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International Standard Music Number

[ismn logo]
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<th>Term</th>
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ISMN is the International Standard Music Number.

It identifies publications of notated music.

It assigns a unique identification number to all notated music publications.

It is best described in relation to “music”: 
each number identifies a single edition of notated music  
each number identifies the publisher

each number represents significant information

M - ean - ingful

each number is used only one time  
each number is exclusive

each notated music publication has its very own distinct number

U - ni - que

each number has 13 digits  
each number is constructed in the same way

each number starts with the prefix 979-0

S - tr - aight - forward

each number tracks a product from creation to end-user  
each number simplifies communication between parties

each number facilitates process automation

I - ntell - igent

each number has international reach  
each number provides useful data for the global community

each number facilitates a borderless market

C - om - pre - hensive
The ISMN was developed for the music sector to enable a computer-based supply chain in the field of notated music.

In 1993, ISO 10957 was released by the International Standards Organization (ISO) and the International ISMN Agency was established. In 1994 the first newsletter was published following the first International ISMN Agency meeting in Berlin, Germany. Three years later, the first edition of the Music Publishers International ISMN Directory was made available in printed form. Originally, the ISMN was a ten-digit system, each number starting with M-. 2008 sees the introduction of the prefix 979-0, with 13 digits. Since 2010 the Music Publishers International ISMN Database has been accessible digitally.

A panel meeting is held each year as an opportunity to exchange ideas and experiences between the ISMN worldwide agencies.

The number of member countries has been growing steadily. In less than twenty years the number of agencies has risen to more than 50.

The ISMN is a non-profit organization with status in Germany as a charity.
The advantages of the International Standard Music Number develop from the fact that the number is a unique identifier.

Each number points to information relevant only to the notated music publication associated with it.

Because the ISMN is meaningful, unique, straightforward, intelligent and comprehensive, it offers an array of benefits applicable to all stakeholders in the music industry supply chain.

The key benefit which lays the foundation for all other benefits is the ability of the ISMN to accurately track products through their lifetime. Through tracking, critical information is captured, products are followed-up, the worldwide supply chain is availed of and monitoring and synchronization is made possible.

This one core benefit paves the way for the realization of many other gains. These include improved stakeholder communication, greater interoperability of systems, increased opportunities to automate processes, better management of data, improved ordering and sales, online information exchange, transparency in the field of copyright, streamlining of royalty payments, simplification of legal deposits in libraries and more efficient and effective cataloguing.
The ISMN is described as a ‘comprehensive rationalization’ tool. This description rightly suggests that the number helps to organize and simplify.

The International Standard Music Number is an efficient organizational and simplification tool wherever notated music publications are produced, distributed, sold and lent. Therefore, the ISMN gives added value to the entire music industry chain. Music publishers, music traders, rights organizations and librarians profit most from this rationalization effect of the ISMN.

The relevance of the ISMN for the music publisher is primarily apparent in the broad field of applications. The operational stages which profit include production and distribution planning, the flow of products in-and-out, printing and trade logistics, to link the processes of layout, plate-making, printing, collating, binding, trimming and palletizing, inventory checks and stock control, accounts payable, supplier and customer relationship management, print-on-demand, outsourcing, and warehousing and transporting.

For the music trader, the importance is evident in relation to barcoding, electronic point of sales, marketing, warehousing, online information exchange, inclusion in global repertoires, ordering, sales, database management and international trade.

Rights organizations reap benefits in areas such as database management, monitoring of music usage, compiling statistics, royalty administration and distribution, copyright control and piracy detection.

The significance of the International Standard Music Number for libraries is most obvious in the areas of legal deposits and cataloguing.
Figure 1: The ISMN helps to organize and simplify notated music publications
### Beneficiaries, Applications and Benefits of the ISMN

#### Music Publisher
- **Applications**
  - Production and distribution planning
  - Supplier relationship management
  - Accounts payable
- **Benefits**
  - Accurate tracking
  - Ease of outsourcing
  - Barcode creation
  - Use of worldwide supply chain
  - Stakeholder communication
  - Interoperability of systems

#### Composer
- **Applications**
  - Royalty payments
  - Ownership security
- **Benefits**
  - Timely and accurate royalty payments
  - Unquestionable ownership of the piece of music
  - Linking of composer and music piece for the entirety of the pieces existence
  - Creation of a future for music by ensuring an income for music creators
  - Preservation of musical heritage
beneficiary

