DAISY Music Braille Project:

Q1 update 2022

Reporting on project activity in Q1: Jan, Feb, March 2022

**Date:** 28 April 2022

**Author:** Sarah Morley Wilkins, Project Manager & User Experience Consultant

**Email:** musicbraille@daisy.org

**Project website**: [www.daisy.org/music-braille](http://www.daisy.org/music-braille)

# Document purpose

This document gives an overview of work conducted by the DAISY Music Braille Project in January, February and March 2022 towards tool development, a music braille production network, metadata for music braille and upcoming work, as well as sharing news from around the sector. With acknowledgements to our funders.

# Contents

[Executive summary 2](#_Toc102050311)

[1. Professional music braille conversion tool (MakeBraille) 5](#_Toc102050312)

[2. Interactive end-user music braille tool (SMB with Musescore) 8](#_Toc102050313)

[3. Other project news 12](#_Toc102050314)

[4. Related news from around the sector 14](#_Toc102050315)

[5. With thanks to our funders 18](#_Toc102050316)

# Executive summary

Q1 activity continues on-track across all project activity streams, summarised here, and described in detail in the body of the report.

## 1. MakeBraille (professional automated conversion tool)

dzb lesen has continued to make improvements and fixes in MakeBraille after the project funding finished, and a Spanish version of the User Guide is now online. Test accounts are still active, and dzb lesen anticipates contacting all agencies in Q2 with details of how to obtain a licence for the tool, contact makebraille-support@dzblesen.de.

## 2. SMB with MuseScore (interactive end-user music braille tool)

The second (and final) year of development in the interactive end-user music braille tool, Sao Mai Braille (SMB) with MuseScore has started well:

SMB released version 22.2 in Q1, with many new powerful music braille transcription features for international use as well as using LibLouis library 3.20 and display table selection, automated generation of table of contents, saves as SMB, BRF, BRL and PEF, read more at <https://saomaicenter.org/en/news/technology/new-powerful-music-transcription-and-more-braille-related-features-smb-222>. We jointly hosted a well-attended and interactive webinar introducing blind musicians and transcribers to music braille transcription using the SMB software. The recording and transcript are available at: <https://saomaicenter.org/en/webinar/smb03-17-2022>. Q2 plans for SMB development include another major update with additional music braille functionality, beginning to translate the interface for further localization, and connecting braille functionality with MuseScore to provide live editing and braille translation features.

MuseScore development included accessibility fixes for keyboard and screen reader accessibility where elements were previously inaccessible (Inspector, and Special Characters window) and improved MusicXML export for concert pitch and headless notes. MuseScore 4 (to be released in the summer) will include further accessibility improvements, including keyboard navigation, text editing, musical annotation, Palette element announcements, a video demonstrating MuseScore for blind and low-vision users, and connecting braille functionality with SMB.

## 3. Music Braille Production Network

Our pilot network is already proving effective for sourcing scores between agencies, and we continue to seek feedback to improve the process. A score-production trial is underway (all producers transcribe the same two scores, for review by blind musicians). We are looking for ways in which agencies can create scores more efficiently for international use; and how we can best advise end-users about reading international scores. More details at: <https://daisy.org/activities/projects/music-braille/production-network/>

## 4. Metadata for music braille

To improve the search and retrieval of music braille scores from online collections we are working with ABC, NLS, BookShare and ONCE to review existing metadata used in collections of music braille, and to propose a harmonization of fields to be used in future. We will share our latest proposals with you all during Q2 for comment.

## 5. Teaching and learning of music braille

We are still collecting a reference list of all available resources for end-users and teachers, and if you have not yet reported the resources you hold, or find most valuable in your country, please do let us know at musicbraille@daisy.org.

## 6. Publisher Workflow

We now have a contact list for music publishers to approach. We would like to discuss their workflows for music publishing and see if they would take part in a trial to follow our guidelines at their music-setting stage. This should generate better MusicXML files which we can use for conversion into music braille (and other accessible formats). We will make these approaches during the rest of the year.

