



D2.3 User group report



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Executive summary

Mus4VIP is a Specific Targeted Research Project funded by the European Commission within the LLP Programme.

The main goal of Mus4VIP is to bridge the gap between Braille music and its non-sighted users.

This goal will be achieved by designing, developing and testing a new didactical methodology, capable of exploiting the new software, in a context of integrated education.

The project will also address the fragmentation in this area; this approach brings together different groups working in different countries. The project will develop a learning route that will promote wider adoption of Braille Music by encouraging its integration within mainstream environments.

Music4VIP will design and develop a dedicated portal for blind music teachers and blind music students.

This portal will include practical resources for teaching / learning purposes, which will offer our users the possibility of exploiting fully the available technological resources in order to achieve the best possible music learning and teaching.

In order to meet the needs and requirements of the various types of users their involvement in this project is considered of great importance. Therefore, several kinds of Expert User Groups have been established that have participated in

different activities, such as testing activity and dissemination, until the end of the project's life.

This document contains a description of the first task carried out, aimed at identifying users who could serve as reference users for the project. They received a brief interview in order to establish a closer cooperation with our team. They allowed us to use their e-mail and we kept in contact with each of them and sent them all main documents in order to receive their feedback.

Their contribution has been extremely useful for us in the design and implementation of our evaluation plan.

Within this framework, two expert users have performed a very accurate test on the system conversion of the proposed service from MusicXML format to Braille, which has been included in our report D5.2 .

For the sake of clarity, we have decided to write only one comprehensive document, whereas our original plan mentions two separate documents.

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1. The Mus4VIP Project

The Mus4VIP project aimed to develop the best possible use of new technologies in the field of Braille music, so as to prevent further disadvantage to visually impaired people and in order to reverse the dramatic decline in music literacy among blind people. In recent years there have, in fact, been signals (New York Times articles by Rachel Aviv, Published: December 30, 2009) of a serious return to musical illiteracy, due to the fact that new basic technologies (I-Pad, smart phones, and similar technologies based purely on listening), have discouraged the visually impaired from learning Braille, offering them the easy, but inferior, alternative of relying on learning by ear. This method is indeed very easy to implement; in fact today, the Internet allows the retrieval of almost anything, as well as offering immediate results. On the other hand, as we point out in all our documents, it is also known that learning only on the basis of listening tends to limit the ability to conceptualize learning contents. In fact, hearing / listening recalls written symbols in those who are literate, while, for those who are not literate, it does not produce concepts, but only labile shadows in the memory, which cannot easily be refreshed, corrected or enriched, through the continual, flexible and personal reference to a written source. This turns out to be a very significant obstacle to genuine education, and denies the principle of equal opportunities.

Mus4VIP sought to overcome these problems by exploiting the best of available resources, both in terms of the functioning senses (touch and hearing), and the best possible use of existing technology based on these two senses.

Mus4VIP has therefore drawn maximum advantage from the sense of touch, which offers the only true means of achieving real literacy for a blind person. The sense of hearing, instead, gives an "overview" of a musical score but, crucially, it does not allow the same degree of accuracy in examining details. With regard to the available technologies, Mus4VIP has combined the use of tactile devices, such as Braille display and Braille embosser, with acoustic devices, including sound cards and speech synthesis.

The outcome of this has been to promote Braille music literacy, because hearing and touch have proved to be capable of supporting each other in the complex process of deciphering and comprehending music as a language.

In particular, the project achieved the following results:

- Developed an educational methodology that has proved to be more attractive for students and has proved to be an effective support for teachers in the field of accessible music.
- Offers the opportunity to develop training materials in a collaborative way, taking into account knowledge and understanding of the cultural differences between the various participating countries. In fact, each country has developed its own local Braille language, with small, but significant differences; the project has considered this aspect, by collecting and systematically organizing the differences between countries.
- Helped young visually impaired students to develop a more attractive and accessible method for studying music, bearing in mind what an important contribution music can make to an individual's intellectual and psychological development.
- developed appropriate tools in order to help new generations of teachers, teaching assistants and lecturers to acquire specific basic skills in the area

of accessible music, by offering them powerful resources and workplace opportunities, both in special schools and in institutions devoted to training the visually impaired.

- Has developed, tested and disseminated new teaching models in the areas of Braille music theory, reading and writing, based on the use of new technologies.
- Created a collaborative process among schools at European level, aimed at improving both basic training and services for music teachers and other categories of people working in schools, such as teaching assistants for visually impaired students. The purpose of this collaboration is to exchange experience, with a view to developing new teaching strategies aimed at improving music teaching quality and the use of Braille both in schools and special institutes, particularly in those classes with one or more visually impaired students.
- Developed a guide to the use of available computer tools that will meet the training needs of teachers at primary, secondary schools of theoretical and practical subjects in music conservatories and music high-schools, taking into account the conditions in each participating country in terms of school integration and education provided by special institutes.
- Has activated a very promising dialogue with projects and networks that operate similar themes
- Has improved the quality and European dimension of training for teachers of visually impaired students;
- Has promoted the development of resources, services, pedagogical solutions and innovative practices based on IT in the field of permanent learning.

2. Part 1: User involvement

In order to meet the needs and requirements of the various kinds of expert users Mus4VIP identifies three types of User Groups:

1. Teachers of blind students & self-learners;
2. Expert blind musicians and blind music teachers;
3. School leaders

Each project partner will provide at least 3 members for each type of Expert User Group, and several others users that will be meet during the project life.

The diversity of the Expert User Groups should reflect as much as possible different backgrounds in education, age, discipline, vocation, and if possible, ethnicity.

Expert User Group and User Group activities will continue until the end of the project.

All users will participate in the project on a completely voluntary basis, with no additional costs for the project.

In order to keep the members of Expert User Groups committed during the project several incentives could apply. During the demonstration phase of the on-line portal with music scores and information the users will be in close and constant

contact with the project team; furthermore, they will receive a fully functional copy of BME2, and they will be offered every possible opportunity to use all resources available on our web portal. The consortium was able to respond to their demands in terms of aid for the use of the available services and offered help and support in the production of specific customised musical material in Braille.

