used 24/7 and by that the customer once again can shorten down the lead-times to remedy and restoration.

3.6 Software Feature Releases

A SW Feature Release is a software code compilation or other solution provided by Tilgin encompassing, in addition to possible error corrections (bug fix), an increase in functionality of the relevant product(s).

As with the SW Maintenance Release the Feature Release will be up-loaded on the Self Help location as soon as released from Tilgin's development department.

3.7 ACS Health Check

A ACS Health Check program is to ensure that the customer's installed ACS system is as functional and streamlined as possible.

Tilgin's experience shows that it is not uncommon for customer's ACS systems to quickly become outdated in regards to software release & critical operational settings. This can, and in the long run will, cause operational problems that can be expensive and time consuming to resolve.

This service element is tailored to move over the responsibility to Tilgin's Professional Services team to perform the regular ACS health check.

Each month, one of Tilgin's professional services professionals will login to the customer ACS (from remotely) and run a protocol for verifying the general health of the system.

Prior to such log-in, Tilgin's representative will schedule a time-slot within the customer's IT maintenance window to eliminate operational disturbance and guarantee a secure process.

This service element is only included in the PALTINUM support, but can be contracted separately to GOLD level as well.

3.8 Assigned PS Engineer

Included in the PLATINUM support package the customer has access to a “personal interface” within Tilgin’s support organization.

The appointed person, the single point of contact will be the customer access point for all issues and matters that will be brought up within the contractual obligations.

By having an assigned engineer the customer will have an interface that in detail knows the products, environment and network behavior. That will generate a closer contact and even decreased response times due to less/shorter start-up session to receive the complete information regarding a possible issue.

3.9 On-site Support (LIMITED)

An additional alternative within the PLATINUM service package is to have a Tilgin support engineer locally on site. The normal process and handling of support is done remotely through our ACS access, but from time to time the customer might value to have an engineer side-by-side at the local office.

The on-site support activity will be triggered upon a customer request which need to be agreed between customer and Tilgin prior to start. When done a Tilgin engineer travels to the local site and start to work with customer personnel upon arrival. The obvious value here is the close co-operation with customer personnel for e.g. transfer of know-how and best practices.

3.10 Yearly Support re-view (ON SITE)

Once every year Tilgin will send a relevant technical resource to customer site to review the support delivery agreement as a whole. The purpose with this yearly on-site meeting is to review what has been good, what can be improved and to listen to general feed-back upon the support service.

The point is to take learning from previous period(s) and try to improve the coming one. It has been proven that on-site technical follow-up meeting(s) will generate a much more common understanding, for both parties, in comparison to a remote one.

Note that this is meant to be a technical and not a commercial meeting.

4. Service Levels

Attached below are Tilgin’s service level commitments belonging to each Support service package (SILVER, GOLD and PLATINUM).

Response time: CPE						
Serverity	Service Level	Initial reply	Share	Remedy (temp fix)	Share	Resolution (final fix)
Critical	Platinum	SBD	95%	4 days	95%	15 days
	Gold	NBB	85%	5 days	85%	20 days
	Silver		BEST COMMERCIAL EFFORT			
High	Platinum	SBD	95%	8 days	95%	25 days
	Gold	NBD	85%	10 days	85%	30 days
	Silver		BEST COMMERCIAL EFFORT			
Low	Platinum		BEST COMMERCIAL EFFORT			
	Gold					
	Silver					

Clarification: SBD – same business day, NBB – next business day

Response time: ACS						
Serverity	Service Level	Initial reply	Share	Remedy (temp fix)	Share	Resolution (final fix)
Critical	Platinum	SBD	95%	4 days	95%	14 days
	Gold	NBB	85%	5 days	85%	20 days
	Silver		BEST COMMERCIAL EFFORT			
High	Platinum	SBD	95%	10 days	95%	21 days
	Gold	NBB	85%	12 days	85%	Next Release
	Silver		BEST COMMERCIAL EFFORT			
Low	Platinum		BEST COMMERCIAL EFFORT			
	Gold					
	Silver					

Note that for Tilgin to be able to commit to attached service level agreements it is required and mandatory that Tilgin will have remote access to all products that are signed under each agreement.

A consultation/operational/maintenance request is classified as severity Low. However the ambition is to answer within a reasonable time frame.

For the Stretch support service package, Tilgin can only commit to “Best Commercial Effort” as best possible lead-time.

Response time: CPE & ACS						
Severity	Service Level	Initial reply	Share	Remedy (temp fix)	Share	Resolution (final fix)
Critical	Stretch	BEST COMMERCIAL EFFORT				
High	Stretch	BEST COMMERCIAL EFFORT				
Low	Stretch	BEST COMMERCIAL EFFORT				

As earlier stated in headline 1.4, Tilgin Stretch support service is a package brought forward to extend support upon products that already have passed end-of-support or that do not have the right SW versions installed (as explained in head-line 1.4).

