CEV DATA PROJECT SOFTWARE GUIDELINES

INCLUDING:
DATA VOLLEY
E-SCORESHEET
E-SCORESHEET BENCH + REFEREE APP

RELEASED ON: 24/04/2015

CEV DATAVOLLEY USER GUIDELINES

Data Volley

Data Volley is the statistics software provided by Data Project. The use of the Data Volley software is mandatory for all CEV matches. It provides the statistical information on the CEV website which is used by users and media around the world.

To download the latest version of the Data Volley online statistics program, please follow the instructions outlined under www.dataproject.com/cev/

Technical support is provided by Data Project: score@dataproject.com.

Prior to the Match

For single matches:
- <u>At least 1 week before the match</u>, the hosting club/National Federation must perform the "test of the official Match" to ensure that the user and the account have the appropriate rights to complete their work.
- <u>1 day before the match</u>, again perform the "test of the official Match" procedure in the presence of the CEV Supervisor, from a courtside location using the internet connection in the competition hall.

For a tournament:
- <u>At least 1 week before the tournament</u>, the organiser/National Federation must perform the "test of the official Match" to ensure that the user and the account have the appropriate rights to complete their work.
- <u>1 day before the first match of the tournament</u>, again perform the "test of the official Match" procedure in the presence of the CEV Supervisor, from a courtside location using the internet connection in the competition hall.

The day of the Match

- The notebook/laptop must be connected to the internet through a wired connection (NOT wireless) and must support the use of FTP protocols.
- The CEV Supervisor may request to receive a printed copy of the stats after each set and at the end of the match.

During the Match

- At the end of each set the statistician is required to upload the relevant set statistics file.

At the end of the Match

- After the end of the match, the statistician has to print the final version of the match statistics for approval by the CEV Supervisor.
- Upload the match statistics (this may take up to 5 minutes) and verify they are visible on the CEV website.
- All statistics for a match in a tournament must be processed after that specific match has finished.
- Only then can the statistician leave the playing court.

It is very important that the match statistics are uploaded as soon as the match is finished. There should be no delays.

CEV E-SCORESHEET USER GUIDELINES

E-SCORESHEET WORKSTATION

1. Teams/National Federations hosting CEV matches/competitions must guarantee that an "E-Scoresheet Workstation" will be installed at the scorer's table and must include:

   - Two [2] notebook/laptops with a Windows operating platform with minimum configuration of Windows XP or Vista
   - The notebook/laptop must have the ability to connect to an external monitor and have dual view display
   - laser or inkjet printer
   - USB storage drive with a minimum of 256mb memory
   - an additional monitor on the CEV Supervisors table – minimum size 15" or 38cm
   - the notebook/laptop must be connected to the Internet via a wired connection and NOT wireless
   - a backup notebook/laptop with the current version of e-Scoresheet installed and updated, must be available during the match plus an additional USB storage drive with a minimum of 256mb memory

2. The workstation must be fully operational and tested a minimum of 90 minutes before the start of the match

3. The host team/National Federation is responsible at all times for the operation of the workstation and must ensure that all elements of the workstation are operational

4. All elements of the workstation and software must be tested in the days before the match

   - downloading the last version (Update) of E-Scoresheet
   - update the database of the competition

   Technical support is provided by Data Project: score@dataproject.com.

E-SCORESHEET SOFTWARE

The most up to date version of e-Scoresheet is available to download at the following link the

http://www.dataproject.com/VolleyBall/Service_For_CEV.aspx

Each CEV competition has its own file (this also applies to DATAVOLLEY), in which all of the information relative to the particular competition is held. This file will show

   - the full name of the competition
   - the competition logo
   - all phase (current and future)
   - the specific competition regulations
   - the competing teams
   - the player rosters
   - the appointed referees
   - the appointed CEV Supervisors

This file is updated by the CEV each time a change to the competition file is made. E-Scoresheet provides a periodic verification and an update function that must be activated before each match.

In order to be able to test the competition hall set-up and the e-Scoresheet software, test matches can be accessed which will allow full training of all match operations. To enable such a test, the following usernames and passwords must be used:

> Scorer (for downloading the match)
> Username and password: "scorertest"
> Supervisor (for the virtual online connection and closing of the match)
> Username and password: "supervisortest"
> Referee (for the closing of the match)
> Username and password: "refereetest"

For training purposes, the assigned scorer or the manager of the team can install and use the E-Scoresheet software on different computers. A full training database is to enable-Scorers to develop their skills before matches or competitions.   The matches for this training must be prepared manually. In addition the training software should be used to test the e-Scoresheet workstation (hardware check, match simulation, live score, etc.).