## 7. Seeking engravers/music setters

We’d like to create a list of recommended ‘transcription-friendly’ music engravers/setters who can be used to create scores for effective conversion into music braille (and other accessible formats). They would follow our guidelines for engraving, to create well-structured MusicXML files. If you know any reliable Sibelius music setters/engravers, please do put us in touch via musicbraille@daisy.org.

## 8. News from around the sector

Condolences to friends, colleagues and family of Antonio Quatraro, from the Italian Library for the Blind, who made a significant contribution to our sector for many years. He will be missed.

The International Council on English Braille (ICEB) is working with its members to preserve music braille available only as hardcopy by digitizing these resources; and to prepare a supplement of issues to add to the New International Manual of Braille Music Notation by Bettye Krolick (1996). The ICEB website also lists resources in member countries on Music Braille and UEB: <http://iceb.org/music.html>. Their midterm meeting will be held on Zoom 5-9 June, to include an update from the music braille committee and our Project. Register by 13 May: [www.iceb.org/register](http://www.iceb.org/register).

Congratulations to Bill McCann - the California Transcribers and Educators of the Blind and Visually Impaired (CTEBVI) named Bill as the latest recipient of their Innovator Award, and the Dancing Dots founder gave a keynote address at the CTEVBI 62nd annual conference on 8 April.

The American Printing House of the Blind (APH) has circulated a proposal for a new braille file standards, eBRF: <https://www.aph.org/establishing-a-new-braille-file-standard-with-the-ebrf/>. As there is currently no mention of music braille in their proposal we will stay in touch with them and contribute expertise as required.

We’d like to showcase Olga Koeva in this report, an outstanding blind musician and music braille reader, and a hyperpolyglot, with her own YouTube channel: <https://www.youtube.com/channel/UCn9_dzA0MtPdqp-qGdls9gQ/videos>.

Deadline for your news for inclusion in the Q2 report: 30 June 2022.

## 9. Thanks to our funders

CNIB, DAISY Strategic Development Fund, Friends of dzb lesen, MTM, NLB, Norwegian Association of the Blind, NOTA, ONCE, RNIB, SBS, Vision Australia; as well as in-kind contributions from the agencies undertaking development work: dzb lesen, MuseScore and Sao Mai Centre for the Blind.

The rest of the report describes these areas in more detail.

# 1. Professional music braille conversion tool (MakeBraille)

**Aim**: At least one improved tool is available for rapid professional, accurate and automated music braille transcription which produces global formats and is linked to a production workflow. Note that this does not remove the need for skilled music braille staff.

**Summary update:** The project funding has now finished, but dzb lesen continues to implement improvements and fixes in MakeBraille, test accounts are still active, and dzb lesen is preparing to share information with agencies about when and how to obtain a professional licence. Read on for more details.

## 1.1 MakeBraille developments at dzb lesen

Lead: Matthias Leopold.

Update provided by: Hannes Kaden, Head of Production, dzb lesen

### Wiki

With thanks to ONCE for providing the translation, the User Guide for Make Braille is now also available in Spanish Language (please see: <https://dzblesen.uber.space/projects/hodder/wiki/Gu%C3%ADa_de_usuario_de_MakeBraille>).

Also, the Wiki has been set to public so that it is now accessible without a need to login.

### Start of License Model and Test Accounts

While the development continues, dzb lesen is finalizing the License Model for the use of MakeBraille by agencies. dzb lesen is preparing to announce the availability of licenses and to start with interested agencies during May 2022. The pricing model will be on an annual base and depend on the licensee‘s country of origin and its World Bank‘s classification.

As some features, that might be relevant for an active usage of MakeBraille (at least for some countries/regions), are still in development, the test accounts, that have been set up during the project time in 2020-2021, are still active and will remain until the features are in place.

### Development Progress

Since the final quarterly report for Q4/2021 the following progress has been made in the continuous development of the MakeBraille service (please also see [https://dzblesen.uber.space/projects/hodder/wiki/What's\_New\_in\_MakeBraille](https://dzblesen.uber.space/projects/hodder/wiki/What%27s_New_in_MakeBraille)).

