

The Italian CBI 2: New Corporate Banking Services to optimise the financial value chain



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Liliana Fratini Passi is the Secretary and the Technical Secretariat Responsible of ACBI, the Italian Interbank Corporate Banking Association. ACBI, created under the auspices of ABI (Italian Banker's Association), owns the governance of the CBI Service, which is a system developed to facilitate the corporate management of electronic multibanking connections and Business to Business (B2B) services.

As of today, CBI Service is one of the most important community for Business to Business (B2B) and Business to Government (B2G) integrated services.

ACBI defines XML Standards for all the CBI Service functionalities.

Currently the CBI Service enables more than 620.000 companies to access to payment services offered by more than 680 Banks (90% of Italian Banks). Since 2002, Liliana has coordinated the project for the complete renovation of CBI services, to improve/extend the range of payment CBI services; in fact, new CBI services will include XML based payment and document management services such as electronic invoicing, SEPA Credit Transfers and Direct Debit. New CBI services will also include the "Invoice Financing Service", whose business model and XML messages are going to be registered into ISO20022¹ Repository.

Liliana is a senior industry expert on payment industry: she has more than ten years of experience on payment services for banks and corporates, including Global Payments and Clearing Infrastructures (ACH, EBA, SWIFT, TARGET etc.). She is member of ISO20022 Registration Management Group, UN/CEFACT TBG5 Working Group², European Commission Informal Task Force on Electronic Invoicing and Italian Committee for SEPA migration.

She is also active in payments-related industry Forum and coordinates the Italian Banking Association Consultation Forum, created to cooperate with companies for the

¹ ISO 20022 Initiative - UNiversal Financial Industry message scheme – has been created by ISO (International Organization for Standardization) to provide the financial industry with a common platform and methodology for the development of XML messages for financial services.

² UN/CEFACT International Trade & Business Processes Group (TBG)'s Working Group responsible for the Finance-related business domain

implementation of the SEPA payment services and for the evolution of the CBI services.

ABSTRACT

In recent time payments industry has been deeply affected by technological evolutions, which have been cross to every industrial sector: security, integrity, authenticity of transactions, end-to-end, flexibility, integration with corporate systems and automatic reconciliation are words which have been under use in years, and now is time to shift them into concrete solutions, as expected by the market. Moreover, the need for EU harmonization of payment methods, prices and standards has led to the creation of SEPA, the Single Euro Payments Area, which represents a major opportunity for multinational enterprises and banks who operate at a cross-border level. The Association for Interbank Corporate Banking – ACBI – thanks to its numbers (over 620.000 corporates connected and the most part of the Italian banking system), has ridden the wave and is now becoming a real benchmark for the corporate banking community thanks to the launch of a new Internet based Virtual Private Network, the usage of XML syntax, the integration between the financial cycle (payments) and the supply chain (trade relationships and documents, e.g.: e-invoice). The new services sight the maximum alignment with ISO 20022 standards (UNiversal Financial Industry message scheme) providing bank customers with a set of specific Additional Optional Services (AOS) built over the core scheme of existing services (e.g.: credit transfer), and offer new end-to-end functions, such as the trade documents exchange, and financing traditional solutions which have been now converted to electronic, such as the Invoice Financing Request. But how does it work? And which value added do the new mentioned functions generate for companies? The article explains in detail all these topics, by affording the experience of ACBI, the critical factor of success, lessons learned and the value that the model could have in other countries and zones given the widespread extent on the Italian market.

Keywords: Interbank Corporate Banking (CBI), CBI 2, end-to-end, SEPA, payment initiation, e-invoicing, reconciliation, invoice financing request, STP, remittance information, Credit Transfer, Direct Debit.

INTRODUCTION

Recent improvements in network technologies and the explosion of the Internet in Italy made it possible to communicate at lower costs, allowing for a remarkable widening of applications and therefore opening the way to new supply channels of products and electronic services. At the same time, Italian banks boosted their investment in Information Technology in order to develop innovative services in support of the various types of customers: consumers, enterprises and public agencies.

Among these services offered by Italian banks, those based on Interbank Corporate Banking (CBI) standards have gained importance for the corporate marketplace. The Association for Interbank Corporate Banking (ACBI), established with the coordination

of ABI (Italian Bankers' Association) in 2001, has defined these standards in order to develop and improve the CBI Service in a cooperative context.

The CBI service (see Figure 1) has been operational since 1995, providing firms with electronic connection service to interbanking payment systems. CBI is a great asset, allowing online *Business-to-business* relations with one bank and providing a wide range of financial, information and business facilities. CBI is the banking system's answer to enterprises' demand for simplified management of the accounts held by each enterprise with various banks. Firms which have arrangements with various banks (in Italy enterprises on average make five account-based arrangements with as many banks) can therefore simplify their own activities not only because they centralize in a single point all their relations with the whole banking system but also because they use the same communication standards. These messaging standards allow firms equipped with highly automated organizational arrangements to reconcile bank information with firms' own data (accounting, warehouse, debt collection, etc).

The development of such payment Initiation interbanking network, which has been recently finalized by ACBI, is called CBI 2. CBI 2 allows Italian firms to add better document management services to traditional collection and payment orders and accounting information.