- music trade

applications

- supply chain management
- data management
- ordering
- marketing and sales
- online information exchange

benefits

- barcode creation
- electronic point of sales
- acceptance by warehouses
- worldwide supply chain
- data exchange

beneficiary

- rights organization

applications

- copyright control
- piracy detection
- royalty administration and distribution
- global repertoire database

benefits

- monitoring of music usage
- copyright transparency
- streamlining of royalty payments
- compiling statistics

beneficiary

- library

applications

- legal deposits
- acquisitions
- cataloguing
- data structuring

benefits

- simplification of legal deposits
- easy and unambiguous acquisition
- efficient and effective cataloguing
- data interchange
The ISMN was developed for the music industry. The aim was to provide an international numbering system which would enable a computer-based supply chain in the field of notated music. Everyone, therefore, who comes in contact with notated music publications benefits from the ISMN.

Its usefulness is broadly recognized internationally by music publishers, music traders, libraries, rights organizations and also composers, thanks to enhanced royalty administration workflow.

**Figure 3: The ISMN is a valuable tool for its users**

- "the ISMN contains all you need"
- "the key number in the process from production to distribution is the ISMN"
- "orders without a standard number are rejected by the system and can only be ordered manually"
- "automation is the way to go for all and standards are the only way to achieve automation"
- "the standard numbers are the only way to detect and avoid duplicates"
Music Publishers are indebted to the ISMN for its ability to uniquely track each of its products be it a score, sets of parts, an anthology or a Braille music publication.

The musical work can be in printed or digital format and be for sale, for hire or distributed free of charge.

The number helps music publishers in managing the supply chain through close tracking of a products movements, enhanced communication, greater interoperability of systems, automated workflows, better data management, increased visibility, streamlining of accounts payable and smoother progress of an outsourcing workflow.

Figure 4: Publishing using the ISMN

Bernstein Theatre Songs
49 Songs

für hohe Stimme und Klavier
BHL 93388 ISMN 979-0-051-93388-4
€ 25,95

für mittlere/tiefe Stimme und Klavier
BHL 93389 979-0-051-93389-1
€ 25,95

für 2 oder mehr Singstimmen und Klavier
BHL 93390 ISMN 979-0-051-93390-7
€ 25,95
The ISMN, being a unique number, tracks a product - a notated music publication - through all stages of its life. Tracking is particularly important at the operational level where the production and logistics of the musical work are planned and carried out.

**Capturing of Critical Information**
The ISMN captures critical information such as timelines, serial numbers and materials used. Through the operational workflow i.e. of products in-and-out, production and distribution planning, inventory checks, warehousing and transporting, the use of the ISMN facilitates transparent and dependable tracking of individual product movements. It is recommended that the ISMN is assigned as early as possible in the process.

**Figure 5: The music publishing supply chain**

- **Product Concept:** Assign ISMN
- **Production Planning:** Incorporate ISMN into production schedule
- **Printing:** Track product through use of ISMN
- **Warehousing:** Product movements easily traced using the unique number
product follow-up
Close tracking of the physical printed musical works on the shop floor eliminates the need for manual searching and facilitates stock control allowing for easier follow-up of product batches or where necessary enabling prompt identification of a batch of quality-affected products.

print-on-demand
By the use of one identification number per item, self-publishers (composers) and large-scale publishers can capitalize on Print-on-Demand by the simplification of the ordering process, by automatic job submission to production through internet-to-print solutions and by remote monitoring of orders and sales.

Figure 6: Print-on-demand, facilitated by the ISMN

- automated job submission to production
- recognition of job by digital printing press
- printing of product
- notification to indicate that product is ready
outsourcing
The ISMN is a global communication tool and a reliable transporter of information. This facilitates the possibility of outsourcing and makes outsourcing more approachable due to the already inherent control of a standard number. The use of a standard product number facilitates detailed specification in the service level agreement enabling clarity between the partners and precision in carrying out of tasks.

Figure 7: Outsourcing, made smoother by the ISMN
The use of the ISMN standard number offers a steadfast link between all people in the notated music publication supply chain.

