



ASSIA®

# DSL Expresse® Overview

2018

*Reliably Fast Broadband &  
Wi-Fi for the Home*

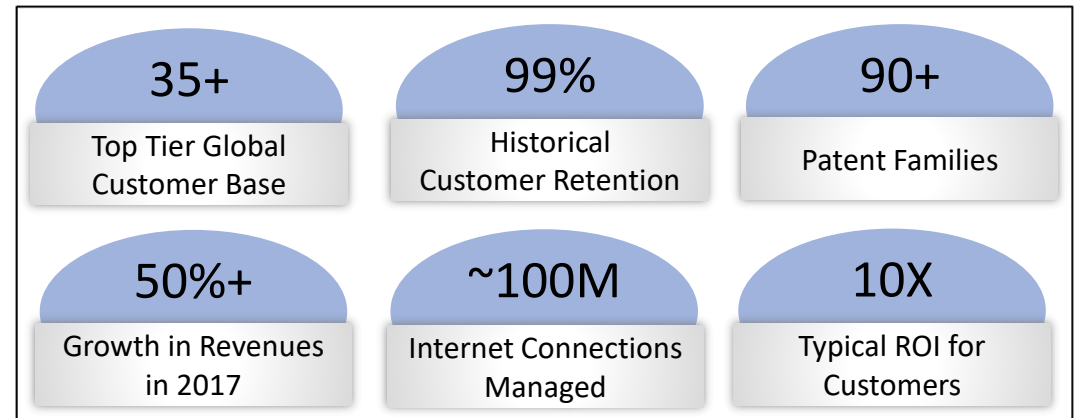
# ASSIA Overview

Market Leader in Diagnostics  
and Optimization Software

DSL & Optical Broadband  
and Residential Wi-Fi

Machine Learning Cloud Technology

Improves Subscriber Internet  
Performance, Reliability, QoE



## Key Customers

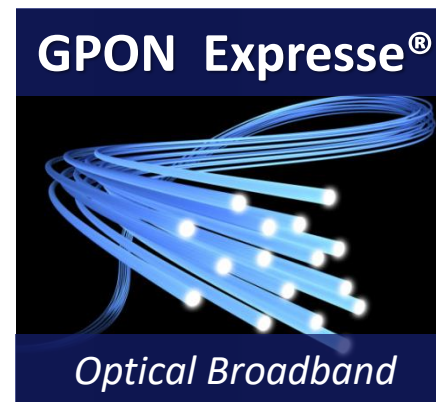


## SOFTWARE SOLUTIONS

*Driving Subscriber Satisfaction Up & Churn Down  
while Reducing Costs for over 30 Service  
Providers around the world*



*Market Leading Cloud Based Management,  
Diagnostics & Optimization serving over 100  
Million Homes*



- Dramatically improves broadband to the home by increasing reliability and performance.
- This powerful software solution allows service providers to qualify and optimize each line in their DSL network.

