Transcript of the webinar "Introduction to Music Braille Transcription using the Sao Mai Braille Software" 17 March 2022

- Hosted by: the Sao Mai Centre for the Blind and the DAISY Music Braille Project
- Presenters: Dr. Sarah Morley Wilkins, Mr. Phúc Hoai Dang, Mr. Haipeng Hu
- Webinar and transcript: <u>https://saomaicenter.org/en/webinar/smb03-17-2022</u>

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Links referenced during the presentation and Q&A

- 1. Webinar and transcript at https://saomaicenter.org/en/webinar/smb03-17-2022
- 2. Sao Mai Braille (SMB) info and download: https://saomaicenter.org/en/smsoft/smb
- 3. Join the SMB testing group: support@saomaicenter.org
- 4. SM Music Reader app for iOS and Android: <u>https://saomaicenter.org/en/smsoft/sm-music-reader</u>
- 5. MuseScore notation tool info and download: <u>https://musescore.org/en</u>
- 6. DAISY Music Braille Project, securing the future of music braille: <u>www.daisy.org/music-braille</u>
- 7. Sign up for the DAISY Music Braille Project mailing list and receive news as it's announced and take part in sector knowledge-sharing: <u>musicbraille@daisy.org</u>
- 8. Engraving guidelines for preparing 'braille friendly' masters, on the DAISY Music Braille Project / Latest Developments page: "Guidance for Engravers (using Sibelius, Finale, MuseScore)": https://daisy.org/activities/projects/music-braille/latest-developments/
- 9. Haipeng Hu's online music braille collection of freely available transcribed scores: http://www.brailleorch.org/en/
- 10. MakeBraille converter tool enquiries: makebraille-support@dzblesen.de

Introduction

Hello everyone. And welcome to today's webinar all about music braille transcription using the Sao Mai Braille software for blind musicians and transcribers, jointly hosted by the Sao Mai Centre for the Blind, and the DAISY Music Braille Project.

Let's meet our presenters for today.

I'm Dr. Sarah Morley Wilkins, the Project Manager and User Experience Consultant of the DAISY Music Braille Project. Our objective is to improve access to music braille, and I'm going to share with you some of the activities we're leading and supporting to secure the future of music braille.

The DAISY Consortium is an international non-profit membership organization working with over 150 partners all over the world to improve access to reading for people with print disabilities.

I'm delighted to be here with Mr. Phúc Hoai Dang, the SMB development team lead from the Sao Mai Center for the Blind who will tell us about the main braille translation features of SMB.

And I'm also pleased to be joined by Mr. Haipeng Hu, the Technical Consultant on the DAISY Music Braille Project who will demonstrate using SMB to convert scores into music braille.

We'll finish with a Q&A session at the end of the webinar, so please add your questions or comments into the Chat window during the webinar if you'd like us to address anything in particular.

Part 1: The DAISY Music Braille Project: securing the future of music braille

So firstly, I'd like to put this webinar into context. The DAISY Music Braille Project (which is in its final year) is making strategic interventions to secure the future of music braille production and use in the face of declining expertise, and a lack of suitable conversion tools and file format standards.

We have several strategic interventions underway. The first is the development of tools for music braille creation.

Today's webinar covers the development of one kind of tool in particular: an interactive multimedia music notation and editing tool for blind users and transcribers: SMB with MuseScore.

Related tool development which we won't cover in this webinar includes a professional automated online conversion tool for transcribers, MakeBraille, from dzb lesen.

Tool development is, however, just one part of the story to secure music braille for the future.

Our other interventions are helping to improve the file standards for music scores, with W3C and music publishers, so the master files are more accessible and easier to convert into braille. We're making it easier for people to find existing braille scores in online collections with improved and harmonized metadata. We're helping educators and blind musicians by signposting teaching and learning resources. And we're continuing with our sector networks to improve efficient international collaboration between music braille producers and users.

So, let's now hear how we came to support the development of SMB.