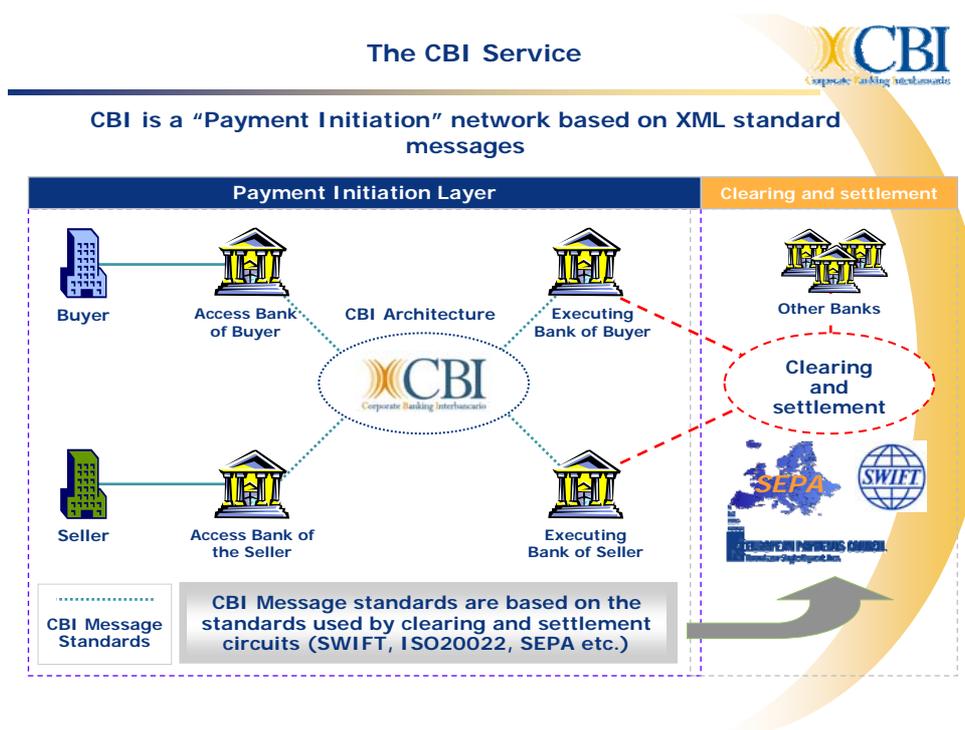


Figure 1. The CBI Service overall architecture

Thanks to the development of CBI 2, Italian banks have adapted their online services to CBI stakeholders' needs and to current international trends. In fact, the new technological infrastructure allows more than 620,000 enterprises which are served by 680 banks affiliated with ACBI (accounting for 90% of the banking system's assets) to communicate directly among themselves via the Interbank Corporate Banking (end-to-end communications). In doing so, they support STP (Straight Through Processing)³ and benefit from more integrated payment systems.

³ "In the sequence of events, which is typical of a chain with multiple parties, the most significant advantages associated with the use of Information and Communication Technologies (ICTs) depend on the possibility of immediate use, in the passage from one person/structure/phase to another, of the data contained in a electronic document,

The shaping of these services has been remarkably impacted by strong pressures deriving from the new trends within the SEPA (Single Euro Payments Area) as well as the excitement, at international level, of the definition of payment and document management standards, particularly related to the *supply chain* and the *financial value chain*. The ACBI will make the new payment initiation facilities available progressively following the same timeframe of the EPC (European Payment Council) Roadmap (EPC is the body to which the SEPA refers).

THE NEW DOCUMENT MANAGEMENT SERVICES OFFERED BY CBI INFRASTRUCTURE: E-INVOICING TRANSMISSION

International compliance goes hand in hand with the possibility of integrating business information systems, which will allow firms to use data running on the CBI service for their own book keeping and so making the financial value chain more efficient. "The development of CBI concerning the integration between business documents and collection and payment orders follows technological paradigms of flexibility and compliance and aims at international standards for transmission of electronic messages and processes."⁴ CBI 2 is therefore an interbanking infrastructure allowing, among parties, secure, fast, confidential and certified transmission of norms, data and documents, based on CBI transmission standards, concerning the market or those generic (pdf format, images, etc).

The development of the e-invoicing transmission service received a strong stimulus by the recent change in the legislative framework originated by the adoption of the EC Directive 2001/115. The Directive has been the main factor enabling the development of new Electronic Invoicing initiatives. With this Directive, the European Community has therefore redrafted the rules on invoicing, transmission and storage of electronic invoices, taking account of the development of new invoicing technologies and methods and thereby favoring electronic commerce.

Directive 2001/115 also provides that other e-invoicing transmission means, in addition to those defined by the Directive, may be explored and allowed, subject to the prior acceptance by interested Member States. In Italy, the following ones are allowed:

- The Decree adopted on 23 January 2004 by the Ministry of Economics and Finance addresses compliance with fiscal requirements of electronic documents and their reproduction in various types of optical support or other suitable support. The issuance, storage and exhibition of documents in the form of electronic documents as well as the electronic storage of analogue documents are allowed for fiscal purposes.
- Decree no. 52 of 20 February 2004, which implements EC Directive 2001/115, introduces into our legal system the possibility of creating, forwarding and storing invoices in a single electronic format (also via third parties).

without any further changes on data which have already been validated or "certified" (*Straight Through Processing, STP*)." Definition extracted from CNEL, "*La dematerializzazione dei documenti nelle attività di amministrazione, finanza e controllo*", 28 April 2005.

