representative:
Igor Yanovskiy

TreeTalk
Wireless Voice Terminal and System

supported by:

KRITBI

FASIE

Microsoft BizSpark
Startup Microsoft

Let me start by introducing TreeTalk.
We are building the **Terminal**, the **System** and the **software environment** for real-time voice group communications.

Land Mobile Radio Flaws

- Noise

- Bulky antennas

- Limited range of communication

- Need for power amplifiers

- Complex mounting, commissioning, and maintenance

First, we have addressed the problems of the low-cost segment of the LMR market.

Land Mobile Radio Sales

2 billion U.S. dollars a year

Despite those flaws, segment ratings show a growing annual profit.

The Advantages of Radio
(and of TreeTalk too)

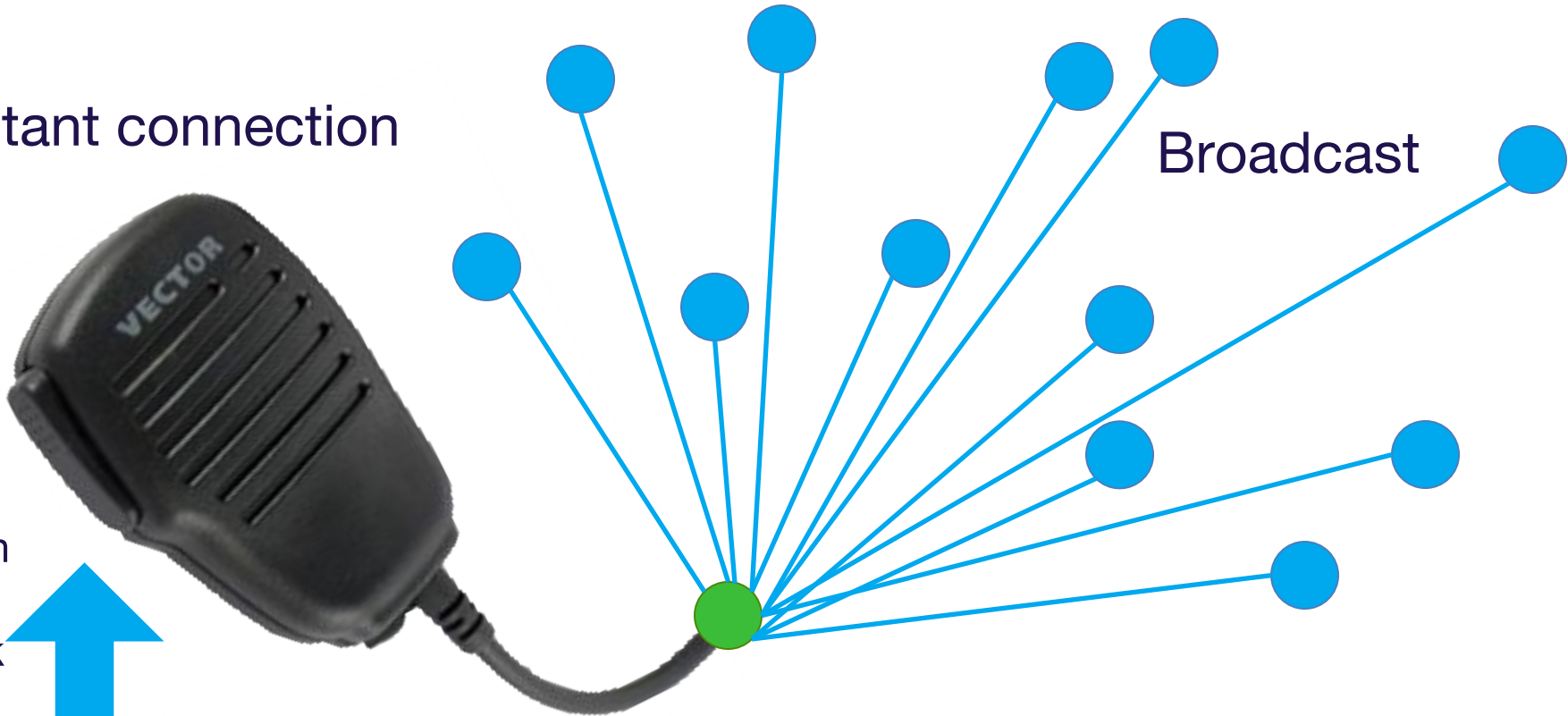Why have people been buying these pricey radios for 100 years?

Instant connection

Broadcast

Push & Talk

Easiness

Because of those 3 simple advantages!