Their contributions to the project will help to improve the availability, viability and usability of the Braille music tutorial materials. Furthermore, they will benefit directly from the new tutorials developed by our consortium.

The objectives of establishing the Expert User Groups are as follows:

- to achieve a better assessment of the current situation in Braille music literacy and teaching.
- To establish the user needs and requirements of print-impaired Braille music users, taking into account different educational and professional levels. The findings will be used for the State of the Art analysis (D2.1) and the requirements analysis intended for the development of tutorials, software and services across Europe (D2.2).
- to have access to user communities with a view to the testing and evaluation of the portal services.
- To start dissemination activities by keeping the users informed about the results of Mus4VIP and asking for feedback.

Users will be kept informed of results and activities by means of email, publications on the Mus4VIP website and the possibility of attending demonstration and training sessions, workshops and meetings (in person or by use of telecommunications).

3. Methodology: Online Surveys

3.1 Online Surveys

To gather information from the expert User Groups throughout the project the Mus4VIP consortium will make use of questionnaires, workshops and interactive sessions, plus real-life testing of software and services by users.

The first round of information gathering will be by means of questionnaires as shown below.

- About you
Personal data like age, sex, employment, etc
- About you and music profession
Level of education, level of skills, instruments, music genres
- About you and accessing music
Availability and choice of music score format
- About you and (music) technology
Use of computer and software
- Getting Braille music
Availability and quality of Braille music provision
- Use of Braille music
Training in reading Braille music scores; Availability and quality of Braille music
- Your views on Braille music
Handling Braille music scores; (Dis)advantages of formats
- Your help with this project
Suggestions for Mus4VIP

The project partners will administer the questionnaires, in most cases by phone, to the User Groups in their respective countries. The questionnaires for teacher, musicians will comprise approximately thirty questions. Question types will be a mixture of multiple choice, rating scales, numeric open ended and text open ended.

Results will be reported to the project partners and members of the User Groups. Furthermore, outcomes will be available on our website, after due analysis and evaluation.

3.2 Expanding existing User groups

Most partners in the project consortium already have active user groups, who may be interested in the project. All project partners would collect contact details of organisations and people who are involved in music for visually impaired people. Examples of these organisations and persons are:

- Service providers who deliver music scores (music library)
- Music schools
- Music teachers for blind musicians

The partners would contact these organisations and ask if they would be interested in distributing a short survey among their clients and students. This survey would request some basic information and ask the respondents if they would be interested in receiving more information on Mus4VIP

3.3 Language Issues

There are several barriers and problems to acknowledge in the process of creating a User Framework. One of the barriers is language related. Although English is

one of the main languages for communication in Europe, the User Groups cannot be expected to be fluent in this language. This is why all information and communication should be disseminated in the user's native language. The translation process can be time consuming and slows down the dissemination of information. Nevertheless all project partners support the idea of communication in their own language, which is also why the information on the project website is given in four different languages: English, French, Italian and Polish.

4. Activities in which users have been involved

4.1 User requirement

The most important task we have undertaken with regard to our interaction with users was certainly our efforts to involve them in a survey aiming at a better knowledge of primary requirements for music teachers, for their students, as well as gathering information concerning the basic decision about whether, when and how to use computer aids to read music in Braille.

The D2.2 deliverable product was accomplished in the first six months of work by the project consortium.

4.2 Conferences and Info days

The consortium has deployed their effort in different kinds of dissemination activities, after having designed, discussed and shared appropriate plan, in order to introduce the Mus4VIP project and its services and software to visually impaired musicians from different backgrounds, age groups and experience levels. UT2J was the leading partner in the reporting of the dissemination activities and was available to assist all partners in the organisation and planning phase.

Thanks to the dissemination activities the number of users who have been involved has increased and many new addresses were collected and added to the first restricted reference group.

This valuable result has been used to produce a large demonstration and evaluation of products and services included in the portal.

Further information and data concerning the users involved can be found in the D6.1 deliverable on dissemination.

In 28 working months it can be estimated that over 800 thousand people have been reached at least once by our communication campaigns, including general public, local administrators, teachers of music, blind musicians, students, parents, school assistants.

Here a list of the main events organized by the consortium with involved users.

Meeting Location	Date	Purpose of the meeting
Soave (IT)	18/1/13	Music conference and disability - techniques, technologies , methodologies and experiences Organisation: Associazione Ailamus, Comune di Soave, Ministero dell'Istruzione ed Uffici Scolastici Regionali e Provinciali
Firenze (IT)	18/01/2013	10 days devoted to presentation MUS4VIP project with different interlocutors
Treviso (IT)	3/2/13	Mus4VIP info day a Treviso training activity with support teacher

Brno (Czech Republic)	11-15/02/2013	The 3rd Universal learning Design Conferenze BRNO Support Centre for Students with Special Needs at Masaryk University in Brno, Czech Republic (alias Teiresias Centre) 2 Presentations
Firenze (IT)	26/02/2013	Seven days of meetings
Ferrara (IT)	14/6/13	Meeting dedicated to the University for Lifelong Learning - Development and Employment
Monza (IT)	20/6/13	Mus4VIP info day a Monza
Antwerp (NL)	13-15/09/2013	Dissemination at Association Européenne des Conservatoires, Académies de Musique et Musikhochschulen (AEC), Annual Meeting for International Relations Coordinators of Conservatoires
Warsaw (PL)	28/09/13	Fryderyk Chopin University of Music, Warsaw To introduce Mus4VIP to staff at the university
Mestre (IT)	28/9/13	Info Day with support teachers
Milan (IT)	12/10/13	Dissemination at Reatech fair – workshop: inclusion and education for people with sensory disabilities presentation
Oxford (UK)	15/10/13	Faculty of Music, Oxford University To introduce Mus4VIP to members of the Music faculty