⁴ See footnote at p. 12 CNEL (National Council of Economy and Labour) "*La dematerializzazione dei documenti nelle attività di amministrazione, finanza e controllo*", 28 April 2005.

- Circular no. 45 adopted by the Tax Administration Agency on 19 October 2005 explains some provisions of Decree no. 52 of 20 February 2004 concerning the VAT regime, e-invoicing and signature of electronic invoices, as well as the requirements to store electronic documents.

Within this regulatory framework and at this stage of technological development, the development of new CBI transmission services, as part of the Document Management tool (see Figure 2), will allow for the exchange of electronic documents from a sending firm to a recipient one, via their respective Access Banks (*four corner model*). Exchangeable documents will be:

- Structured, i.e., based on system standards for which it is possible to carry out a technical validation
- Unstructured, such as images, files * .pdf, proprietary non-system standards, etc.

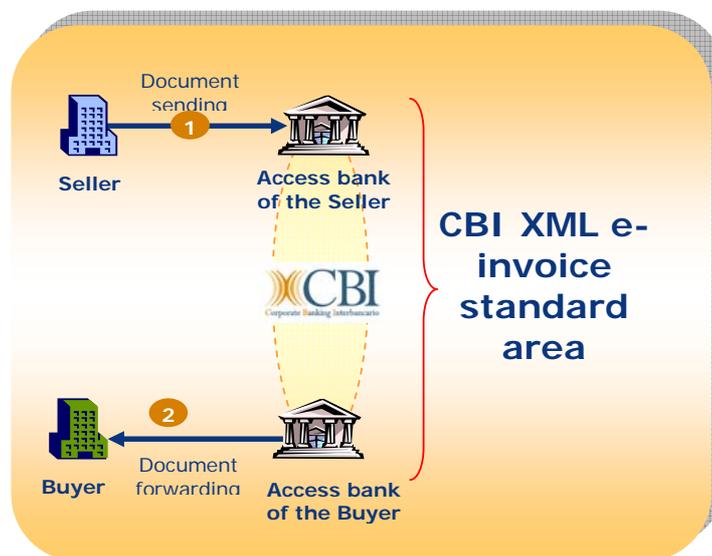


Figure 2. Document exchange over CBI channel

PARTICIPATION IN INTERNATIONAL COMMITTEES/WORKING GROUPS

As above mentioned, in order to achieve interoperability at a cross-border level, ACBI has undertaken several gap analysis tasks among the main international initiatives and SEPA standards: FINVOICE, UN CEFAC/TBG1 (Cross-Industry-Invoice), TWIST have been punctually analysed and compared to CBI standards to pursue the best alignment; multi-standard support, which is granted by a standardized message header and a flexible body suitable for any kind of processing, renders CBI standard really unique and capable of ensuring payments reconciliation and integration with financial services (e.g.: invoice financing based on the same data dictionary).

In order to achieve the maximum alignment to international issues of the banking sector, ACBI, thanks to its role of standardization organism, takes part in several on going international initiatives.

In particular, a very strategic assembly is now represented by the Informal Task Force on E-Invoice created under the European Commission (General Division "Enterprise and Industry"), aimed at developing a common business framework on a UE basis for e-invoices exchange. This Task Force will be replaced within December 2007 by an Ad hoc Steering Committee, constituted by all the main international stakeholders (included ACBI) under whose umbrella will operate three specific subgroups:

- Legal
- Authentication
- Standards (ISO/TBG5 convergence towards CEFACT/TBG1).

Each of these subgroups will be in charge of removing internal "barriers" which create hindrances to an interoperable UE model. The EC Informal Task Force is in strict liaison with experts from CEN Workshop E-Invoice, which is focused on a series of recommended guidelines (CEN Workshop Agreements – Phase II) aimed to provide technical countermeasures to present UE obstacles. ACBI is attending this working group too.

As for SEPA, ACBI has developed a set of new services ISO 20022 based and perfectly in line with EPC requirements; moreover, the new CBI Network allows End-to-End interchange between 620.000 corporate end-users, and with Public Administration too in the next future (B2G relationships).

Even though EPC rules are mandatory only in the interbanking space, ACBI has gathered the SEPA opportunity to launch new XML value added services which activate automatic reconciliation functions and end-to-end integration between *financial value chain* and *corporate supply chain*, based on the maximum *compliance* with respect to the new paneuropean instruments.

AUTOMATIC PAYMENT RECONCILIATION AND ADVANTAGES FOR STAKEHOLDERS

CBI 2 meets therefore the needs of banks' clients by offering an innovative information transmission service, which aims at promoting the automation and integration of business processes (e.g., the integration of the invoicing and payment cycle). It also offers other e-invoicing transmission means and meets security requirements thanks to the introduction of digital signatures. The interoperability of digital signatures is ensured in Italy by the Directory of Certifying Entities enabled to work within CBI in compliance with regulations in force.

The New E-Invoice Transmission Service (see Figure 3) meets also the requests of those companies that have not yet established any communication standards with their business partners. These companies can rely on an intermediary invoicing channel that, as required by CBI 2, is interoperable also with existing systems and systems widely in use by well-established communities.