**New:**

* Setting for duplex printing (brf+pef).
* Error analysis on MusicXML files (to be expanded and included in a suitable automated way)

**Improved:**

* For different countries default setting changed from bar over bar to continuous bar over bar (=continuos bar over bar).
* For brf and pef output: page numbers are on a separate line
* Page division for brf and pef output
* Some countries now get a chord symbol prefix also for bar over bar
* Recognition of figured basses from lyrics
* Recognition of commands
* Separation of music pieces into movements etc.
* Acceleration of system by system for large pieces
* Clef, key signature and time signature changes at the end of a bar are now processed in the following bar.
* Assignment of numbers to fingerings or figured basses
* Support of TAB systems
* No phrasing slurs (two-shaped slurs) when there are lyrics.
* BOB: Bar numbers are - if there is space - always written in front of the note blocks and otherwise omitted (Spain only)

**Fixed:**

* Rhythm detection
* Handling of incomplete bars
* Bugs related to moving notes between systems (turquoise notes under capella)
* Creation and handling of part measures
* Errors in the creation of full measure rests
* Implicit resolution of a key under capella, taking into account interactions with MusicXML sources
* N.C. for chord symbols is nowbetter inferred from context
* Output created in large print despite erroneous conclusions
* Empty or missing instrument names no longer cause crashes
* Bar continuation (interrupted bars) corrected
* PEF output corrected (blank line at beginning, wrong page width)
* Error in transfer to system by system if only one bar was on one system
* Handling of whole bar pauses
* Under certain circumstances bar over bar and system by system could be activated at the same time
* When converting a file from several pieces, the generation of sections did not work
* Separation of pieces of music on the basis of movement headings/indication of variations
* Recognition of implicit triplets etc. from MusicXML sources
* Switching of profiles corrected
* Saving computer braille = 8-point braille corrected
* Corrections to French encoding
* Dealing with note endings in connection with whole beat pauses
* BrailleVis/BraillePlayer stabilised against wrong entries
* Import of several chord symbols or chord symbols + N.C: on one note also with different lengths
* Improved evaluation of the orchestration tag (MusicXML)
* Improved recognition of copyright information (MusicXML)
* Incorrect resolution characters corrected as of the second system (MusicXML)

### Contact

If there are any questions about MakeBraille, please feel free to contact dzb lesen at makebraille-support@dzblesen.de.

# 2. Interactive end-user music braille tool (SMB with Musescore)

**Aim:** At least one improved interactive music braille user tool is available for blind musicians to independently read, write, convert and explore music in accessible ways, in education, for work and leisure.

**Summary update:** A new version of Sao Mai Braille was released in March, with further music braille functionality, making it a valuable tool for musicians already. In MuseScore, further accessibility improvements have been made: two keyboard bugs and two MusicXML export bugs, as well as more general keyboard navigation improvements. Read on for more details.

## 2.1 SMB developments at Sao Mai Centre for the Blind

Lead: Phúc Hoai Dang

### Q1 developments

##### SMB v22.2

In early March 2022, we released Sao Mai Braille (SMB) version 22.2 with the following new features:

* Uses latest LibLouis library 3.20 with display table selection for Braille output in Ascii or Unicode. New Braille table style; and two new translation rules for list indent and right-margin indent.
* Created table of contents from both print and Braille documents.
* Saves Braille document in SMB (Sao Mai Braille rich-text format), BRF (Braille-Ready Format), BRL (unformatted Braille), and PEF (Portable Embosser Format). Can provide meta data for SMB and PEF document types.
* Many new powerful music Braille transcription features such as advanced repetition and note grouping; music text dictionary; doublings; advanced slurs and ties; instrument type detection and applying correct Braille translation rules; transcribing in single-part and full score mode (orchestra and chamber) for bar-over-bar, line-over-line and section-by-section formats; flexible part label and staff control in Score Info dialog for advanced full score translation; and many more other improvements and bug fixes.

Read more about the release announcement, the SMB user guide and What’s New at: <https://saomaicenter.org/en/news/technology/new-powerful-music-transcription-and-more-braille-related-features-smb-222>

##### Webinar

We hosted a webinar on 17 March, ‘An Introduction to Music Braille Transcription using The Sao Mai Braille Software for blind musicians and transcribers’, presented by Dr. Sarah Morley Wilkins, Mr. Phúc Dang Hoai, and Mr. Haipeng Hu. Over 40 participants took part, and got an introduction to the DAISY Music Braille Project, and how SMB and MuseScore will work together at the end of the funded development period, a tour of the main braille translation features of SMB, and detailed demonstrations of how to convert scores into music braille using SMB. The live Q&A session generated some good dialogue, which we have captured in the transcript of the session.