**ClearView®**  
*Next Best Action for Customer Care*

**DSL Expresse®**  
*Copper Broadband*

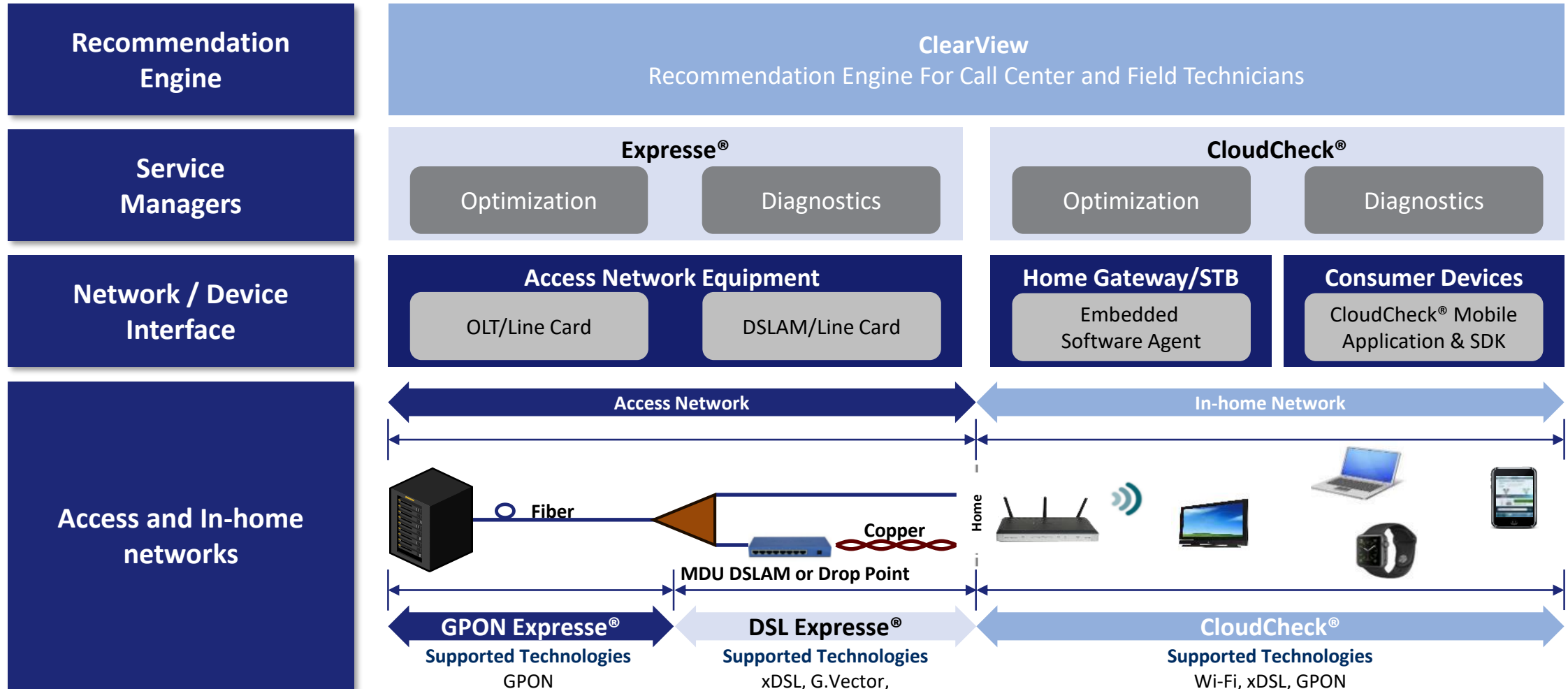
**GPON Expresse®**  
*Optical Broadband*

**CloudCheck®**  
*Wi-Fi Management*

**Professional Services**  
*Training, Analysis, Best Practice, More*

**IP & Technology Licensing**  
*Fixed Line Broadband, Wireless, Wi-Fi*

# End-to-end Access Monitoring and Optimization



Access and In-home networks are the predominant source of subscriber issues

# Expresse® – Access Network Management

- ASSIA® began building DSL management technology under a 3 year joint development agreement with AT&T beginning in 2005. AT&T continues to use this technology today.
- ASSIA® brought Expresse® to market in 2008 and first deployed with operators BSkyB in the UK and Orange in Poland.
- ASSIA® has 2 major software releases per year and continues to add functionality to the platform.
  - New access technologies: VDSL2, G.Vector (and newer 35b band plan), G.fast, GPON (and newer PON technologies).
  - New features provide upsell opportunities.
  - Improvements to support maintenance contracts.
- Today Expresse® is deployed on 30+ operator networks world-wide and manages 100M household internet connections daily.