Pros & Cons

Traditional conventional radio

+

+ Broadcasting

+ Instant connection

+ Simplicity

- Noise

- Limited range of communication

- Complex mounting, commissioning, and maintenance

- Power amplifiers

- Bulky antennas

TreeTalk system

+

+ Broadcasting

+ Usability

+ Instant connection

+ Duplex mode operation

+ Digital sound

+ No noise

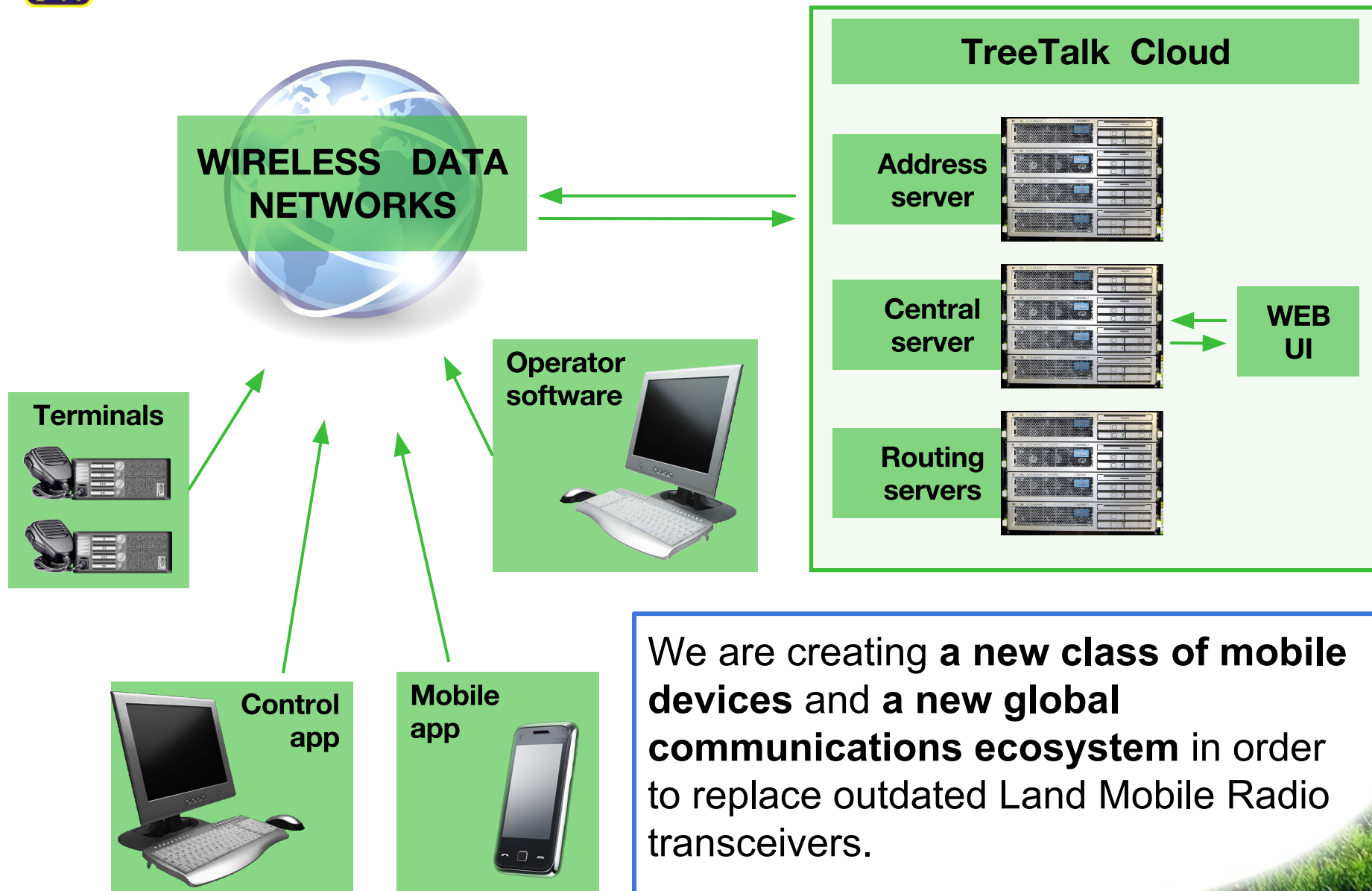+ Extra features (GPS etc.)

+ Selective call

+ Flexible groups

We are going to transplant the advantages onto the new technical platform.

TreeTalk Ecosystem

TreeTalk Cloud

WIRELESS DATA NETWORKS

Address server

Central server

WEB UI

Routing servers

Operator software

Terminals

Control app

Mobile app

We are creating **a new class of mobile devices** and **a new global communications ecosystem** in order to replace outdated Land Mobile Radio transceivers.

