

ETMA Inventory Standard for Fixed Wireline, Mobile and IT



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Executive Summary

This paper seeks to establish inventory standards for enterprises and Solutions Providers as it relates to a telecommunications environment (voice, data, wireless and IT services). It identifies the information that should be collected and managed as part of a Telecom Expense Management (TEM) or Managed Mobility Services (MMS) program.

The TEM and MMS market has evolved. Many firms no longer consider themselves to be pure TEMs. They are software or services companies that incorporate expense management as a component of larger offerings driven by digital transformation in the workplace and enterprise technology management.

Enterprise technology management parallels and overlaps telecom management. In 2015, to reflect this change and align its members with these emerging solutions within the IT Industry, ETMA updated its name replacing the word “Telecommunications” with “Technology” (Enterprise Technology Management Association).

Inventory standards in this paper are broken into three sections: fixed, mobile and IT. The IT section in the standard reflects this new thinking. IT may not be part of a standard TEM or MMS engagement today, but it is included to help clients and Solutions Providers define the scope of work.

One of the goals with this paper is to promote more precision regarding inventory discussions and what will be included in the scope of work.

Inventory and asset management provide a critical foundation for all programs. The listing below provides clear standards and a minimum requirement for what should be tracked, managed and reported. It also identifies a second category of items that are not part of the required standard with items that are “nice to have.”

Automation and electronic records for tracking of inventory is preferred. Many providers in different parts of the world still only offer bills and inventory in paper format so it may be necessary to supplement automated processes with manual collection of inventory records.

ETMA is proposing inventory standards with this paper, but it also recognizes that each client is unique. Some client projects may not require tracking of IT inventory; others may require additional items which are not part of this standard.

**ETMA
developed
this paper
because
inventory
and asset
management
provide
a critical
foundation
for all
programs.**

Executive Summary

Before starting a project, enterprises and Solutions Providers should answer these questions:

- **What inventory information will be captured?**
- **What are the best sources to create the inventory?**
- **How will it be captured?**
- **What interfaces and additional source feeds are necessary**
- **Who will verify data accuracy, enter it into the database and manage updates?**
- **How often will data be refreshed?**
- **How often will data be validated?**

Clients can use the standards in this paper to answer these questions:

- ***What are the critical inventory elements that need to be tracked?***
- ***How complete is my inventory collection compared to best practices?***
- ***What business metrics and capabilities do I need to further establish visibility and control of my inventory as well as asset management vendors?***

With this paper ETMA seeks to:

1. Establish an industry standard that serves as a baseline for Solutions Providers and enterprises.
2. Identify inventory items that enterprises and Solutions Providers consider valuable to track.
3. Insure there is clarity on what will be captured.

This paper also features a call to action. Adoption of the standard requires ETMA members, enterprises and analysts to work proactively to use the standard. Over time, your feedback will help ensure that the standard evolves as the industry and technology used by enterprises changes. This will secure better results for management of fixed, mobile and IT inventory.

I. Fixed Inventory

A fixed inventory includes:

1. **Vendor Billing:** Any recurring charge that appears on a bill.

- *Challenges:* Inventory data on invoices varies from vendor to vendor; it can be incomplete or non-existent. Typically, the invoice does not contain complete information about the inventory. It will require other sources to provide complete data auditing and analysis. These other sources can be difficult to identify. Enterprises and Solutions Providers may incur high costs capturing and normalizing data, which is often in a format that is difficult to access.

Information on the CSR represents a comprehensive view of an enterprise's services, which providers use to create the invoice. Data entry errors on the CSRs can lead to billing errors. Reconciliation and verification of information on the CSR with the phone bill is a common first step for a telecom audit.

Using a CSR is a preferred method for building an initial inventory of local services. However, it is not a minimum requirement. CSRs are used primarily by local providers in the U.S. for fixed services. All providers in the U.S. do not use CSRs. Therefore, it is not practical to list it as a minimum requirement. When a CSR is available, it will provide information that is not included on a bill or invoice. Using the vendor bill or invoice to build the inventory can usually be automated and it will provide a quicker implementation compared to using CSRs.

- *Minimum Requirement:* A line, circuit, name, description, or service provided by a service provider; inventory name, description, account number, type of inventory, vendor, and automated alerts for missing bills.
- *Nice to Have:* Validated inventory that reconciles CSRs and bills; Physical inventory; model, serial number, manufacturer. Establishing this level of detail can be very costly.