Our sector research in 2018 identified an international and vital need for a reliable interactive tool for blind musicians of all ages to be able to create and learn music in multimedia ways, in speech, sound and braille. This was true for blind musicians in education, for their leisure activities and for their employment, and for the sighted people supporting them.

The tool would have to include the prioritized international sector requirements we'd gathered so that it would be up to date with braille rules and usable in different countries.

We're funding the development of two free tools which will work beautifully together: Sao Mai's braille converter, and MuseScore (a free, mainstream music notation and editing program). Music braille functionality is being added into Sao Mai's braille converter, and MuseScore is adding accessibility improvements (this will be covered in a separate demonstration).

By the end of 2022, these two tools will work together to give a fully accessible and seamless music notation and editing tool for blind musicians and transcribers, for creating, reading and learning music independently, in speech, sound and braille.

Now, we'd like to express our thanks to the agencies who have made all this possible with their kind financial support: CNIB, DAISY Strategic Development Fund, Friends of dzb lesen, MTM, NLB, Norwegian Association of the Blind, NOTA, ONCE, RNIB, SBS, and Vision Australia. We thank you all.

For more information about the DAISY Music Braille Project in general, you can sign up to our mailing list by emailing us at <u>musicbraille@daisy.org</u>, and you can visit our project web page at: daisy.org/music-braille.

So, having set the scene, it's now my pleasure hand over first to Phúc Hoai Dang, the SMB development team lead from Sao Mai Center for the Blind who's going to talk about the general braille translation features of the SMB converter tool.

We will then hear from Haipeng Hu, the Technical Consultant of the DAISY Music Braille Project, who will demonstrate using SMB to convert some real scores into braille.

And, we'll finish with a Q&A session, so please continue to put your questions or comments in the Chat window during the webinar ready for that final session.

Part 2: Quick tour about main features of SMB

Hi everyone,

This is Phúc from Sao Mai Center for the Blind, i'm currently serving as the executive director of the center.

In my presentation today, I would like to give you a quick tour about main features of Sao Mai Braille software (SMB).

SMB's designed to be an accessible editor and a Braille translation software.

And it's created with the hope to provide an additional affordable solution for both blind individual and Braille transcribers.

After starting SMB, you can press ctrl+n to new print document; or ctrl+shift+n to new Braille document.

One SMB document might contain one or all of data types such as text, image, math equation and music score.

Objects like image, equation and music score, can be inserted into print document from the insert menu.

You can insert as many objects as you want. For instance, if you have music textbook with 50 scores, you can insert them in line with text and translate them all into Braille.

Please note, from version 21.6, we temporarily disable the Braille translation feature for math and tactile graphics, due to some unstable Braille translation results.

We are exploring resource to help further develop and improve the math Braille translation features in our next major release of SMB.

Now I am going to open a file that I already prepared for this presentation.

This demo document has:

Text with some styles, and inserted objects.

I will go through the document so you can listen the Jaws screen reader reading different text with styles and objects.

I'm navigating within the tables

Now below are inserted objects:

The screen reader reads the graphic together with the alternate text.

This is the math equation. On the screen the sighted people can see the math equation.

This is the first English score, Yesterday Once More. SMB doesn't draw the sheet on screen. But it puts the music icon so sighted people can recognize that is the music score.

This is the second with Norwegian lyrics.

And this is third score with lyrics written in Vietnamese language.

Now I am talking a little bit about style feature.

SMB has two types of styles, the print and Braille styles.

The print style is applied for print document. It saves the text format information such as font attributes, font name and font size etc.

While, Braille style is applied for Braille document. And it saves Braille translation rules such as left right indentation, whether to insert blank lines before or after, and whether to state with opening and closing indicators for the text with style.

To customize translation rules and settings for Braille styles, go to menu Tools, and then choose Options, a nd from the options dialogue, you choose Styles page.

Now I will choose one style like heading 1, and then tab through the different translation rules so you can have a look at.