E-invoice transmission and credit transfer service



E-invoice transmission service enables activation of payment order requests and supports automatic reconciliation between commercial and financial data

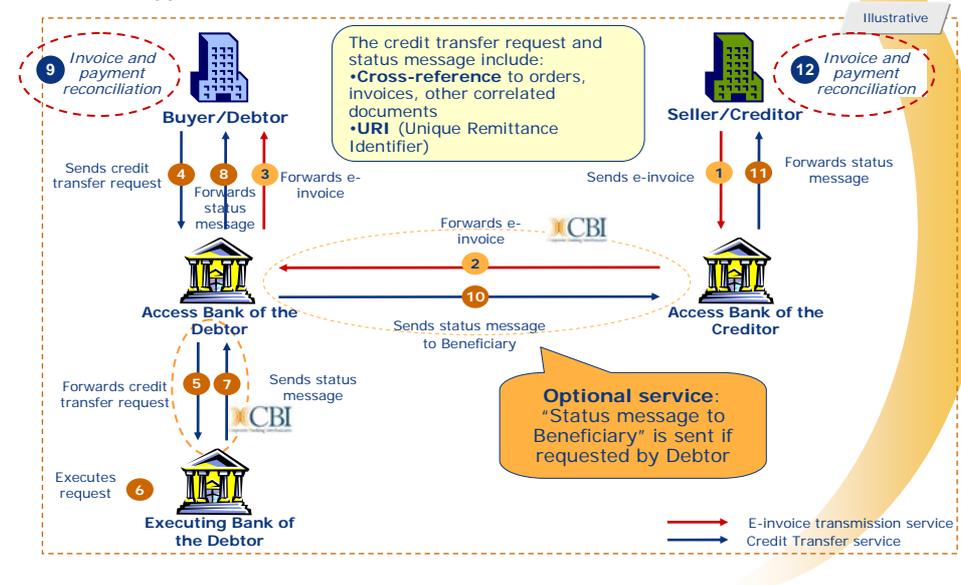


Figure 3. Integration and reconciliation via CBI

In order to develop the e-invoicing transmission service, ACBI has carried out a number of *gap analysis* with the most common invoice standards at the international level (e.g., EDI, UN/EDIFACT, INDICOD, proprietary standards, etc), with particular focus on the TBG 1 standard as defined by UN/CEFACT.

As a result of such analyses, ACBI identified four possible ways to structure messages, which rely on two principal blocks of information to transmit documents: the heading and the body.

1. The heading contains only information “summarizing” the content of the invoice (not the entire document), including only financial data needed by banks in order to give an advance.
2. The body contains instead all the details of an invoice (e.g., description of goods, quantity of goods, reference to the packing list, applied discount, information on taxation - applied rate, etc.), which are typical of the commodity sector and its related business.

By splitting the message into two information blocks, four ways to structure messages and consequently transport them have been defined:

1. Structuring and transport of the Heading only: definition of a message, which only contains information “summarizing” the invoice (not the entire document), including only those data needed by the banks in order to give an advance (e.g., data of the beneficiary and the issuer) (*see next paragraph*)
2. Structuring of heading + “not published” body: definition of a message, which contains information “summarizing” the invoice (heading) and the document (“body”) drafted on the basis of a CBI unpublished standard (e.g., a standard agreed among parties, which means that each firm can use its own layout or exchange a pdf document);

3. Structuring of heading + "published" body: definition of a message containing information "summarizing" the invoice (heading) and the document ("body") drafted on the basis of a CBI "published" standard (e.g., standard defined by a ERP provider who requested its publication on the ACBI site);
4. Structuring of heading + "white label" body: definition of a message containing the information "summarizing" the invoice (heading) and the document ("body") drafted on the basis of a CBI well-established and "published" standard.

This structure also allows for the integration of the E-Invoice transmission service into the New Payment Service – the SEPA XML-based bank transfer, thanks to the integration into the standard of cross-reference information that makes it possible to match the credit transfer and the related invoice (see Figure 4). This information can "be structured" (with detailed information contained in a specific document) or "unstructured" (with free text information).

