

International Online Meetings on Tactile Graphics Production in Europe

23/10/2026

Introduction

This first international online meeting on tactile graphics production in Europe brought together over 60 participants from 14 countries.

Australia	Netherland
Canada	Norway
Deutschland	Poland
Finland	Romania
France	Spain
Italia	Sweden
Lituania	UK

The initiative was launched by an international working group created following the Tactile Reading Conference in Amsterdam. The objective is to build an international network, improve mutual understanding of national contexts, share professional practices, and explore future opportunities for cooperation.

This first series of online meetings consists in three meetings, each featuring presentations of two countries. The first meeting focused on Poland and France. At the end of this first series, a summary document will be produced to provide an overview of the national contexts, practices and perspectives shared during the meetings.

The presentation slides accompanying this report provide additional examples, illustrations and contextual information. Readers who did not attend the webinar are encouraged to consult them alongside this summary, as some nuances and details may not be fully reflected in the notes below.

Poland and France: National Contexts and Practices

Educational Context and Organisation of Support

Poland

- Blind students are still mainly educated in specialised schools.
- Students with low vision are more often educated in mainstream schools.
- There are eight specialised educational centres for blind students.
- The centres generally produce their own tactile graphics and adapted educational materials.
- They use a special equipment and longstanding expertise.
- Mainstream schools often have fewer resources and less specialised knowledge regarding tactile graphics.

France

- The French system is highly decentralised.
- Tactile graphics are produced by a wide variety of organisations, including specialised educational services, associations, public institutions, universities and freelance professionals.
- School-related production is largely supported through specialised educational services.
- Other sectors, such as museums and public institutions, rely on different funding and organisational models.

Organisations Producing Tactile Graphics

Poland

Production is distributed among several types of institutions:

- Special schools and educational centres.
- The Centre for Education Development, commissioned by the Ministry of Education.
- The Polish Association of the Blind.

- University adaptation centres.
- Non-governmental organisations.
- Private companies.

There is no single national institution responsible for tactile graphics production, and organisations generally operate independently.

France

Production is carried out by:

- Medical and social care services.
- Associations and accessible-format publishers.
- Public institutions such as universities.
- Independent freelancers.

Like in Poland, no central production centre exists and the system relies on multiple independent organisations.

Professional Profiles and Training

Poland

- There is no formally recognised profession of tactile graphics adaptor.
- Adaptations are produced by professionals from various backgrounds.
- These include special education teachers, specialists in visual impairment, graphic designers and educational engineers.
- Expertise is distributed across educational institutions, universities and commercial providers.

France

- An estimated 200 to 250 adaptors are active nationwide.
- Adaptors working in educational settings generally produce both text adaptations and tactile graphics.
- Professional training can be undertaken through the FISAF certification programme.
- Specialised training is also provided by INSEI.

- Additional learning relies heavily on peer exchanges and self-training.

Cooperation Between Production Units and Shared Resources

Poland

- Several repositories and initiatives already exist.
- Resources are available through the Polish Association of the Blind, Tyflomapy and university centres.
- Cooperation remains largely informal.
- There is no formal national coordination framework.

France

- Cooperation is also mostly informal.
- Several image banks exist, including repositories maintained by CTRDV, INJA-Louis-Braille and INSEI.
- ATAF plays an important role in facilitating exchanges and documenting professional practices.

Production Techniques and Technologies

Poland

Techniques currently used include:

- Embossed graphs.
- Swell paper.
- Thermography / thermorelief.
- Thermoforming.
- Tactile collage.
- UV printing.
- 3D printing.

The use of UV printing and 3D printing has increased in recent years.

France

The most commonly used techniques are:

- Embosses graphs.
- Swell paper.
- Thermoforming.
- 3D printing.
- Resin-based 3D production.
- Tactile collage.

Thermoforming is becoming less common because the equipment is ageing and difficult to maintain.

Software and Production Tools

Poland

No detailed overview of software was presented, although several production technologies and workflows were described.