The Terminal

50* mm

178* mm

Repeat button

PS unit

12V/24V

* ISO 7736 / DIN 75490 compliance
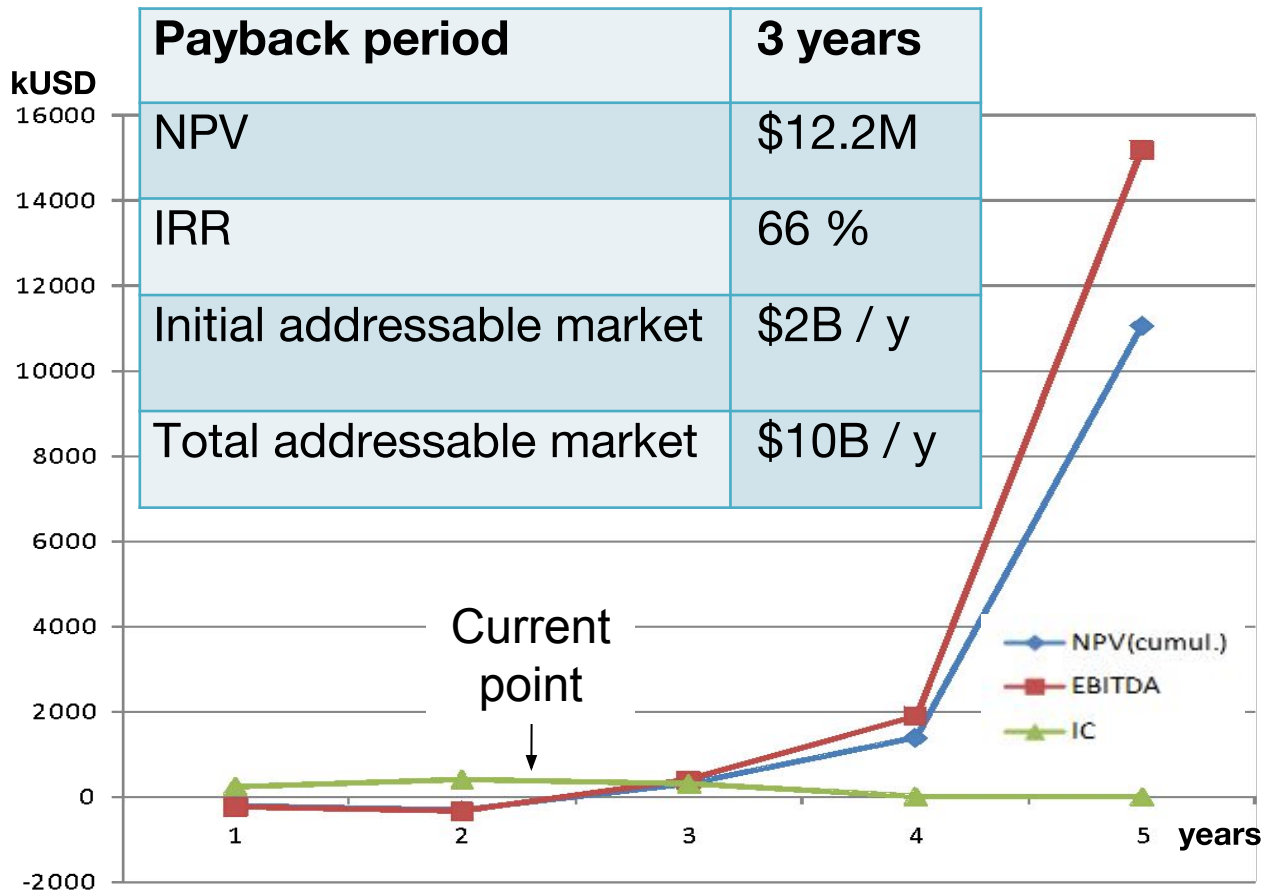
** Intellectual Property registered:
United States Patent N 9,338,275
RF UM Patent N 121411
PCT/RU2013/000062, WIPO WO 2013/162414 A1, US 2015/0072724 A1
+ numerous know-hows...

Financial Model

Payback period	3 years
NPV	$12.2M
IRR	66 %
Initial addressable market	$2B / y
Total addressable market	$10B / y

kUSD

Current point

NPV(cumul.)
EBITDA
IC

years

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		V			
Digital radios	V	V			
Digital trunked systems	V				V

We offer a modern and convenient solution to meet the existing needs of the customers. We have no direct competitors for our solution, as there are no similar devices. Indirect competitors are worse.

