

PARTNERSHIP PROGRAMS

- Project Management
- Conditions
- Customers



Content

About VAS Experts

[Brief Summary](#)

[Our products](#)

[Development History](#)

Partnership Info

[Customers Overview](#)

[Partnership Benefits](#)

[Programs](#)

[Share of Responsibilities](#)

Project Management

[Stages](#)

[Deal Registration](#)

[Presale](#)

[Hardware quotation](#)

[Demo Installation](#)

[Implementation](#)

[Support and Maintenance](#)

Contacts

[Contact List](#)

About VAS Experts

VAS Experts is a telecom software developer. Since 2013, we have completed **over 2000 installations** worldwide.

Our team has **over 25 years work experience** in telecommunication software development and wide knowledge in technologies.

20M+
users

More than
35 Tbps

Latest Installations:

- Middle East
- CIS
- South America
- Europe
- Africa
- Asia-Pacific



Our products

Stingray Service Gateway (SSG) — multifunctional platform for traffic management

For Internet service providers:



DPI

QoS-based traffic management,
filtering by black and white lists



BNG/BRAS

Scalable and Cost-Effective
Software Gateway



AntiDDoS

Protecting the operator's network
from cyberattacks



QoE analytics

Traffic Monitoring and Analysis
System



CG-NAT

Providing transparent network
address and protocol translation



VEOS

Operating system

Our products

Stingray Service Gateway (SSG) — multifunctional platform for traffic management

For mobile operators:



PGW

An intelligent gateway that provides traffic control within the EPC architecture



PCEF

Flexible pricing based on various conditions in accordance with PCRF requirements



PCRF Proxy

Solution for targeted mobile network management



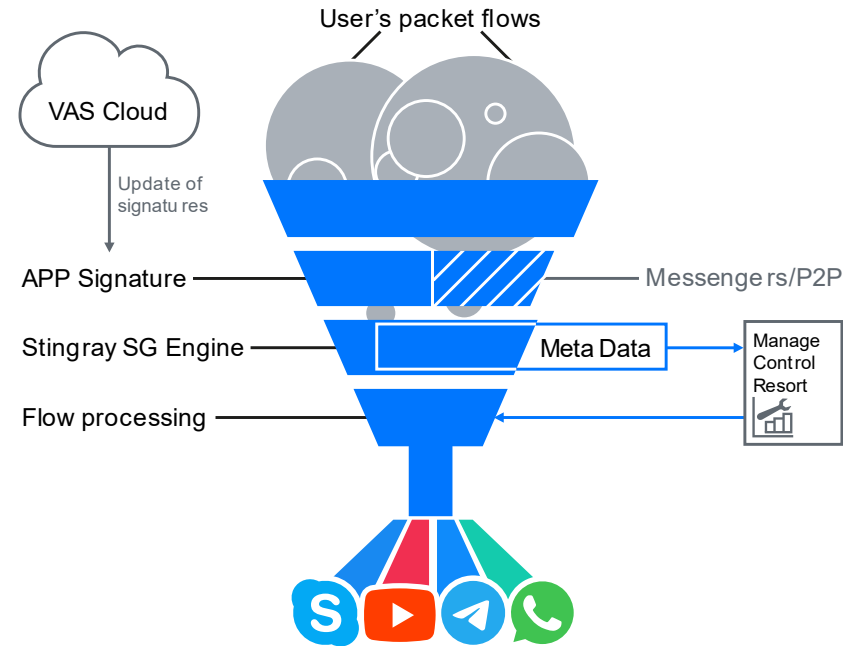
EPDG

Solution for launching Wi-Fi Calling (VoWiFi)

Own DPI Engine

History

- 2013 — DPI
- 2016 — CG-NAT
- 2017 — L3 BNG DualStack IPv4/IPv6
- 2018 — Lawful Interception
- 2019 — L2 BNG DualStack IPv4/IPv6
- 2020 — Mobile Networks Support
- 2021 — Border Router
- 2022 — VAS Cloud Services, LBS
- 2023 — VEOS, On-Stick, EPDG
- 2024 — PCEF, Diameter
- 2025 — PGW, AntiDDoS
- 2026 — PCRF, TWAG