**high standards**
The open and steady communication flow between all people involved encourages upholding of the high standards needed in production, printing and trade logistics. It breeds a common cultural awareness of the usefulness of a unique identification number for each product. It is important that the publisher designates a person to be in charge of the assignment of ISMN’s.

**product handover**
The trustworthy handover of a product through the operational stages of, for example, print publishing is vitally important. The ISMN facilitates this dependable handover, from the processes of layout to plate-making to printing to collating to binding to trimming to palletizing, ensuring a reduction in confusion and an elimination of mistakes and human errors. This results in less re-work and a reduction in unnecessary costs.
Figure 8: Using the ISMN to enable trustworthy product handover through the operational stages of print publishing
The ISMN is a numbering system as opposed to a global assortment of lettering. Numbers are easier to interpret internationally than letters leading to enhanced international co-operation and ease of communication for all parties.

Spelling mistakes can often occur when dealing with alphabets. Because the ISMN is a numbering system, there is a reduction of errors created and transmitted through the supply chain. This also minimizes the occurrence and impact of indirect problems related to spelling mistakes.

Figure 9: The ISMN is a truly global numbering system (example shows ten-digit ISMN number)
Not only does the ISMN enhance the communication flow between employees and partners but it also allows for improved technical communication.

**system interaction**
Having a standard number for each product advances the implementation of end-to-end automation. System-to-system interaction smoothly connects people, departments, and applications. This allows greater management of processes end-to-end. For example, a manager needs a report about a published anthology. Instead of requesting data from several different departments whose processes are highly manual, the report is assembled automatically following a series of interactive steps between databases and applications.

**cost-effectiveness**
Through interoperability, the limitations of closed, proprietary systems are removed which protects technology investments and offers a sound base for the development of more cost-effective solutions. For example, a music publisher has an in-house central database which holds all their title data. From the onset, each title is assigned an ISMN. The data from this database is fed into other databases e.g. the music publishers online shop, a global repertoire database, the warehouse and distribution database, dealers online shops, mail-order shops and foreign dealers online shops.

**automation**
The ISMN paves the way for system compatibility allowing automated checking of numbers which detects and eliminates duplication of records.

**outsourcing**
Via alignment of the unique ID number, interoperability and systems optimization is possible paving the way to outsource efficiently and confidently. Contracting out time-consuming tasks such as Accounts Payable and Customer Service leads to performance improvements and cost reductions.
The use of ISMN allows adoption of automated data capture technologies such as electronic scanning, electronic invoicing, optical character recognition and automated workflow processing.

**matching numbers**
Automatic processing of invoices is enabled by means of matching the standard number on the invoice with the product number in the internal database. This leads to a decrease in time-consuming manual intervention, a reduction in errors, a reduction of transaction processing costs and acceleration of cash flow.

**Figure 10:** The effects of streamlining the invoice receipt and workflow cycle

<table>
<thead>
<tr>
<th></th>
<th>before</th>
<th>after</th>
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<tbody>
<tr>
<td>processing cost of a single invoice</td>
<td>$36.51</td>
<td>$3.47</td>
</tr>
<tr>
<td>number of days to process an invoice</td>
<td>32.9 days</td>
<td>2.9 days</td>
</tr>
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“Standardization ensures that all business units of an enterprise are leveraging the same set of guidelines and processes for the invoice receipt and workflow phase of the A/P process”

Data extracted from Aberdeen Group research report “E-Payables: Invoice Receipt and Workflow”
Accessed through www.basware.com
improved relationships
Automatic routing of invoices through the approval process improves productivity and relations with trading partners securing early pay discounts through faster processing. In addition, through automation and accurate tracking there is increased Customer Service Management efficiency.

transparency
There is greater clarity and control by the easy breaking-out of individually listed items on an invoice and the easy collection of detailed statistics and concise reporting, per product. The greater financial transparency facilitates adherence to regulatory compliance.

strategy
By reducing the time needed for reconciling invoices, eradicating errors and chasing the invoice paper trail, additional time to focus on strategic improvements such as identifying additional contract opportunities, enhancing the corporate relationship with suppliers and negotiating additional early payment discounts is enabled.

routing
The ISMN holds detailed product data including the intended usage of the product. This gives the ability to identify and segregate items which are published either for sale or as hire materials and makes it easy for the musical work to follow its intended path. Routing of order requests to the appropriate staff in the correct internal department is facilitated because of the ability to distinguish specific notated music publications.
Optimizing the workings of a supply chain leading to lowered costs and increased sales is a goal of every company. However, managing a supply chain is a complex business with many and varied players. The simpler the information flow the greater the chance of an effective and efficient supply chain. Using an information-rich unique id for each product creates a smoother and more efficient ordering system, a transparent and accessible selling process and smooth online information exchange.
The ISMN closely tracks notated music publications as they are passed through the selling process, enabling, for the retailers, concrete visibility and control.

