# Best Practices for Evaluation, Pricing and Cost Savings of Telecommunications Management



Telecom Expense Management Industry Association

Published January 8, 2013

# **Table of Contents**

Executive Summary	2
Key Challenges	
Recommendations	
Telecommunications Management Processes	3
Fixed and Mobile Telecommunications Management Services Differ	5
Global Engagements	7
Data Privacy	7
ISO 27001	8
Safe Harbor	
SAS 70	8
International Telecommunications Management and TEM Programs	<u>c</u>
Pricing	
Cost Savings	
Conclusion	12
The Cost of Not Acting	12
Recommended Reading	13
About TEMIA	13

# **Executive Summary**

This document identifies best practices for buyers of Telecommunications Management. It addresses evaluation of solutions, pricing and cost savings. Executives and managers have an interest in telecommunications, which represent one of their top five line item expenses. In addition, telecommunications provides an integral role in communications and competitive advantage, which calls for a proactive approach.

Telecommunications Management is defined as all the activities that enterprises oversee for their telecommunications network. It includes Telecommunications Expense Management (TEM), Wireless Expense Management (WEM), Mobile Device Management (MDM) mobile application and security management.

### **Key Challenges**

- Telecommunications Management and TEM engagements vary for each client.
- Solution Providers are not all the same.
- Solutions Providers offer services in different ways in response to client needs.
- Customers benefit from Solutions Providers who provide tailored solutions to meet their specific needs.
- Lack of standards presents a challenge for those who seek to approach the market and its solutions with a "cookie cutter" approach common in commoditized markets.
- In this market, firms offer highly competitive pricing. Buyers who demand lower pricing may get it, but it may dictate service cuts and weaker results.

#### Recommendations

- In the early stages of evaluating solutions managers should determine what they
  are buying, which legacy functions and applications, if any, they will maintain.
  This will enable them to communicate needs, make effective comparisons and
  streamline buying.
- Organizations must obtain internal consensus and alignment on areas for improvement before creating a Statement of Work.
- Executive sponsorship for the program is critical to success.
- Enterprises spend between two and four percent of corporate revenue on telecommunications services for voice and data services.

#### Roles for CFOs

- Serve as a catalyst and establish an agenda for managing expenses.
- Set corporate standards and drive accountability for charges.
- Establish rules for recognition and reporting of savings.

#### Roles for ClOs

- Drive adoption of Telecommunications Management applications across different departments.
- Ensure system integration of Telecommunications Management with enterprise resource planning and financial applications.
- Eliminate duplication of effort from employees seeking to use legacy systems.
- Drive standardization to one application for management and reporting of telecommunications expenses.

# **Telecommunications Management Processes**

An effective Telecommunications Management program focuses on ten major service domains, which include inventory management and change control, telecommunications sourcing management, procurement and order management, invoice management, expense management (including validation and optimization), usage management, bill payment, mobile device management, mobile applications management, reporting and business intelligence.

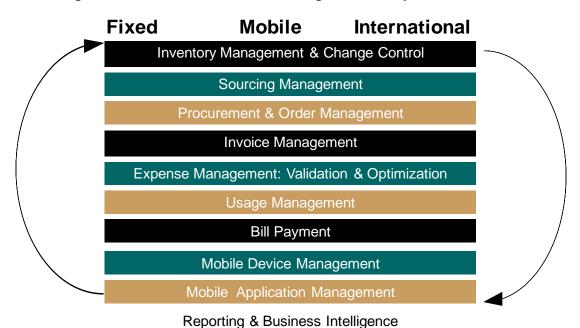


Figure 1: Telecommunications Management Components

**Inventory Management and Change Control** 

Telecommunications Management inventory consists of inventory elements. Elements include any item which appears on a bill or customer service record (CSR) for a line, circuit, mobile line, or service provided by a telecommunications service provider. It is different from comprehensive inventories, which include items that do not appear on bills.

Some Solutions Providers collect inventory information for telecommunications assets that are not available from carrier bills. This could include mobile accessories, mobile software licenses, routers, network hardware and other customer premise equipment (CPE). Collection of this additional data presents opportunities for better asset management, sourcing, optimization and validation, usage allocation, budgeting and reporting. There may be opportunities to manage maintenance charges or redeploy equipment when employees leave a firm or sites are closed.

As part of the evaluation, enterprises should ask who will be responsible for capturing inventory data, verifying its accuracy, entering it into the system and the costs for performing these activities. TEM pricing benchmark studies often fail to account for the costs of gathering and validating inventory.