The recording and transcript is now available, and you are welcome to share it to present the tool in your own organization/events: <https://saomaicenter.org/en/webinar/smb03-17-2022>

##### Specific developments in Q1

* Hairpin ending is removed when another hairpin or dynamic starts from that point. It’s also removed if a barline is followed.
* Supported cross-staff, cross-voice, tie-ring, slur/tie without start or stop and special slur and tie cases. Added new options:
	+ Use both tie and slur signs or just tie when both are occurred.
	+ Applied grace slur with dots 56-14 instead of normal slur for grace notes with slurs.
	+ Whether to use long slur brackets or use only dots 14-14 for long slur passage.
	+ Show hand sign when changing to new staff or not.
* Support to detect hidden/shown staves and apply correct translation. In addition, in full score mode, part/staff with measure rests will be hidden. If one parallel has all parts with measure rest, at least first part will be translated and shown.
* Support part with multiple staves, not limited to 3 staves per part as before.
* Support to detect part’s instrument type and apply defined translation settings for that type. Instrument types detected include: keyboard, organ, accordion, string, pluck, brass, wind, percussion and vocal. An XML-based instrument type settings file is created and customizable by users. Translation rules and settings include:
	+ Transcribe mode: translate single-part (part by part) or full score mode (with orchestra and chamber).
	+ Translation styles: by-staff and by-voice. Most instrument types are defined with by-staff style. While vocal type is defined with by-voice style. By-staff will translate and write notes in staff-by-staff order. While by-voice, it will separate and write each voice on its own Braille line.
	+ Both by-staff and by-voice supports detection attributes including interval-direction, clef, type and associated Braille staff and voice Braille names.
	+ Instrument name list: each instrument type has a list of names and the associated Braille abbreviation names. The list is used to detect instrument type. It’s completely customizable.
* Support to automatically provide Braille names with numeric/alphabet suffix for multiple-staff part belonging to string, pluck, brass, wind and percussion types. In addition, each staff will be added with part abbreviation, considered each staff as an independent instrument part.
* Support to translate custom Braille tags for part names, part abbreviations, staff names and instrument changes in a part. For this feature, Score info dialogue in SMB was added new fields for users to provide custom translation settings for part, staff and instrument change info.
* Completed all required layouts for both single-part and full score translation modes, including: title page, instrument list, part info, parallel/section info and main note content layout.
* Translated thumb-position and enharmonic signs. Two new doubling options for natural and artificial harmonics were added. Thumb-position was also added to the show/hide symbols list.
* Support to process hidden notes: appeared in chord and in different voice as hidden playing notes.
* Support local key and time signatures. Added option whether to restate key signature at beginning of each parallel.
* Support to state supplement accidental and the toggling option.
* Supported classical harmony analysis with Roman letters for harmony and chord progressions.
* Supported partial and full measure repetition for fingering and accidental cases.
* Support to translate time signature with dotted-note symbol.
* Supported option to check and combine multiple voices into chords.
* And many more improvements and fixes such as: added more conditions for value distinction signs; note grouping for pickup and broken measures; wavy line and ornament on same note; unnecessary added rests; show/hide clef sign; missing added rests or stem signs when translating some scores with partial in-accord mode; fixed line breaks in full score translation mode and alignment for bar-over-bar format; fixed issue when text direction written at the end of a measure; fixed multiple voice issue when score exported by Sibelius Dolet plugin.

### 2.1.2 Plans for Q2 development of SMB

* The SMB team expects to release another update version 22.4 in mid-April with many new improvements and completed features for MusicXML to Braille.
* In addition, during this time, the updated translation management tool called “SMTranslator” will be also sent to translators to help update both new and existing strings for user interface language.
* From quarter 2-4, the SMB team will mainly focus on developing Braille-related features in Musescore. In quarter 2 (Apr-Jun 2022) specifically, we will be mainly working on the integration of the SM Music Braille engine into Musescore in order to provide live editing and Musescore data Braille translation features.