# Quality of Experience (QoE) Metric Measures Customer Sentiment

## Measuring Customer Sentiment

- Understanding customer sentiment is key to improving efficiency, OPEX reduction, churn reduction and upsell opportunities
- ASSIA® has developed QoE metrics based on network performance data that correlates to consumer sentiment and actions
- There is a direct correlation with customer call and dispatch rates

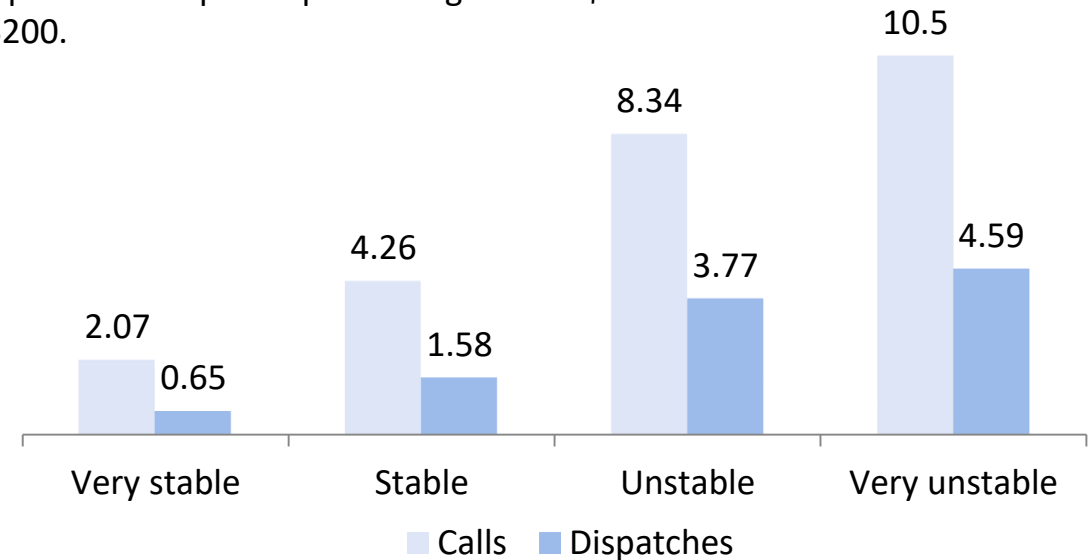
## Improving Customer Sentiment

- ASSIA® **improves** QoE through automatic optimization and actionable diagnostics
- The improvements lead to direct and measureable benefits in call rate, dispatch rate, subscriber churn and other operating expenses.

