

representative:
Igor Yanovskiy



TreeTalk

Instant Voice Telecommunications

Supported by:





Evolution of the Telecommunications

Instant-call



Two-way radios



?



Session-mode





Land Mobile Radio Flaws

Noise

Bulky antennas

Limited range of communication

Need for power amplifiers

Complex mounting,
commissioning, and maintenance





Land Mobile Radio Sales



10 billion U.S. dollars
a year





The Advantages of Radio

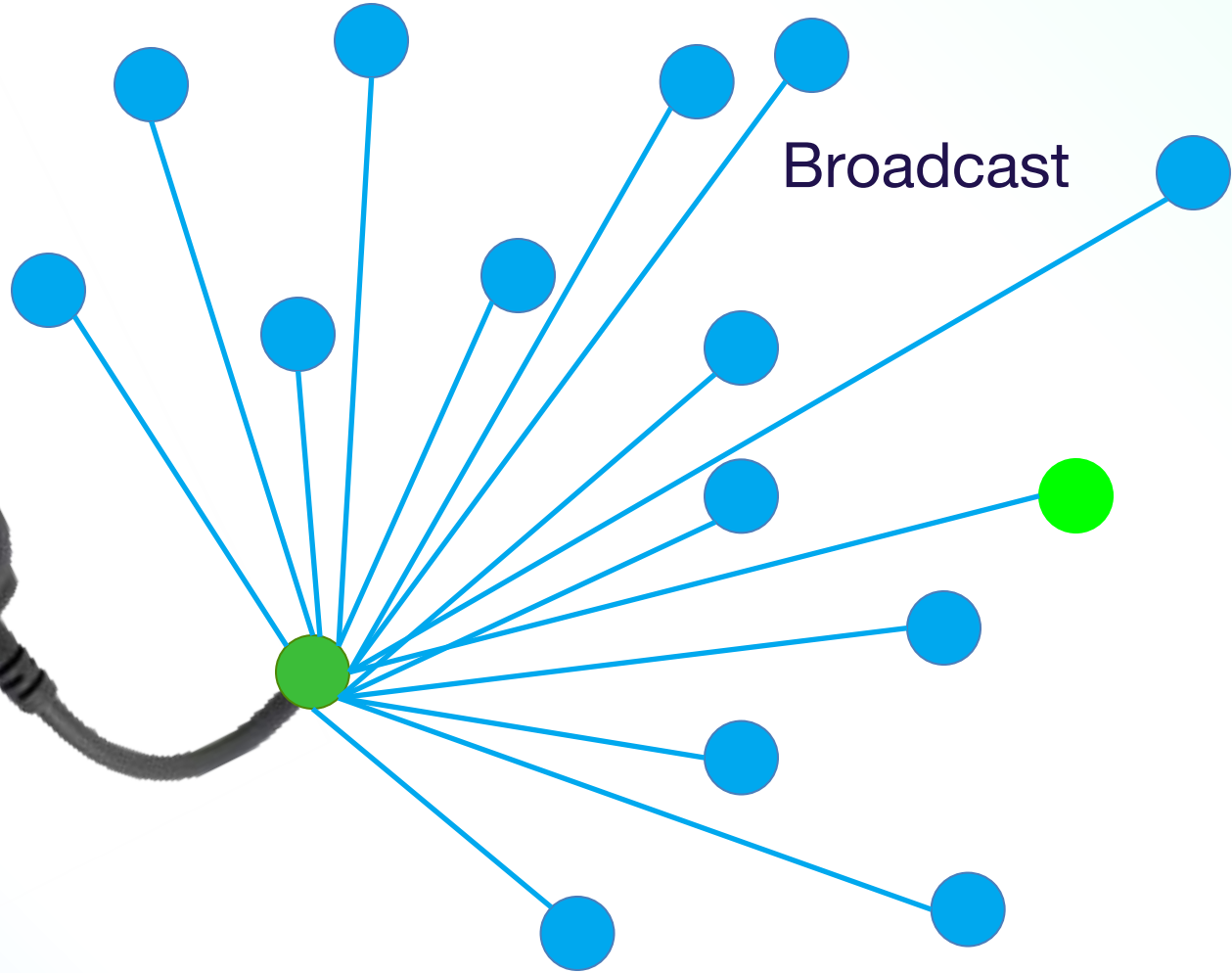
(and of TreeTalk too)