Stingray SG can compete with:

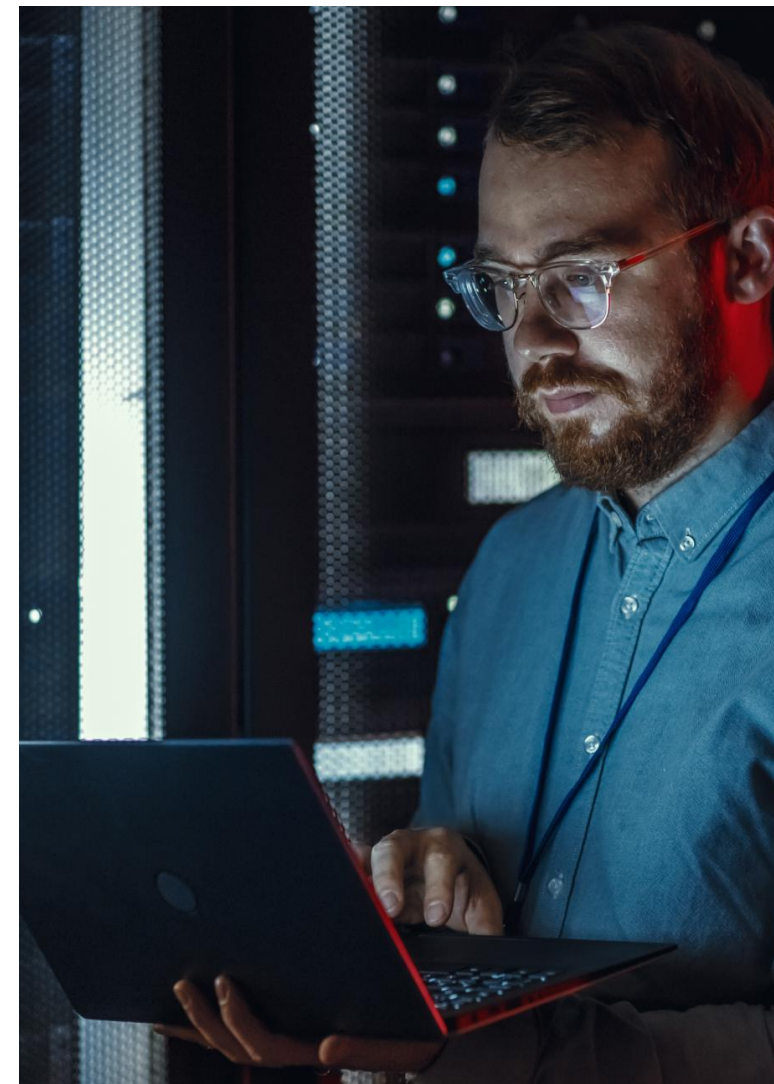
Sandvine	ZTE	Cisco	MikroTik	Ericsson
Allot	A10 Network	Juniper	Huawei NE	Nokia

Customers Overview

VAS Experts key customers are **telecom operators, Internet Service Providers, Mobile ISP, IPTV providers** and other telecom companies.

Stingray platform is multifunctional – so it can be applied also in enterprise for **Wi-Fi HotSpot deployment, network optimization and reorganization, network control**.

The decision-makers are **network architects, system administrators, technical directors, commercial directors and marketing specialists** of the company.