France

Examples of software currently used include:

- Inkscape.
- Illustrator.
- CorelDRAW.
- QuickTac.
- DBT (Duxbury).
- eTextB.
- TactileView.
- 3D modelling software such as Blender.

Software choices vary considerably from one production centre to another.

Guidelines and Quality Standards

Poland

- Numerous guidelines and standards have been published.
- Additional guidance has been developed by Warsaw University.
- Existing standards cover educational graphics, Braille adaptation, maps and 3D models.

France

- A widely used set of guidelines was published by INSEI in 2003 (not mandatory).
- Since 2025, an ATAF working group has been developing a new French-language guide.
- The objective is to combine international recommendations with professional expertise from the field.

Adaptation Decisions and User Support

Poland

- In schools, teachers identify needs and discuss adaptations with producers.
- Outside education, adaptors generally work directly with clients.
- Poland has developed structured methodologies for teaching tactile graphics literacy.
- Particular emphasis is placed on teaching users how to interpret tactile representations.

France

- Adaptation decisions result from discussions between teachers and adaptors in educational settings.
- In museums and other public contexts, extensive consultation often takes place between commissioners and producers.
- Support may be provided by teachers, specialised educators, classroom assistants, occupational therapists, parents or museum mediators.

Both

- Adaptation processes may differ significantly between individualised productions and resources designed for broader audiences.
- Generic productions often provide fewer opportunities to understand users' specific needs and collect feedback.

Feedback and Evaluation

Poland

- No formal national evaluation system was described.
- Existing expertise is considered strong but dispersed.

France

- Difficulties exist in obtaining systematic feedback from users.
- Feedback mechanisms vary according to organisational structures and contexts.
- Educational productions are rarely tested before delivery because of time constraints.
- Cultural projects more often include design and testing phases.

Strengths and Challenges

Poland

- **Strengths**
 - Existing standards and guidelines.
 - Educational repositories.
 - Strong expertise in tactile graphics literacy.
 - Active NGOs.
 - Growing research activity.
 - Increasing interest in new technologies.

- **Challenges**

- Fragmented organisation.
- Lack of a central repository.
- Insufficient development in mainstream schools.
- Limited cooperation between institutions.

France

- **Strengths**

- Large number of production centres.
- Existing training programmes.
- Rich collections and image banks.
- Existing professional networks.

- **Challenges**

- Uneven geographical distribution.
- Limited sharing of resources.
- Lack of national coordination.
- Insufficient feedback mechanisms.
- Inconsistent adoption of common guidelines.

Discussion Following the Polish Presentation

Production Techniques and Durability

Tiberiu (Canada)

- Could you provide more information about UV printing?
- What are the costs, equipment requirements and durability aspects?

Emilia (Poland)

- A comparative study evaluated thirteen production techniques.
- The study includes user experience, durability, production constraints and financial aspects.

- The publication can be shared with interested participants.

Bogusław (Poland)

- Thermographic powder technology offers very good durability.
- It remains an interesting option for materials intended for long-term use.

Tiberiu (Canada)

- Swell paper remains the most commonly used technique in our context.
- Durability remains one of its main limitations.

Tactile Graphics Literacy and Interpretation

Bogusław (Poland)

- Production quality alone is not sufficient.
- Learning how to read tactile graphics is equally important.
- Tactile graphics should be considered a language.
- A language must be taught before it can be understood.
- Blind children should progressively learn the relationship between real objects, intermediate representations and tactile drawings.
- Teaching methodologies deserve as much attention as production methods.

Cécile (France)

- Could the transfer graph and related teaching materials be made available internationally?

Bogusław (Poland)

- Distribution is possible on a limited scale through Hungry Fingers.
- Similar tools have already attracted interest in several countries.

Discussion Following the French Presentation

Training of Adaptors

Lisa Roxanne (France)

- What training opportunities exist in France for tactile graphics adaptation?