Warsaw	January 2014	Individual coaching, distant learning of BMR
London (UK)	14/01/14	RNIB, London Composers' Focus Group To obtain feedback on BME2 from blind users
Firenze (IT)	16/01/2014	Illustrating work carried on: Florence University
Firenze (IT)	22/01/2014	Illustrating work carried on: Regional Authorities
Roma (IT)	24/01/2014	Conference Law 284/97
London (UK)	7-8/02/14	Music Education Expo Barbican Exhibition Hall 2, London To introduce Mus4VIP to people working in the field of music education
Worcester (UK)	11/02/14	New College Worcester NCW Outreach event To introduce and demonstrate the Mus4VIP technology to people working in the field of music education for visually impaired students
Warsaw (PL)	6/2/2014	Presentation of BME2 and BMR to a blind musician and his assistant from Warsaw
London (UK)	21/03/14	UKAAF Accessible Musical Formats Exhibition RNIB, London To introduce and demonstrate the Mus4VIP technology to VI musicians and people working to support them
Rimini (IT)	4/4/2014	Rimini (Italy) c/o CAD Cooperative in Nuova Circonvallazione street 57/d Rimini

Szczecin (PL)	12- 13/04/2014	Typhlodidactic Music Workshop
UICI di Milano e Circolo G. Baragli (IT)	7/05/2014 – 25/06/2014	Presentation of the project MUS4VIP with objectives, planned activities, expected results
Warsaw, at the seat of EKMS	May 8, 2014	Presentation of BME2 and BMR
Sight City Frankfurt	15/05/2014 (17:00 - 19:00)	Presentation of the project MUS4VIP with objectives, planned activities, expected results
Brindisi (Italy)	28 /05/2014 (2 hours)	Training course for assistants to the study of blind children
Laski (PL)	June 5, 2014	Presentation of Music4vip Project, demonstration of BMR and BME2 at Music School for the Blind in Laski
Palermo (IT)	13 June 2014	Investigation of the needs of the area to implement the program for the European Social Fund program 2014-2020
Paris, (FR)	11-13 June 2014	Handicap 2014
Cracow (Poland)	June 16, 2014	Jagiellonian University Blind students and computer experts assisting the visually impaired students at the university

Cracow (Poland)	June 16, 2014	June 16, 2014 - Music School for the Blind in Cracow
Paris, (FR)	9-11 july 2014	ICCHP focuses on Assistive Technology (AT) and accessible ICT
Bologna (Italy)	from 25 to 30 August 2014	Master IULINE University course for assistants to the study of blind children
Laski (Poland)	November 12, 2014, 1 day	Introducing BME/BMR to the three groups of students in Laski music school, practical application of BME, individual consultations with teachers and students
Palermo (Italy)	14, November 2014, one day	Conference: The visual rehabilitation in developmental age ARIS association
Toulouse, (FR)	18 nov 2014, 3 hours	Master MEEF : Métiers de l'intervention auprès de publics à besoins éducatifs particuliers (IPBEP) » Assistant to the study of children with special needs
Trento (Italy)	20/11/2014 at 5 p.m. in Malvasia street 15, Trento, Afternoon	Training course for assistants to the study of blind children

Natal, Brazil	5/12/14	Braille Music and Music teaching conference, University of the State Rio Grande do Norte in Natal, Brazil Lecture by Jorge Gonçalves on Braille music software including information about the Mus4VIP project provided by the NCW partner. The lecture included a strong endorsement of the project.
Toulouse, (FR)	07 December 2014	Sciences et handicap: Present some examples in which science can help handicapped people
Verona (IT)	12/12/2014, 19/12/2014, 9/1/2015, 16/1/2015 4 events of 2 hours	Laboratory about new technologies for blind people, Training on the BM2 and knowledge of the MUSIC4VIP portal
Toulouse (FR)	20 jan 2015, one day	Midinnov
Toulouse, (FR)	27 Jan 2015, 3 hours	Master MEEF E-Formation et environnement numérique (eFen) » Distance learning and « Master MEEF Concepteur de Ressources Numériques (CRN) » Pedagogical resource creator
Paris (FR)	31 January 2015 deadline presentation	TENOR 2015 28,30 May 2015 First International Conference on Technologies for Music Notation and Representation (presentation of a paper)

	paper	
Roma (IT)	18-22/02/15	Residential seminar for 43teachers of music of Italy
Verona (IT)	27/02/15	International Conference of Mus4VIP

4.3 Testing and evaluation

In order to identify the teachers to be involved in the demonstration phase and in the evaluation activity, the user group has been an important reference for us. We submitted our draft questionnaires asking them for their feedback and asking them to indicate some reliable users for our experimentation activity.

This preliminary work has helped us to define our questionnaires, namely Q1 (establishing first contact), Q2 (maintaining contact), Q3 final verification and Q4 the overall evaluation.

The formulation of the final version of the evaluation questionnaires (see D5.1 evaluation plan), required much time, as recorded by the various meeting via SKYPE that have been carried out by the project partners. The main difficulties concerned a) need for clarity; b) need for minimum complexity of questionnaire; c) need for comprehensiveness, given that we are working on small numbers.

Users' requirements have been really very numerous because the aim of the questionnaires was to cover the maximum number of cases.

All members received the first draft of the final assessment documents "D5.2 evaluation" and were asked to send open comments and suggestions, which have been taken into consideration.

4.4 Mus4VIP Services

All the resources produced, including manuals, tutorials, programs and video lectures have been published in the four consortium languages, in order to support a national approach, and in order to facilitate the involvement of national experts.

As shown in D5.3, the consortium has adopted various strategies in order to improve the linguistic aspects both on the portal and with regard to the BMR program. In this regard the scripts for the screen reader were adjusted for best possible localisation. This allows all users to refer to a central point where they can operate and share ideas, views and comments concerning both learning material and technical resources for access to music in an innovative way. This can be considered as a legacy for the project, which can continue to attract and give information to potential users of music in Braille and music through multisensorial approach.

4.5 Feedback

Since the beginning of the project's life our web portal included a forum where users have had the opportunity to discuss freely the core ideas of the project, and also to have individual exchanges. The forum was blocked after a short time, in order to filter messages, and in order to publish only those directly related with our topics. We decided then to set up a specific contact page, in order to make communication between users and the consortium more effective. We published only threads which were relevant for dissemination and only with permission by authors.