Partnership Benefits

Earn more with the services and products range expansion:

- Expand ISP market coverage from small (1G) to Tier-2 operators
- Use all upselling possibilities (license expansion, hardware upgrades, additional options)
- Sell your HW with our SW as an appliance
- Quick start with no need for in-depth product knowledge
- Vendor support: dedicated sales, technical and marketing teams



4 steps to become a Partner



Training plan for Sales and Pre-sales:

- About VAS Experts
- Products overview
- Hardware requirements
- Network schemas
- Understanding architecture
- User Interface overview
- Services and rate control
- QoE Analytics
- System Administration
- Solutions
- Use cases
- Stingray Benefits

Programs

Parameter	Parameter Affiliate Status		
	Bronze	Silver	Gold
Dedicated sales managers	1	2	4
Presale engineer	0	1	2
Implementation engineer	0	0	1
Technical support engineer	0	0	2
Ticket system	-	-	Yes
Spare parts warehouse	-	Yes	Yes
NBD Support / 24*7	-	-	Yes
Price advantages			
Basic license discount	10%	20%	25%
Project license discount	Dynamic		
Basic discount on technical support	5%	15%	30%
Marketing			
Marketing fund (sold as additional discount)	-	1%	2%
Co-financing of marketing activities	50%	50%	50%
Benefits for participation in vendor events	-	25%	50%
Other			
Formation of your own HW configurations	-	Yes	Yes
API access and the ability to implement integration solutions	-	Yes	Yes
Selling your own service	-	-	Yes
Possibility of selling SSG as a Service	-	Yes	Yes

Dynamic Partner discount

Parameter	Parameter Affiliate Status		
	Bronze	Silver	Gold
Price advantages			
Basic license discount	10%	20%	25%
Project license discount:	Dynamic		
• Lead generation - marketing	3%		
• Presale - technical consulting	5%		
• PoC - technical support	7%		
• Implementation - technical support during implementation	5%		
Total discount	30%	40%	45%

Share of Responsibilities

SHARE OF RESPONSIBILITIES RASCI*				
Item	Description	VAS Experts	Partner	Customer
1	Product description to be given to the customer	R	A	
2	Prerequisites and assumptions about customer's environment	R	A, S	S
3	Requirements for HW	R	A	
4	Dimensioning of the solution, Required HW / SW over 5 years	R	A	
5	SW charging model, perpetual license, cost per subscriber, yearly license...	R	A	
6	Inclusions, exclusions, assumptions	R	A	
7	Solution design and solution description (see also #13)	R	A	Approval
8	Project management	R	R, A	
9	Installation and commissioning services (remote installation)	R	S	S **
10	Remote installation	R	S	
11	Training – Partner / Customer, details of training	R	S	
12	Support and maintenance – level 1	S	R	
13	Support and maintenance – level 2, optionally starting from level 1	R	S	
14	Documentation: PM, product descriptions, solution description, other documentation	R	A	
15	Agree on tentative schedule and pricing for the project	R	A	

* Responsible, Accountable, Supporting, Consulted and Informed

** Setting up VPN on customer end, support with configuration

Project Management



Task	M1	M2	M3	M4	M5	M6	M7
Project Open	Partner						
Design	Partner	VAS Experts					
Demo Installation		Partner	VAS Experts				
HW lead time				Partner			
Installation					Partner	VAS Experts	
Training						VAS Experts	
Approval						Partner	
Support and Maintenance							VAS Experts