**barcoding**
The International Standard Music Number is used to create barcodes. The ISMN-related barcode enables tracking of products’ movements from creation of musical work to dispatch through recording vital information at each stage of the process.

**warehousing**
Warehouses have a greater acceptance of publications that contain an ISMN. This is because process automation is facilitated through matching the numbers of incoming products with the numbers in the warehouse database.

**worldwide supply chain**
The use of the ISMN to create barcodes supports participation in worldwide supply chain management practices. The ISMN uses the 13-digit EAN barcode which is a worldwide barcoding standard. Barcodes introduce the opportunity to keep pace with global innovations in supply chain technology such as 2D barcodes and RFID and integration into management information systems, for example, enterprise resource planning (ERP).
The ISMN is ‘only’ a number. What is important is the product data, or metadata, that is attached to it.

**data exchange**
The use of a standard number which holds all key data allows easier database maintenance, record keeping and information management and allows computers with different operating systems to connect and match data. Easy data exchange is made possible and publisher’s catalogues and global musical works databases are aligned through easier updates.

**global database**
Through barcode scanning of the ISMN, creation and updating of a comprehensive global musical works database becomes a manageable goal and this can be used, among others, by retailers to make confident decisions about stock selection and ordering.

**data accessibility**
The ISMN improves access to data which is in a consistent format and structure. The ISMN numbering system as part of the EAN code gives system-wide compatibility and a standardized exchange of data creating mutual workflows, saving time and streamlining processes.

**data availability**
The ISMN is linked to the physical flow of trade items through the supply chain which gives instant availability to product data and quick checking of order status in online databases.

**individual items**
ISMN makes for successful electronic trading thanks to the definite identification of every product and transaction and it allows processing of individual items in an order as opposed to a single combined order.
The ISMN, through its transparency, enables a smooth and efficient ordering process and supports the enhancement of sales opportunities.

**publisher order numbers**
The ISMN metadata (product data) contains accurate information about the publisher. In the ordering process, this inbuilt detail eliminates the occurrence of music publishers’ order numbers duplicating each other and being distinguishable only when combined with the publisher name. For example, AC10259 is assigned by Music Sales publishing group to Roy Orbison’s “In Dreams”. This order number is also assigned to Busser’s “Le Sommeil De L Enfant Jesus” Ext.. 4 Violon Ou Violoncelle by Choudens publishing. The same ISMN is never assigned to two different notated music publications.

**ease of ordering**
The ISMN allows ease of ordering for retailers when ordering through a book channel such as a clearing center or distribution center as well as accurate identification of editions and automatic functioning of EDI (electronic data interchange) ordering systems.

**warehouses**
Retailers who use the ISMN when ordering online have the ability to avail of discounts from warehouses because of the automatic distribution of orders through matching of the ISMN in the warehouse database.

**certainty**
Due to the uniqueness and consistency of the number and the resulting dependability of order records there is an elimination of uncertainty when endeavoring to identify the correct version of a music title. This allows customers who are not industry specialists to order a publication even without knowing the specific internal publisher number. This eliminates the need for industry specialists to memorize publisher numbers and composition names as ISMN displays this information on screen.
efficient ordering
When establishing an order for hire material, the inputting of just one number – the ISMN – rather than numerous details in an exhaustive web-form facilitates faster order submission.

accurate orders
Knowing the identification number for each piece of music required, helps orchestra libraries to prepare accurately, and ensures submission of comprehensive orders to publisher. This leads to the creation of a timely orchestra library budget through obtaining accurate and up to date rental quotes. In addition, when orders are submitted early and with accurate product numbers, it ensures the definite availability of sets and greater traceability of the lending of material from publisher to orchestra.
visibility
By registering contact information and listing publications in library catalogues, music related websites and trade directories, there are increased distribution options for small/self-publishers. Using the ISMN leads to full visibility in publishers’ advertisements, catalogues, stock list, leaflets, brochures, marketing material and discovery of notated music publications online leading to further lending and sales due to increased internet presence.