On the basis of feedback from our correspondents, the following observations seem particularly relevant:

The most frequently mentioned reason for not using Braille music scores is that it is hard to learn and use for the students. Especially when people become visually impaired at an older age, it can be very difficult to master Braille, and a-fortiori Braille music notation. It also requires a lot of effort to memorise music scores; this is not only the case for Braille music scores but also for spoken music.

It is also clear from users' comment that there is a limited availability and access to music scores in Braille. Transcription is a time-consuming and expensive process. Especially when visually impaired musicians want to play in an ensemble or orchestra with other musicians, it is essential to obtain new music scores at the required time.

Most users were aware of the possibilities of digital music scores, but not of the possibilities of accessible digital music scores. Many users immediately inquired about the interoperability of BMML with other digital music score solutions. This shows that while the user communities are quite aware of the requirements for interacting with digital music scores, they currently have inadequate or no solutions offered to them.

One of the biggest challenges in starting to learn Braille Music is the lack of similar peers locally. This can be partly overcome by allowing potential users to interact in online communities via the Mus4VIP portal. Here they can ask questions and find answers to queries from other Braille Music users.

4.6 Feedback to consortium and developers

The development of the Mus4VIP products were based on several points of view. Development was initially based on the combined vision and experiences of the consortium with respect to what they expected the user requirements to be. This was then updated in the early stages of the project with initial user requirement gathering which resulted in the creation of a list of specifications for the software Braille Music learning and conversion modules. The specifications were assembled from all the suggestions coming from the consortium's users. The feedback and suggestions about the software were added iteratively. There were some key areas where users continually requested additional information:

- Integration with Finale and Sibelius. What can the Mus4VIP systems do and what can they not do? It is interesting that even visually impaired users were aware of the market share that these two products have and the importance of integrating fully with them. In particular, the fact that the latest version of Sibelius only allows the export of MusicXML in version 3.0, while it can import MusicXML files in both version 2.0 and version 3.0
- The availability of a user friendly manual and a user friendly tutorial for the program BME2.
- Implementation of localisation, especially Polish, concerning help files.

- New features in BMR as listed in the deliverable D5.3 that led to the creation of over 10 new versions of the program.
- Further functionalities. There were several interesting functionalities which were suggested by the users as extensions to the products. Some of these were implemented (e.g. extension of several keyboard shortcuts). Others have not been possible due to time constraints (e.g. Braille combination searching).
- Braille Music information. Most of the problems encountered by users draw attention to a lack of information available and a lack of teaching resources in the area of Braille Music.

4.7 Test of the conversion modules

A challenging and serious test was carried out by two professional musicians for the blind on the Music XML to Braille conversion module. Both these experts are former music teachers of the Conservatory of Padua, now retired, and they have engaged themselves for several months in examining and dissecting all the functionalities of the program. They used different kinds of music and genres, such as well as ad hoc fragments, made by colleagues in MusicXML format and then converted to the Braille format and evaluated their completeness and their syntactic organisation, based on the international manual. Their outstanding evaluation work has been included in D5.2 evaluation.

5. Conclusion and Further work

The inclusion of users in the Mus4VIP project has been recognised from the onset of the project as an essential task in achieving the objectives of the project. This has not always been an easy foundation on which to build the success of the project. Braille Music use, being as thinly spread as it is, there has been a need in the project not only to integrate with communities but also to build them. This work in itself will prove invaluable beyond the life of the project not only for each partner's local networks but also for Braille Music users in general.

To keep the members of the User Framework committed during the project and beyond the end of the project several incentives will apply. Frequent communication with the users on progress and new developments within the project is essential to maintain their attention as hypothesised in the D7.1 exploitation and exploitation plan. In all communication to the users it will be emphasised that their contributions to the project will help improve the availability, viability and usability of music for visually impaired people. They should be aware that they might benefit directly from new technologies emerging as a result of Mus4VIP. It is also in the interests of all the organisations in the consortium to continue to communicate and interact with these user groups in future endeavours. Each partner of the consortium will be responsible for the further exploitation of the Mus4VIP user groups.

Over and above the statistical analysis of user feedback (see D5.2) and the contributions to improving the portal and the software, the key result from all the

user interaction performed in the past 2 years is the enthusiasm of users for digital Braille Music solutions. In most cases it was clear that many users had very little awareness of the possibilities of computer support for music, and they were very enthusiastic about bringing their use of music more up to date. In general there has been a marked difference in the acceptance of Digital Braille Music solutions in the past five years. During the conception stage of the project, it was often very difficult to convince users that computer support for Braille Music was a help rather than a hindrance. Transcribers believed that automating Braille Music production made them redundant, whilst leading to an inferior transcription of the score. This attitude is slowly changing. The online conversion modules software has helped with this as it starts with a score which has already been created and augments the process of transcription rather than replacing it. There has also been a change in user attitudes towards the use of computers to access Braille Music scores. This is most likely to be due, at least in part, to a general increased use of computers in the last five years.

The User Group has been invaluable in ensuring that the consortium sees the bigger picture and focuses not only on their objectives but on the effect of their objectives in the eyes of their peers. The Braille Music expert community in Europe is only a small community and there is a real need to support each other further in ensuring that successes can be used across Europe and repetition of failures or work in general can be avoided. The focus of the Mus4VIP output as demonstrations rather than solutions supports this. The enthusiasm by the experts involved during the lifetime of the project will certainly open new perspectives for a more collaborative European Braille Music community in the future.

In terms of tangible results, the info days, dissemination activities and the work of the User Group have shown an overwhelming enthusiasm for a tool, such as the Braille Music Reader and the online conversion modules. While there are several solutions which aim at providing a conversion process for creating Braille Music

and also solutions for allowing end users to compose their own Braille Music there has been a shortage of solutions for purely consuming Braille Music other than receiving embossed paper from libraries. While in some cases basic ICT skills are still a barrier to success in this area, most users involved have shown an eagerness to be involved in Digital Braille Music solutions of the future.

6. Annex1: Members of the Expert User Group

Here a list of expert user groups who have participated in the very first user group. These persons have been involved in our project using a questionnaire.