Physical inventory/demarcation surveys can

- Identify lines and circuits billed in error (i.e. inactive, demarc'd incorrectly, no cross connection, unable to locate, never installed, or moved out of location.)
- Validate the line and circuit inventory is billed accurately.
- Identify opportunities to eliminate charges for lines and circuits not in use.

One of the goals with this paper is to promote more precision regarding inventory discussions and what will be included in the scope of work.

I. Fixed Inventory (continued)

2. **Locations:** The physical location of the inventory or asset.
 - **Challenges:** Location data may or may not appear on the invoice. It may reside in many different places on the invoice. If location data is on the invoice, it is often incomplete or abbreviated inconsistently, and it may be difficult to match to a location in the database's master list.
 - **Minimum Requirement:** Location/Site ID; street address; city; state; Zip Code, country.
Nice to Have: Site lease or date owned; # of employees; telecom closet location; effective start date and close date for the site; contact name; phone number; email; type of location: manufacturing, retail, office, home etc.
 3. **Vendor Contacts:** Provider contacts for billing and asset/inventory management, contracts, customer support and account management.
 - **Minimum Requirement:** Billing; contracts, customer support and account management contact name; phone number; fax; email; mailing address.
 - **Nice to Have:** Contact time zone; escalation/manager, contact information, role in the account, portal URL* (for network service providers i.e. carriers) and login credentials.
- *This does not include providing access to an incumbent TEM Solutions Provider's portal. Giving access to a competitor's application to gather inventory data for a cutover, exposes enterprises and TEM Solutions Providers to legal action over intellectual property. Contracts should clearly define what information will be provided if a contract is terminated.
4. **Assets:** Services, assets; install date; move; add; change; disconnect (MACD) information; warrantee dates; purpose or function; speeds/bandwidth.
 - **Challenges:** MACD data can be difficult to obtain if the TEM Solutions Provider is not performing the procurement function or provide software to manage it and the client cannot or will not provide feeds of its MACD ordering process. MACD information can sometimes be found on the invoice, but it is usually incomplete. It will need to be verified by the client before it can be used for auditing purposes.
 - **Minimum Requirement:** Asset install date, add, change; disconnect date; contract linked to the service or asset and vendor account information.
 - **Nice to Have:** Warrantee dates; purpose of the asset or function; speeds/bandwidth; asset market value; make and model.

Inventory management should not be thought of as a onetime event that merely focuses on capturing information from the day a program is implemented.

I. Fixed Inventory (continued)

Additional inventory elements listed above as “*Nice to Have*” can be used for asset management, sourcing, validation, and optimization, cost allocation, budgeting and reporting. There may also be opportunities to manage maintenance charges or savings from redeploying inventory when employees leave or sites are closed.

5. **Contracts:** Data that describes how the inventory should be billed by vendor; terms and conditions; account information; effective start/ end date; quantities and rate plans.
 - **Challenges:** Contract data regarding the asset can be challenging to identify within the clients’ contract and associate back to the account where the asset is billed. If the inventory is not listed on the invoice, then it can be challenging to identify the account to associate with the inventory.
 - **Minimum Requirement:** Account number, vendor, rates, quantity, effective start and end dates; minimum annual revenue commitment; rate plans discounts offered for rate plans, features; effective start and end date for Early Termination Fees (ETFs); Monthly Recurring Charge (MRC); Non-Recurring Charge (NRC); waivers credits; provider contract number; provider contract contact information; renewal options auto-renewal dates; payment terms.
 - **Nice to Have:** Auto-notifications with customizable intervals before the contract(s) expire; Detailed Discount Levels, Credits, SLA’s.

6. **Customer Financial:** How the client manages the inventory for financial reporting and analysis such as cost centers, currency, etc.
 - **Minimum Requirement:** Cost center designation for the service or asset; General Ledger codes; currency; payment information and charge-back allocation rules.
 - **Nice to Have:** Workflow approval process and method by which cost center “owners” can approve or disapprove charges.