Mathieu (France)

- Transcriber-adaptor certification organised by FISAF.
- Specialised image adaptation training provided by INSEI.

Cécile (France)

- The FISAF programme is organised over two years.
- Training sessions take place one week per month.

Guidelines and Quality Standards

Reiner (Germany)

- Germany has started a project dedicated to tactile graphics quality and design.
- Different types of graphics require different approaches:
 - maps;
 - mathematical graphics;
 - technical diagrams;
 - faces and people;
 - landscapes;
 - artworks.

Théo (France)

- Numerous international recommendations already exist.
- The ATAF guide aims to provide a practical tool for French-speaking professionals.

Tiberiu (Canada)

- Canada is currently developing its first tactile graphics design course.
- BANA guidelines are being used as a starting point.

Dorine (Netherlands)

- Dutch guidelines can be shared with participants.

Emilia (Poland)

- The T-REP project has collected guidelines, publications and research from many countries.
- Resources can be shared with participants.

Cross-Country Discussion and Future Perspectives

Artificial Intelligence and Tactile Graphics

Question

- What role could artificial intelligence play in tactile graphics production in the coming years?

Emilia (Poland)

- AI may be useful for simple production tasks.
- Producers and practitioners should remain central to decision-making.

Mathieu (France)

- The more AI is used and trained, the better its results will become.
- The field is still at an early stage.

Dorine (Netherlands)

- Several international groups are already exploring AI applications.
- Recent meetings have focused on practical uses.
- AI could become the topic of a future webinar.

Reiner (Germany)

- Experiments have been conducted using AI to convert paintings into tactile graphics.

- Initial results are encouraging.
- Better prompts and further training are needed.

Dan (Romania)

- AI should be treated as a colleague.
- Professionals should learn how to train AI systems.
- Properly trained systems could significantly reduce production costs and development time.

International Repositories and Shared Databases

Question

- Many educational and informational tactile graphics are repeatedly produced by different organisations, often without knowledge of existing resources created elsewhere. Tactile graphics may be particularly difficult for people who are not affiliated with major resource centres or specialised institutions. Could a European database for tactile graphics be developed?

Emilia (Poland)

- Yes.
- T-REP is already moving in this direction.
- Shared repositories are essential for exchanging models, symbols and knowledge.

Mathieu (France)

- A common repository requires common guidelines.
- Quality control and validation procedures are necessary.
- Verification and maintenance represent a significant workload.

Julian (Netherlands)

- An international working group is already exploring this topic.
- Editable files may be more useful than finished graphics.
- Metadata, terminology and copyright issues must be addressed.
- Discussions are underway with WIPO.

Dan (Romania)

- More than 1,700 tactile graphics already available online.
- A future platform could combine:
 - free resources;
 - editable resources;
 - shared resources;
 - commercial content.

Conclusion

The meeting highlighted many similarities between the Polish and French contexts.

In both countries:

- Tactile graphics production relies on multiple actors.
- Production techniques are diverse.
- Organisational structures are largely decentralised.
- Cooperation and resource sharing remain challenging.
- Training, quality standards and user feedback continue to be important topics.

A broader challenge also emerged from the discussions: despite the considerable effort invested in tactile graphics production, access to high-quality informational tactile images remains limited for many users. Improving access to such resources and ensuring that essential information is available to all readers remains a shared objective across countries.

The need to raise awareness of these issues among educators, institutions, policy-makers and the wider accessibility community was also emphasised.

The discussions identified several common areas of interest for future work:

- Guidelines and quality standards.
- Tactile graphics literacy.
- Artificial intelligence.
- Shared repositories and databases.
- International cooperation and networking.

Next meetings:

November the 19th: the next speakers are currently being identified and the programme will be announced in early November.

January the 14th: further details will be communicated after the November meeting.

Feel free to propose additional country presentations or ideas for other international meetings after January, and to help expand the international network of professionals working in tactile graphics production.