## Average Calls/Dispatches - 100 Lines/Month

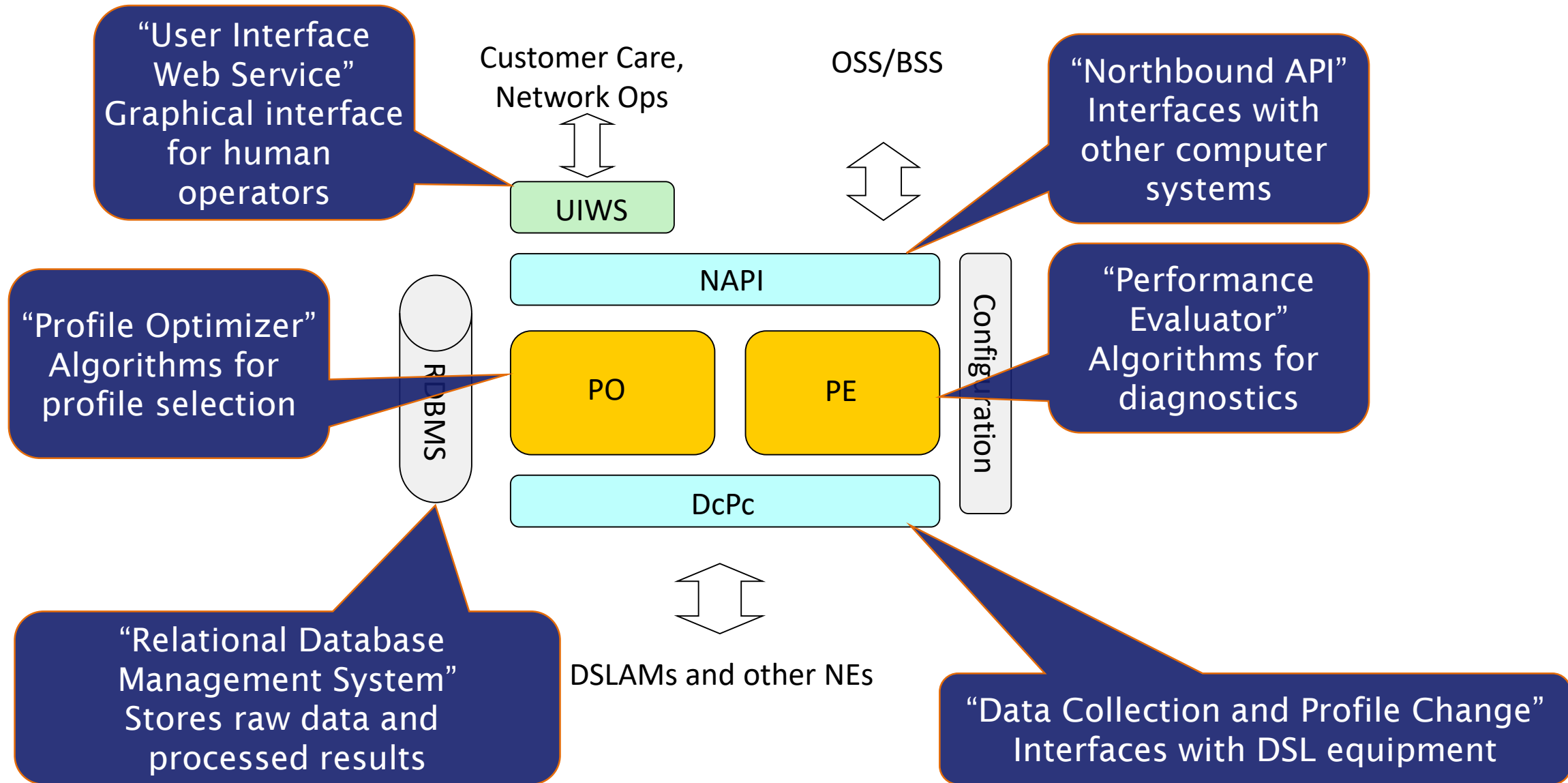
Operator cost per call ranges from \$1 to \$6.

Operator cost per dispatch ranges from \$30 to \$200.