7. **Enterprise Employees:** Employee name or identification number; hierarchy charge-back information.
 - **Minimum Requirement:** Employee name or identification number; Hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; Employee Status (hire date, termination date, active or no longer working for firm).
 - **Nice to Have:** Job role/function, VIP/executives, P&L decision maker, employee location, region and country; Cost allocation formula for charge-back, split-billing information to charge across multiple cost centers.

Failing to gather inventory elements that are needed to manage expenses and the services that an enterprise uses, can lead to an ineffective program that delivers poor performance.

II. Wireless Inventory

1. **Vendor Billing:** Any recurring charge that appears on a bill for a mobile line, device, asset, accessory, service, or app.
 - *Challenges:* Typically, the invoice does not contain complete information about the smartphone; it will require other sources often captured by the service provider's IT Service Management (ITSM) platform to provide complete data.
 - *Minimum Requirement:* Description; account mobile phone number; vendor and automated alerts for missing bills.

2. **Locations:** Captures the assigned office for mobile user for tax purposes.
 - *Challenges:* Location data may not appear on the invoice, if it does it is frequently inaccurate because it will list the distribution center for kiting.
 - *Minimum Requirement:* Information that ties individual user information with Location/Site ID; street address; city; state; Zip Code, country. This can be very useful for to validate taxes. Often wireless hardware is associated incorrectly with a central warehouse where it is shipped to individuals rather than their primary location.

3. **Vendor Contacts:** Provider contacts for billing and asset management, contracts, customer support and account management.
 - *Minimum Requirement:* Billing; contracts, customer support and account management contact name; phone number; fax; email; mailing address.
 - *Nice to Have:* Contact time zone; escalation/manager contact information, role in the account.

4. **Assets:** Mobile line; smartphone, tablet, head-mounted display, smartwatch, smart card, SIM card, IoT device; accessory, or app.
 - *Challenges:* Asset data can be difficult to obtain if the MMS Solutions Provider is not performing the procurement function or providing software for this function the client cannot or will not provide feeds of its ordering process. It can sometimes be found on the invoice. Unlike fixed services, much of the asset information can be obtained from carrier portals and an MDM, but it must also be validated.
 - *Minimum Requirement:* Activation date; BAN/FAN; mobile number; plan and features (voice, text, data, international; SOC codes; device type, make and model; warrantee dates; IMEI; SIM; Supply chain: (new, old, recycled, original purchase price); asset acquisition date, eligibility date for replacement device; subsidized device and next eligibility date; Early Termination Fee (ETF); ETF date; deactivation date.

Who will verify data accuracy, enter it into the database and manage updates?

II. Wireless Inventory (continued)

Assets: (continued)

- *Nice to Have*: Device purpose/function (depending on the asset this may fit better under the employee category); policy information; MDM/EMM software; MAC address; OS; asset market value; serialized and non-serialized peripherals that have PCI related issues tied to them.
5. **Contracts**: Data that describes how the service should be billed by vendor terms and conditions; account information, effective start and end dates, plans and rates.
- *Challenges*: Contract data regarding the asset can be challenging to identify within the client's contract and associate back to the device.
 - *Minimum Requirement*: Account number, vendor, contract terms and conditions; rate plans; effective start and end dates; discounts offered for rate plans, features, devices, accessories; original hardware cost if applicable; effective start and end date for ETF fees; contract number; provider contract contact information; renewal options; payment terms.
 - *Nice to Have*: Auto-notifications with customizable intervals before the contract(s) expire, detailed discount levels, credits, SLA's.
6. **Customer Financial**: How the client manages the inventory for financial reporting and analysis such as cost centers, currency, etc.
- *Minimum Requirement*: Cost center designation; general ledger codes; currency; payment information; how the bill is paid (direct by company, reimbursement, or stipend).
 - *Nice to Have*: Cost allocation formula for charge-back, including split-billing information to charge across multiple cost centers. Workflow approval process and method by which cost center "owners" can approve or disapprove charges.
7. **Enterprise Employee**: Employee name or identification number; Hierarchy charge-back information. A feed from the HR system is very important to maintain accurate charge-back and billing if employees leave an enterprise.
- *Minimum Requirement*: Hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; (remaining not applicable for IoT and other mobile hardware) Employee name or identification number; employee status (hire date, termination date, active or no longer working for firm).
 - *Nice to Have*: Job role/function, VIP/executives, P&L decision maker, employee location, region and country; Cost allocation formula for charge-back, split-billing information to charge across multiple cost centers.