Ok, so those are the translation rules of Braille style.

Another main feature that you may want to explore is to add Braille translation table.

By default, SMB is added with two English UEB tables.

Now I am going to add other two tables, Norwegian language and Vietnamese language. So I can apply for the second and third scores in my demo document.

I am also going to Tools, Options Dialogue, and then I choose translation tables pages.

Press Tab to move through this page.

On this page, you can also change default translation table. Now I am going to the translation table checkbox list. So I can add Norwegian and Vietnamese tables.

I want to add Norwegian grade 1. Press space to check.

Ok, this is Vietnamese table that I want to add. And then, just press enter to activate Ok to save it.

Now I want to apply the Norwegian language table for the second score, and Vietnamese table for the third score.

Because I know that lyrics of two scores are written in Norwegian and Vietnamese.

And the remaining will be translated with the default English UEB table.

To apply, you just select the text or object, and then go to menu Tools, translation tables submenu, and choose the table that you want to apply for that selection.

Ok, this is the second score, I already selected. Go to menu tools, down arrow and choose translation tables submenu. Ok Norwegian, this is the table that I added in previous step. Press Enter to apply.

Repeat same step for the third score with Vietnamese translation table.

Now I am going to press Ctrl+T to translate into Braille.

Ok, the first page is text. It's translated with English Braille translation table.

I move to second page. Yes, this is the start of first score, Yesterday Once More.

And now as I remember that page 10 will be the second score. So I press Ctrl + G to the Go to

This is the title of second score. I don't know Norwegian Braille but if some of you know, you can read it.

This is the note line, and after that is the lyrics.

But I can check for translation of Vietnamese, for sure. So I go to page 13.

Yes, this is the title of the Vietnamese song. It's translated correctly.

Please note that, for the music, all text elements like lyrics, titles, will be translated by using the LibLouis translation table. For music notes and other elements, will be translated by our own music translation engine, SMMusicBraille.

SMB supports to save Braille into different filetypes:

The native one is with .smb, stands for Sao Mai Braille. .smb saves the rich-text Braille document so you can freely edit it later.

The second one is BRF file. It's the formatted Braille.

The third one is brl, that's unformatted Braille.

And the last one is PEF, Portable Embosser Format. It's a new XML-based file format.

Now I am going to save this document as the brf file.

Now I would like to share with you some information about the project that we are working on.

With the funding support from DAISY music Braille project, we will continue to improve the music Braille translation features of SMB in this second year.

In addition, new Braille related features will be also developed for the latest version of Musescore 4.0.

They are included:

Support to open and transcribe Musescore data file into Braille;

Live editing Braille translation feature, working as a module for Musescore;

Incorporate between Musescore and SMB via either plugin or web service to get highquality Braille output;

And the 6-key Braille input method.

I hope that with my presentation, you already have a general idea about how to get started with SMB.

And please also check the user guide for more details.

Now I am handing over to Mr. Haipeng for his demonstration of music Braille transcription with SMB.

Thank you.

Part 3: How to convert a score into music braille using SMB

Hello everyone,

I'm Hu Haipeng, a Chinese blind musician and braille music transcriber, founder of the BrailleOrch and Open Braille Music Projects, and music braille technical consultant of the DAISY Music Braille Project. I'm now guiding Mr. Phuc for the development of SMB's music braille translation function. After a year's hard work, we have already achieved a basically good result from scratch. Today I'll demonstrate how I use SMB's tool to create music braille from a digital score.

Currently, SMB accepts Musicxml files generated from any music notation software. To prepare a good Musicxml file for braille translation, the quality of the source notation file is very important. Basically, every object should have its correct category, attached to correct note or any other musical element, in order to get the most accurate braille output. Hidden objects for playback purpose are strictly forbidden. We have prepared very detailed

engraving guidance for use with mainstream music notation software, and it can be found at the Music Braille Project page of the DAISY website.