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
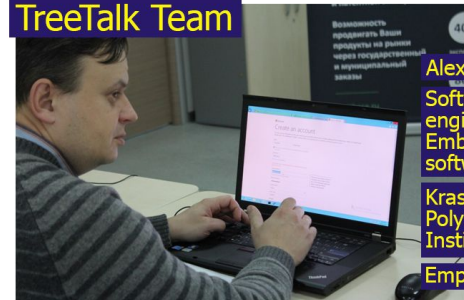
Co-founder

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

I.Y.: *"I was fortunate to gather a team of highly educated professionals."*

Traction and Plans
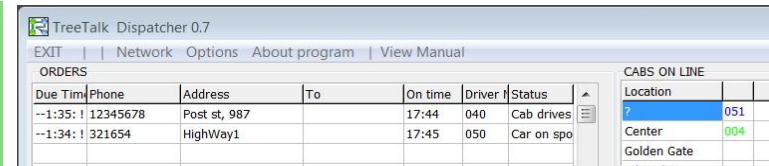
July 2014: Investment of founder.
Dec 2014: Grant for R&D has been won in the "Start" contest.

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.

2016 Q2: Field tests.
2016 Q3: Web UI and server infrastructure. Pilot batch of terminals.
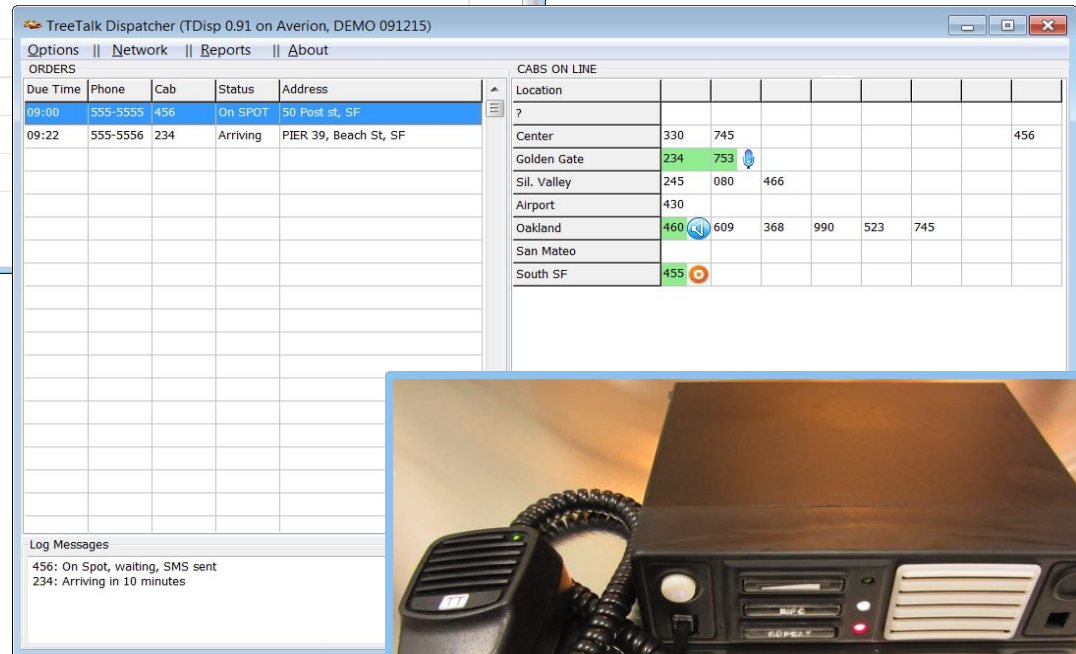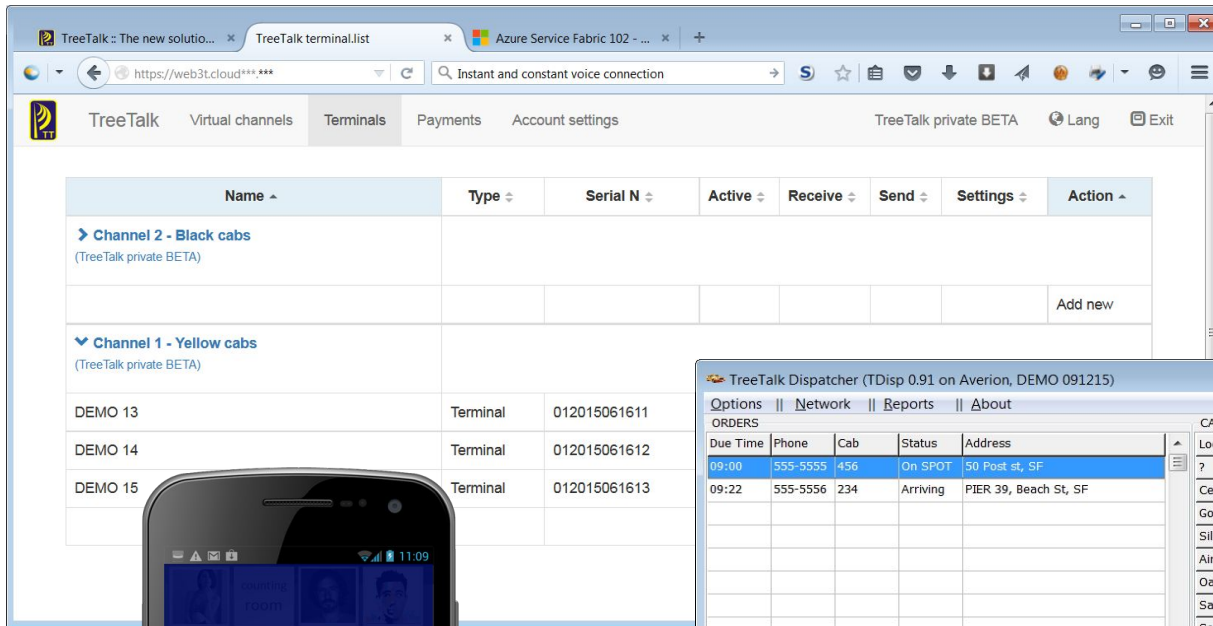2016 Q4: Final version of the **Terminal One** ready for production.