Most international service providers do not use CSRs. In addition, CSRs do not capture information regarding wireless devices and mobile services and inventories for mobile services require additional information for optimization and other management functions. TEMIA's RFP paper outlines these inventory elements.

Change control refers to tracking, management and control of Move Add Change and Disconnect (MACD) activity. Reconciliation of inventory with invoices and tracking MACD activity is critical because Carrier bills may contain disconnected items and other errors. Organizations with large volumes of MACD activity or poor tracking mechanisms require extra resources to manage inventory and reconciliation.

### Sourcing Management

Sourcing includes negotiation of contract rates, special pricing, terms and conditions. Pricing for this service may be sold per contract, on a project basis, with separate or an additional fee. Some Telecommunications Management Solutions Providers negotiate contracts for clients, benchmark the rates, scrutinize terms and conditions, monitor contract performance and proactively provide notice of contract expirations.

### • Procurement and Order Management

Procurement and ordering management enables enterprises to enter orders, manage workflow for approval of orders, and placing orders with Carriers through a portal or helpdesk service. Fulfillment of orders includes tracking of order milestones and escalation if promised delivery dates are missed. TEM pricing benchmark studies often fail to account for the costs of providing this service.

### Invoice Management

Invoice Management includes receipt of invoices, conversion of paper billing to electronic media and software to centralize processing and management of bills. Carrier billing is complex with a wide range of services, special features and line items. Lack of standards for Carrier billing make it nearly impossible for organizations to process bills in electronic format without custom software.

TEM pricing benchmark studies may describe Telecommunications Management and TEM processes with recommendations for buyers to verify all the services are included, yet these same reports may only include costs of providing invoice management component in their pricing studies.

Expense Management (Audit, Dispute Management and Optimization)
 Expense management includes validation of expenses to contracts tariffs, MACD inventory activity and optimization of charges. Identification of billing errors and overcharges, documentation and filing of claims with Carriers and claims resolution are part of dispute management. Benchmark pricing and comparisons of pricing should consider the costs for historic audits, ongoing dispute management, resolution and optimization.

Optimization of enterprises' communications infrastructure and network expenses provide savings through cost avoidance. Savings come from reconciliation of usage and services with reduction from unused or underutilized lines and services; identification of services that do not have a contract or those that have uncompetitive contracts; finding inactive lines and circuits; discontinuing unnecessary equipment maintenance; and grooming of services to higher capacity lower cost services.

### Usage Management

Telecommunications Management programs promote accountability for service consumption and visibility through expense chargeback to cost centers, departments, individuals or other user defined expense categories. The level of detail for chargeback can include call detail records. Usage management reports can also help identify theft and misuse of the telecommunications network.

#### Bill Payment

Solution Providers batch and submit bills to the customer for payment to Carriers. In other cases, the Solution Provider establishes an account for customers to transfer funds and uses these funds to make payments to the Carrier. Regardless of which approach is selected, Providers track the invoice payment date, the amount that was paid, the name of the Carrier, the address or account that received the funds, and when the funds cleared.

### Reporting and Business Intelligence

Reporting provides detailed information on enterprise telecommunications networks and budgets. Data is maintained in a usable format that is readily accessible to managers. Reporting provides dashboard information in a graphical format with trending for expenses.

### **Fixed and Mobile Telecommunications Management Services Differ**

Enterprises need to determine if the Telecommunications Management project will include domestic wireline, mobile/wireless, and/or international expenses. The three areas of fixed, mobile and international telecommunications expenses have a number of unique challenges. Carriers use different billing systems because regulations and revenue models vary for each of these services. Enterprises may also have different groups that manage these three areas. Below are areas which differ for fixed and mobile.

### Procurement and Ordering Management

- Account Portals: Users for fixed services portals usually have specialized knowledge of Carrier services and procurement. With mobile/wireless services, a mass audience of employees does not have specialized telecommunications knowledge so these portals must be more intuitive.
- Service/Device/Policy Catalog: With mobile programs, continually changing devices, accessories, rate plans, entitlement rules and approval policies must be maintained. Additional scope of work and costs of keeping information current should be identified.