Now, I'll demonstrate the braille music translation features of SMB using a short and intermediate levelled piano piece, the first prelude from Shostakovich's 24 Preludes Op. 34. This score was extracted from the complete preludes, well-engraved by a Musescore engraver. The file almost meets all of our engraving guidance.

Before doing any translation, we should first check the source score. If the source is a Musicxml file, import it into Musescore or Finale. if you are sighted, compare it with the original score, check if there are wrong notes, missing symbols and texts, and if there are unwanted hidden objects. If any errors are found, correct them; if any unwanted hidden objects for playback are found, remove them and clean the score. If you are blind, it's better to find a sighted person to check it. Fortunately, this Shostakovich score doesn't contain any errors and extra hidden information. So we can now export this score into Musicxml.

Before importing the score into SMB, you should also check if your SMB settings meet your requirements, e.g., cells per line, lines per page, braille translation tables, braille music format you want (that is, bar-over-bar, section-by-section), whether you want a full score or parts, whether you want all musical elements to be shown, etc. I keep most of the settings as default, with some minor adjustments I'll say below.

So, here is my exported MusicXML file, and now I just import it into SMB. Create a new document, and then insert the Musicxml file, this score.

SMB is a very flexible tool. Before doing the translation, we can do lots of things.

The Score Info dialog lets us check for title information. If it's a chamber or orchestral score, we can even choose which part(s) to be translated, control very complex part labelling and instrument changes during the piece, so that we can get correct braille instrument abbreviations for every part even in very complicated scores.

The magic for transcribers like me is the Music Braille pages of the Options dialog. Here we can choose what format to use, show or hide specific symbols, adjust some translation behavior to fulfil different country's style. For me, I choose bar-over-bar format, but not force octave mark at the beginning of every measure in a parallel. I also prefer slur over tie to show the whole slur clearly as in print.

After adjusting the options, if needed, we can choose a translation table for texts such as title and tempo marks. I prefer pre-UEB uncontracted English, the so-called EBAE, so it's set by default. Now, let's begin the SMB translation by pressing CTRL+T.

As you can see, the score is quickly translated. SMB can do a very quick translation, even on large scores.

Now we're in the braille document. The title, composer, tempo marks and time/key signatures are correctly placed, bar-over-bar is well-formatted, giving us a quite good appearance.

Here, I can see something we need to fix -- the subtitle, Roman number I at measure 1, is exported in MusicXML as a general word, and should be centered above, not placed inside the music. So we remove it, and re-input it above the tempo mark. The mf dynamic should be before the diminuendo text, so we move it.

Next, we'll take a look at the translation of a full orchestral score, which is the most exciting feature in SMB. At this time, in case of any known issues, I'll choose a score for harp and string orchestra--Danses sacrée et Danses profane by Debussy. The orchestration is simple, but the music is not. The original Sibelius score is from a UK publisher Scores Reformed, with whom I've worked for four years to transcribe their excellent orchestral repertoire into braille. Here I'll show the original score opened in Sibelius, just as the publisher sent to me.

I've already prepared the Musicxml file. It doesn't need much editing before exporting the Musicxml file from Sibelius, because this publisher's standard generally meets most of our engraving guidance. To keep the braille clean, in Sibelius, before exporting to Musicxml, I removed some duplicated titling text tags for footers and blank pages, by locating and deleting these texts using a plugin called System Objects.

Now we import the well-marked up Musicxml score into SMB and translate it. I set the translate mode to Orchestra, make measure numbers with number sign, uncheck "each parallel on new page", set interval direction to down, and disable showing clefs. Other options are nearly the same as in the previous Shostakovich score.

Here's the result. From a general view, the result is very impressive, saving lots of time when editing for the final production. All instrument names are correctly labelled in braille, and we can even find a list of instruments and their braille abbreviations before the score, just as we would find in a standard braille transcription. SMB has many unique features, such as automatically listing instruments and their braille abbreviations, translating let-ring ties, handling cross-staff passages with correct note grouping and logical line breaking. When working with complex orchestral scores, we can define braille part labels flexibly, according to instrument changes on the same staff, and also according to varying staff amount in a multistaff part, such as a divisi strings section.