TreeTalk: Wireless Voice Terminal and System

Welcome to the future of professional communications!

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

Appendixes

Financial Projections

Capital required to obtain first sales	$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**

We are **not** dreaming up any new market.
There is a huge niche in the B2B segment already, developed and growing.

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:

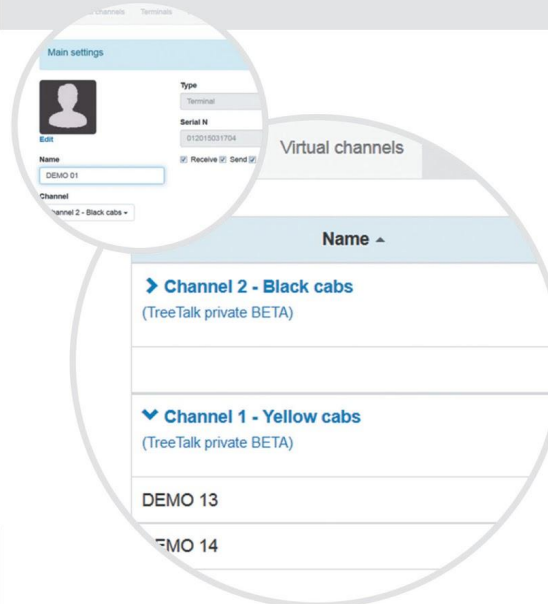|		
Terminal	TT-1	$249
Terminal	TT-1-GPS	$269

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.
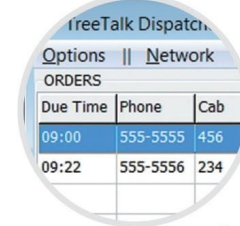
Prices

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

Main settings

Type: Terminal
Serial N: 012015031704
Name: DEMO 01
☑ Receive ☑ Send

Virtual channels

Name ▲

> **Channel 2 - Black cabs**
(TreeTalk private BETA)

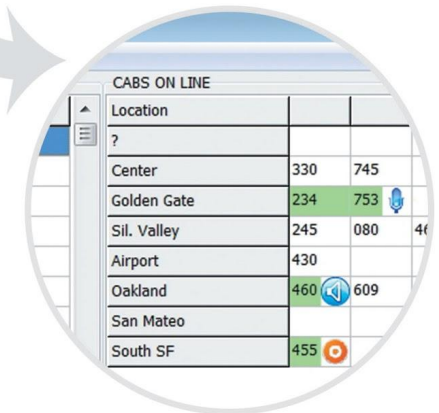∨ **Channel 1 - Yellow cabs**
(TreeTalk private BETA)

DEMO 13

ᴱMO 14

Dispatcher's application

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

TreeTalk Dispatch
Options || Network
ORDERS

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.

CABS ON LINE

Location		
?		
Center	330	745
Golden Gate	234	753
Sil. Valley	245	080
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

TreeTalk Winter Tests

TreeTalk on #KEF2016

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