Instant connection

Broadcast

Push
&
Talk

Easiness





Pros & Cons

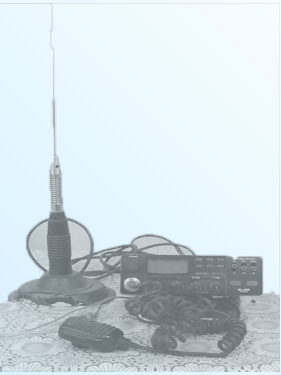
Traditional conventional systems



- + Simplicity
- + Instant connection
- + Broadcasting



- Noise
- Limited range of communication
- Complex mounting, commissioning, and maintenance
- Power amplifiers
- Bulky antennas



TreeTalk system

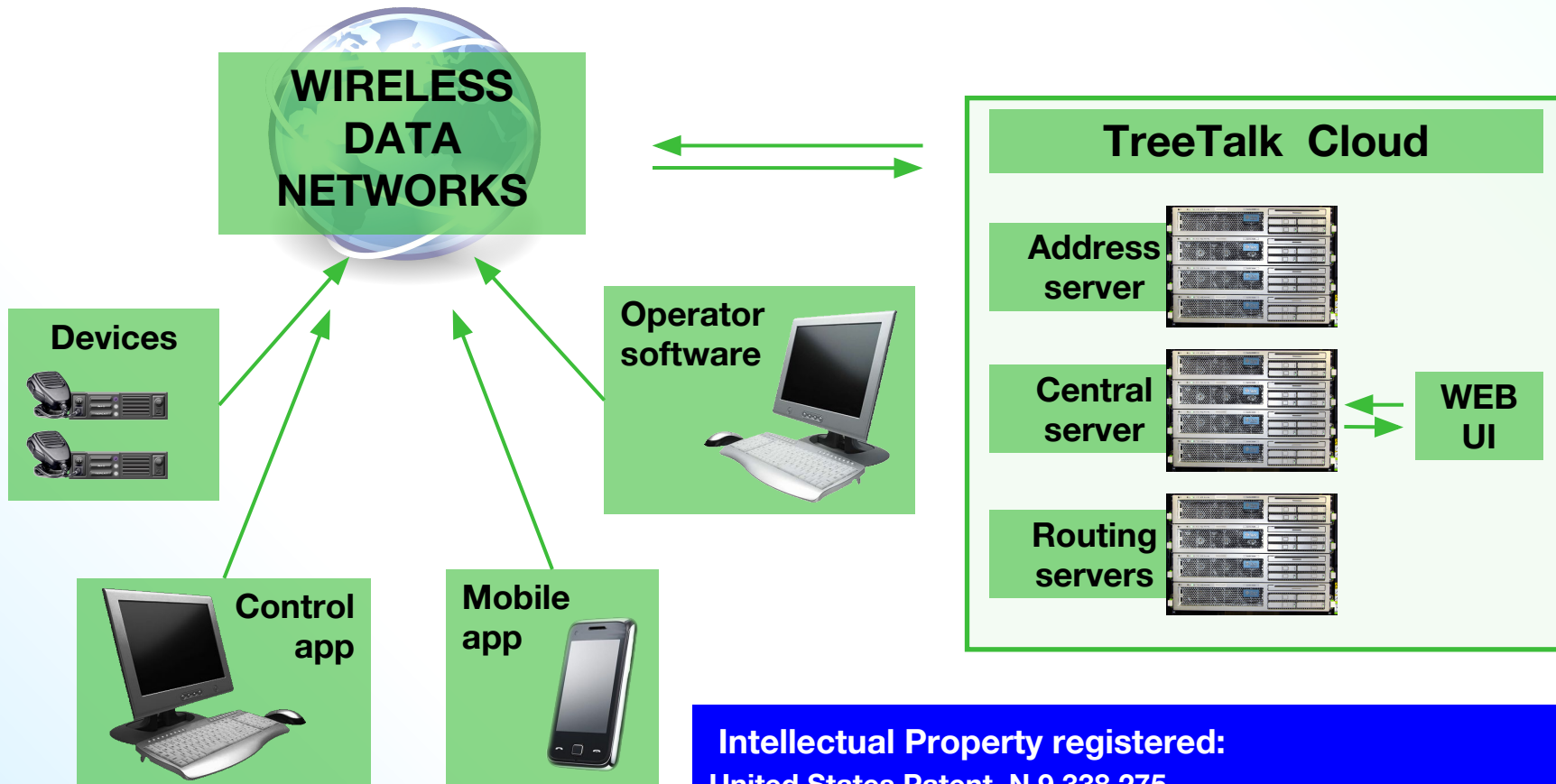


- + Broadcasting
- + Usability
- + Instant connection
- + Duplex mode operation
- + No noise
- + Extra features (GPS etc.)
- + Digital sound
- + Selective call
- + Flexible groups