<p>How often will data be updated and validated?</p>

III. IT Inventory

In the 80s, enterprises had a telecom department that managed voice circuits, PBXs, and telephone handsets. IT was a different department that was responsible for managing PCs, printers, networks and servers. Ten years later, IT teams started buying WAN, Internet circuits and managing circuits from carriers. Over the next decade, the adoption of VoIP, with handsets that plugged into network ports rather than telecom ports, required IT to come together with telecom departments.

By 2010, many PBXs that required traditional circuits started to near the end-of-life. Voice traffic and SIP voice "circuits" use the Internet with cloud-based SIP switches or on-site SIP switches. Smartphones are powerful networked computers with apps that offer more than just phone service. Telecom is part of IT. IT inventory and distinctions between telecom inventory for TEM and MMS engagements are not as clear.

Enterprise technology management parallels and overlaps telecom management. Telecom (fixed and mobile) and IT have similar characteristics:

- Consumption based billing for service usage.
- Charge-back to business units or some owner.
- Tiered-pricing based on volume or other characteristics.
- Management benefits from third party tools and managed services to automate labor-intensive processes.

Enterprises need Solution Providers for IT and telecom management for:

- Sourcing and contract management.
- Procurement and order management.
- Inventory management and change control.
- Asset retirement/disposition and value recovery.
- Entitlement management with on-boarding and off-boarding for employees.
- Invoice management and bill payment.
- Expense management: to validate and optimize charges.
- Usage management and charge-back.
- Reporting and analytics.
- Consulting services for planning, strategy and execution across the ecosystem.

Many ETMA members currently manage IT and elements of cloud services, Software-as-a-Service (SaaS) Infrastructure-as-a-service (IaaS) and Platform-as-a-Service (PaaS). It is also important to emphasize that client engagements vary. Some projects may not include management of fixed, mobile or IT. In the current environment, IT asset data listed below could be a minimum requirement or it could something that is nice to have depending on the scope of work.

Inventory management is an ongoing process with an ongoing sustained effort required to gather, reconcile and validate information.

III. IT Inventory (continued)

The listing below assumes it is part of the scope of work. The inventory standard seeks to establish a framework to identify what to track for IT.

1. **Vendor Billing:** Any recurring charge that appears on a bill for an IT service or asset.
 - *Challenges:* Inventory data on invoices varies from vendor to vendor; it can be incomplete or non-existent. Typically, the invoice does not contain complete information about the inventory. It will require other sources to provide complete data auditing and analysis. These other sources can be difficult to identify. Enterprises and providers may incur high costs capturing and normalizing data, which is often in a format that is difficult to access.
 - *Minimum Requirement:* Inventory name, description, account number, type of inventory, vendor, and automated alerts for missing bills.

2. **Locations:** Captures the physical location (host for cloud services) of the inventory.
 - *Challenges:* Location data may or may not appear on the invoice. If it is on the invoice, it may reside in many different places. Location data is often incomplete or abbreviated inconsistently; it is difficult to match to a location in the database's master list. Many IT assets are hosted by a service provider. They do not reside on site. Cloud is not a product; it is a method for delivery.
 - *Minimum Requirement:* Location/Site ID; street address; city, state, zip, country.
Nice to Have: Site, # of employees; effective start and close date for the site; lease date/owned location: contact name; phone number; email; location type: manufacturing, home, office, retail, etc.

3. **Vendor Contacts:** Provider contacts for billing, contracts, customer support and account management.
 - *Minimum Requirement:* Billing; contracts, customer support and account management contact name; phone number; fax; email; mailing address.
 - *Nice to Have:* Contact time zone; escalation/manager, contact information, role in the account.

Additional inventory elements listed above as "Nice to Have" can be used for asset management, sourcing, validation, and optimization, cost allocation, budgeting and reporting. There may also be opportunities to manage maintenance charges for savings from redeploying inventory when employees leave or sites are closed.

Your feedback will help ensure that the standard evolves as the industry and technology used by enterprises changes.