customer availability
Accurate and detailed information is made available to the public through the detailed product data. The ISMN gives direct access to the ‘right’ product and to a range of well-defined products thanks to the availability of accurate data through the use of the metadata in search engines. This, in turn, leads to better marketing and enhanced communication flow with customers due to the development of web-enabled tools.

no barriers to trade
Owing to the fact that the ISMN uses the EAN-standard barcode, technical barriers to trade are eliminated facilitating the exchange of goods. This leads to automatic processing and routing of orders granting ease of use in the retail sector. Due to the ISMN being a unified standardized system it gives publishers the freedom to be more effective and organized allowing greater scope for selling activities.

certainty
The ISMN makes it easy to order a music piece confidently from a country with which there is no common language. There are no words of explanation needed to describe the piece. This ensures the elimination of frustrating communications, misunderstandings and the delivery of the incorrect piece.
Due to its universal international format the ISMN enables computer-to-computer communication and the ability to interchange information between parties involved in creating, distributing, licensing or otherwise making available intellectual property in published form.

**enhanced description**
The metadata (data about the product) connected with the ISMN describes notated music publications with images and other information which assists in marketing and online selling and allowing publishers to distribute electronic information about books to wholesale, e-tail and retail booksellers.

**detailed data**
The ISMN records a wide range of evaluative and promotional information. It associates rich product metadata/rich information with each publication, which publishers and retailers require, including the accumulation of sales data for each title and identifying the publishing status of a title.

**data accumulation**
The ISMN represents basic bibliographic and trade data and enriches library-created catalog records allowing publishers to create one file which is pushed through all parts of the supply chain and updated along the way.

**linking**
An ONIX (ONline Information eXchange) application for the ISMN is being considered. Through ONIX the ISMN could offer a selection of preferred data elements even including audio files. It could enable linking of the ISMN in the ONIX metadata package with the registration agency and type of publisher and the publisher name. Linking of the audience for whom the publication is intended may be permitted, which would be useful for libraries and copyright holders.
Rights Organizations embrace the ISMN for its ability to uniquely track each of its licensed musical works. The number is deemed most useful in the simplification of the title registration process, tracking and close follow-up of music usage, transparency in copyright issues and streamlining of royalty payments.
The ISMN metadata (product data) can hold all the required data including contact information, writer and publisher information and accepts updates of changes to contact information.

**clarity**
It guarantees that each edition is registered separately; it removes confusion over instrumentation distinctions and eliminates the need to search for the CAE (Composer, Author, Publisher) number.

**automatic calculation**
The ISMN metadata can hold all information critical for accurate calculation and payment of royalties e.g. instrumentation, duration of piece, social security numbers and also supports automatic calculation of publishers and writers ownership share.

**efficiency**
The transparency of the ISMN leads to a reduction in time needed to load submissions to the Rights Organization (PRO) database, minimizes manual intervention, eliminates issues surrounding accents and keyboard characters, deems spelling errors irrelevant and eliminates the need for a lengthy user guide.
The ISMN can hold all data about the title including publisher name, address, contact person, telephone number, state, city, area code etc. which allows easy tracing of songwriters, composers, lyricists and music publishers resulting in accurate tracking of musical works from the creation of the musical work, to the distribution of royalties for that same piece.

**monitoring**
The ISMN allows straightforward monitoring of the thousands of businesses that use music and allows streamlining of permissions granted to businesses to perform music publicly and assists synchronization of supply and demand in a vertically integrated environment.

**synchronization**
The ISMN allows harmonization of titles registered by members with titles in the Rights Organization (PRO) database and assists synchronization of PRO records and their public databases. It enables convergence of information from different sources i.e. if a title is listed differently on the label of the recording than the way the copyright owner indexed it.

**comprehensive database**
The ISMN eliminates the danger of incomplete and/or duplicative registration information thereby facilitating an extensive database leading to a reliable sourcing of sales statistics and use of each piece and assisting clearing representatives in finding information. It allows convenient filing of new works and aims for a global licensing system by helping to structure a global repertoire database.
The Global Repertoire Database (GRD) aims to provide access to “authoritative comprehensive multi-territory information about the ownership or control of the global repertoire of musical works and that is openly available to songwriters, publishers, musical work collective rights management organizations and users.”