- Optimization: Individual employee mobile usage must be reconciled with rate plans to avoid overage penalties and forfeited minutes or data that are not used if pools or allotments exceed employees' needs.
- Orphaned Devices: Significant savings come from identifying and disconnecting
  unused devices which employees may return when they leave the company.
  These unused devices with service plans will remain on monthly bills unless they
  are suspended or disconnected. Some former employees may keep devices with
  services that are continuing to be paid for by their former employer and should be
  discontinued.
- Help desk: Organizations should consider help desk expectations of employees and areas where a help desk will help make employees more productive to ensure that inquiries for on boarding new employees, password reset, remote data wipe, replacement, and other functions are efficiently managed.
- Provisioning/Kitting: Some organizations are seeking providers to warehouse and deliver wireless hardware which has preset applications, accessories and instructions set when devices are delivered to their employees.
- Mobile Device Management (MDM): programs secure, manage and support mobile devices deployed across enterprises. It includes over-the-air distribution of software applications, inventory tracking, policy management, data and configuration settings security management, and service management for all types of mobile devices, including mobile phones, smartphones, tablet computers, ruggedized mobile computers, mobile printers, and mobile Point of Sale (POS) devices. Depending on the organization it may apply to both corporate owned and employee owned (BYOD) devices across the enterprise.
- MDM Services: Many organizations need third parties to manage MDM software and provide services to address their MDM needs.
- Mobile Security Management: Application security is a crucial area where MDM tools don't play much of a role beyond pushing patches out to at-risk devices. It provides software to protect against viruses and malware, scans for malicious code in files, memory cards, applications, Internet downloads and text messages, blocks risky websites to protect against phishing and other scams, encrypt data on the device and provide over-the-air data encryption.
- **Mobile Device Retirement:** The proliferation of mobile devices with short lifecycles requires organizations to consider how they will dispose of them ensuring that sensitive data is wiped and avoid sending material to landfills while getting top dollar for the retired devices or making a donation.

# **Global Engagements**

Global deployments of Telecommunications Management and TEM programs face some unique challenges compared to programs that focus on a single county. Corporate culture, the way that employees work, think and act vary in different regions.

Laws and regulations also present challenges. In Europe information relating to legal entities on telecommunications bills is not classified as personal data. However, these same bills also are likely to include individuals' phone number, business address which is classified as personal data. This information is subject to privacy protection laws. Telecommunications Management and TEM programs must address these issues.

### **Data Privacy**

Data privacy and regulations for personal data for the U.S. and the European Union (EU) are quite different. Currently, the U.S. approach to data protection focuses on a "Bill of Rights" with codes of conduct for stakeholders. In Europe, privacy is considered a fundamental human right. Data privacy guarantees are based on provisions from:

- Article 8 of the European Convention of Human Rights in 1950.
- The Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS Article 108).
- Directive 95/46/EC of the European Parliament and Council which was approved in 1995 and implemented in 1998.
- Article 8 of the Charter of Fundamental Rights for the European Union from December 7, 2000.
- A draft from new European Commission Data Protection Regulation issued on January 25 2012, and it will ultimately override the Data (Directive 95/46/EC)

In the US organizations must comply with several regulations:

- Gramm-Leach-Bliley Act (GLBA)
- The Health Insurance Portability and Availability Act (HIPAA)
- The Californian Senate Bill 1386
- Online Personal Protection Act
- Sarbanes-Oxley Act (SOX)
- Federal Information Security Management Act.

The United States, Australia, Britain, France, Germany, Ireland Japan and Spain either have or are developing <u>stiffer enforcement and penalties</u> for data breaches resulting in exposure of personal information. Currently, each European country has a dedicated data agency to enforce its <u>data laws</u>. Spain can impose fines up to €600,000. France's cap on fines is €150,000 for a first offense, plus five years in prison. German data fines can reach €250,000 and in the United Kingdom, fines are unlimited.

Japan imposes fines of 300,000 yen and up to six months in prison. Google and Facebook face fines up to \$1.1 million and other sanctions for privacy lapses under Australian privacy laws. The patchwork of regulations listed above present additional requirements and penalties for failing to protect data.

International Telecommunications Management or TEM programs must be tailored to each individual country, its laws and its cultural norms. Compliance with international laws adds to the cost and timeframes to implement international programs, but it is a requirement. In Europe programs must be coordinate with local work councils. Violating data privacy law imposes costs beyond financial penalties. Firms face damage to their reputation and loss of business for data breaches. Three common approaches to meeting data security and privacy requirements include ISO 27001, Safe Harbor certifications and SAS 70 reviews.