Now for something to correct: The title for the first section Danses sacrée should be above the tempo text, instead of being the second line of the tempo text and before the time and key signatures. So we move the text block up, right centered above the tempo text and time and key signatures.

There's a small bug: measure numbers are counted from 0 in this score. This issue will be fixed soon.

Generally, the overall translation result is pretty good, and at the current stage of development, results should be checked, and feedback sent to the developers.

So, this is a very short and basic demonstration from a transcriber's angle. SMB is a newlyborn music braille translation software, and it still has lots of improvements and new features which will be made over the coming year. We're working hard to improve its essential functionality, so that at the end of this project, it will become a powerful tool for every transcriber and blind musician.

Part 4: Q&A

NB: this is a transcript of the live Q&A session, but the live discussion is not included in the recorded webinar video.

General comments on the tool/webinar

- As a blind orchestra conductor, this software is a dream for me!!!
- Thanks for creating this affordable solution
- I have used the Sao Mai Braille program to open xml files, and am impressed with the potential of the program.
- I'd like to thank the DAISY Music Project, and SMB project for this detailed and wonderful software, I will use in the future, I hope. Really nice software, very grateful Thanks for this initiative
- Wow thank you and congratulations for really good work with developing this program.
- Congratulations on getting so far!
- This is a very impressive project.
- Congratulations, everyone! Excellent presentation
- Thanks for this wonderful webinar The Latin American community is watching all SMB projects very closely
- This is so wonderful, thank you!
- Wow! That was like watching magic!
- congratulations for wonderful presentations
- I just updated my SMB, it looks great!
- Thank you for this presentation. Much appreciated.
- Thanks everyone for this really interesting webinar.
- I'm so grateful to learn more about this project, thank you Sao Mai for creating this software.

What is the compatibility with braille displays, in particular for the French braille music notation?

Liblouis will handle the lyrics and titles into e.g. French, but the music is handled by SMB following MBC, and NIM, to manage as many needs as possible to meet all country requirements. But let us know if there are any special rules for your country which aren't implemented yet.

How does SMB manage the chords names?

We have two display options for chords: writing the chord symbols with the note line, e.g. c quarter has G major, so we write it together with C quarter like:

GM + C quarter (on same Braille line).

The other way is to write the chord on a separate line, below the note line which follows the print standard, MBC and NIM. E.g.

This is a note line of measure 1

This is chord symbols line of measure 1

Can SMB handle figured bass?

Version 22.2 does not yet support figured bass, but in the development version it's being tested right now, and support for figured bass will be available in the next release (April).

If the music was created using Sibelius or Finale, they can't export Figured Bass, so you won't get a good translation into braille (with any tool). But if the score is created using MuseScore which does correctly export figured bass, then SMB will translate it well into braille.

Comment: We need to do much more to ensure that braille music is as consistent as possible across countries to make initiatives like this as effective as possible and to aid their speedy development.

Agreed. There is a real need and impetus to harmonize as much as we can for tool development, and also to make it easy for users to understand scores produced from other countries, and for producers to transcribe materials for other countries.

How can we find out even more about the possibilities with SMB?

During the rest of this year of funded development we will be producing more information for transcribers and users, videos, demonstrations, webinars, user guides. You can sign up to test the tool and each new release (and we'll send out regular updates for new features and fixes), and you can sign up to the DAISY Music Braille project to stay in touch more generally with all the music braille activities we're working on. See links section above.

Does SMB work with the midi standard?

No, because that will be available through MuseScore, where you can navigate through the score in music output, and there are lots of tutorials available for blind users to do this. SMB supports only the braille element. But, you might be interested to know that we have an app for IOS and Android platforms, free, to read the score in speech, sound with MIDI, as well as displaying the score on the screen, allowing you to share the score with your sighted colleagues. The app is called "SM Music Reader". To find more information about the app, visit: https://saomaicenter.org/en/smsoft/sm-music-reader

Is there an audio feature that will play back music once it is converted, to help with picking up any mistakes that might occur?