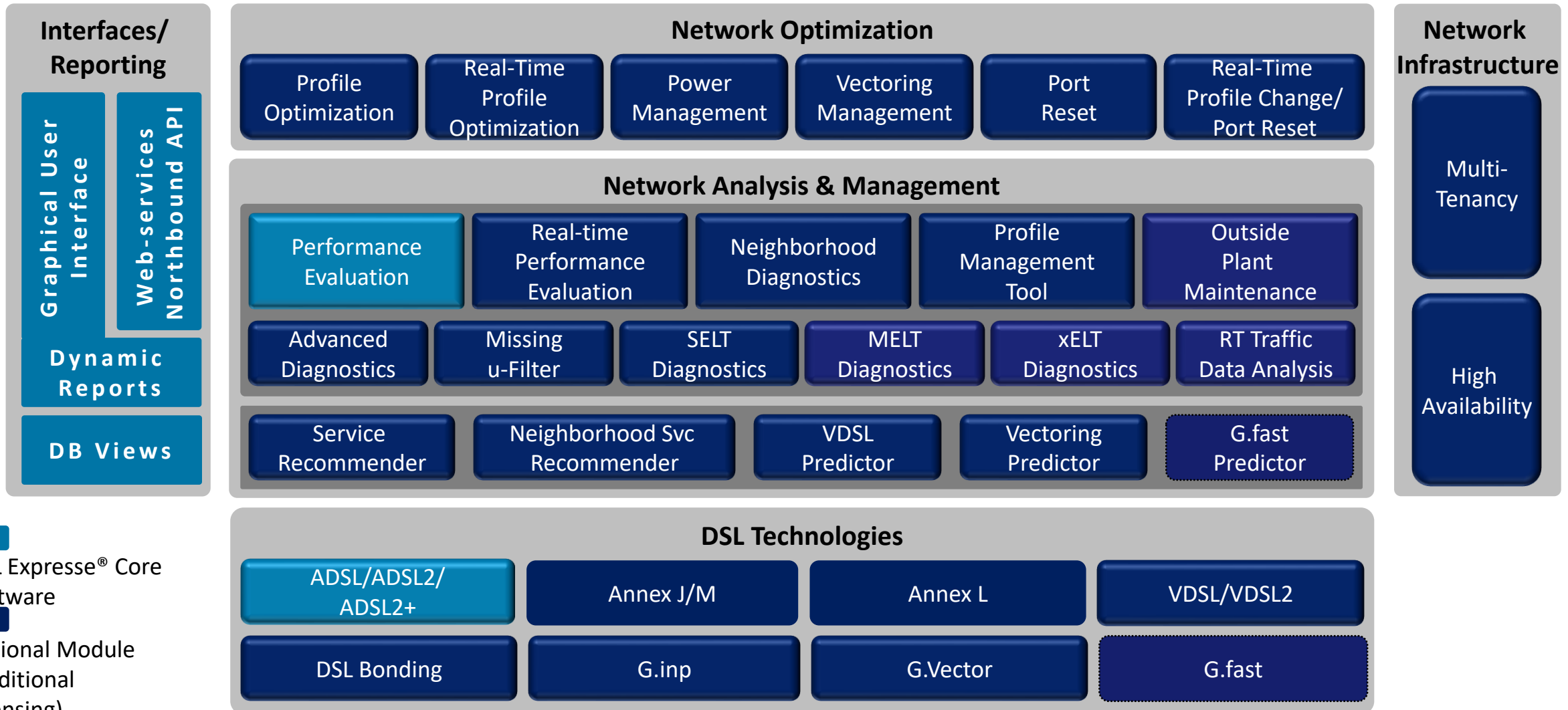
**Improvements in QoE saves network providers money by eliminating calls and dispatches**