#### ISO 27001

ISO 27001 is considered by many to be the international best practice standard for managing data. The Information Security Management System (ISMS) provides a systematic approach to manage information and ensure that data is secure. It encompasses people, processes and IT systems; it also addresses electronic and physical processes. ISO 27001 sets out specific requirements, which can be audited and certified. The standard was published jointly by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). ISO27001 can provide a framework for compliance with many regulatory standards.

#### Safe Harbor

Safe Harbor certifications offer U.S. firms a way to show that they have met the "adequacy" requirement under the European Directive on Data Protection. It was developed by the U.S. Department of Commerce, in consultation with the European Commission, industry and non-governmental organizations. The safe harbor framework includes seven principles:

- 1. **Notice**: how to contact an organization and information transferred to third parties
- 2. **Choice**: an option to opt-out of third party disclosures or purposes other than those originally collected and opt-in provisions for other sensitive information.
- 3. **Onward Transfers**: disclosure of information to third party, organizations must apply notice and choice principles, unless it is an agent and it either complies with the safe harbor principles or it is subject to the Directive or other adequacy finding or it enters into a written agreement with the organization.
- 4. **Security:** Demonstration that reasonable precautions are in place.
- 5. **Data Integrity:** the relevance and purpose for use of information.
- 6. **Access:** individuals must have access to personal data that is collected except when expenses for providing access are disproportionate to the individual's risk.
- 7. **Enforcement:** an organization must have verification, dispute resolution and a mechanism for remedies in place before it will qualify for safe harbor certification.

### **SAS 70**

All U.S. public companies must comply with the Sarbanes-Oxley Act (SOX). Section 404 requires that CEOs and CFOs of public companies personally attest to and sign-off on the adequacy of their internal controls. It applies to customers that use Telecom Expense Management (TEM) Outsource and ASP Solutions Providers that process transactions on their behalf.

The SAS 70 report can assist public companies in assuring that their financial statements are accurate by relying upon the verified financial controls provided by their Outsource and ASP vendor. SAS stands for Statement on Auditing Standards of the American Institute of Certified Public Accountants No. 70. SAS 70 opinions can only be issued by CPA firms.

Type I audits do not include testing of the controls. Type II reviews are more comprehensive. Type II reviews include the testing of the control in place and verification that the controls are working. A SAS 70 Type II report will include a thorough description of the Solution Provider's processes and tools, corporate controls, service goals to be achieved, and the control objectives needed to accomplish the goals. It summarizes the results of the auditor's testing of the controls.

### **International Telecommunications Management and TEM Programs**

Below are examples of the scope of work for global international projects:

- Invoice management for bills that originate from international carriers
- Language translation
- Currency conversion
- International inventory/asset management and change control
- International procurement and order management
- Global sourcing management of telecommunications services
- Multinational usage reporting and expense allocation chargeback
- Central reporting of international telecommunications expenses
- Expense management: validation and optimization of international expenses
- Mobile device management for multinational locations and traveling employees.
- Mobile security management for multinational locations and traveling employees.

With sourcing and procurement, it is important to establish clear policies for selecting service providers, acquisition, and disconnect procedures. Global sourcing of telecommunications services is difficult because few Carriers have the network coverage to deliver international services through a single sourcing agreement. In most cases, service providers have a patchwork of alliances.

Processing telecommunications bills that originate from international Carriers can be difficult. Enterprise rules for converting currency vary. A common approach is to use the date when the invoice was created or the date when payment is issued. It is critical to use a consistent approach for currency conversion for the entire enterprise for reporting. Managers may have to have to start by learning where the billing is currently being processed and identify their counterparts in other countries. It is necessary to understand the requirements of local regulatory bodies. It may be necessary to coordinate with local workers or a council of employees for the region in which the bills are located.

International inventory and asset management require a centralized repository to store the voice and data inventory. Domestic Carriers have different names for services and inventory items. International brings challenges with more service providers and difficulties reconciling different naming conventions for services.

Multinational allocation chargeback for telecommunications expenses with reporting provides better visibility and accountability for spending. The benefits to having all the data in a centralized repository and being able to analyze comparative costs of communications for different regions go far beyond cost savings.

### **Pricing**

Pricing models for fixed and mobile Telecommunications Management services vary.

- Mobile/wireless Telecommunications Management service charges are set for each device in the program.
- In a software-as-a-service or SaaS engagement, licensed software or hosted application pricing is usually expressed as a percentage of fixed service spending and billed with a monthly recurring charge.
- For Business Process Outsource (BPO) Telecommunications Management program, pricing is also expressed as a percentage of fixed service spending, and billed monthly.