More expert users have been added mainly by French partners and are listed after these first

Simone D. M. (Italy)

- **About you**

Personal data like age, sex, employment, etc

29, male, professional musician, blind

- **About you and music profession**

Level of education, level of skills, instruments, music genres

Musical Degree and Piano Diploma

- **About you and accessing music**

Availability and choice of music score format

Good Braille reading for music.

- **About you and (music) technology**

Use of computer and software

Of course, I am a technical trainer and former and I know very well screen reader. Developer of NVDA, good user of Lambda Program and BME2 Program

- **Getting Braille music**

- **Availability and quality of Braille music providing services**

- There are many information in Monza Library, but what I don't find there, I can have them through Music XML Conversion.

- **Using Braille music**

- **Training in reading Braille music scores; Availability and quality of Braille music**

- In my opinion the formation of music Braille is quite critical. There are no prepared teachers and some students are left alone.

- **Your views on Braille music**

- **Handling Braille music scores; (Dis)advantages of formats**

- Braille music is very complicated with letters to use. I pull some single pages off as the books are really bulky.

- **Your help with this project**

- **Suggestions for Mus4VIP.**

I find that the music as music should have, for the blind young people, some ways with different paths. Instead we have always to find some solution for them trying to suite them for us. For example at the Music University where they should have some reserved seats, so as the teachers that are afraid if a blind person decides to register himself, and sometimes the demand is failed with such a shame justification. I know that sometimes they advice the student not to register himself as he will not be able to do the profession of piano player and that the music is

better kept as a nonprofessional level. I find that with the new technology there should not be the difference between electrical score and Braille version. I mean, for example, with MIDI Music, sequencer that should be important instruments and they should be on disposal. I think that the first aim of the project should be cultural and formative, first of all for the “normal” teachers and, and it should make them understand that the Didactics for Blind People changes respect the traditional one for the writing and for little changes for “feel” the piano keyboard. The musical theory and Braille version should not be a problem if there are adequate Computers aims, but it is very important that the teacher, even if he doesn't know Braille, could communicate with Blind people with the same language used with everybody. It would be a task of the program to make transparent the Braille version to teachers.

Igino C. (Italy)

- **About you**

Personal data like age, sex, employment, etc

70, male, professional musician, retired musical teacher, blind.

- **About you and music profession**

Level of education, level of skills, instruments, music genres

Musical Degree and Diploma of piano, composition and choral singing.

- **About you and accessing music**

Availability and choice of music score format

Braille Expert, Braille transcriber for many years

- **About you and (music) technology**

Use of computer and software

Use of BME2 Program for all my musical activities and for realizing some part of my chorale.

- **Getting Braille music**

Availability and quality of Braille music providing services

At Monza Library, often, I transcribe everything in Braille but helped by a seeing person.

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music

Now times are changed respect those ones when I was young and there are no able school of music and Braille. It's a problem for younger generation.

- **Your views on Braille music**

Handling Braille music scores; (Dis)advantages of formats

Since I started studying music at only 5 years I have taught Braille immediately and I think that this is the key to bring the young boys to Braille, ie to train children from the beginning to the Braille and to musical Braille so when they are older they don't feel this format so complicated and difficult to use. Compared to my day, computer science has a significance that cannot be put out of the door, even for young children. I suggest you to use the PC as early as 6-7 years of age. The computer is for all blind people and it is the real solution to access to information and to communicate in a true and complete way.

- **Your help with this project**

- Suggestions for Mus4VIP.**

I would like to introduce in the new systems and modern solutions for teaching also positive aspects that existed in my day, when all of us were directed to the study of music. Who was a good student went on, who was not a good student did other things, but for better or worse all the blinds of my generation have a cultural musical that was undoubtedly useful to build their intelligence and personality, to wide their future, understand visual concepts visuals that are only possible with paragon related to the world of music.

Nowadays things are changes, so many fears, thousand of problems due to the school background, due to the bad preparation of the teachers, to the fragility of the parents that, very often, they really don't know what to choose for their sons. They need help, it's fundamental that the school would be more careful about these themes and able to give to children and relatives the right instrumentals, since they are at the elementary, for approaching them to this extraordinary musical experience I think is essential and fundamental, able to open the minds of this Blind children. Music can build that external and internal world that the view don't let you know and with the music this is possible, training the mind, that unemployed part of the brain, due to the absence of visible stimuli, usually completed unemployed. I hope I can convey this message to the project and be able to suggest to Consortium to push for giving solutions for those not well

prepared teachers, it is important not to be afraid of Braille and to feel how much responsibility they have on their students if they are fans or not in the correct manner of musical world.

Marcella N. (Italy)

- **About you**

- **Personal data like age, sex, employment, etc**

- 50, female, professional trainer area sensory disabilities

- **About you and music profession**

- **Level of education, level of skills, instruments, music genres**

- degree in pedagogy and specialised on special needs for sensory disabilities

- **About you and accessing music**

- **Availability and choice of music score format**

- Good Braille reading for music.

- **About you and (music) technology**

- **Use of computer and software**

- I carry out training activities, and I know the tools for the visually impaired:
good user of Lambda Program and BME2 Program

- **Getting Braille music**

- **Availability and quality of Braille music providing services**

- In Italy there is a good quality service offered by the library of Monza.

- **Using Braille music**

- **Training in reading Braille music scores. Availability and quality of Braille Music**

I spent a good part of my life in organizing masters and training courses for educators and educational assistants. These are the people who blind students really need, and unfortunately we are still back in this field. Much work still needs to be done.

- **Your views on Braille music**

- Handling Braille music scores; (Dis)advantages of formats**

I think that a professionals' music knowledge also requires a Braille music acquaintance and, since it is a difficult language, everything should be done to make it easier to learn and to use. I'm not saying this to discourage students or give excuses to those schools that doesn't want to teach Braille music.

- **Your help with this project**

- Suggestions for Mus4VIP.**

I think that the most important job for this project is to make it clear to school principals, functionaries and politicians that the formation of the blind young student has to be full, even in music field. Although a blind young student will never become a professional musician, it is necessary that he/she has a good music culture and a base training. This preparation necessarily needs to be supported by the Braille knowledge. Knowing Braille and all of its syntax, in addition to traditional subjects such as mathematics, music and chemistry, is essential for the full growth of the blind boy or girl. So, the project should be able to offer not only a solution for those students who want to become professionals in the music field, but having a proper care for everyone, especially for kids who in compulsory education face a general kind of music study, often by just using a simple flute or singing in a choir.