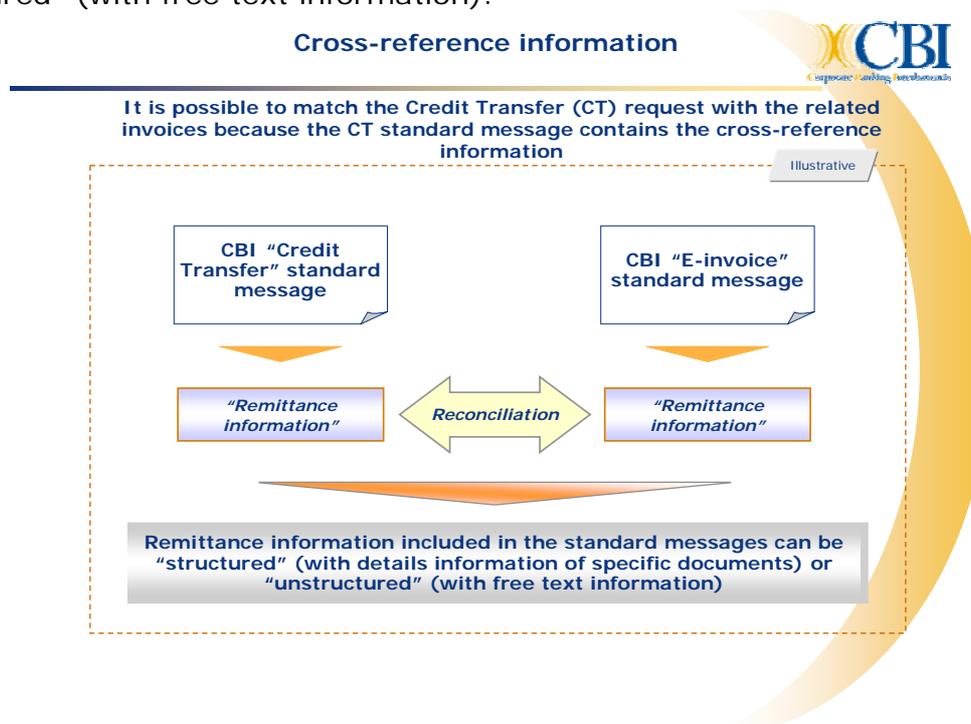


Figure 4. Cross-references between credit transfer and e-invoice

The New Document Management Services integrated with those in the Collection and Payment Orders area allow various economic stakeholders to benefit significantly from the integration between the invoicing business cycle and the collection/payment financial cycle. Stakeholders include:

- Firms of all sizes, both large and Small and Medium Enterprises (SMEs), will be able to replace paper invoices and books with digitally-issued documents stored on optical supports or other suitable supports.
- Local and central public administrations, professional associations, and Market Places.

Large corporations and SMEs are those who can principally benefit from the electronic invoicing Service. The management of the assets/liabilities cycle and its connection with the financial aspects traditionally result in a considerable employment of personnel as well as inefficiencies/errors deriving from paper-based processing.

More specifically, the possibility of developing customized e-invoicing services solves many of the difficulties encountered by firms (see Figures 5,6), which are now able:

- To automate and simplify internal processes
- To reduce and rationalize operational costs;
- To communicate using end-to-end and pre-defined standards
- To integrate payment systems with business documents and information services

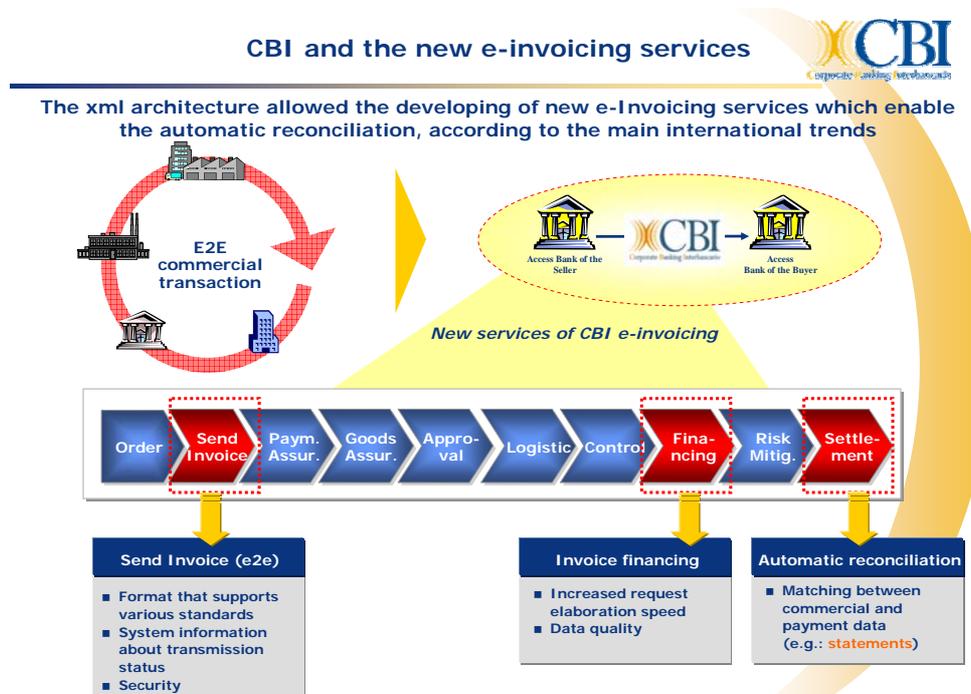


Figure 5. The service range covered by CBI

By increasing security and transparency, by making data management simpler and by considerably reducing transaction costs, errors and delays, "paperless trade" meets the needs not only of firms but also other players, including:

- Market Place and Virtual Communities
- Central and local public administrations. Public administrations can in fact develop services for local communities, such as integrating service supply channels, making collection/payment processes more efficient, for example, with respect to collection orders
- Intermediaries and professional associations. With respect to the needs of Intermediaries and professional associations, paperless trade allows the addition of new services dedicated to users/members to the invoicing process. It also allows greater efficiency in the collection/payment processes (e.g., membership fees), which have been updated to current technological trends.