4.1 Severity definitions

Each generated trouble-ticket reported in JIRA will be connected to a severity class. The severity class will dictate what prioritization order will be given to each ticket (in comparison with other generated tickets in the system).

The initial classification will be done by the reporter (customer), but Tilgin has the right to re-evaluate the severity class based upon reported content in relation to each severity definition.

Severity classification will also be connected to a specific service lead-time stipulated in above SLA tables.

4.1.1 Critical severity

Critical issues are applicable for business critical systems, i.e. the customer's business suffers significantly. The following situations are classified as severity level critical:

- A complete system failure.
- A major disturbance in the product(s) functionality resulting in an overall capacity decrease of more than 30% of total product population.
- A complete loss of the ACS product and solution

The presence of a Critical error implies that the product(s) cannot be used at all, or that the product(s) disrupts the functionality of the designated solution to the extent that the designated solution cannot be used, in effect a "showstopper".

The critical level is not applicable at a node/system failure that is compensated by some sort of network redundancy (e.g. but not limited to ACS HA solution).

4.1.2 High severity

A High severity error means that the error seriously affects the functionality of the product(s) but can be circumvented so that the product(s) can be used or implies that a program or a function in the product(s) cannot be used at all, but other programs or functions remains unaffected.

Severe problem or disturbance affecting a specific area of functionality (but not whole system). Serious disturbance with impact given to end-user services. The following situation is an example of severity High:

- A disturbance degrading performance of the product and/or parts of the system with minor impact to the system.

4.1.3 Low severity

A severity Low error has no significant effect on the functionality or usability of the product(s) and/or solution. The following situations are examples of request type low:

- disturbances that do not affect traffic or causes any loss of service
- incorrect system printouts
- documentation faults

Consultation issues/requests like operational and maintenance questions are classified as severity Low. E.g. assistance on issues not directly related to disturbances in product functionality but related to the day to day operation.

4.2 Initial reply, Remedy and Resolution definitions

Following is a description of the various definitions attached to Tilgin's Service Level commitments as per table in Head line 4. Service Levels.

4.2.1 Initial reply definition

Initial reply means the elapsed time from when customer reports an error in JIRA to the time at which Tilgin provides customer with a specific case number and an acknowledge for the reported error(s).

4.2.2 Remedy definition

A remedy is the action(s) required to solve a problem by limiting its effects. The aim is to have the system functioning at an acceptable level.

Remedy means a bug fix which has not been formally tested and/or released but is provided to relieve or circumvent an error.

A remedy might, for example, be:

- Selective disabling of functionality; or
- Manual restart/reload; or
- Return to previous SW configuration(s).

4.2.3 Resolution definition

Resolution means, the action(s) required to prevent the reoccurrence of a problem and/or any underlying causes of a problem. When a restoration is implemented, the system is restored to the state it was in before the problem occurred.

The Resolution Service Level Agreement (SLA) means the elapsed time from when Tilgin has been able to reproduce an error and an error category has been assigned to an error, until the time the error is resolved or a Remedy action or workaround has been provided.

5. Requirements and Responsibilities

For Tilgin to deliver the stipulated and agreed support service the customer personnel must be skilled enough to operate and manage the overall system and solution. Tilgin will provide support upon actual products (CPE and ACS) but the actual network with all its various components is up to the customer to be responsible for.

In addition to delivered and agreed support service, the following tools must be provided and available on customer responsibility:

- A secure remote access solution to supported products; and
- Internet access; and
- Preferable dedicated phone number and E-mail address.

Different product types (CPE and ACS) might have different service levels connected to them (SILVER, GOLD or PLATINUM). A service level agreement is used to define service levels and capture the customer unique needs and requirements.

6. Service Limitations

The support service packages does not cover:

- Upgrade activities (except the ACS upgrade work that is included in PLATINUM support package).
- Activation, installation and integration of new software releases.

- Training and competence development.
- Physical replacements of products either in field or at customer premises unless otherwise agreed in writing.
- Limited service delivery in and to so-called embargo countries due to export legislation.
- Limitations in providing support on equipment which is no longer at sale and if supply is no longer available (one option can be to include such in Stretch support package).

- All services rely on a continuous connection to the products under scope for service (via remote connection). Service commitments do not apply if this connection is not available.
- Several of the advanced services require explicit customer permission to regularly collect data from the network in order to review configuration and fault rate profiles. Service commitments are not valid without this permission and without an efficient cooperation to simplify the process of solving any obstacles when collecting the data.

7. Related Services

In relation to above described Support Service Packages (SILVER, GOLD, PLATINUM & Stretch) the customer has an option to contract the following elements as add-on services:

- Hosted ACS service
- Educational services
- Integration services
- RMA / Screening services
- Software Customization services
- Fast Track services
- Local services
- ACS Health Check services

- ACS Migration & Upgrade services

Note that not all mentioned add-on service elements can be combined with all support packages.

More information around the add-on elements can be found in service description:
[*Optional Add-on Elements*](#)