1. Deal Registration

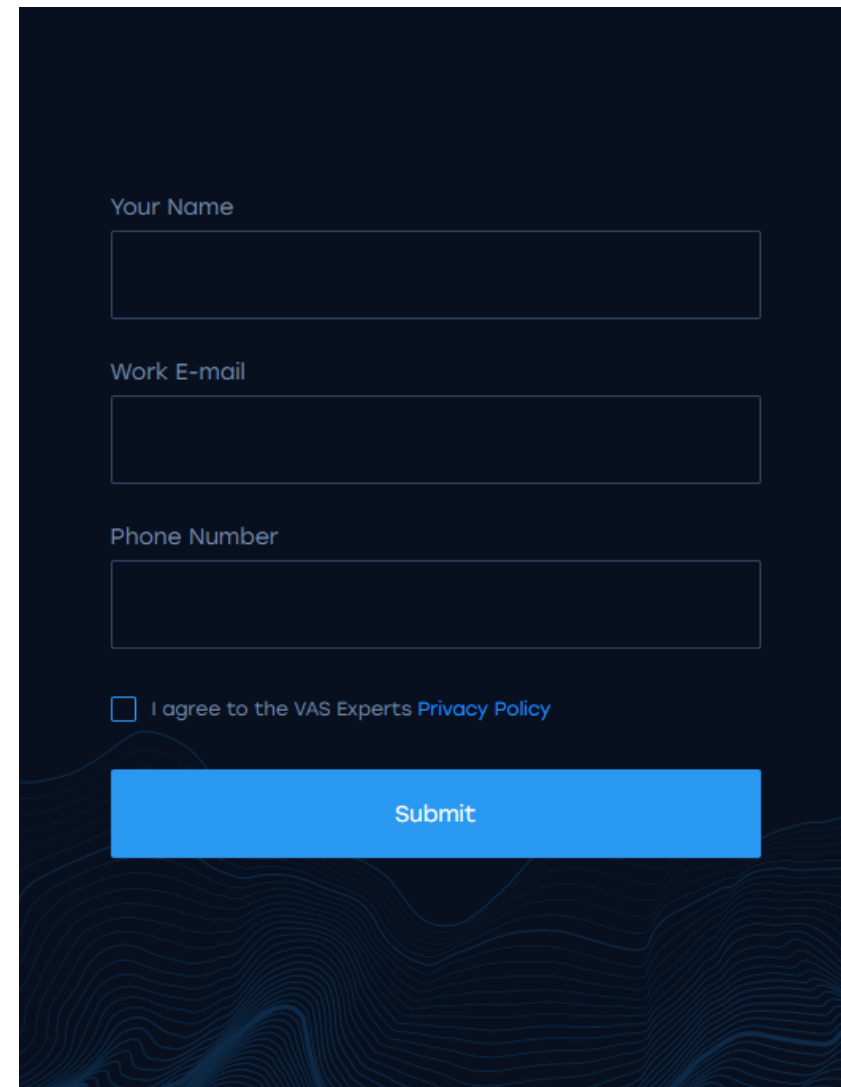
The project is assigned to the Partner for **a period of 6 (six) months** with a possible argument-announced extension.

The specified customer project is registered (one customer can have multiple projects).

Required customer's data:

- Company name
- Company website
- Lead contact (name, surname, e-mail, telephone)
- License Type (SSG-6/10/20/40/80/100/120, BNG/BASE/COMPLETE)
- Project implementation period

The further work is carried out with partner portal.

A registration form interface with a dark blue background and a wavy pattern at the bottom. It contains three input fields for 'Your Name', 'Work E-mail', and 'Phone Number'. Below these is a checkbox for 'I agree to the VAS Experts Privacy Policy' and a blue 'Submit' button.

Your Name

Work E-mail

Phone Number

☐ I agree to the VAS Experts [Privacy Policy](#)

Submit

2. Presale

The presale stage sets:

- 1) Implementation scheme
- 2) Current traffic volume and forecast for 3 years
- 3) The required set of options
- 4) Types and number of interfaces 10G/25G/40G/100G
- 5) Implementation points number

This information should be recorded in the questionnaire.

When installing the software on the client's equipment, provide the complete server specification:

- CPU
- RAM
- HDD
- Network interface cards

Week2	1	2	3	4	5	6
Requirements gathering						
High level solution description						
Statement of work						
Low level solution description						
Testing document						
Design meetings with customer						
Design approved						

2.1 Converged Core Network Architecture

Solutions for every network model:

Fixed broadband

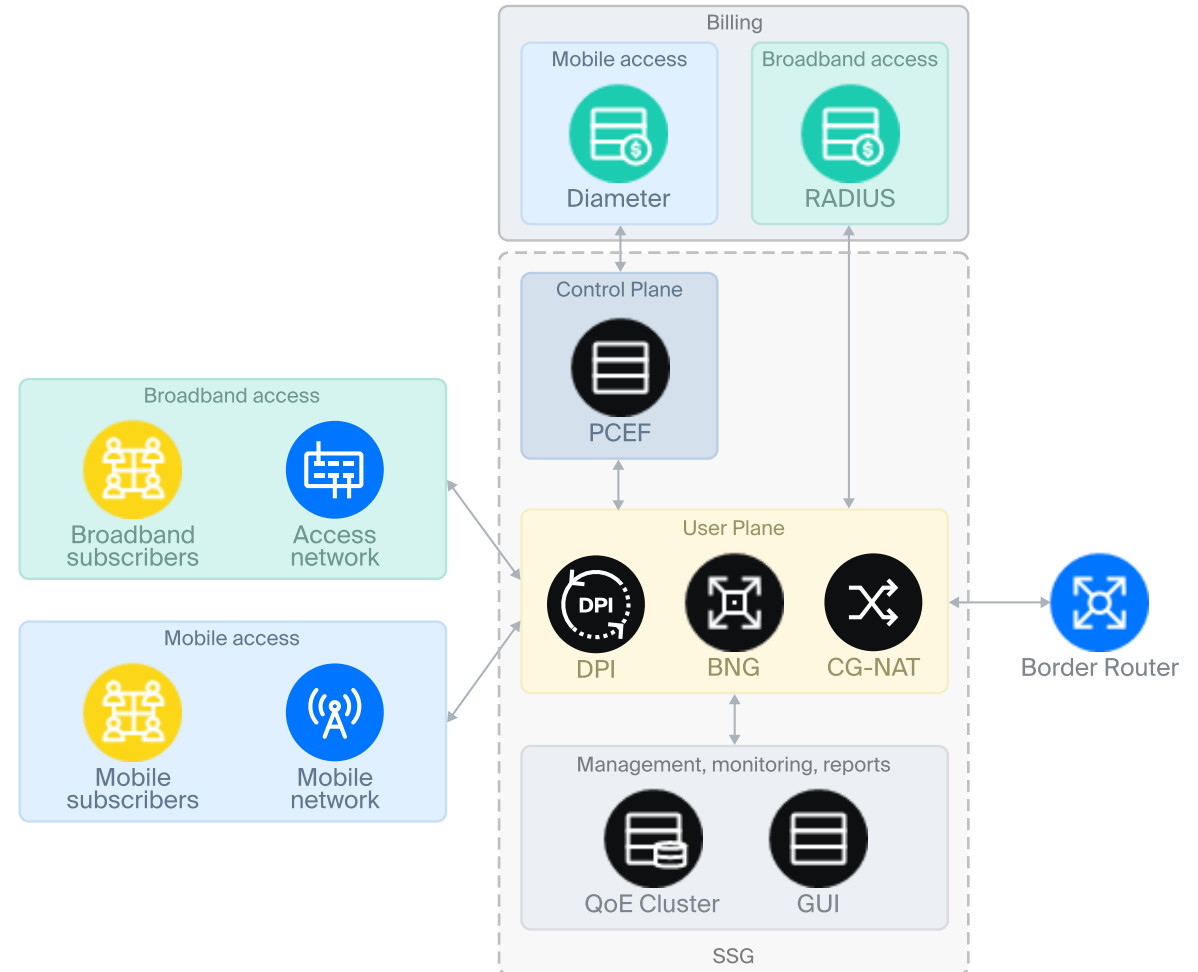
DPI · BNG/BRAS · CG-NAT · QoE · AntiDDoS

Mobile

PCEF · PGW · ePDG · PCRF Proxy

Converged

Unified solutions for fixed and mobile networks



2.2 SSG License quotation

The license choice depends on the traffic volume and functionality:

- The total traffic must be calculated, upload + download.
- There are three license levels: BNG, BASE, COMPLETE. BNG has additional options.

The license is bind during installation to the server platform and the transfer is carried out only by technical support.