A second aspect of my job is to not forget the study assistants or those people who haven't a specific training in the music field, but that should be a guide for the text interpretation and generally for the study of blind students. It's important that they can have fast and easy to use training tools, as well as the possibility of remote work, being people who make some efforts and need a constant updating.

Agnieszka W. (Poland)

- **About you**

Personal data like age, sex, employment, etc.

18, female, student, blind

- **About you and music profession,**

Level of education, level of skills, instruments, music genres

Level of education: after 5th year of secondary music school in the mainstream system. In a year I will graduate from the secondary school and start university studies.

- **Level of skills, instruments: playing the piano and the harpsichord.**

Agnieszka Warecka is a very talented and hard-working student, who participated in a number of music competitions, including piano competitions and some in music theory (e.g. history of music).

- **Getting Braille music**

I am definitely for the use of Braille while studying music.

I learn only through reading, because I consider learning by ear not precise enough. I use Braille scores which I borrow from the central library for the blind in Warsaw. However, since many scores I need are unavailable, I order transcription at the Edwin Kowalik Music Society.

- **About you and accessing music**

Availability and choice of music score format

I like the section-by-section format. I learn music reading with one hand and playing with the other. At the beginning I could read much better with my left hand, but I practiced a lot and now both hands are equally good at reading Braille. I prefer to have all the nuances (dynamics, fingering, accents etc.) in my Braille score, because I like memorizing them simultaneously with the music text.

- **About you and (music) technology**

Use of computer and software

I use a computer and Braillesense. I experimented a little with producing myself Braille scores with the use of Braillesense, but it is not perfect. I wish all the Braille devices had universal coding. I would also like to have the software capable of translating music from traditional scores into Braille and the other way round.

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music

Some teachers teach blind students after studying “The New international Manual of Braille Music Notation”, because generally, there are no courses available for teachers or students. Children should be taught Braille music from the beginning i.e. as soon as they start playing any instrument. The reason is that the music pieces they play at the beginning are easy to read.

If a blind person starts learning Braille music notation late, he/she will not be able to use it effectively during the music studies. It is only at the beginning that the pieces to be memorized are easy, very soon they are becoming difficult. Reading

complex music requires a lot of practice, so it is good to get familiar with the Braille music notation as early as possible. I occasionally taught Braille music to some children and this is just my experience.

- **Your views on Braille music**

Handling Braille music scores; (dis)advantages of formats

In my opinion, you have to read Braille music if you want to be a good musician. I can use any format available. I am used to the section-by-section format. The numbering of measures helps, especially for the analysis of music.

Some Braille scores available in libraries are too old and the way they were made is not always understandable. However, the paper used in the past was high quality and therefore the old texts are well legible. Nowadays one can order another hard copy if the old one has been worn out.

- **Your help with this project**

Suggestions for Mus4VIP

I can test the outcomes of the project and express my opinion.

I am interested in the new software and new Braille scores.

I am eager to visit the Music4vip website and find some new software and Braille scores I could download.

Agata B. (Poland)

- **About you**

Personal data like age, sex, employment, etc.

28, female, unemployed, blind

- **About you and music profession**

Level of education, level of skills, instruments, music genres

Graduated from the secondary music school (piano), playing the piano, singing, composing songs; singing poetry, sometimes returning to classical music.

- **About you and accessing music**

Availability and choice of music score format

I can't imagine learning music without Braille, though at the beginning I was against it: I thought it is faster to learn by ear. However, in the second grade school I realised it would not be possible to manage without Braille.

For the piano music I prefer section by section formats, in vocal music I prefer to have the notes and lyrics put separately. However, in general Braille music is not readily available.

- **About you and (music) technology**

Use of computer and software:

I can use a computer, but I have some technical problems with the Braille display.

I would like to use an efficient editor for Braille music. I would like to write down my compositions. Now I only make records so as not to lose them.

I am going to experiment with BME, but I think some assistance/training would be helpful.

- **Getting Braille music**

Availability and quality of Braille music providing services

I borrow Braille notes from the library for the blind, but Braille music is not the best section in this library. It seems that nobody cares for Braille music. Some scores are very old and impossible to read.

I got some hand-written scores from the widow after a blind musician who used to transcribe music himself. It must have been a hard job.

The services are very poor and if one really needs something, it is necessary to order transcription, but you have to pay for it. There is no tax relief or financial assistance to compensate for these extra expenses.

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music:

I think nowadays not all the schools for the blind put the emphasis of teaching Braille music. In the past it was much better. Since many young people attend music schools in the mainstream system, they should be provided special courses in Braille music, but it is difficult as people go to school in different places and the training should be organized not far from home.

- **Your views on Braille music**

Handling Braille music scores; (Dis)Advantages of formats

I am definitely for using Braille music notation. The books should not be too bulky.

I like section-by-section format for the piano music.

In my short experience with choir singing I found it necessary to have difficult pieces (e.g. Palestrina) written in Braille, but somebody had to dictate it to me.

- **Your help with this project**

Suggestions for Mus4VIP:

I am eager to test BME and evaluate it from the practical point of view.

Henryk W. (Poland)

- **About you**

- **Personal data like age, sex, employment, etc.:**

60, male, teacher in the special school for the blind at Owińska near Poznań

- **About you and music profession**

- **Level of education, level of skills, instruments, music genres:**

I started studying music when I was in the second grade of primary school. At first, I learnt to play the violin to which I returned later, during my university studies. However, my main instrument is the piano. On the amateur basis I was interested in many other instruments: keyboard, accordion, organ, My general interest in music was really vast. In the second grade music school I chose the oboe as my second instrument. I was keen on getting to know the techniques of playing different instruments, such as guitar, mouth-organ, percussions, harp. The most fascinating subject for me were study of instruments and acoustics. I also learnt piano tuning.