Remittance information included in the payment requests status message enables also reconciliation with "cash account reporting" service

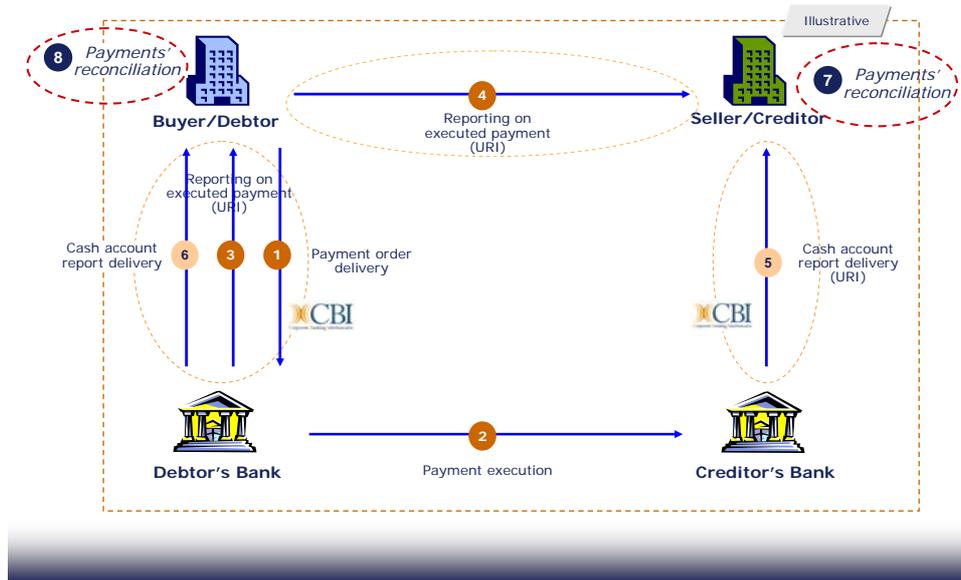


Figure 6. URI based workflow allowing automatic reconciliation

THE INVOICING FINANCING REQUEST SERVICE AND ITS REGISTRATION INTO THE ISO 20022 REPOSITORY

Based on the structure of the e-invoice standard header and the *expertise* acquired through the analysis of the national and international environment and the regular attendance of international meetings organized by institutions and industry, ACBI proposed itself to act as a *first mover* in the registration process of the Invoicing financing Request standard within the ISO 20022⁵.

In the course of 2006, ACBI has submitted the relating Business Justification to ISO 20022 Registration Authority. The Business Justification evaluation phase by the competent Registration Authority has been successfully completed in May 2006; thus, ACBI recently carried out the production of technical specifications, with the SWIFT involvement in quality of Registration Authority.

Nowadays the technical documentation is under evaluation by the competent Standard Evaluation Group named "Trade Services", wherein ACBI takes part as auditor interested in the working progress.

Standardization of messages and processes allows a reduction in costs, boosts efficiency in dealing with changes and improve global performance. For these reasons, ACBI has already requested the registration of the request for invoicing financing services to the ISO Registration Management Group and compiled technical documentation to be submitted to the Trade Services Standard Evaluation Group.

⁵ ISO (International Organization for Standardization) is a non-governmental organization made up of entities coming from more than 157 countries. It comprises several technical committees, including in particular the ISO/TC 68 dealing with the definition of standards in the banking/financial field and of security standards.

In drafting technical specifications, ACBI has closely cooperated with SWIFT that, being the Registration Authority, supports *submitting organizations* in compiling the standard documentation in line with ISO 20022 requirements. The drafting process is almost completed; if the last consultations succeed, ACBI will consolidate the documentation by the end of November 2007. Subsequently, the competent Standard Evaluation Group dealing with "Trade Services" will analyze the relevant technical documentation in order to validate it.

The development of such service is based on the assumption that in a market that increasingly competitive, it is vital for enterprises to access credit without having to renegotiate conditions. The invoicing financing service in fact allows enterprises (especially small ones) to optimize their management of cash accounts by facilitating cash flows necessary to make profitable investments as well as internal business processes automation. In particular, the business value [of this service] consists in that it offers the opportunity to switch the invoice into transferable capital, facilitating payments and operational costs before the related invoice is cashed (see Figure 7).