It plans to offer:
For rights holders and CRMs: significant improvements in efficiency and reductions in costs particular in the areas of data reconciliation and subsequent usage matching.

For rights holders: authoritative and comprehensive data will also maximize matching and improve the accuracy of distributions to whether rights are licensed on a “worldwide repertoire” or specific repertoire basis.

For licensees: access to authoritative data about musical works will ensure that appropriate licenses can be obtained with more transparent rights clearance processes, which will enable simpler reconciliation of royalty invoices and eliminate multiple charging where rights are licensed on a repertoire specific basis.

For all music industry stakeholder groups: there will be general reductions in costs and improvements in efficiency associated with the people and processes involved in works registration, resolution of data conflicts, matching of usage information and the management of the resulting financial transactions.

All of these benefits in turn inevitably lead to increased revenue to all stakeholder groups regardless of where they sit in the supply chain.
One of the intentions of the Database is to stand up for and work with standards authorities such as, (among others), the ISMN to enable dissemination of unique identifiers across the (musical works) industry.

Some other intentions of the GRD are:

...to enable effective management of rights across multiple territories and for all licensed uses
...to be created from the “most trusted” data sources available, e.g. from publisher originators of data
...to meet the needs of both online and offline worlds
...to be capable of seamless integration with all organizations within the value chain

Data extracted from Global Repertoire Database Working Group:
The ISMN assists tracking of ownership of intellectual property rights creating a smooth flow of information through the intermediaries in the value chain helping international trade ventures in the music industry.

**country specific laws**
It promotes records management as a means to establish control and accountability in the business and encourages tracking of the origin and nationality of electronic publications, in turn deciding which country’s legal deposit law to apply.

**protection of works**
The ISMN limits the ability to access certain publications. It contains publisher information should permission be required for reproduction for conservation purposes and controls permission to reproduce a protected work. The ISMN contains printer details in the metadata in cases where printers are required to legally deposit copies.

**digital reproductions**
The ISMN allows follow-up of both tangible and intangible music products and helps to control the risks associated with digital technology and the “unmanaged” network. It enables the possibility of piracy detection and ensuring that copyright laws are adhered to.

**control**
It allows monitoring and protection of rights exploited across open networks, prevents borrowing of works and re-registering as one’s own property and tracks content manipulation and modification history.

**online licensing**
Customers have the option to buy a digital license to make physical copies of a piece of notated music whereby the customer receives a digitally delivered PDF file of the ‘original’ pages and can copy it a specified number of times. It is important that the original not only contains a watermark but also an ISMN number.
The ISMN, combined with compatible ISO identifiers (see ‘Understanding Standards’ section) enables tracking of a musical work through its many manifestations throughout its life.

**combined use of standards**
Accurate and realistic tracing of music usage is enabled through the combined use of ISNI, ISWC, ISMN, ISRC and ISAN eliminating the need for ‘guessing’ and surveys as well as automatic transmission of messages to a central database of the relevant rights organization through the metadata of the five ISO numbers.

**transparency**
There is greater transparency of statistical data due to less reliance on third parties for usage information and facilitates reporting between ‘foreign’ rights organization societies.

**direct payment from source**
The ISMN simplifies the design of the “follow the dollar” payment system i.e. it is easier to track the medium on which the piece of music was used allowing fairer distribution of funds from the specific medium to songwriters and publishers and avoids the issue of “non-distributable” funds.

**private copying**
Statistics gathered can be used to determine remuneration to right holders from private copying levy.

**income distribution**
The ISMN ensures protection of the interests of small market players; it offers assurance of protection to rights holders and creates a future for music by helping create an income infrastructure for music creators.

**automation**
It allows automatic royalty calculation by the rights organization database ensuring timely automatic transfer of funds to royalty recipient accounts owing to the inclusion of pertinent metadata including receiver of cash and bank account data.
Libraries value the ISMN for its proven ability to uniquely track the whereabouts of each musical work. The number is esteemed for its usefulness in the simplification of the legal deposit and acquisition process, inclusion in library catalogues and to enable comprehensive data structuring.