TreeTalk Telecommunications Ecosystem



Intellectual Property registered:

United States Patent N 9,338,275

RF UM Patent N 121411

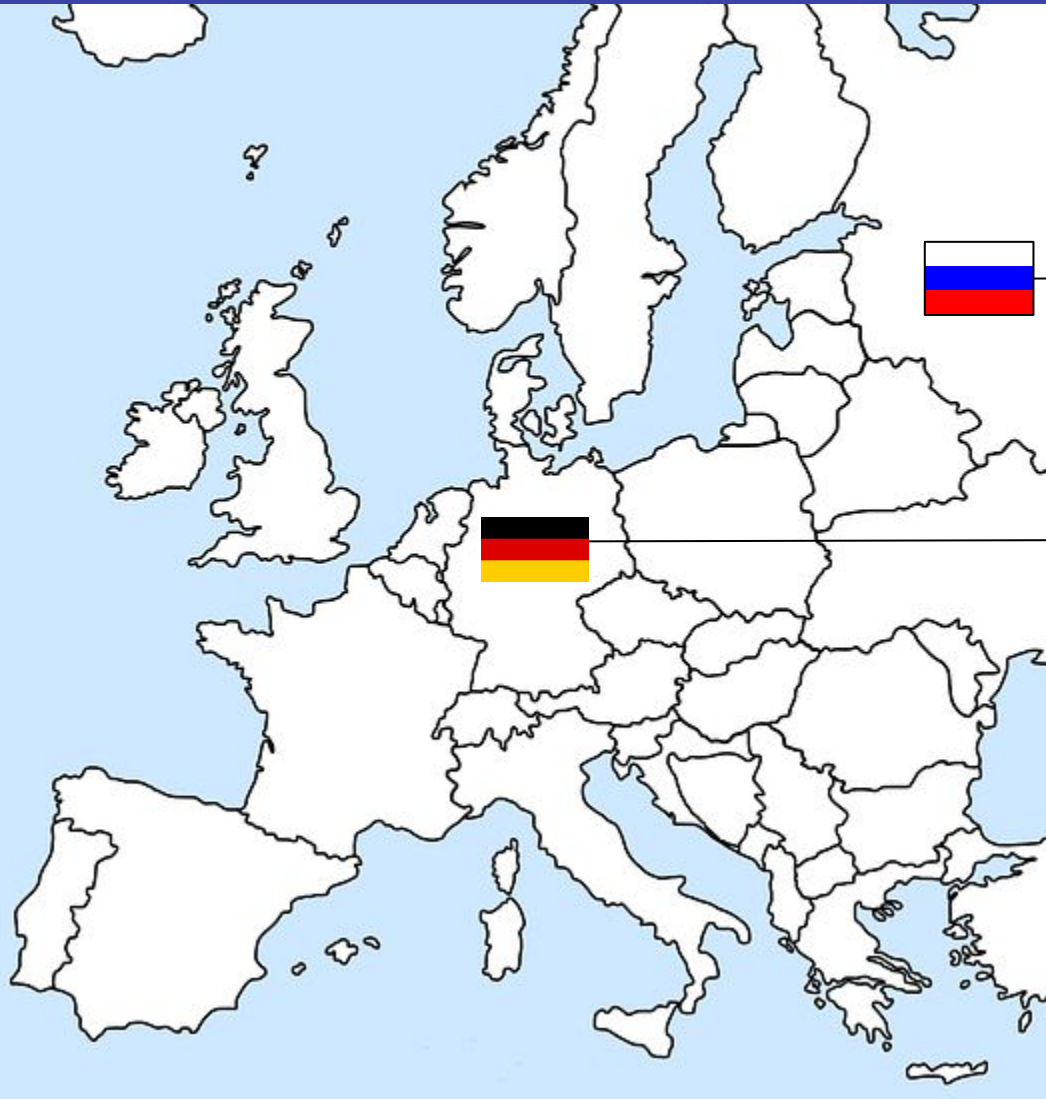
PCT/RU2013/000062, WIPO WO 2013/162414 A1, US 2015/0072724 A1

+ numerous know-hows...