III. IT Inventory (continued)

4. **Assets:** Services, assets; install date; move; add; change; disconnect information; warranty dates; purpose of the function use; speeds/bandwidth.
 - *Challenges:* MACD data can be difficult to obtain if the client cannot or will not provide feeds of its MACD ordering process for IT. Sometimes it can be found on the invoice but it is typically incomplete. It will need to be verified by the client before it can be used for auditing purposes.
 - *Minimum Requirement:* Assets: routers, switches, servers, network hardware and other customer premise equipment (CPE), desk sets, user peripherals, software licenses, PBX equipment, VoIP hardware and software; Services: data circuits, WAN/SDN, cloud, unified communications, maintenance on CPE for a managed services network, software licenses; asset, install date, add, change; disconnect date; contract linked to the service or asset and vendor account information.
 - *Nice to Have:* Warranty dates; purpose of the asset, use and or function; speeds/bandwidth; asset market value; make and model, location, operating System, OS version level, serial number, MAC address.
5. **Contracts:** Data that describes how the inventory should be billed by vendor terms and conditions; account information, effective start and end dates, quantity and rates.
 - *Challenges:* Contract data regarding the asset can be challenging to identify within the customer's contract and associate back to the account where the asset is being billed. If the inventory is not listed on the invoice, it can be difficult to identify what account to associate with the inventory.
 - *Minimum Requirement:* Account number, vendor, rates, quantity, effective start and end dates; minimum annual revenue commitment; rates and quantities, effective start and end date for ETF fees; percentage MRCs; NRCs; waivers credits; provider contract number; provider contract contact information; renewal options auto-renewal dates; payment terms.
 - *Nice to Have:* Auto-notifications with customizable intervals before the contract(s) expire, detailed discount levels, credits, SLA's.
6. **Customer Financial:** How the client will manage the inventory for financial reporting and analysis such as cost centers, currency, etc.
 - *Minimum Requirement:* Cost center designation; General Ledger codes; currency; payment information and charge-back allocation formula.
 - *Nice to Have:* Workflow approval process and method by which cost center "owners" can approve or disapprove charges.

More precision in discussing the scope of work and inventory will help ensure that project costs are clear.

III. IT Inventory (continued)

7. **Enterprise Employee:** Employee name or identification number; hierarchy charge-back information.
 - *Minimum Requirement:* Employee name or identification number; hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; employee status (hire date, termination date, active or no longer working for firm).
 - *Nice to Have:* Job role/function, VIP/executives, P&L decision maker, employee location, region and country; cost allocation formula for charge-back, split-billing information to charge across multiple cost centers.

IV. Inventory Comparison Grid

Inventory Management

Category	Fixed	Wireless	IT
1. Vendor Billing	Any recurring charge that appears on a bill.	Any recurring charge that appears on a bill for a mobile line, device, asset, accessory, service, or app.	Any recurring charge item that appears on a bill for an IT service or asset.
Minimum Requirement	Line, circuit, name, description, or service provided by a service provider; inventory name, description, account number, type of inventory, vendor, and automated alerts for missing bills.	Description; account mobile phone number; vendor and automated alerts for missing bills.	Inventory name, description, account number, type of inventory, vendor, and automated alerts for missing bills.
Nice to Have	Location/Site ID; street address; city; state; Zip Code, country.		
2. Locations	The physical location of the inventory or asset.	Assigned office for mobile user for tax purposes.	Physical location (host for cloud services) of the inventory.
Minimum Requirement	Location/Site ID; street address; city; state; Zip Code, country.	Information that ties individual user information with Location/Site ID; street address; city; state; Zip Code, country.	Location/Site ID; street address; city, state, Zip Code, country.
Nice to Have	Site lease date/owned; # of employees; telecom closet location; effective start date and close date for the site; contact name; phone number; email; type of location: manufacturing, retail, office, home etc.		Site lease date/owned; # of employees; Effective start date and close date for the site; Location: contact name; phone number; email; ; type of location: manufacturing, retail, office, home etc.
3. Vendor Contacts	Provider contacts for billing and asset/inventory management, contracts, customer support and account management.		
Minimum Requirement	Billing; contracts, customer support and account management contact name; phone number; fax; email; mailing address.		
Nice to Have	Contact time zone; escalation/manager, contact information, role in the account, portal URL (for network service providers i.e. carriers) and login credentials.		