# DSL Expresse® System Architecture





# DSL Expresse® Functional Modules



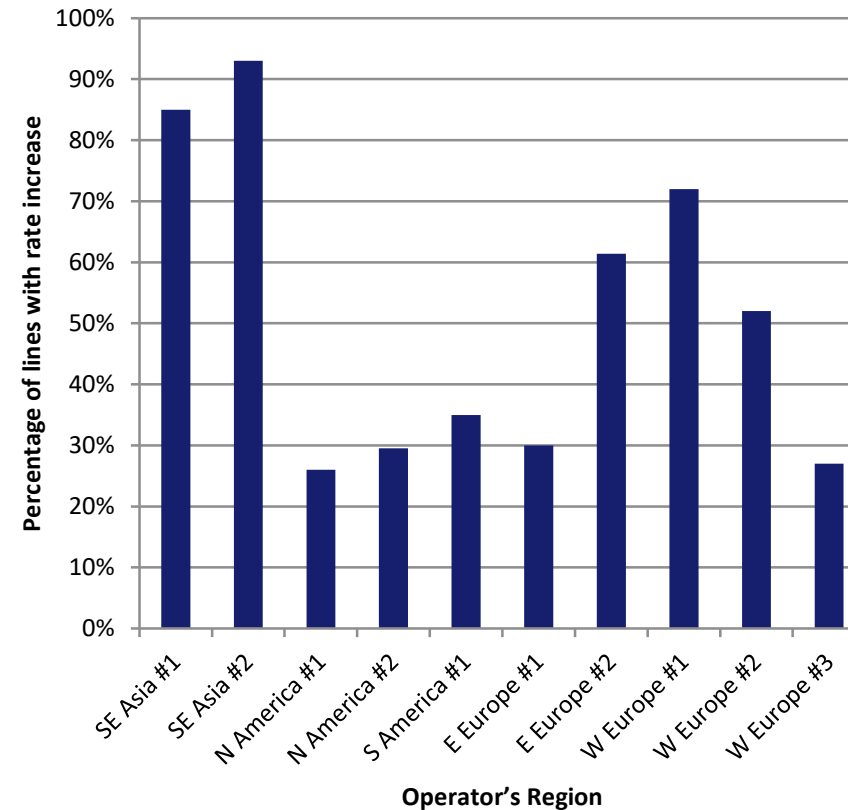
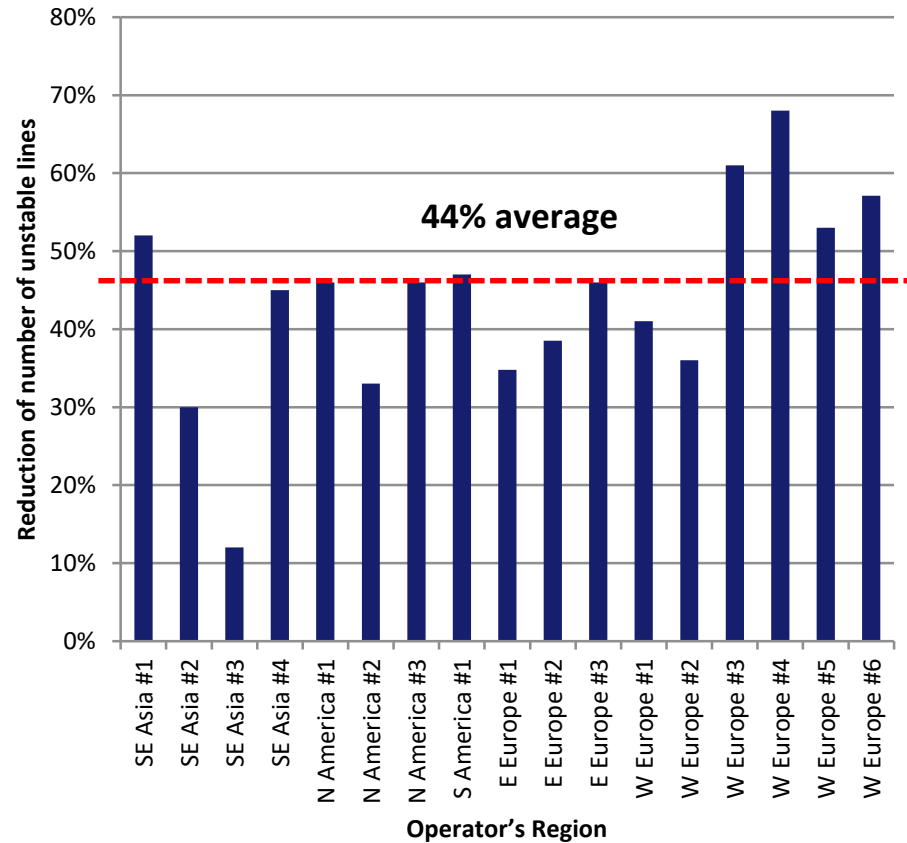
**Complete, field-hardened product deployed on 100M lines.**