GDPR Compliance

TreeTalk platform instances deployed



Moscow, Russia



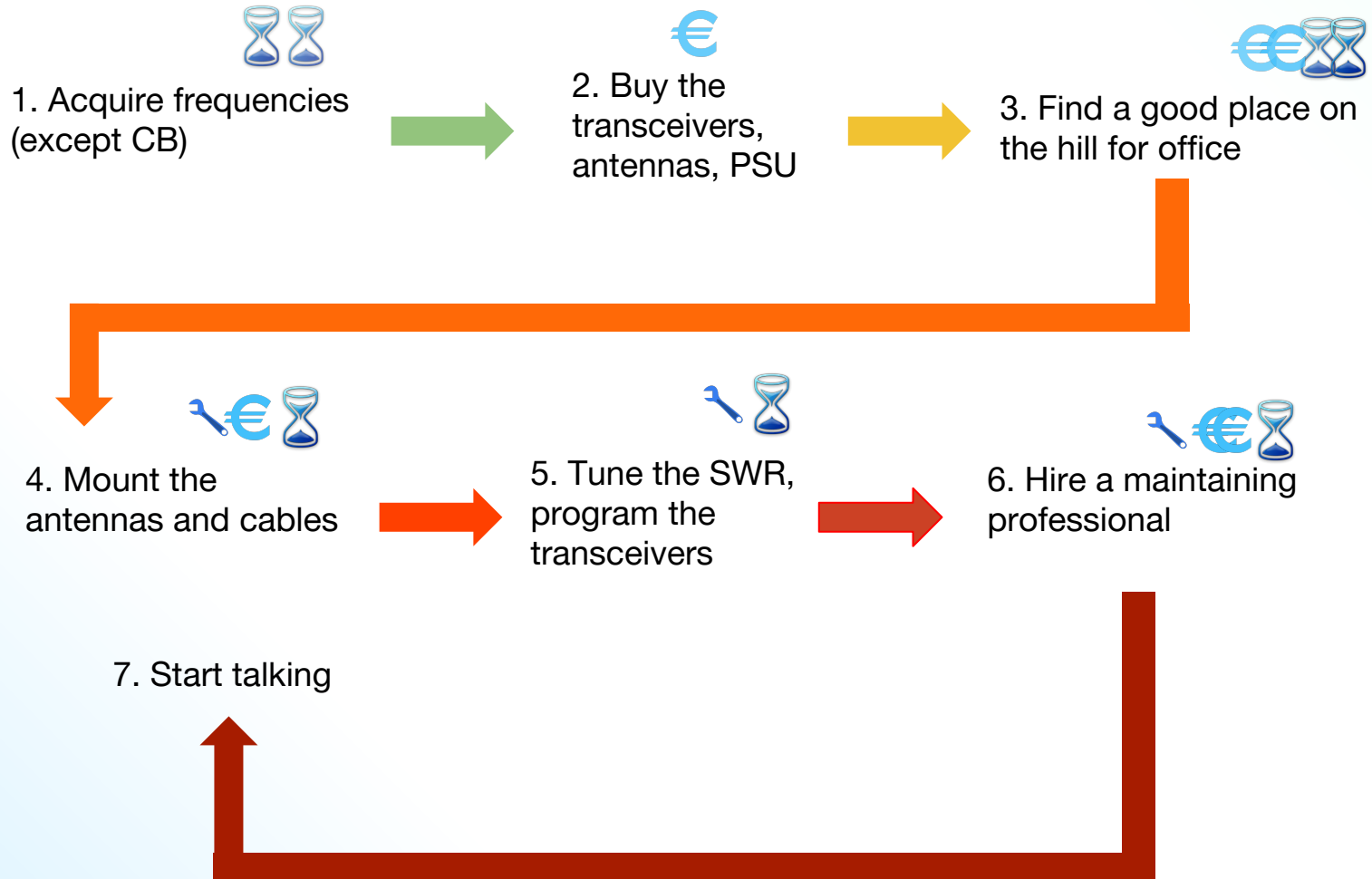
Nuremberg, Germany



panel.tree-talk.com
Login: demo
Password: demo12345



The Difficult Way of the LMR User





The Easy Way of a TreeTalk User



Start
talking!