All the teams/National Federations participating in CEV Competitions must advise the CEV, at least 1 month before the start of the competition the names of the e-scorer(s) and provide e-mail addresses of all the scorers that will use the E-Scoresheet during the matches. It is recommended where possible to use the same e-Scorers. Applications for user accounts should be made to

<p align="center">database@cev.lu</p>

A complete and in depth English user manual is attached to the e-Scoresheet software. This handbook can be found in the software folder after the install process (a link on the desktop will be available)

USING E-SCORESHEET DURING THE COMPETITION

As previously stated, the club/National Federation is liable for the correct operation, the update and verification of the workstation at least 90 minutes before the start of the match (it is advisable to install an antivirus program):

Prior to the match

For single matches:
- At least 1 week before the first home match, the host team/National Federation should perform the "test of the official Match" procedure ideally from the e-scorers workstation location courtside. This will ensure that the user account(s) have the correct rights and that the internet connection on the court is working well
- 1 day before the match, again perform the "test of the official Match" procedure ideally from the e-scorers workstation location courtside and preferably in the presence of the CEV Supervisor

For a tournament:
- 1 week before the tournament starts, "test of the official Match" ideally from the e-scorers workstation location courtside.

- <u>1 day before the first match during the Sport Hall Inspection Visit</u>, "test of the official Match" procedure ideally from the e-scorers workstation location courtside and preferably in the presence of the CEV Supervisor

The day of the Match

- The notebook/laptop must be connected to the Internet through a wired connection (NOT wireless) and must support the use of the FTP protocol.
- The printer, according to its size, must be positioned under the table
- The USB drive must be connected to a USB port and must function correctly
- The additional monitor must be positioned on the table of the CEV Supervisor and must be connected to the notebook/laptop of the e-scorer in order to show a mirror image of the display
- The e-scorer will be asked by the CEV Supervisor to perform a test moving the match from the official notebook/laptop to the backup one, to be sure that the e-scorer knows the procedure and that the software is correctly installed and updated
- The duty of the e-scorer is to carefully complete and verify the information required by the software before the start of the match, e.g. the team delegations, players' shirt numbers, libero [60 minutes before the start of the, captain, team officials, line judges, the competition hall, date etc.
- Once all this information is verified and included the e-scorer must print the relative form number 12 for the particular competition (EC-12, CL-12, EL-12 or CH-12). The correct form is pre-installed so no choice is required
- Once printed the form should be handed to the CEV Supervisor
- The CEV Supervisor must check the form and ensure that all is correct in the e-scoresheet before live scoring on the CEV website.
- Live Score should not be opened until at least 59 minutes before the start of the match to allow the teams to nominate their liberos and no later than 30 minutes before the start of the match
- In all cases the CEV Supervisor must enter his/her password themselves.
- Once the password is registered, live scoring should be enabled on the CEV website. the team/National Federation should verify that live score is working
- The CEV Supervisor may require a copy of the scoresheet after each set. This is good practice should there be any issues however it is up to him/her to decide

At the end of the Match

- After the end of the match, the e-scorer has to print the final version of the match result report form number 12 for the particular competition (EC-12, CL-12, EL-12 or CH-12) and the scoresheet. Both copies must be given to the CEV Supervisor who will check together with the referees and verify that the forms reflect the match result
- Once the documents are checked by the CEV Officials, the 1st Referee and the CEV Supervisor must enter their respective passwords and the e-Scoresheet file will be closed permanently and be sent to the CEV
- Once again the 1st Referee and CEV Supervisor must enter their passwords themselves
- Upload the match and ensure all ok before leaving the court

It is very important that the match result is uploaded as soon as the match is finished. There should be no delays.