**Integrated into the operations of 30+ operators world-wide.**

**Compatible with all major xDSL equipment vendors.**

**Modular design makes new feature development easier.**

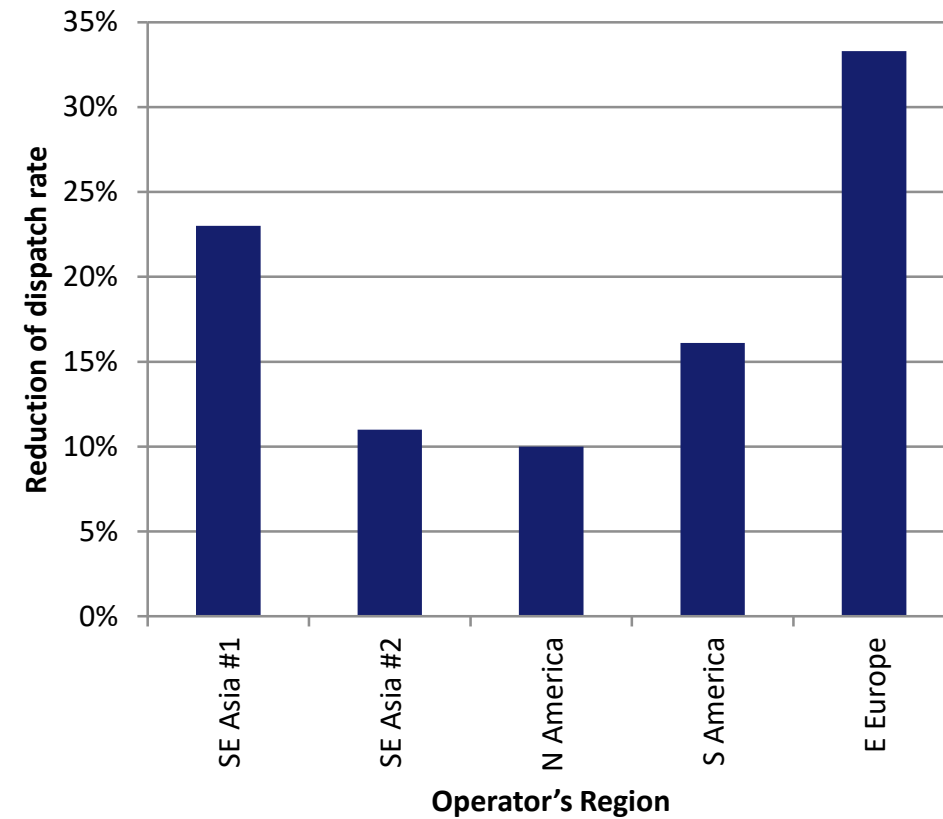
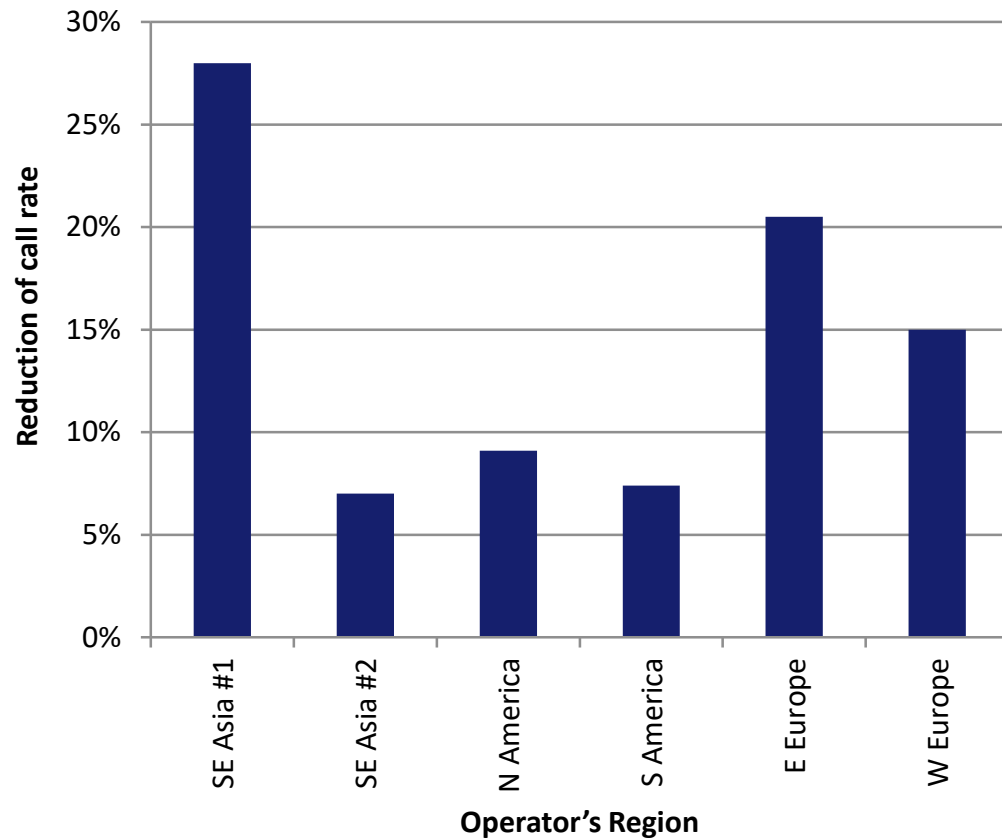
# ASSIA® Provides Benefits Across Operators Worldwide