## MuseScore developments

Lead: Peter Jonas

### 2.2.1 Q1 Project-funded improvements

Two keyboard bugs and two MusicXML export bugs were fixed this quarter:

1. Loss of keyboard accessibility for Inspector on elements with handles
2. Special characters windows not accessible at all with keyboard
3. Unable to export score in concert pitches
4. Headless notes exported incorrectly as hidden notes

### 2.2.2 Additional accessibility improvements funded by MuseScore

MuseScore’s internal development team continues to improve accessibility for MuseScore 4:

1. Text editing is now supported in all screen readers
2. Blind users are now able to add and edit lyrics, tempos, and expressive marking in VoiceOver and Windows Narrator as well as in NVDA
3. The MuseScore team also fixed an accessibility regression in the Palettes that had caused most palette elements to be announced as “text” rather than giving the actual name of the item in question.

### 2.2.3 Plans for Q2 development of MuseScore

The plan for the next quarter is to tackle a more fundamental accessibility problem in MuseScore where certain aspects of score layout are not navigable by keyboard users, and are therefore not exposed to screen readers.

For example, keyboard navigation allows musical elements like notes, rests, lyrics and articulations to be selected, but presentational elements like systems, pages, measures and staves are not selectable. As a consequence of this, blind users are unaware where each new page begins or ends, so when presented with an instruction like *“turn to page 5”*, the blind user would be unable to comply. In addition, sighted users are able to right-click on staves and measures to bring up a context menu with options relating to that staff or that measure, but these options are not (currently) available to keyboard users because keyboard users are unable to select the staff or measure in order to request a context menu for it.

In addition to this, we will be standing by to assist Sao Mai’s developers as they get started with their development tasks in MuseScore. We will also be making a video demonstrating how blind and low-vision musicians can use MuseScore.

# 3. Other project news

## 3.1 Music Braille Production Network

Our trial continues with agencies continuing to make score requests and production requests through the network. With an efficient way of reaching all producers with a single email, it has never been easier to search for a score, and to get quotes for production from agencies. However, we are continuing to review the process to try to make further efficiency improvements.

We have also started a score-trial, where all producers in the network transcribe the same two short pieces for review by expert music braille readers. The purpose of this score-trial is:

1. To be able advise users on the best way to interpret scores produced internationally, and
2. To identify any ways in which producers could easily make music braille to be (more) usable by international audiences without transcribers having to learn lots of other countries’ rules.

The Music Braille Production Network now has a reference page on the DAISY web site, so if you’d like to know more please visit: <https://daisy.org/activities/projects/music-braille/production-network/>

## 3.2 Metadata for music braille resources

Our sector research clearly highlighted a need to improve the search and retrieval of music braille scores from online collections.

We would like to make it both easier for agencies to add their music braille collections into online collections, and for users to find and retrieve suitable scores from those collections. One way we can do this is by making the metadata for music braille resources in different online collections more consistent and comprehensive.

To this end, we are hosting quarterly discussions with ABC Global Book Service, BookShare, NLS and ONCE, working together to review their various metadata fields, and to identify common or missing metadata fields, with a view to potential harmonization (maybe even standardization) of music braille metadata fields in the different collections.

We will share our latest proposals with you all during Q2 for comment.

## 3.3 Teaching and learning of music braille

We have been working to collect a reference list of all available resources for the teaching and learning of music braille, since many agencies and some technology companies list resources on their websites.

During our sector research it was reported that whilst resources do exist, it was hard for people to locate them. We will be considering how to improve this situation during Q2 and Q3.

If you have not yet reported the resources you find most valuable in your country, please do let us know: musicbraille@daisy.org.

## 3.4 Publisher workflow

We now have a list of music publishers who might be interested in working with us and their freelance engravers to create more accessible master files as part of their existing workflow.

We know from our work so far that when creating music for printing, if music setters (also known as engravers) use their tools in a particular way following our guidelines, that their digital score would include elements which permit more effective conversion into accessible music. We have demonstrated this during the project already with freelance engravers for our own productions.