Most wireline Telecommunications Management and TEM Solution Providers express their fee based on the amount of spend that they are managing, but their pricing is not developed straight from a table using a percentage of spend calculation. This approach does not reflect the actual workload and resources needed to staff a project.

Costs resources and technology used for managing invoices vary based on if the bills will be processed in paper or electronic format. Rules are not simple for determining what will be available electronically from a carrier. Sometimes larger customers receive priority for electronic billing. Other times, the account team may be able to accelerate a transition to electronic billing. In some cases, bills for particular services or products may not be available in an electronic format.

The level of detail that is provided by Carriers in some electronic formats may be insufficient to validate the charges or meet clients' needs. Sometimes, Carriers require paper bills to dispute a charge or pay a bill. It should also be noted that the readers used to process EDI and other electronic formats usually need to be customized for each client. Any announced or unannounced changes that Carriers make to bills require reworking of the readers adding to the labor costs for Solutions Providers.

In addition, the complexity of clients' cost allocations and their volume of MACD activity affect the labor and resources that a Solutions Provider need to dedicate to the project. This is why Solutions providers do not simply use a table to calculate fees based on a percentage of spend. Also, consider what happens if the expenses on a complex bill with many different services are reduced through sourcing, optimization, or removal of ongoing billing errors. In these cases, the workload and resources may not change for the Solutions Provider to receive, validate and manage usage allocation chargeback for the bills which now have reduced expenses.

Not all Telecommunications Management and TEM programs are the same. Enterprises must balance their needs to negotiate contract price stability with considerations for flexibility to allow for challenges in accurately defining the scope of work and effort to manage the program. Pricing is based on a calculation for the specific project scope, carrier mix, allocation complexity and other factors tied to the technology, resources and effort a Solutions Provider determines will be necessary to perform the work. Future increases and decreases in the volume of billing that will be managed and other items also will impact pricing. The value from the program will go above and beyond expense management.

# **Cost Savings**

### **Telecommunications Management Cost Justification**

An effective cost justification for Telecommunications Management will help to avoid buying a solution that exceeds or fails to meet the needs of the organization.

### **Telecommunications Management program savings fall into three categories:**

- Spending less on telecommunications services
- Labor efficiencies
- Indirect savings

Savings Category	Potential Savings	
Spending less on telecommunications services	3	
A. Recovery of refunds for billing errors		
Audit and recovery of billing overcharges	2% - 15%	
MACD reconciliation and recovery of billing overcharges	of expenses	
B. Cost avoidance by reducing future spending	·	
Strategic Sourcing: better contracts and rates	5%-25%	
Inventory management		
a) Grooming to higher capacity lower cost services	7	
b) Elimination of unused services	F0/ 150/ of ovnonces	
3) Optimization		
a) Wireless service optimization of voice and data matching	5%- 15% of expenses	
consumption to service plans		
b) Identification of services with no contracts, receiving better		
rates though quote requests and negotiation		
c) MARC penalty avoidance	Depends on MARCs	
Accountability chargeback visibility, reporting on usage	1%-3% of expenses	
5) Elimination of late payment penalties and service disruption for	.5-2% of expenses subject	
late payments, nonpayment, or lost bills	to penalties	
Labor efficiencies automation of manual processes or outsourcing		
A. Automation of procurement processes	FTE reallocation or FTE	
	cost – BPO cost	
B. Automation of inventory management	FTE reallocation	
C. Consolidation of invoices to reduce the volume of payments	FTE reallocation	
D. Automation of invoice management and validation	FTE reallocation	
E. Automation of usage chargeback and reporting	FTE reallocation	
F.Reduction of help desk costs or outsourcing	FTE reallocation or FTE	
	cost – BPO cost	
Indirect savings		
A. Consistent application of procurement policies	1%-5% of expenses	
B. Unifying processes and improving collaboration	1%-3% of expenses	
C. Risk mitigation from improved compliance to mobile policy	Likelihood of breach X cost	
	of lawsuit or penalties	
D. Better information for improved decisions	benefit from better	
	decisions	
E. Freeing working capital	cost of funds X savings	
F.Redirect staff to focus on income producing projects and areas where	income or value from new	
they add more value	activities or	
	staff cost	
G. Application of corporate business, mobile policy and accounting	"Priceless"	
rules globally		
H. Compliance to each country's regulations	"Priceless"	

### Conclusion

The likelihood that a program will produce savings to justify its expenses depends on the:

- Level of oversight and tools currently in place.
- Authoritative inventory source if any being used as the basis for paying bills.
- Regular reconciliations or inventory clean ups performed.
- The claims management and credit retrieval capabilities in place.
- Level of ongoing audits and optimizations.
- Centralized or disparate services and carrier mix.
- Volume of Move Add Change, and Disconnect activity.
- Current contract rates and complexity terms and conditions.
- Quality of historical records.
- Business rules and level of adherence.
- Commitment by key stakeholders in pursuing savings and opportunities.

