

## Annex 2 - Technical Data Sheet (TDS) for Chess ID Game Viewer

<b>Design</b>	
<b>Subject</b>	<b>Description / Reply</b>
Is Board visible and contains squares, number, and letter?	
Do Boards have “classic” view of wood?	
Is moves panel 2 columns?	
Is moves panel without columns?	
Does moves panel display taken pieces?	
Does moves panel display pieces as letters?	
Does moves panel display pieces as characters?	
Does moves panel use special font to display pieces?	
Does moves panel uses graphics to display the pieces?	
Is graphics used in SVG format?	
Do graphics set format? Are there several chess sets available?	
Describe the available graphics sets	
Describe the available colors sets	
Do graphics set setup via button in viewer application?	
Do graphics set setup via configuration file?	

Is reload of page with application required to change graphic set?	
Does App have “minimalistic” design set?	
Can the size of chess viewer be changed by drag of the mouse?	
Can the size of chess viewer be changed by configuration file options?	
Does App have animation of moves?	
Does App have arrows to show moves direction and pieces?	
Can App disable animation of moves by button click?	
Can App disable arrows via config file?	
Can App highlight squares of moves?	
Can App change color of highlighted squares via config file?	
Can App rotate board via button click?	
Can name, country, rating of a player font be customized via config file?	
Is result is shown in moves panel?	
Is result is shown over the board?	
Is the custom format for clocks hh:mm:ss?	
Is the custom format for clocks mm:ss?	
Does App show errors in special panel visible vie setup in config file?	
<b>Subject</b>	<b>Description / Reply</b>
Does the Analysis panel have several “lines”, not less than 3?	

Does the Analysis panel use chess font to display moves?	
Does the Analysis panel use graphics to display moves?	
Does the Analysis panel use chess font to display moves?	
Does the Analysis panel have custom colors setup via config file?	
Can the Analysis be hidden by button click?	
Can the Analysis panel position be modified?	
<b>Subject</b>	<b>Description / Reply</b>
Analysis board presence?	
Can the Analysis board be hidden via config file?	
Can the Analysis board save previous state?	
Does the Analysis board have highlight of the moves?	
Does the Analysis board have multiple arrows drawing by user button and hotkey clicks?	
Can the Analysis board size be customized via mouse dragging and configuration?	
<b>Subject</b>	<b>Description / Reply</b>
Can the moves panel position be setup via config file?	
Does the moves panel display the time taken for a move?	
Is the taken pieces panel for both sides available?	
Taken pieces pieces graphics?	
Taken pieces panel chess font?	

Can the taken pieces panel be hidden by button click or config file?	
Advantage scale text?	
Advantage scale graphics?	
Does the advantage scale show several types of graphics?	
Can the advantage scale points measure be setup via config file?	
Can the advantage scale be hidden by button click?	
Can the advantage scale be hidden via config file?	
<b>Subject</b>	<b>Description / Reply</b>
Describe available clocks text	
Describe available clocks graphics	
Describe available clocks design types	
Live clocks even without clocks values in PGN file?	
Can clocks be hidden by button click?	
Can clocks be hidden by config file?	
Can clocks position be setup via config file?	
Can clock color schemes be setup via config file?	
Is the time taken for moves displayed in moves panel?	
Can the time taken for moves be hidden by config file?	
Does the App provide mobile-friendly scaling?	

<b>Client operations</b>	
<b>Subject</b>	<b>Description / Reply</b>
Does the App read data from server?	
Does the App read games data from the server with interval given in config file?	
Does the App reads players data from server?	
Does the App reads data from server via tag in read file?	
Does the App reload all data clean via tag in read file?	
Does the App receive constant updates and display them correctly in given panels and board?	
Does the App not “freeze” on read errors on incorrect file format errors?	
Please indicate consumption of memory after 1h of usage of test games	
Please indicate consumption of memory after 3h of usage of test games	
Please indicate consumption of memory after 6h of usage of test games	
Please indicate consumption of memory with 1 game instance on page	
Please indicate consumption of memory with 4 game instances on page	
Please indicate consumption of memory with 24 games instances on page	
Please indicate consumption of memory with javascript engine enabled	
Please indicate consumption of CPU with javascript engine enabled	