## 3.5 Do you know any good Sibelius music setters/engravers?

We’re still looking for recommendations for engravers/music setters please who use Sibelius to set music scores, who can follow our guidelines to create well-structured master files which when exported into MusicXML can be easily converted into music braille. We have worked with several so far, but we’d love to have others on our list of recommended ‘transcription-friendly’ suppliers who can help agencies as part of their transcription workflows.

If you know any reliable music setters/engravers, please do put us in touch via musicbraille@daisy.org.

# 4. Related news from around the sector

### 4.1 In Memoriam: Antonio Quatraro

From: Guilio Benincasa, Italian Library for the Blind

In a sudden and unexpected way our dear Antonio Quatraro left us, who throughout his life has dedicated his efforts to the integration of the blind and partially sighted of all ages. Among the many activities of Antonio, who has held important roles in regional, national and international organizations, we remember his commitment in the music sector.

Antonio was also well known internationally, certainly one of the best known Italians in the musical field when the latter is associated with the visually impaired. He has participated as coordinator for several European projects, aimed at increasing the diffusion of Braille music in the world and improving the quality of transcriptions and use. And there are many written texts in which he made proposals, proposed analyzes and raised questions to be resolved, always with a window towards the future.

His contribution, his humanity, his skills will surely be missed by many. The many things he did, however, will remain forever, as well as his memory.

### 4.2 International Council on English Braille: Music Committee

From: Jordie Howell, Chair

The Music Committee works to align Unified English Braille to the international music braille code. We achieve this through discussions on an email list comprising a voting member from each ICEB member country. We are also joined by observers who are very much part of our conversation.

At the ICEB seventh General Assembly, there were two resolutions pertaining to music that were passed. The first is on the topic of the **preservation of music braille Available Only as Hardcopy.** ICEB calls uponmember countries and agencies to invest time and resources into the digitization of hardcopy music braille.

We found that the US and Canada are the main players in the digitization of music braille, and are investing considerable resources and time in scanning and proofreading hard copies. Australia, New Zealand and the UK have indicated that their time is specifically devoted to working on new editions.

The second resolution involving music braille concerns investigating **updating the New International Manual of Braille Music Notation** (1996) by Bettye Krolick. Some of you will remember my emails seeking interest in this project, and through resulting discussions with specialists in the field, we agreed that a supplement is a much more feasible way to proceed to capture material not currently covered in the New International manual.

The Music Committee’s webpage contains a list of resources produced by member countries in Braille Music and UEB <http://iceb.org/music.html>. Each country lists resources and their developments in technology in both braille music production, distribution and rehearsal practices.

I do hope that you will attend the ICEB Mid-term meeting (see below) to hear and perhaps take part in the music discussions touched on here. We may also talk about how the teaching of braille music has been affected by the pandemic. The exciting developments with the MakeBraille software through the DAISY Music Braille Project will also be featured and how automated music translation processes are improving.

## 4.3 Midterm Executive Meeting of the International Council on English Braille (ICEB)

The International Council on English Braille (ICEB) is pleased to confirm that the midterm meeting of the Executive Committee will be held from Sunday 5th June to Thursday 9th June 2022. The event will be held daily online via Zoom at 20:00 UTC. The virtual meeting will bring the Executive Committee together to discuss ICEB business, including updates on work undertaken by ICEB committees. The meeting will include additional presentations on braille and reports from the member country representatives to ICEB. Observers are welcome to attend.

The **deadline to register is the 13th of May, 2022**. The meeting agenda, as well as committee and country reports, will be provided to  registrants in Word and BRF formats. Visit [www.iceb.org/register](http://www.iceb.org/register) to complete the registration form.

Those interested are also invited to follow @ICEBbraille on Twitter and the hashtag #ICEB2022 for updates.

Thanks are extended to Braille Literacy Canada (BLC) for hosting the

meeting in collaboration with ICEB. We look forward to connecting with you all in a week dedicated to braille!