Figure 14: Libraries value the ISMN
The ISMN through its distinctiveness deepens connections and accountability between publisher/printer and libraries.

**transparency**
The use of ISMN avoids the occurrence of duplication of pieces where same copies are taken in twice and filed under different identification numbers.

**clarity**
A new ISMN signifies a new edition and that the piece has been changed in some way from the original. This offers ease of coping with additional material and limited staffing in libraries.

**filing**
The ISMN offers reliable recording and preserving of music scores in a comprehensive legal deposit, supporting the compilation, publication and systematic filing of a national bibliography providing uniformity and standardization of bibliographic records. It enables sheet music to be considered as a separate and valuable type of material.

**longevity**
The ISMN offers better accessibility to researchers of the country itself and researchers abroad, to a national collection of notated music. It also offers bibliographic control and facilitates record-keeping of all notated music works.

**cooperation**
The ISMN enhances co-operation between the national institution responsible for legal deposits and the music publisher. The ISMN facilitates clear tracking by the publisher of deposits made into the legal deposit. The transparency of the claiming system for the library helps to ensure that all copies have been delivered.
The process of selecting and purchasing materials for a library is made smoother through use of the unique ISMN.

**vendor selection**
Once the required publications are accurately defined, selecting a standards-compliant supplier who works with ISO 10957 creates a solid foundation for future business.

**order form**
A large input of data on the Library Materials Order Form is avoided through the use of one unique number per publication.

**exact ordering**
Using a unique number per publication when ordering, ensures that exact order requests are received by the vendor and that the precise titles are delivered to the library.

**order checking**
Deliveries received are easily and quickly checked against the expected order.

**collection building**
Through developing a library collection using a global standard number the collection management responsibilities become more transparent.

**publication exchange**
The international exchange of publications, through use of the global standard number, facilitates easy communication on a global scale.
The ISMN allows simple creation of library catalog records by enabling an accurate and all-inclusive description of the publication.

**sharing resources**
It is easier to harvest product data and enables creation of a comprehensive notated music database. ISMN allows one-time entering of a record and prevention of duplication of work and records. This leads to industry-wide communication – sharing of bibliographic resources across the whole library community and a predictable and reliable cataloging of data.

**interchange**
The ISMN allows interchange between systems using different metadata formats and fosters ability of non-library catalogers to describe their own web resources.

**search engines**
The ISMN standard enables search engine optimization through embedded Dublin Core metadata elements into web pages, complementing HTML metadata and preparation of web pages for the evolution of the semantic web.

**global**
The ISMN allows inclusion of publications in the worldwide recognized Machine-Readable Cataloging (MARC) format and gives greater functionality and control over online public access catalogues (OPAC).

**research**
It assists in forming a comprehensive global database of musical works which can be used by libraries to research a complete bibliography of notated music through searching for publications using the ISMN field.
digital music publishing
Digital items of notated music are often edited upon downloading, resulting in many different versions of the same notation circulating in the digital world. This makes it very important that the original piece of notated music has been assigned an ISMN and is filed in order to preserve the original piece.

library information network
Publications are deposited by the music publisher and are uploaded to the library catalogue. The publications, through the ISMN identification, are automatically redirected to the virtual music catalogue. This offers music organizations a convenient way to deliver digital music publications. Not only does it enable music publishers to make their publications known to the global public but also establishes a gateway through which the source of the publication can easily be accessed.

Users are given the opportunity to locate music resources easily without experiencing accessibility obstacles caused by, for example, geographic location. As a one-stop shop for music publications, it makes possible exploration of a wide range of music scores, both old and new.

Through participation by a host of contributors and through interaction and knowledge contribution by users, an overview of the scale of the music publishing industry is realized.

The Network helps to create added-value by providing a range of information options supplementing, for example, a musical event: the National Library could hold an exhibition about the events’ composer, the radio station may give airtime focusing on the musical work and a local museum makes it known that it has the manuscripts of a forgotten 19th century musician.

Such information in the network may raise the level of awareness concerning events and resources in the music sector and positively influence the sale of related music publications.
ISO is the International Organization for Standardization. ISO publishes International Standards.

The standards are developed by technical committees who are chosen by ISO. When an industry sector has an established need for a standard, a team of experts – the technical committee – in that field prepares the standard.