Buy the
terminals



Create an account
on the TreeTalk
website



3 steps

Fast

Simple



The Terminal One

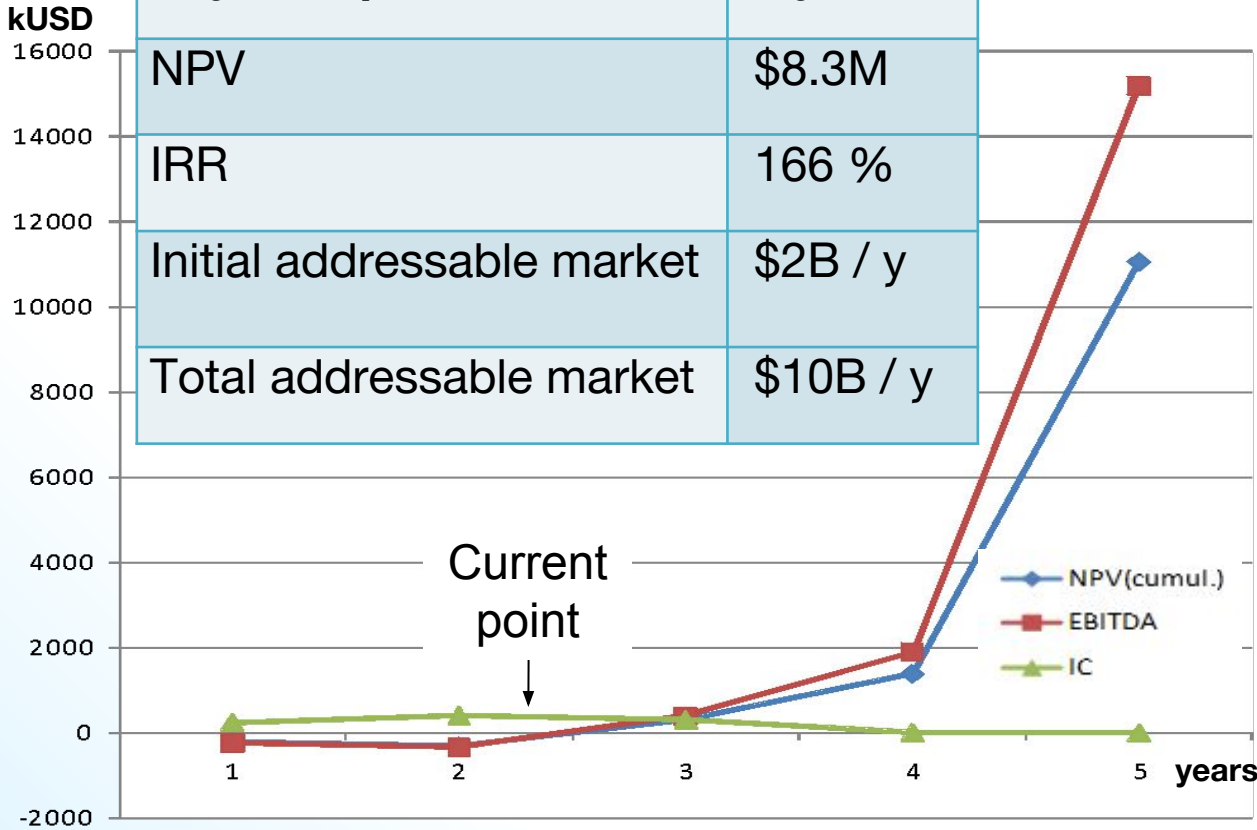


* ISO 7736 / DIN 75490 compliance



Financial Model

Payback period	3 years
NPV	\$8.3M
IRR	166 %
Initial addressable market	\$2B / y
Total addressable market	\$10B / y