If the enterprise has good records for its MACD activity, many disconnected items that are found to remain on bills issues will be refundable issues. If it does not have the disconnect requests, the items will merely be future costs savings items. Also, if the enterprise works closely with its Telecommunications Management Solutions Provider to make the case that it is due refunds, it will be more successful compared to firms that have providers "go it alone" on escalating billing issues.

Enterprises also need to align savings calculations from cost avoidance measures with their corporate policies and a practical approach. The CFO can help by establishing rules for recognition of savings and reporting of those savings.

#### The Cost of Not Acting

Finally, it is important to consider the cost of not acting or delayed action. With telecommunications expenses, there are costs for not acting because Carrier contracts often limit the period of time in which customers can file claims for refunds. The statue of limitations for refunds is typically 6 months for long distance services and two years for local billing. Increasingly, telecommunications contracts are setting more stringent limits on the time to file a claim for a billing error. In addition, with cost avoidance each month that a service is not optimized is a month in which the savings are forfeited forever. Carriers do not provide refunds for organizations that fail to act on cost savings.

Ultimately, the cost justification should focus on areas that add value for the organization. Cost avoidance and labor savings are an important part of justifying a program and evaluating its ongoing performance.

Telecommunications Management is more than TEM. Prospective customers should not focus solely on the savings. It may be difficult to get away from the savings, but there are many other benefits such as inventory management, visibility, consolidation, business intelligence for better decisions. The value-add and by-product is savings, but that should not be the sole focus.

## **Recommended Reading**

Readers can access TEMIA reports online: <a href="www.temia.org/resources/download-reports">www.temia.org/resources/download-reports</a>.

Adoption of Telecommunications Management as New Industry Term

**TEM RFPs - Guide to Evaluating TEM Solutions** 

A Call to Action: Overcoming the Conundrum of Telecom Invoices and Electronic Billing

Your Exceptional TEM Program: Best Practices for Sourcing Using TEM Metrics to Improve Performance

Your Exceptional TEM Program: Best Practices for Enterprises and Suppliers that Raise TEM Performance through Key Performance Indicators and Industry Standards

We welcome your feedback on this document, at <a href="mailto:info@temia.org">info@temia.org</a>.

TEMIA has authored this paper. TEMIA's mission is to raise awareness and knowledge of the benefits of Telecommunications Management solutions, to improve the quality and value of solutions through the development and promotion of open industry standards, and to cultivate shared industry knowledge among Solutions Providers, business partners, telecommunications service providers, and enterprise clients. TEMIA is a nonprofit association, which receives its funding primarily from Solution Providers.

### **About TEMIA**

TEMIA is the authoritative voice for Telecommunications Management, Telecommunications Expense Management, TEM, Wireless Expense Management, WEM, Mobile Device Management, MDM, Mobile Security, Mobile Content and Mobile Applications Solutions Providers.

In 2006, many of the largest Telecommunications Expense Management (TEM) solution providers established The Telecommunications Expense Management Industry Association (TEMIA). TEMIA has redefined itself with a broader mandate to focus on Telecommunications Management. TEMIA's ongoing mission is to raise awareness, to improve the quality and value of solutions and to cultivate shared industry knowledge for Telecommunications Management, Telecommunications Expense Management, TEM, Wireless Expense Management WEM, and Mobile Device Management, MDM, Mobile Security, Mobile Content and Mobile Applications. TEMIA seeks to do this through the development and promotion of open industry standards, and industry knowledge among solutions providers, business partners, telecommunications service providers, and enterprise clients. Further, TEMIA members subscribe to a Code of Ethics, which clearly differentiates their level of commitment to their clients.

For more information about TEMIA, please visit, <a href="http://www.temia.org">http://www.temia.org</a>, contact info@temia.org, or call TEMIA's Executive Director, Joe Basili at 973 763-6265.