Stability improvements reduce customer complaints and operator expense.

Rate increases improve operator revenue.

# ASSIA® Reduces the Operator's Call and Dispatch Rate



Stability improvements lead to a direct, measureable expense reduction

# Customer Testimonials for ASSIA® Products



- *Orange: “30% reduction in troubled customers” (\$320M over 3 years)*



- *BSkyB: “ASSIA® allowed Sky to triple new-add rate without increasing tech help” (\$90M annual value)*



- *SFR: “ASSIA® Churn value of 70M euros in first 6 months of deployment”*



- *Telefonica LATAM (5 countries) – “255M euros in 5 years opex reduction”*

# Case 1: Call / Dispatch Savings

- Tier 1 North American DSL Operator
- Call/Dispatch Benefit
  - **\$17.0M/year**
  - \$4.48/line/year
- Results audited in a controlled study on 400K lines.

	Tech Support
Without ASSIA® Tickets per 100 Lines per Month	4.49
With ASSIA® Tickets per 100 Lines per Month	3.99
ASSIA® Improvements Tickets per 100 Lines per Month	0.50
ASSIA® Improvements as %	11.1%
Cost of Tech Support call	\$8
Total Annual Tech Support Benefit per 100 lines	\$48.03
Total Lines	3,800,000
<b>Total Annual Benefit</b>	<b>\$1,825,030</b>

	Field Dispatch
Without ASSIA® Tickets per 100 Lines per Month	1.65
With ASSIA® Tickets per 100 Lines per Month	1.47
ASSIA® Improvements Tickets per 100 Lines per Month	0.18
ASSIA® Improvements as %	10.9%
Cost of a Field Dispatch	\$185
Total Annual Field Dispatch Benefit per 100 lines	\$399.80
Total Lines	3,800,000
<b>Total Annual Benefit</b>	<b>\$15,192,566</b>

# Case 2: Churn Reduction

- Tier 1 European DSL Operator
- Results audited in a controlled study on 250K lines.
- Churn Benefit of \$18.6M incremental revenue

	Churn Reduction
Without ASSIA® Churn per 100 Lines per Month	2.00
With ASSIA® Churn per 100 Lines per Month	1.83
ASSIA® Improvement per 100 Lines per Month	0.17
ASSIA® Improvements as %	8.5%
Incremental revenue per subscriber per month	\$34
Total Lines	1,500,000
<b>Incremental Revenue Improvement per year</b>	<b>\$18,583,992</b>

# Thank You

*End of Presentation*



*Essential to Reliably Fast Connectivity*

[www.assia-inc.com](http://www.assia-inc.com)