Not in SMB, but audio playback is done through MuseScore which does the audio. SMB will provide the live braille feedback and conversion in MuseScore, when you compose, read or edit, as MuseScore will connect to SMB's internet conversion service. When we can demonstrate how MuseScore and SMB will work nicely together you'll be able to see that you get that seamless music notation and editing experience that you want. Because MuseScore is a mainstream tool (and free), blind and sighted musicians will be using the same tool side by side, which makes it much easier for people to collaborate.

How much editing is needed in the finished braille product? If sighted transcribers are not familiar with music braille rules, do we need proofreaders who are music specialists?

At the moment during development, most of the finished braille needs some editing. In addition no software can ever convert music 100% accurately, so there might always be some editing needed to create a totally perfect result. But these automated tools do significantly reduce the amount of work needed.

Which versions of braille displays and Jaws and NVDA can the Sao Mai software support?

SMB supports all versions of NVDA (and as that is open source it's easy to upgrade to the latest version). For Jaws, Freedom Scientific supports the SMB editing control in all versions

from 2021 onwards. SMB will display braille on whatever screenreader the user has installed.

Will this software be supported by both Windows and Mac devices?

Currently, tool development is only for Windows. But the braille translation engine does have a stand-alone version, on Linux, so it would be completely possible to provide a MacOS version in the future. In any case, by the end of this project you will be able to log into the online version of the music braille converter tool, whichever operating system you're using.

Can the ios and android apps open xml files? Can the apps support Braille?

The SM Music Reader app on Android and IOS opens MIDI and XML files. For the Android version we are also developing a braille translation engine for the app, but braille conversion in the IOS app will be done later.

How much will the software cost?

It's free. Just download it and use it.

Is there a demo version or a trial version so we can give feedback?

You can sign up to test the tool by emailing us at <u>support@saomaicenter.org</u> if you want to try it and give feedback before each version is released. We don't have a demo or trial, because the current version is on our website, and it's free, so just download it and use it. Let us know if you have any trouble downloading it.

How will the six key entry method work?

SMB works like regular 6-key input method, but doesn't yet support 6-key input for music input. But basic 6-key input will be developed to work in MuseScore to enter music, along with the other ways you can enter music in MuseScore, such as MIDI controller and mouse, and computer keyboard. MuseScore is free and open source, and we hope that we can attract other developers to contribute to these modules.

Regarding 6-key entry from a braille display, neither SMB nor MuseScore control the braille display directly. The users' braille display is controlled by their screenreader e.g. JAWS and NVDA, so if their screenreader supports 6-key input then they can use that to interact with SMB software too.

Can SMB handle music not based on western tempered system, such as pieces from Chinese or Ottoman modal music?

During development we are testing different music systems which are the most commonly needed, but we haven't done everything.

In educational settings, what expertise should we have in our team to work with SMB and help blind students with braille music?

Staff should be able to check that the MusicXML score is well-marked up compared to the original score. We are trying to build as much into the tool as we can to get you the best music braille result for the least effort/expertise. [This question probably needs a longer answer, and may be relevant to many others, so will be addressed separately].

It seems as if the live music braille translation feature that you plan to include in MuseScore is a direct replication of LimeAloud and Goodfeel. I also agree that this is vital for blind musicians. What are the advantages of recreating a program that already exists?

The Sao Mai Braille solution was originally created as an affordable tool for developing countries (we're from Vietnam), and we had already built text conversion. We saw that MuseScore (also free) shares some common interests around access to music for blind musicians - we both wanted to build open source and affordable solutions for the community.

Does SMB support braille printers (embossers)?

It currently generates text, we're working on embosser configurations and drivers this year and may need some support from the embosser manufacturers.