IV. Inventory Comparison Grid

Order Management

4. Assets	Services, assets;	Mobile line; smartphone, tablet, head-mounted display, smartwatch, smart card, SIM card, IoT device; accessory, or app.	Services, assets; install date; move; add; change; disconnect information; warrantee dates; purpose of the function use; speeds/bandwidth.
Minimum Requirement	Asset install date, move; add; change; disconnect information; warrantee dates; purpose/function; speeds/bandwidth; contract linked to the service or asset and vendor account information.	Activation date; BAN/FAN; mobile number; plan and features (voice, text, data, international; SOC codes; device type, make and model; warrantee dates; IMEI; SIM; Supply chain: (new, old, recycled, original purchase price); asset acquisition date, eligibility date for replacement device; subsidized device and next eligibility date; Early Termination Fee (ETF); ETF date; deactivation date.	Assets: routers, switches, servers, network hardware and other customer premise equipment (CPE), desk sets, user peripherals, software licenses, PBX equipment, VoIP hardware and software; Services: data circuits, WAN/SDN, cloud, unified communications, maintenance on CPE for a managed services network, software licenses; asset, install date, add, change; disconnect date; contract linked to the service or asset and vendor account information.
Nice to Have	Warrantee dates; purpose of the asset, use and or function; speeds/bandwidth; asset market value; make and model.	Device purpose/function (depending on the asset this may fit better under the employee category); Policy information; MDM/EMM software; MAC address; OS; Asset market value; Serialized and non-serialized peripherals that have PCI related issues tied to them.	Warrantee dates; purpose of the asset, use and or function; speeds/bandwidth; asset market value; make and model, location, operating System, OS version level, serial number, MAC address.

IV. Inventory Comparison Grid

Contract

5. Contracts	Data that describes how inventory should be billed by vendor, terms and conditions, account information, effective start and end date, quantity and rates.		
Minimum Requirement	Account number, vendor, rates, quantity, effective start and end dates; minimum annual revenue commitment; rate plans discounts offered for rate plans, features; effective start and end date for Early Termination Fees (ETFs); Monthly Recurring Charge (MRC); Non-Recurring Charge (NRC); waivers credits; provider contract number; provider contract contact information; renewal options auto-renewal dates; payment terms.	Account number, vendor, contract terms and conditions; rate plans; effective start and end dates; discounts offered for rate plans, features, devices, accessories; original hardware cost if applicable; effective start and end date for ETF fees; contract number; provider contract contact information; renewal options; payment terms.	Account number, vendor, rates, quantity, effective start and end dates; minimum annual revenue commitment; rates and quantities, effective start and end date for ETF fees; percentage MRCs; NRCs; waivers credits; provider contract number; provider contract contact information; renewal options auto-renewal dates; payment terms.
Nice to Have	Auto-notifications with customizable intervals before the contract(s) expire, Detailed Discount Levels, Credits, SLA's.		

Accounting

6. Customer Financial	How the customer manages inventory for financial reporting and analysis such as cost centers, currency, etc.		
Minimum Requirement	Cost center designation for the service or asset; General Ledger codes; currency; payment information and charge-back allocation rules.	Cost center designation; general ledger codes; currency; payment information; How the bill is paid (direct by company, reimbursement, stipend).	Cost center designation; General Ledger codes; currency; payment information and charge-back allocation formula.
Nice to Have	Workflow approval process and method by which cost center "owners" can approve or disapprove charges.	Workflow approval process and method by which cost center "owners" can approve or disapprove charges. Cost allocation formula for charge-back, including split-billing information to charge across multiple cost centers.	Workflow approval process and method by which cost center "owners" can approve or disapprove charges.



IV. Inventory Comparison Grid

7. Enterprise Employee	Employee name or identification number; hierarchy charge-back information.		
Minimum Requirement	Employee name or identification number; Hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; Employee Status (hire date, termination date, active or no longer working for firm).	Hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; (remaining not applicable for IoT and other mobile hardware) Employee name or identification number; employee status (hire date, termination date, active or no longer working for firm).	Hierarchy information (i.e. organizational/financial) department, general ledger code and cost center charge-back; Employee name or identification number; employee status (hire date, termination date, active or no longer working for firm).
Nice to Have	Job role/function, VIP/executives, P&L decision maker, employee location, region and country; Cost allocation formula for charge-back, split-billing information to charge across multiple cost centers.		