Example:

Part Number	Description	Price (GPL)
SSG-6-BNG	VAS Experts SSG License - BNG - 6G total (up+down) traffic	\$ 6 000
SSG-6-BASE	VAS Experts SSG License - BASE - 6G total (up+down) traffic	\$ 6 000
SSG-6-COMPLETE	VAS Experts SSG License - COMPLETE - 6G total (up+down) traffic	\$ 20 000

2.3 License gradation - SSG

Stingray Service Gateway features	BNG/BRAS	Base	Complete
Bypass Support, On-stick, LAG	Yes	Yes	Yes
Statistics gathering and analysis on protocols and directions	Yes	Yes	Yes
Traffic prioritization depending on a protocol and direction	Optional	Yes	Yes
Channel policing and session policing	Optional	Yes	Yes
Subscribers channel policing and session policing	Yes	No	Yes
Allow Lists and Captive Portal	Yes	No	Yes
BNG/BRAS L3 (IPoE), Dual Stack IPv4/IPv6, Radius with CoA	Yes	No	Yes
BNG/BRAS L2 (PPPoE, DHCP, L2TP), Dual Stack IPv4/IPv6	Optional	No	Yes
Router with BGP, OSPF, VRF support	Optional	Optional	Yes
Carrier Grade-NAT with NATFlow export by IPFIX	Optional	Optional	Yes
Mini-Firewall for blocking on certain ports	Optional	Optional	Yes
Protection against DOS and DDOS attacks	Optional	Optional	Yes
DNS requests control	Optional	Optional	Yes
Regulatory compliance			
Filtering by the blocklisted Internet sites	Optional	Yes	Yes
Lawful Interception (LI), export metadata by IPFIX	Optional	Optional	Yes
Additional modules and services			
URL Classifier Local version	Optional	Optional	Optional
URL Classifier Cloud version	Yes	Yes	Yes
GUI (Graphical User Interface) Base version	Yes	Yes	Yes
GUI (Graphical User Interface) FilterUI version	Optional	Optional	Optional
QoE (Quality of Experience) module Base version	Yes	Yes	Yes
QoE (Quality of Experience) module Standard version	Optional	Optional	Optional
SDK — DPI Tool kit for protocols customization		Subscription	
VAS Cloud custom protocols		Subscription	
Reserve License			
Stand by License	25% from main License		

2.4 License gradation – QoE

QoE Module features	Base	Standard
DPI-based Full NetFlow and ClickStream statistics visualization	Yes	Yes
Built-in TOP reports on Full NetFlow: high RTT and retries, by speed and traffic volume, by application protocols, by AS, by subscriber AS, by traffic classes and DSCP, by access and aggregation switches	Yes	Yes
Built-in ClickStream-based reports: URLs, hosts, subscribers, devices, IP resources	Yes	Yes
Custom filters by categories of web resources, protocols, protocol groups, subscribers, AS, IP	Yes	Yes
Reports export in *.xlsx, *.csv, *.pdf and *.png	Yes	Yes
API support for integration with external systems	Yes	Yes
Uplinks quality monitoring and cyberthreats detection	No	Yes
Online reports by specific IP, Login, Host IP	No	Yes
NAT Flow statistics collection, compression, custom filters	No	Yes
DNS Flow statistics collection, compression, custom filters	No	Yes
GTP Flow statistics collection, compression, custom filters, map view	No	Yes
Setting triggers and actions for events, notification by email and telegram with a set frequency	No	Yes

2.5 Hardware quotation

The equipment is supplied by the Partner. Hardware requirements are specified in the [VAS Experts documentation](#).