Sales of our web-services



\$5 / mo

Sales of our software



\$99

Sales of our devices



\$249

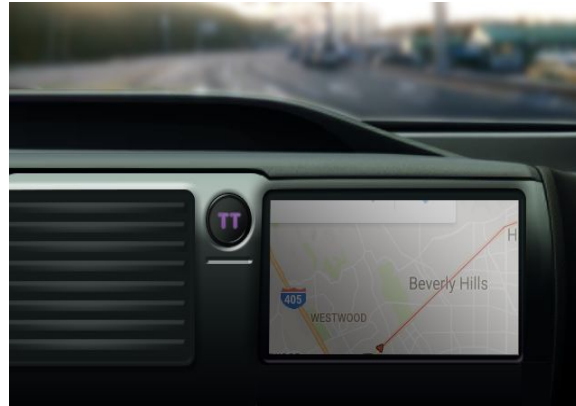


Market Fit and Competition

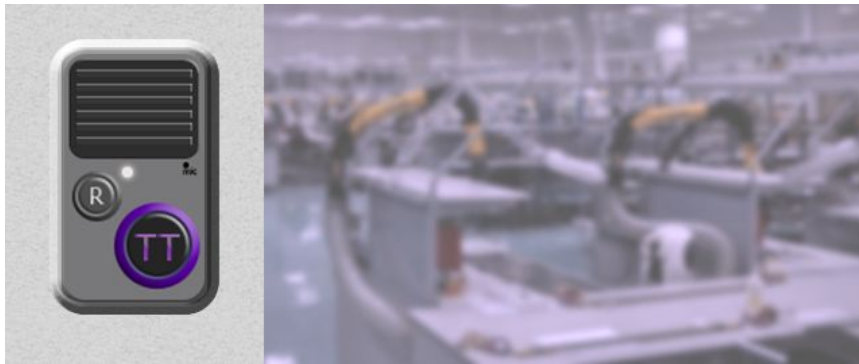
	Digital sound quality	Cheap exploitation	Quick launch	Spectral efficiency	Coverage area
TreeTalk	V	V	V	V	V
Analog radios / intercoms		V			
Digital radios	V	V			
Digital trunked systems	V				V



Product Line Expansion (in development)



Handheld Communicator



Wireless intercom modules



Instant-call Messenger



TreeTalk Core Team

TreeTalk Team



Igor Yanovskiy
System Architect,
Software developer
Siberian Institute
of Technology,
1992
Founder, CEO

TreeTalk Team



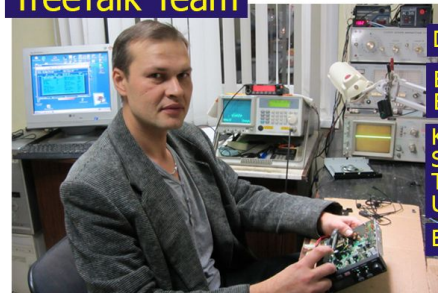
Maria
Yanovskaya
Web and
industrial
designer
Siberian Federal
University, 2012
Co-founder

TreeTalk Team



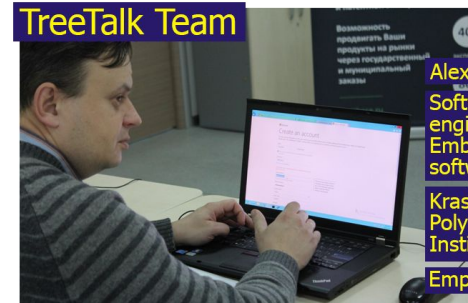
Nicholas
Dzeltovskiy
Software
engineer /
Servers, web,
c++, python
Khakas State
University, 2000
Employee

TreeTalk Team



Dmitry Potylitsyn
Electronics
Engineer
Krasnoyarsk
State
Technical
University, 2002
Employee

TreeTalk Team



Alex Podrezenko
Software
engineer /
Embedded
software, c++
Krasnoyarsk
Polytechnical
Institute, 1992
Employee



<http://www.Tree-Talk.com>
info@Tree-Talk.com



TreeTalk

Instant Voice Telecommunications

*Welcome to the future of professional
telecommunications!*





Appendixes

User interface

The screenshot shows a web browser window with the URL `https://web3t.cloud***.***`. The page title is "TreeTalk terminal.list". The interface includes a navigation menu with "Virtual channels", "Terminals", "Payments", and "Account settings". The main content area displays a table of terminals under two channels: "Channel 2 - Black cabs" and "Channel 1 - Yellow cabs".

Name	Type	Serial N	Active	Receive	Send	Settings	Action
Channel 2 - Black cabs (TreeTalk private BETA)							
Add new							
Channel 1 - Yellow cabs (TreeTalk private BETA)							
DEMO 13	Terminal	012015061611	Yes	No	No	Default	Edit
DEMO 14	Terminal	012015061612	No				
DEMO 15	Terminal	012015061613	Yes				

Prototype of dispatcher's app

The screenshot shows the "TreeTalk Dispatcher (TDisp 0.91 on Averion, DEMO 091215)" application. It features a menu bar with "Options", "Network", "Reports", and "About". The main interface is divided into two panes: "ORDERS" and "CABS ON LINE".

