# Report from the Technology commission of The International Braille Chess Association

## Introduction

In this report, we sometimes touch upon developments that started already before the congress in 2021, as they still are developing. We will also mention some important achievements that happened without support of the tech commission.

For a long time, the commission consisted of one person only, Jörgen Magnusson who was appointed chairperson in 2021. But in 2023, Vladyslav Kolpakov from Ukraine, Tage Johansson from Sweden, and Eric (che) Martin from the US joined the commission. As all members of the current commission are blind and as blind and visually impaired person face different problems regarding accessibility, our aim is to include partially sighted persons as well. We are aware of that this report more or less exclusively focuses on problems that blind chess players face. Our ambition, however, is that the focus will be broadened by in the future including people with different types of visual impairments.

## Point of departure

Back in 2018–2019, we are not certain of the exact date, Tage Johansson and Jörgen Magnusson approached the popular chess platform Lichess.org. We hereby express our gratitude to the very constructive attitude shown by Lichess developers over the years. To a large extent, Lichess is accessible, and it continues to improve. In 2021, Johansson and Magnusson, together with developers from FIDE worked on the FIDE platform Tornelo. Our experience from Lichess was a big help for us and now tornelo is accessible, but some bugs remain to be fixed.

The commission has detected a number of important steps that should be taken in order to improve the opportunities for blind chess players to develop their skills on more equal terms as sighted and visually impaired players. An accessible interface under which blind players can run chess engines is needed. Many of us have used different versions of Fritz, but the working process with Chessbase products is troublesome for blind persons, and as Chessbase often has expressed its neglect of accessibility issues, we were looking elsewhere. Not using Chessbase, we had to find a way to run analyses on chess engines and to browse game databases. It is already possible to analyze games on Lichess by using Stockfish. However, we did not find a good way to save the analyses in pgn-format. Moreover, the game database on Lichess is perfectly accessible, but we were looking for high quality games as a complement to the vast variety of games on Lichess. We presently are looking at Twich.

## A probable solution

Tage Johansson is currently developing a software called Chess-cli. It is a command-based application that already makes it possible to run Stockfish 16 and LeelaZero 29.0. It is also possible to write pgn-files with comments. We want to develop an application programming interface that would make it possible for a person who uses Chess-cli to put up a position on Lichess and then start to play against a friend or Stockfish on Lichess. We also want to develop this function to make it possible for a coach to set up a position and produce links that can be sent to the students so that we easily can play thematic training games online on Lichess. We have also toyed with the idea that Chess-cli might give a similar functionality as “move trainer” does on Chessable.com. “Move trainer” is a function that makes it easier to memorize variations. The capacity to search game databases such as Twitch remains to be developed.

Currently, we are testing the application and we are in touch with sponsors in order to speed up the working process.

When the job is done, we have to make it more user friendly for those who are not that familiar with command-line based applications.

## The Ericlock

 So far, we to a large extent have discussed activities related to users of Lichess. But many players of our chess family play via Skype. For those and other players, the work done by Bersan Vrioni has been a valuable resource. And we cordially thank him for his efforts and generosity to make his application available: <https://chessfriends.org/resources/software>

## DGT Echo

Members of the Dutch BCA have initiated a valuable co-operation with DGT that is the largest producer of digital chess clocks, and we want to express our gratitude to the DGT and to our Dutch chess friends. It has resulted in DGT Echo. Using DGT Echo has many advantages. It is a small and handy clock that arbiters are familiar with. It also includes more time-controls than previously have been accessible for visually impaired users. But as was noted in a meeting between member countries in April this year, there are functions that still need to be worked on to call it a fully accessible chess clock. We recommend that a test panel would be set up that together with DGT could solve the remaining problems. As we see it, these problems are mere oversights that easily can be solved. In this context, we also thank our president Dr. Charudatta Jadhav for negotiating with the DGT that when the clock is fully accessible would make it available for an advantageous prize.

## Final words

We understand that we do not know all that different persons have achieved over the last years. Nor can we mention everything in this report. We encourage people to contact us in order to enhance communication so that our members can prosper from all efforts that are made. However, we can say that the developments have been positive, which should encourage all of us to continue improving the accessibility for visually impaired chess players.

On behalf of the Technology Commission

Jörgen Magnusson