How does SMB manage drums notation in jazz for instance?

Percussion is supported in the development version quite well, you'll be able to test in the next release. Jazz notation in the percussion part is very similar to the common percussion notation for the trumpet. If working with MusicXML files we will mainly use two ways: use the displayed pitch, the internal pitch percussion notes notated in the notation software – this is the simplest way. Or it can work (like GoodFeel) to implement every drum note in the bass clef with their independent note pitches. Both ways work for drum kit. There may be some particular jazz symbols, but most of them will be plans, rows, grace notes, tremolo symbols which are very common in notation. In some wind and brass parts they have been well-implemented in SMB.

Does the screen reader speak all musical symbols in braille? Or does it only say the dors numbers?

This only applies and works in MuseScore, not in SMB which is only for the braille translator, and the result is purely in braille encoded in rich text format in the background document.

What languages is the software available in?

SMB is already translated into about 36 user interface languages, but only English and Vietnamese are fully translated. We are looking for volunteers to help to localise the program, please get in touch at support@saomaicenter.org if you can help with the translation of the remaining strings.

Can SMB export a score using the Unicode braille table?

Yes, it supports Unicode and ascii. If you know about LibLouis you can easily customize the LibLouis display table.

Will be possible to write scores in Braille and present them in notation for sighted musicians?

Converting a braille score into print notation will always be a challenge, even for text, let alone for music. But, you will be able to do this through MuseScore – using the 6-key braille input to enter the music, and it will display the printed notation on screen.

Can I use this webinar to showcase the tool?

Yes, the webinar recording will be available afterwards, we will email you all with the link. You are welcome to show it in your organisations, students, teachers etc.

Is there a course I can take to learn more about SMB?

Not yet, but there will be updates, videos etc to demonstrate how to use it, and we will update you via the DAISY Music Braille Project. If a course is needed, and can be written we will let you know.

How can we handle music lesson books in PDF into music braille?

If the PDF score is a searchable text file, we can export the text into a Microsoft Word file, and translate the text through SMB. Then for the music part we have to scan or engrave the music with a notation program, then export the music into MusicXML, which can be translated by SMB. However, if the whole book is a scanned PDF (with no searchable text) then you have to scan the whole book and use OCR to get the text, or type it all in. The music process is the same.

Will SMB testers receive regular development updates?

Yes, we will send out fortnightly updates to all testers who have signed up at support@saomaicenter.org

What are the "save as mp3" tools?

An experimental feature in SMB which saves a text document as a simple MP3 file. In our development plan we intend to support other formats, which might even include DAISY Pipeline.

Will MakeBraille and MuseScore work together? Is there a cost?

MuseScore is free, from the MuseScore website. MakeBraille will be available to professional transcribers/agencies under licence from dzb lesen who are contacting braille libraries etc with details. MakeBraille will work with MuseScore files, yes. All the tools will be listed on the DAISY Music Braille Project page. You can contact dzb lesen about Makebraille: makebraille-support@dzblesen.de

Does SMB support Japanese braille table? And what system?

LibLouis v3.20 (the free and open source braille table library) includes the translation table for Japanese, but it's created for 8-dot braille translation table, so it's not yet added in SMB which currently only supports 6-dot braille. This can be added in future.

What advice is available to prepare MusicXML files for conversion through SMB, especially for sighted volunteers?

The problems of converting MusicXML files are often caused by badly engraved original scores, or a poor export from the music notation tool. Our testing of different MusicXML files is highlighting remaining problems which we will be able to fix. We will also implement

an error-checking/notification system which will help the developers, and the transcriber, to know what the problems are and where in the file. Our Engraving Guidelines can be followed by sighted music notation: see Engraving guidelines for preparing 'braille friendly' masters, on the DAISY Music Braille Project / Latest Developments page: "Guidance for Engravers (using Sibelius, Finale, MuseScore)": <u>https://daisy.org/activities/projects/music-braille/latest-developments/</u>