For example, the music publishing sector had a need for a standard which would enable the identification of notated music publications. The technical committee (TC) which prepared the ISMN standard is called TC 46 and is responsible for developing standards relating to ‘Information and Documentation’ used by libraries and publishers. The subcommittee number 9 (SC 9) deals specifically with identification and description in the information and documentation field.

The official name of the ISMN standard is ISO 10957.

TC 46 also prepares other standards. Some of these standards relate in some way to ISMN. Six standards - ISNI, ISWC, ISMN, ISRC, ISTC and ISAN can be used in conjunction with each other to track a piece of music through its entire life-cycle.
Figure 15: Tracking Mendelssohn-Bartholdy “A Midsummer Night’s Dream” through one of its many manifestations.

<table>
<thead>
<tr>
<th>ISNI</th>
<th>International Standard Name Identifier</th>
<th>Mendelssohn-Bartholdy</th>
<th>000020 45 30 38</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISMN</td>
<td>International Standard Music Number</td>
<td>A Midsummer Night’s Dream, overture, flute</td>
<td>979-0-600-02136-9</td>
</tr>
<tr>
<td>ISRC</td>
<td>International Standard Recording Code</td>
<td>A Midsummer Night’s Dream</td>
<td>FR-Z20-77-30081</td>
</tr>
<tr>
<td>ISAN</td>
<td>International Standard Audiovisual Number</td>
<td>A Midsummer Night’s Dream</td>
<td>0000-0000-4C7C-0000-L-0000-0000-B</td>
</tr>
</tbody>
</table>
The administration of the ISMN is carried out through the:
• international agency
• national agency
• music publisher

**international agency**
The International ISMN Agency promotes, coordinates and supervises the world-wide use of the ISMN system and acts as the Registration Authority for this ISO Standard (ISO 10957). The Agency advises new member states in establishing an ISMN office and allocates ranges of publisher IDs to these national agencies.

**national agency**
The administration of the ISMN is not centralized, but is operated by agencies in each participating country or region. The local agencies liaise with the music publishers and assign publisher IDs to them. Local agencies in all parts of the world monitor the system and keep records of all the ISMNs which have been allocated to music editions.

**music publisher**
Music Publishers are responsible for assigning a unique ISMN to each of their publications. The number is assigned as early as possible in the production process and a database kept of all assigned numbers.
Another standard produced by the TC 46/SC 9 is the International Standard Book Number (ISBN). The ISBN has, because of historical reasons, a close relationship with ISMN on an organizational level. From a technical viewpoint, it would be possible for the ISBN to identify music publications as well as text-based publications. There are a number of practical reasons, however, which exclude this solution.

**specialization**
ISBN agencies and ISMN agencies specialize in different products; text-based publications and notated music publications respectively. Because of this specialization, the expertise required to advise music publishers on rationalizing their work rests with the ISMN agency.

**certainty**
Separately managing the two standards leads to greater certainty and assurance that the numbers are from the correct source.

**supply chain**
The supply chain for the music and the book trade are organized differently from the point of view of marketing, sales and distribution.

**niche**
Many people are music illiterate and cannot read music where illiteracy occurs much less in the book industry. Therefore the market for notated music publications is smaller than that of text-based publications. This makes it vital for music publishers to reach a worldwide audience. In a world (the music world) which is not restricted by the spoken language, it is an opportunity for both small and large music publishers to expand their prominence in the global music industry.
hiring
In the world of notated music publications there is the opportunity for orchestras, for example, to hire musical works direct from music publishers. This option is not something which is available in the book trade i.e. hiring directly from the book publisher. This adds an extra layer of complexity to the demand and supply of notated music publications establishing an even greater need for a standardized way of tracking.

directories
Music is international and knows no global boundaries. The international scope of a musical piece creates the necessity for a global database of musical works. In the book world, a global database of books is almost unimaginable, not only due to the enormous amount of books published each year but also due to the language diversity.

definition
Notated music publications are clearly excluded from ISBN in the text of the standard.

filtering
Music publications can be filtered out of the vast amount of other publications by means of the ISMN and thus used for global music directories etc. This enables customers to more easily pinpoint the publications they want without having to search through millions of items.
Copyright Information

Page 13: Examples taken from a publications catalogue of Boosey & Hawkes

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