V. Call to Action and Next Steps

ETMA hopes this standard will help enterprises and Solutions Providers attain more precision in their inventory discussions. There may be additional information for some projects that should be included and other data that does not need to be captured. ETMA's objective is to provide an industry standard that serves as a baseline for Solutions Providers and enterprises to discuss what should be captured for successful management of fixed, mobile and IT inventory. Each client engagement is unique.

In the current environment, IT may not be part of a standard TEM or MMS engagement. Gathering unnecessary information can add costs to a project. On the other hand, failing to gather inventory elements that are needed to manage expenses and the services that an enterprise uses, can lead to an ineffective program that delivers poor performance. Enterprises should consider how pricing compares for firms that collect, maintain and are able to report on all the desired inventory information compared to firms that don't collect, maintain or can't report on the required data.

Solutions providers and enterprise clients must take more time, prior to starting an engagement, to determine if the scope of work will include management of IT expenses, bills, tracking of inventory and reporting.

Inventory management should not be thought of as a onetime event that merely focuses on capturing information from the day a program is implemented. It is an ongoing process with an ongoing sustained effort required to gather, reconcile and validate information. Using the questions below will help to identify who is responsible for gathering information and maintaining it. The responses will also help to identify the systems and ongoing workflow process that will continually capture the inventory.

- **What inventory information will be captured?**
- **What inventory items are not in the standard, but are necessary that may require additional costs to track?**
- **How will it be captured?**
- **Who will verify data accuracy, enter it into the database and manage updates?**
- **How often will data be refreshed?**
- **How often will data be validated?**

Adoption of this standard requires ETMA members, enterprises and analysts to work proactively to use the standard. Your feedback, will help ensure that the standard evolves as the industry and technology used by enterprises changes. This will secure better results for management of fixed, mobile and IT inventory.

ETMA welcomes the opportunity to receive [feedback](#) as you develop inventory requirements for your needs.



About ETMA

ETMA's ongoing mission is to raise awareness, to improve the quality and value of solutions and to cultivate shared industry knowledge for Technology, Managed Services, Expense Management, Telecommunications Management, Telecom Expense Management, (TEM), Mobile Expense Management, Managed Mobility Services, (MMS), Mobile Device Management, (MDM) and Enterprise Mobility Management, (EMM) solutions. ETMA seeks to do this through the development and promotion of open industry standards, and industry knowledge among solutions providers, business partners, telecom service providers, and enterprise clients. Further, ETMA members subscribe to a Code of Ethics, which clearly establishes standards and differentiates their level of commitment to their clients. ETMA is a nonprofit association, which receives its funding primarily from Solution Providers.

For more information about [ETMA](http://www.etma.org), visit <http://www.etma.org>.

About Juvo Technologies

With industry certified personnel, proprietary software, and a genuine desire to help, Juvo has been able to partner with organizations across a variety of industries. From healthcare to finance, from construction to logistics, Juvo solutions work. While there is no standard profile of a Juvo client, those who choose Juvo are typically committed to driving efficiencies across their organization. Technological change brings challenges, and our clients look to us to provide insight into how to make the most of the leaps in technology we are all experiencing. With a client base that cuts across many of our country's largest industries, Juvo has gained an understanding of what works, and what doesn't within various organizations. From job costing and approvals in the construction sector, to 24-hour support within the logistics space, Juvo knows that your organization is unique, and our entire team is committed to creating simplified solutions that avoid the temptation of using cookie cutter templates that worked for someone else 5 years ago.

For more information about Juvo, visit <http://www.juvotec.com>.



Juvo's "Four Cornerstones"

From its inception, Juvo has adhered to an approach that is reflected in our technology, in our processes, and in how our entire team views Telecom Expense Management. These Four Cornerstones are:

- Inventory Management
- Operations Management
- Expense Management
- Contract Management

It is no accident that Inventory Management is listed first, because while we *believe* all of these functional areas should act in concert, we *know* that TEM can only move into the realm of "best practices" when you can accurately assess what you have and why you have it.

Juvo has been a ETMA member for nearly a decade, and we're proud to have taken part in many of the conversations that have led to this document's publication. We fully support ETMA's efforts to raise the standards associated with the TEM function and believe that this document is yet another step in that direction.