It was as early as in the secondary school that I realized I wanted to be a teacher. That is why already at that time and then during my university studies I became interested in the opportunities, but also difficulties that blind pupils may have with playing various instruments, including vocal music and conducting. While studying at the faculty of pedagogy I got familiar with the problems of a blind conductor. For me the piano was not as much the instrument to perform, but rather a tool to do other jobs related to music. So I played the piano accompaniment during the music classes, I myself successfully carried out such classes with children. I set up childrens' bands, arranged music for little dramas. I organized music festivals, participated in juries etc.

Technology Has always been my hobby, so I of ten had to do with various types of audio equipment and recording. I have always investigated the possibilities of the blind in this area.

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Level of education:

Piano and oboe - diploma at the secondary school level;

I graduated from Music Academy in Poznań at the faculty of pedagogy;

Course in tyflopädagogie;

Yamaha school course;

Courses in electronic musical instruments.

level of skills, instruments, music genres:

Piano, oboe, arrangement, improvisation, music group leader. Music classes in kindergartens.

- **About you and accessing music:**

Availability and choice of music score format

I collected Braille scores from Braille music magazines (Polish and Russian), I acquired or borrowed Polish Braille music publications.

Except for borrowing scores from the libraries I also made own transcriptions or wrote down compositions if needed at work. I also use scores transcribed in the past by other blind musicians.

I use Braille music notation. Braille scores are needed to confirm the accuracy of what I am going to play. Braille is also necessary to write down my arrangements and compositions. I dictate notes from Braille to the sighted members of the music groups I am working with. After some time everybody forgets the music he/she has learnt, even your own music. Braille is perfect to recall it. Records are the source of inspiration for me.

- **About you and (music) technology**

- Use of computer and software**

I use the sequencer a lot to record my arrangements and save the fragments needed as illustrations for various artistic events.

I use Sequencer Roland MC50, software sequencer for midi and audio Sonar. I work with WaveLab and SoundForge for audio purposes. To reproduce music on the external cards simultaneously with the synthetic speech programme I employ Winamp. Winamp and Windows Media Player prove to be useful.

A lot of devices and software I use are not adapted to the needs of the blind. Jaws seems to be the most efficient screen-reader for music purposes. Screamer Radio gives a possibility to record valuable things from the Internet. Songr is good for downloading needed files

- **Getting Braille music**

- Availability and quality of Braille music providing services**

I have not downloaded any Braille scores from the Internet so far.

The Braille scores published are usually prepared very well. Those hand-written by individual blind musicians are not so good. Ordering individual transcription is still expensive. In my opinion, it is necessary to publish the collections of Braille scores on the websites accessible to the blind.

- **Using Braille music**

- Training in reading Braille music scores; Availability and quality of Braille music:**

Training with the use of a computer requires a Braille display which is very expensive.

When using a computer (also a sequencer you can easily write everything and make corrections.

Many blind people have significant difficulties with reading Braille. Coupled disabilities, so frequent nowadays among the blind children, make things even worse. Therefore, it is difficult to teach Braille music notation. Technology provides access to music without scores, making blind people more lazy. In the past, without all this technical equipment, they used Braille notation more frequently. Perhaps an attractive offer in the field of Braille scores in the electronic form would encourage the users to read Braille notes. Many blind people do not realize that in some genres of music there is no better way to convey notes than in Braille notation. In others, however, the ear provides better information. It is useful to show the blind the abbreviated system of writing music in Braille, especially in some genres. The sighted also take advantage of it.

- **Your views on Braille music**

- **Handling Braille music scores; (Dis)Advantages of formats:**

Every format of Braille music has been developed as a result of somebody's experience. Sometimes it is better to have the score in the measure-over-measure format, sometimes it is better to have it written section-by-section. The sections are sometimes made according to staves (systems), sometimes in a logical way – division according to phrases. There is no universal way. All depends what the use of the score is. Perhaps the best solution is to have the score accessible in different formats (in the Internet). I think that if such a website is set up, the users themselves will be able to fill it with Braille scores sharing all they have with the colleagues. May the libraries get opened to the Internet?

Certainly digitalization of the valuable scores would be necessary to achieve this goal.

The electronic format of Braille music requires promotion. The scores should be widely accessible and advertised.

Sighted music teachers should be kept informed so as to encourage their blind students to use Braille.

I am dreaming of a forum, including not only Braille, but also enlarged print and normal print music and information about the modern techniques and software as well as tutorials. Some information can already be found in the Internet, but it is dispersed.

- **Your help with this project**

- **Suggestions for Mus4VIP:**

- I am willing to test the software. I can also copy the scores I have in the format required to increase the internet collection of Braille scores.

- Many efforts have been made and a lot of time and money spent on facilitating the automatic conversion of scores – from print into Braille. The research is still at the stage of experiment. If we had such an Internet library of Braille music, a huge collection would be available by now. It is really a pity I can't use all the materials published in the internet in the pdf format (tutorials, scores).

- I am willing to exchange experience with other blind musicians in the area of electronic creation, editing and saving music.

Maria R. (Poland)

- **About you**

Personal data like age, sex, employment, etc.

24, female, student, blind

- **About you and music profession**

Level of education, level of skills, instruments, music genres:

diploma in jazz at the Higher School in Nysa, at present studying for M.A degree at the Music Academy of Wrocław

playing the piano and organ, classical music and jazz, choir singing

- **About you and accessing music**

- **Availability and choice of music score format:**

Both learning by ear and borrowing scores from the library in Leipzig, ordering individual transcription at the Edwin Kowalik Music Society

Availability and choice of music score format:

I like the measure-over-measure format. I find Braille repetitions disturbing.

I would like to have an opportunity to skip dynamics, fingering etc. And then to restore them again.

I would like to be able to write arrangements for many instruments.

- **About you and (music) technology**

Use of computer and software:

I use a computer with a Braille display and jspeech synthesizer.

I was trying to use Notion and Finale but unfortunately they have no scripts for JAWS and are hardly accessible.

- **Getting Braille music:.**

From the libraries, from the Edwin Kowalik Music Society.

Availability and quality of Braille music providing services:

Very poor in Poland. In Germany there are a lot of Braille scores and they are quite a good quality.