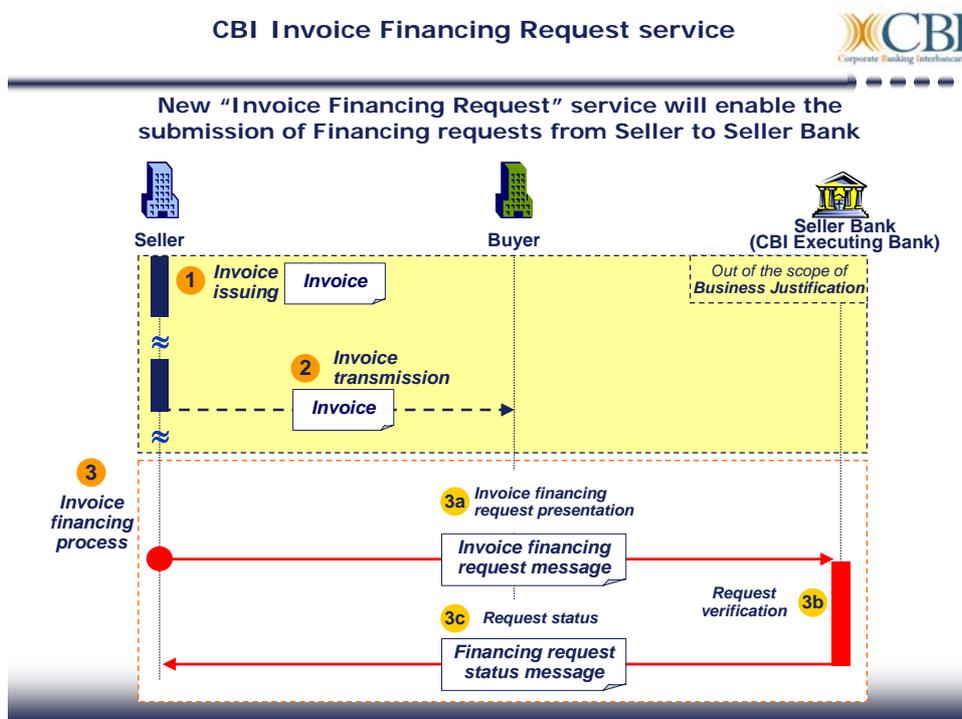


Figure 7. Invoice Financing Request over CBI

SEPA COMPLIANCE OF ACBI ACTIVITIES

Italian corporates, in the context of Consultation Forum on purpose created by ACBI, have declared their will to adopt new SEPA instruments provided that there won't be any kind of decrease in current service levels. In this direction, they have been asking for specific channel AOS, compatible with core SEPA scheme, whose test phase will be in charge of ACBI; this process is now at the stage of specification first release concerning SEPA Credit Transfer, whose market launch has been planned in line with EPC provisions (as of now January 28th, 2008).

Definition of Additional Optional Services has left from a wide set of functionalities and has finally led to a short list of “potential” AOS; banks have already ensured their feasibility in the majority of cases (e.g.: *E-pi*, *Advice delivered to Debtor and Creditor*, *extended Remittance information ISO compliant*).

ACBI has also launched more in-depth analysis of services with an international dimension building on the new XML approach that is compliant with SEPA and further cross border SEPA requirements (see Figure 8). The analysis is aimed at increasing efficiency of operations via the accounts held at foreign banks.

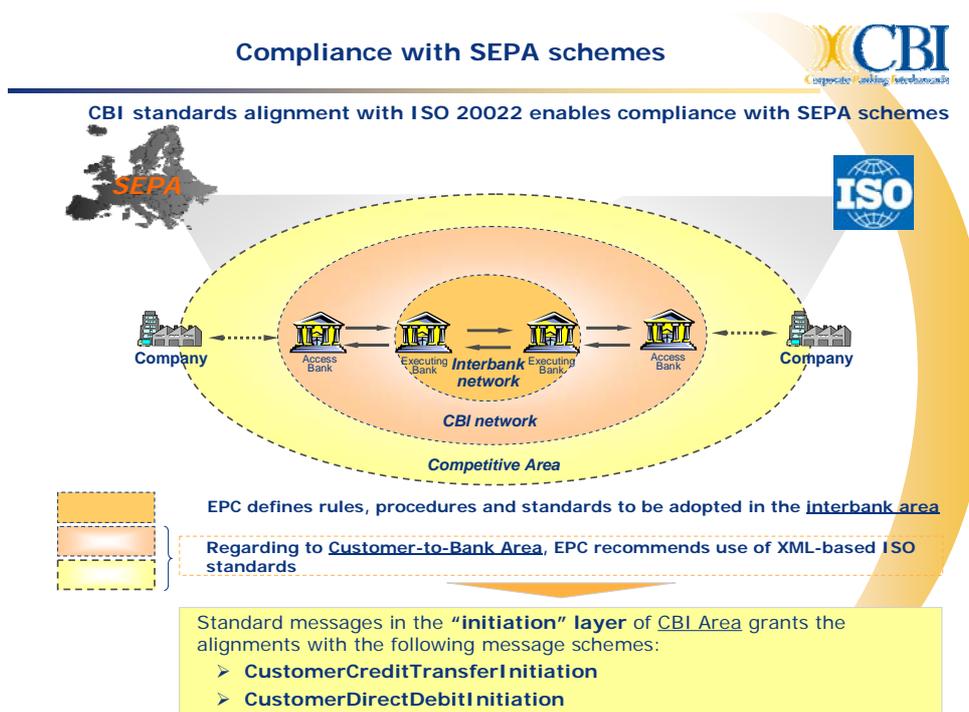


Figure 8. SEPA alignment of ACBI activities

Following this trend and thanks to innovative remote payment services, CBI 2 can represent for many aspects an important reference model to follow in drafting an international standardization protocol.

The general planning of ACBI activities for 2007-09 (see Figure 9) shows the effort afforded by the Association and the entire Italian banking system in order to attempt new business horizons and actively participate to the general harmonization plans shared on a community basis by major European banks and standardization organisms (bodies which are in charge of defining standards for the financial sector, e.g.: EPC, TWIST, SWIFT, ISO).