The International Council on English Braille (ICEB) was formed in 1991 and provides a forum for international cooperation among those countries that use English-language braille by assisting countries to establish standard-setting bodies in relation to braille codes and practices; working towards the development and adoption of international minimum standards for the production and teaching of braille; and facilitating the exchange of braille materials between member countries. Its members currently include braille authorities from Australia, Canada, Ireland, New Zealand, South Africa, the United Kingdom, and the United States. To learn more about ICEB, visit <http://www.iceb.org> or write to info@iceb.org.

## 4.4 CTEBVI Names Dancing Dots Founder Bill McCann for its Innovator Award

The California Transcribers and Educators of the Blind and Visually Impaired (CTEBVI) has named Bill McCann as the latest recipient of their Innovator Award, and the Dancing Dots founder gave a keynote address at the CTEVBI 62nd annual conference on 8 April.

Criteria: The Innovator Award is given to vendors/inventors/creators of a product or service unique to blindness and has contributed to the improvement in the lives of those with vision loss.

Basis for the Nomination: Bill McCann created Dancing Dots so that transcribers and others can create music scores, music sheets, and other associated music for students. Bill provides workshops, training, and has written extensively about music education specific for students with vision loss.

**Bill McCann, Founder of Dancing Dots**: “I am delighted to accept this award on behalf of our entire team at Dancing Dots and in particular with gratitude to Albert Milani, my long-time friend and business associate. Twenty-five years ago, Albert took my simple software prototype and built it into the world’s first commercial braille music translator, GOODFEEL, now in use in over fifty countries. As we approach our thirtieth anniversary as a company, it feels wonderful to receive this recognition which we share with its past recipients, industry colleagues whom we admire so much: Mike May of Sindero Group and Joe Sullivan of Duxbury Systems.”

## 4.5 Establishing a New Braille File Standard with the eBRF

From: Haipeng Hu, Music Braille Technical Consultant, DAISY Music Braille Project, and BrailleOrch

The American Printing House of the Blind (APH) has circulated a proposal for a new braille file standards, eBRF: <https://www.aph.org/establishing-a-new-braille-file-standard-with-the-ebrf/>. As there is currently no mention of music braille in their proposal, we’ve been in touch with APH to find out more.

Haipeng reports: eBRF is a semantic representation of braille material, making every braille character of literary, math, graphic and music with its meaning, providing required formatting information. eBRF will not only ease navigation of headings, paragraphs, pages, volumes and so on using braille display, but also bring the possibility for different countries to use the same material with their own layout, eliminating the complex and painful reformatting process.

This format was inspired by their own free English UEB translation software BrailleBlaster (<https://brailleblaster.org/>) which is based on XHTML format. The proposal is still in development. They are very interested in developing braille music in eBRF, but because they are still at the beginning, and there are no braille music specialists in their office, they have not turned to this field, but will keep in touch with us. When they turn to braille music, we'll be very happy to assist them to develop this excellent format, making braille and braille music translation, as well as braille music reading and learning, much easier.

## 4.6 Showcasing Olga Koeva – singer, pianist, organist and hyperpolyglot

From: Olga Koeva

Olga has recently uploaded her latest repertoire to her YouTube channel, and is not only an outstanding blind musician (and a music braille reader) but also someone who speaks over 13 languages, and is interested in learning Japanese next.

View some of her inspiring work on her YouTube channel at:

<https://www.youtube.com/channel/UCn9_dzA0MtPdqp-qGdls9gQ/videos>

## 4.7 Do you have music braille news to share next time?

I’ll happily collate other news from around the sector and send it out. Our next quarterly update will go out in July 2022, so please send me your news by **30 June 2022.**

This mailing goes out to around 150 music braille experts worldwide, including transcribers, teachers, composers, end-users and developers, among others. Please send your updates to musicbraille@daisy.org

# 5. With thanks to our funders

We’d like to express our huge thanks to all our funders for supporting the project. We are most grateful for your support and belief in the work we’re doing:

* CNIB
* DAISY Strategic Development Fund
* Friends of dzb lesen
* MTM
* NLB
* Norwegian Association of the Blind
* NOTA
* ONCE
* RNIB
* SBS
* Vision Australia

As well as in-kind contributions from the agencies undertaking development work:

* dzb lesen
* MuseScore and
* Sao Mai Centre for the Blind.