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music:

It would be necessary to organize training. There are very few experts in Braille music notation. I learnt Braille notation myself, but I would still need some help. I used International Braille Notation Manual, which is not a didactic source.

- **Your views on Braille music**

- **Handling Braille music scores; (Dis)Advantages of formats:**

Braille notation is useful. Errors in scores disturb, because you often memorize them. On the other hand, nuances and details are only noticeable when reading Braille. Learning by ear is much more effective and faster. Reading Braille is slow.

- **Your help with this project**

- **Suggestions for Mus4VIP:.**

I can test BME. I would need some training, also in BME.

Alastair I. (UK)

- **About you**

Personal data like age, sex, employment, etc.

25, Male, A blind music student

- **About you and music profession**

Level of education, level of skills, instruments, music genres:

Studying for a Doctorate in mathematics at Oxford University.

I play piano and organ and gained Distinctions at ABRSM Grade 8 in both instruments during my last year at school. I continue to study the piano privately

- **About you and accessing music**

- **Availability and choice of music score format:**

GOOD

- **About you and (music) technology**

Use of computer and software:

NO

- **Getting Braille music:.**

RNIB Library

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music:

Very good.

- **Your views on Braille music**

- **Handling Braille music scores; (Dis)Advantages of formats:**

I do not know

- **Your help with this project**
- **Suggestions for Mus4VIP.:**

Help in trial phase

Carol H. (UK)

- **About you**

Personal data like age, sex, employment, etc.

53, female, A music teacher

- **About you and music profession**

Level of education, level of skills, instruments, music genres:

Music teacher in a special school for blind and partially sighted

- **About you and accessing music**

- **Availability and choice of music score format:**

section by section format

I get books from a special library: ABRSM scores via RNIB and I produce them myself

- **About you and (music) technology**

Use of computer and software:

NO

- **Getting Braille music:.**

ABRSM scores via RNIB

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music:

Very good in UK. Regarding New College Worcester it has improved during my time there

- **Your views on Braille music**
- **Handling Braille music scores; (Dis)Advantages of formats:**

Braille is useful, but found it lacking in information

- **Your help with this project**
- **Suggestions for Mus4VIP.:**

Check the system.

Claire-L. L. (UK)

- **About you**

Personal data like age, sex, employment, etc.

48, female, music teacher

- **About you and music profession**

Level of education, level of skills, instruments, music genres:

Teacher : Special school for the blind and visually impaired

- **About you and accessing music**

- **Availability and choice of music score format:**

I produce them myself

- **About you and (music) technology**

Use of computer and software:

NO. Up until now it has been easier to do it on a Perkins Braille. I hope that BME2 will change this

- **Getting Braille music:.**

I produce them myself

- **Using Braille music**

Training in reading Braille music scores; Availability and quality of Braille music:

Unsatisfactory

- **Your views on Braille music**

- **Handling Braille music scores; (Dis)Advantages of formats:**

It is hard for me to answer this question because I have not been teaching Braille music for very many years

- **Your help with this project**
- **Suggestions for Mus4VIP:**
TEST Activity

More expert users have been added

From France:

1. Music teachers who work in inclusive schools

Alain B. and Alice P. music teachers in normal school Mehdi L., Martin Q. music student at the university who help Blind Student

2. Music teachers in special schools.

Muriel L., Music Teacher INJA

Suzy B., Music Teacher IJA

Annie S., Music Teacher Sidvem

3. Other users, e.g. university students, composers, self learners

Agathe, Blind student in musicology

Jose L. composer, self learner and teacher Alain B. composer, self learner and teacher Fabrice M. composer, self learner and teacher

From Italy:

Rino R.: Organist and teacher in the Padua Conservatory

Olivero Z.: teacher of composition in Padua Conservatory

Luigi M.: piano teacher in the conservatory of music of Torino

William B. Support teacher for blind in Verona

Stefano D. S. Percussion teacher to blind student

Giovanni C. Music professor of the Liceo Musicale of Udine, subject taught
harmony

Federico Z. Professor of composition at the Conservatory of Music in
Verona, Director of the music conservatory state of Verona

Tonino P. Piano teacher for blind pupils

Lucia S. Piano teacher for blind pupils

From Germany:

Horst G.: Music teacher for blind in Colonia.

From Spain:

Martí B Blind Guitar Music teacher in Barcelona

From UK

Jack, Blind student in composition and Piano

Victoria W., teacher in Secondary school music students

Wendy R. I teach all levels, predominantly one to one piano teaching alongside music braille instruction, but also group classes of up to 20 young students with vision impairment (braille users and large print users). Group learning generally focuses on vocal scores (choir) and music theory

James R. At RNIB – supporting people wishing to produce Braille music or stave notation by informing them about music4vip., Offering start-up support over the phone. We ran a morning with Jonathan Darnborough for two musicians wishing to produce stave notation.

John S. I am a church music minister. I also work full time at a blindness agency where I help transcribe music into braille, produce music for ensembles, accompany performing students, and sing in the choir

Benjamin B., I'm a professional musician, I studied at the music high school in Zurich, Switzerland. I'm working as an organist at a church, play the piano and sing in various music genres and am directing some choirs

Jorge G. I am a concert pianist and also a piano teacher. I am mainly freelancer. I give solo piano recitals as well as concerts with orchestras. I often have been performing in Portuguese media such as radio and television. I am also very involved in promoting the braille music literacy among blind people who want to study music. I hope that in the future, blind people who desire to study music, will be never stopped because of the lack of access to braille music. I am also a piano teacher.

From PL

Justyna W. Music Teacher in inclusive school

Dorota M. Music Teacher in inclusive school

Tomasz T. Teacher of the Institute for the Education of Organ Players in Warsaw

Jagoda G. Blind self learner

Malgorzata W. Expert music teacher for blind in inclusive school

Sławomira W. Teacher of 14 pupils from 1st to 6th class of the first grade music school for the blind

Radosław Z. Assistive Technology expert employed at the university in the centre for the assistance of the disabled

Waldemar K. Teacher in inclusive school and in special school

Anna F. Teacher of Pupils from 2nd to 4th class of the special music school