Correct display of moves	
Correct display of variants on board upon click in analysis panel	
Can the App automatically go to last move via button?	
Can the App automatically got to last move via config file?	
Do not go to last move automatically via button	
Do not go to last move via config file	
Can the App automatically play game from beginning via button?	
Can the App automatically play game from beginning via config file?	
Can the App automatically play game from given position button?	
Is an update game data button available?	
Is an 'Insert analysis after certain move' button available?	
Does the App show clock values in moves panel via button?	
Does the App show clock values in moves panel via config file?	
Does the App show/hide panels buttons?	
Does the App provide which part to move notification?	
Does the App show “Running” clocks?	
Does the App provide “In check” notification?	
Does the App provide clear advantage notification?	
Does the App display of text comments by commentator?	

Does the App provide error handling if last moves were completely corrected?	
Does the App provide reading tags to re-read complete data?	
Are updates GET method?	
Are updates PUSH methods?	
Please indicate size of initial data reading	
Please indicate size of updates	
Please indicate size of additional data – analysis, comments etc.	
Can the App provide Javascript engine analysis by button click?	
Can the App provide Javascript engine analysis addition to analysis panel?	
Can the App provide Javascript engine analysis saving to server?	
Can the App provide Javascript engine CPU consumption limit via config file?	
Can the App provide Javascript engine analysis CPU consumption limit via button?	
Is a button to add analysis to moves panel available?	
Is a button available to hide comments from moves panel if they exists?	
Can the sound on moves be setup via config file?	
Can the sound on piece taken be setup via config file?	
Can the sound on check be setup via config file?	
Can the sound on advantage be setup via config file?	
Can the sound on update received be setup via config file?	

Notification if new move was made during review of analysis?	
Notification if new move was made during review of previous moves?	
Is a play of analysis line button available?	
Can the App provide position picture shot for each move?	
Can the App provide position screen on hover for each move?	
Can the App provide position picture for each analysis move?	
Can the App provide position picture hover for each analysis move?	

<b>Commentators</b>	
<b>Subject</b>	<b>Description / Reply</b>
Add analysis board by button?	
Draw arras by clicking and defined hotkeys?	
Create variations on boards?	
Records variations to moves panel?	
Can the App send variations to server for given game?	
Does the App allow to add text comments to given game and move?	
Can the App save text comments to given game and move as commentary?	
Can the App save the state of a game?	
Get notification if new move was made on analyzed game	
Clear position on the boards	



Can the App setup any position of the board by mouse?	
Can the App save current state of analysis board for the game?	
Can the App allow to rotate analysis board?	
Can the App allow to move any piece of analysis board?	
Does the App allow to highlight any square of analysis board by clicks and hotkeys pressing?	
Does the App allow to get the list of games?	
Does the App limit the list of games?	

<b>Server operations</b>	
<b>Subject</b>	<b>Description / Reply</b>
Please indicate time to read 1 game of 100 moves and process it for updates sending to client	
Please indicate time taken to read 1 game of 100 moves and process it for updates sending to client with 20 depth analysis	
Please indicate webserver software	
Please indicate server-side software for processing	
Please indicate database type for storage	
Please indicate analysis server software	
Does setup support multi-server deployment for faster analysis?	
Please indicate minimal technical requirements for webserver to serve 100.000 concurrent visitors	
Please indicate minimal technical requirements for webserver to serve 1M concurrent visitors	

Please indicate minimal technical requirements for webserver to serve 10M concurrent visitors	
<b>Subject</b>	<b>Description / Reply</b>
Please indicate requirements for server to analyze 64 games depth 20	
Please indicate requirements for server to analyze 150 games depth 20	
Please indicate requirements for server to analyze 1000 games depth 20	
Does the App support saving of analyzed data for later use by FEN search?	
Does the App clock timer for game without clock values to insert into games file?	
Please indicate processing of results	
Please indicate input of result into database	
Please indicate reading of pairings files to create blank PGN Files	
Please indicate input of results into pairings files	
Please indicate inserting of time tags to correlate with video timing	
Please indicate inserting of tags to re-read data	
Please indicate inserting of tags to re-read whole configuration	
Does the App allow saving of historic data optimized for search by FEN, names, countries, opening, results, events?	
Please indicate backup script to save state of the server software	