ACBI Master plan Adherence with SEPA plans

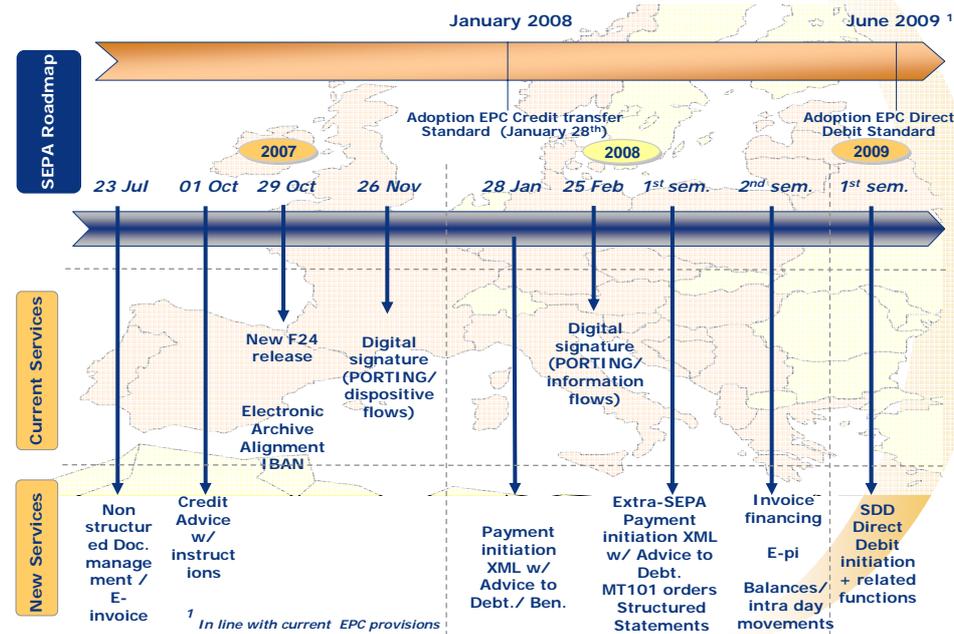


Figure 9. The 2007-09 Masterplan

CONCLUSION

Thanks to the constant monitoring of the international scenario and to the high tendency to exploit new technologies across the Italian banking system, over the last five years ACBI accumulated a great experience in order to enhance the traditional corporate banking services towards a new networking infrastructure, new services such as document management and invoice financing, new functions such as automatic reconciliation/integration, and new syntaxes of messages which ensure maximum flexibility, interoperability and STP for the next future. Nevertheless, the cooperative space wherein ACBI operates requires a constant alignment among needs expressed by End Users, banking members, Interbank Technical Processors, ERP Providers, Software vendors and Regulatory Bodies. That was the key point for successfulness, since only a preemptive information sharing among the main stakeholders can guarantee the effective outcome on the market of decisions taken at a banking system level.

In this direction, the following elements were fundamental:

Maintenance of current standards: current CBI services, which cover traditional financial corporate banking services (multibanking payments, collections, statements), have been constantly maintained and enhanced in line with new corporate and legal requirements; a certification kit for technical validation has been developed in order to certify market solutions achieved by the banks and this way guarantee uniformity of applications.

Contest for the New Architecture: the new technological infrastructure was assigned by ACBI after a long time process started from a long list selected by the Board; based on a first screening of cultural, goodwill and skills factors, the long list was reduced to a short one of suppliers, invited to present their RFPQ; the subsequent

offers were examined by an ad hoc Evaluation Team made up of the expert from the Board; the final result was outlined after a formal and quantitative test of technical parameters (over 200) combined with the economic offer, which led to choose the official Main Contractor of the new CBI peer-to-peer network.

Test and Roll-out of the New Architecture: after the punctual definition of all the test phases, whose actors (Banks and Interbank Technical Processors) were assisted and monitored by the Technical Secretariat during the flows exchange, the roll-out of current CBI services over the New Architecture ("Porting") followed a four-steps subdivision (from December 2006 until February 2007), due to the need to minimize any risk deriving from a big-bang release. A roll-back procedure was moreover introduced in case of blocking errors at a system level; another key issue was the War Room, made up of expert from the Technical Secretariat, which has been effective in many cases and allowed the rapid resolution of emergencies by a constant report to the decisional point. With the aim of providing a direct relationship between Banks and Main Contractor, ACBI organized several fine tuning meeting where technical problems were faced and solved with general satisfaction.

Design of new services: as regards the concept of new services, the key elements have been: monitoring of the international scenario; proneness to innovate by the Italian Banking System and the Italian Bankers' Association; Production and delivery of Analytical documents; Production of minutes of meeting and decisions; Production and delivery of Executive Summaries; Multi-level documents and decision sharing among Members (following organizational hierarchy); Creation of Help Desk by the Technical Secretariat; Creation of a Consultation Forum for all the stakeholders needs.

The ACBI has therefore achieved the result of renewing its offer in line with the latest technological innovations and corresponding to market needs in terms of new services, international compliance, zero latency, reconciliation and integration with corporate information systems.

The Association, furthermore, wishes to prosecute its monitoring on the international overview, which has been until now accomplished at the main standardization organisms, as well as propose itself as an international benchmark for other countries across Europe thanks to its unique experience in the field of multibanking services, deriving from the typical fragmentation of domestic industry, in the role of first mover for new corporate banking solutions which create value and benefits for end users.

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