Total traffic (in+out) Gbps	Max incoming traffic Gbps	Stingray SG Version	Number of cores per CPU with a frequency of 2.5 GHz	RAM, GB necessary to install memory modules in all processor channels on the motherboard	Minimal number of physical ports	Number of Public IPs in a NAT pool	Packet per second in Million base CPU frequency from 2,5GHz
2	1,5	SSG-2	4	12	4x1G, 2x10G	100	1M pps
4	3	SSG-4	4	16	6x1G, 2x10G	500	1,5M pps
6	5	SSG-6	6	32	2x10G	1000	3-4M pps
10	8	SSG-10	12	48	2x10G	2000	6M pps
20	15	SSG-20	16	64	4x10G	3000	9M pps
40	35	SSG-40	18 Intel 6242R	96	6x10G, 4x25G, 4x40G, 2x100G	4000	12M pps
80	70	SSG-80	28 Intel 6258R , Intel 5320 , 32 AMD 7502P	128	10x10G, 4x25G, 4x40G, 2x100G	5000	15M pps
160	140	SSG-160	64 AMD 9534 , AMD 7713	256	24x10G, 16x25G, 10x40G, 4x100G	10000	22M pps
240	210	SSG-240	96 AMD 9654	384	24x10G, 16x25G, 10x40G, 6x100G	12000	28M pps
320	280	SSG-320	128 AMD 9754	512	16x25G, 14x40G, 8x100G	15000	33M pps
400	350	SSG-400	160 AMD 9845	768	24x25G, 16x40G, 10x100G	20000	44M pps
480	420	SSG-480	192 AMD 9965	1024	28x25G, 10x100G, 10x200G	24000	55M pps
640	560	SSG-640	256 AMD 9996	1280	10x200G	30000	66M pps

2.6 Demo Installation

3 ways to test:



Customer's equipment

Any x86 server meeting minimal requirements



Hardware-software complex

Provided by the Partner



VPN stand

VPN-connection to VAS Experts Cloud

Minimum Requirements

1. One CPU supporting SSE 4.2 starting from Intel Nehalem and AMD EPYC Zen2 with 4 or more processor cores, 2.6 Ghz clockspeed and above.
2. At least 3 ports are required:
 - one for the remote management using SSH (any kind of chipset)
 - the two other to process network traffic (network cards with DPDK support)

It is recommended to use only tested cards on Intel chipsets:

- e1000 (82540, 82545, 82546)
- e1000e (82571, 82572, 82573, 82574, 82583, ICH8, ICH9, ICH10, PCH, PCH2, I217, I218, I219)
- igb (82573, 82576, 82580, I210, I211, I350, I354, DH89xx)
- igc (I225)
- ixgbe (82598, 82599, X520, X540, X550)
- i40e (X710, XL710, X722, XXV710)
- ice (E810)
- fm10k (FM10420) - bandwidth limited by PCIe 3.0

with 2, 4 or 6 ports.

3. Implementation

Installation works are carried out remotely according to the originally prepared implementation plan.

Month	1	2	3	4	5
Prerequisites *	Customer	Customer			
Travel costs		-	None, remote inst.	-	-
Installation HW			VEOS		
Integration			Billing, Radius		
Configuration			BNG, DPI, NAT options	BNG, DPI, NAT options	
Testing				VAS Experts	Customer
Approval					Customer

* Remote configuration, which requires customer to purchase the HW, rack and stack it, do the necessary cabling and provide VPN connection to the site.

4. Support and Maintenance

- Technical support is provided by **VAS Experts LLC**
- E-mail: **sd@vas.expert**
- [Rules for contacting technical support](#)
- For SnS-SSG-24X7X4-1Y, an additional interaction channel is negotiated outside of working hours.

SUPPORT TYPES		
Abbrevia tion	Part Number	Description
NBD	SnS-SSG-NBD-1Y	Subscription for updates and technical support (SnS, NBD, 1 year)
8X5X8	SnS-SSG-8X5X8-1Y	Subscription for updates and technical support (SnS, 8x5x8, 1 year)
24X7X4	SnS-SSG-24X7X4-1Y	Subscription for updates and technical support (SnS, 24x7x4, 1 year)

SERVICE LEVEL PARAMETERS			
	NBD	8X5X8	24X7X4
Parameter	Specification		
Agreed time of registration of requests (ATTR)	24 x 7	24 x 7	24 x 7
Agreed time of support (ATS)	8 x 5	8 x 5	8 x 5
Reaction time	24 hours	8 hours	4 hours

Contacts List and Resources

Name	Role	E-mail	Time Zone
Technical Support	Support	sd@vas.expert	UTC+3
Sales Team	Sales	sales@vas.expert	UTC+3

Resources:

- [Presentations](#)
- [YouTube](#)
- [LinkedIn](#)
- [Facebook](#)

Follow The Experts

sales@vas.expert

vasexperts.com