ORDERS

Due Time	Phone	Cab	Status	Address
09:00	555-5555	456	On SPOT	50 Post st, SF
09:22	555-5556	234	Arriving	PIER 39, Beach St, SF

CABS ON LINE

Location							
Center	330	745					456
Golden Gate	234	753					
Sil. Valley	245	080	466				
Airport	430						
Oakland	460	609	368	990	523	745	
San Mateo							
South SF	455						

Log Messages

456: On Spot, waiting, SMS sent
234: Arriving in 10 minutes



Financial Projections

Capital required to obtain the positive cash flow	\$0.45M
Capital required to break-even	\$1.2M
Initial addressable market	\$2B / year
Total addressable market	\$10B / year
Customer lifetime value (3-year basis)	\$280
Payback period	3 years



Field Tests



<http://tree-talk.com/wp/>



TreeTalk Leaflet / Projected Prices

TreeTalk Terminal

The design of our device is developed and patented, based on customer feedback, to fit both - cars and trucks.



- no outer antenna
- fit the standard 1 DIN
- universal 12/24 volt PSU



GPRS/EDGE/UMTS/LTE, WiMAX, HiperMAN iBurst, NGH, FreedomPop and many other compatible.

Prices:

Terminal TT-1	\$249
Terminal TT-1-GPS	\$269

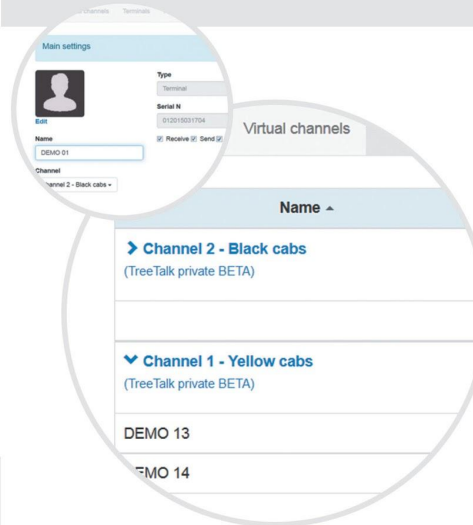
Web front-end

Web front-end provides an access to the user's account.

User can create the virtual channels, add the terminals into them and manage them easily: to connect, to disconnect, to move etc.

Prices

Account support	\$0.00
Unit Software rental Daily for each, up to 4	\$0.00
Unit Software rental Daily for each, from 5th	\$0.10
GNSS Software rental Daily, for each	\$0.12



Dispatcher's application

Dispatcher's app combines the standard functionality for orders handling with new voice functions.

Due Time	Phone	Cab
09:00	555-5555	456
09:22	555-5556	234

The dispatcher can see - who is online and where.
 The dispatcher can see - who is calling, and listen to missed messages.
 The dispatcher can use a group call or selective call.

Location			
Center	330	745	
Golden Gate	234	753	
Sil. Valley	245	080	46
Airport	430		
Oakland	460	609	
San Mateo			
South SF	455		

Prices

Dispatcher Software setup Once	\$99.00
Dispatcher Software rental Daily	\$0.33

* MSRP. Some taxes and fees may be applicable additionally for the certain locations of buyers. Data traffic may need be paid in addition



Market Research - Economic Forum



<http://tree-talk.com/wp/>



Traction and Plans

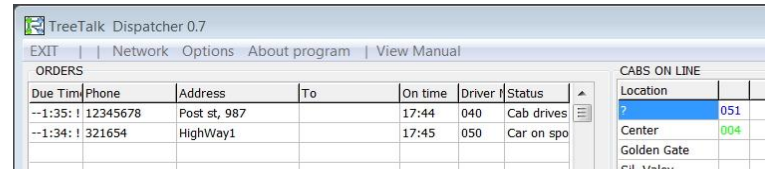
July 2014: Investment of founder.
Dec 2014: Grant for R&D has been won in the “Start” contest.



Apr 2015: First working prototype of the Terminal is ready.



May 2015: First prototype of the dispatcher's software is developed.



Feb 2016: The first R&D study, funded by FASIE, was finished.

May 2016: U.S. Patent N 9,338,275 was issued.

Feb 2017: Field tests of the communicator, Web UI and server infrastructure.



2018 Q2: Web UI and server infrastructure. Pilot batch of terminals.

2019 Q1: Final version of the **Terminal One** ready for production.