GOLDEN SET

- When the match has finished and a Golden Set must be played the e-scorer should close the match without approving or uploading
- From the main menu choose the button "Play Golden Set". The program will load information from the match that has just ended with the same data; team rosters, referee, CEV Supervisor etc.
- The match number will be the same as the original match but with an added "GS". I.E. match number 1-201 becomes 1-201GS
- The live score of the Golden Set match will include Match data of the AWAY Match and data concerning the Golden Set
- At the end of the Golden Set, the program will ask for approvals of the 1st Referee and CEV Supervisor
- After approval, the program will upload the match and, if the previous Match has not been approved, the program will ask for it to be approved also. After approval, the official match result for both matches will be sent to the CEV

CEV e-SCORESHEET APP USER GUIDELINES FOR ORGANISERS

TABLET APPLICATIONS FOR COACHING STAFF AND REFEREES:

- ES BENCH
- ES REFEREE

Index

Both the ES Bench & ES Referee Tablet Applications connect via **Bluetooth or Wireless** technology to the e-Scoresheet laptop (and be able to connect to any reserve laptops without delay). Two android tablets for each teams coaching staff and two android tablets for the Referees plus at least one reserve tablet. The Referees tablets must be fixed to their respective post, with the ability for the 2nd Referees tablet to be removed easily during the match. All tablets must be fully charged prior to each match.

The system will enable each teams coaching staff to request time outs and legitimate Challenge requests. In addition using their tablet they CONFIRM their players to be substituted. The quick substitution process must still be followed.

The ES Referee App will enable the 1st and 2nd Referees to be follow in real time team rotations, substitutions, timeouts and challenge requests in addition to the current score.

Connectivity

ES Bench and ES Referee are designed to work using Wireless or Bluetooth connectivity.

For this option please ensure you install a USB Bluetooth Class 1 adapter onto the e-Scoresheet laptop. The Bluetooth integrated in laptops are not usually Class 1 and therefore will not cover 100m.

IMPORTANT: In some instances when used in large competition halls with high electromagnetic pollution, not just from spectators handsets but by also the TV broadcast signals and other functions within the competition hall, a **high quality wireless router** should be used (INSTALLED AT THE SCORERS TABLE) with each device connected via the dedicated LAN network and using a secure password.

In extreme circumstances the tablets can be connected via a hard-wired solution, however all wires must be safely installed around the playing court and as far as possible invisible. This solution must only be used as a very last resort.

Configuration and equipment

TABLETS

For this Application could be used any Android OS, 4.0 or later, with a minimum of a 7" display and must have Bluetooth and Wi-Fi connectivity (**suggested 5GHz, Wi-Fi 802.11 a/n/ac**).

WIRELESS CONFIGURATION:

Wi-Fi architecture needs a good and powerful Router to improve a private Wi-Fi network. And the 5GHz band is for sure, at the moment, less used than the 2.4GHz. It must be considered choosing the Tablets and the Router.

Once installed the Router should resolve the DHCP conflicts with the local network. Please take care that the e-Scoresheet laptop has a fixed IP Address. The tablet App will request and save the IP address of the e-Scoresheet laptop. That's why is better to be sure that it will not change (e.g. a reboot of the e-Scoresheet laptop).

However it is suggested to carry out some test during important matches, where there are TV broadcaster, video repeaters, Audio mixers and other electronic and radio equipment.

BLUETOOTH CONFIGURATION:

Bluetooth is an intelligent, good performing and cheap communication protocol that will easily connect multiple devices with the Scorer's Laptop. But it is also fragile and sensitive to electromagnetic pollution.

It's recommend to install the Bluetooth adapter, because most laptop's on the market do not have a Class 1 Bluetooth device installed, that is able to support communication at a distance of up to 100m.

However it is suggested to carry out some test during important matches, where there are TV broadcaster, video repeaters, Audio mixers and other electronic and radio equipment.

WIRED CONFIGURATION:

The wired architecture is based on the same Wi-Fi structure: it needs a good and powerful Router, to improve a private Wi-Fi and LAN network, and needs two RJ45-USB adapters, compatible with the 7" Tablet model, with the appropriate LAN cable (min. 10 mt) and USB micro cable (min. 1.5m).

Once installed the Router should resolve the DHCP conflicts with the local network. Please take care that the e-Scoresheet laptop has a fixed IP Address. The tablet App will request and save the IP address of the e-Scoresheet laptop. That's why is better to be sure that it will not change (e.g. a reboot of the e-Scoresheet laptop).

The wired configuration should run a LAN cable from the Router, on top or under the scorer's table, to the benches where the RJ45-USB adapters should be fixed, then the Coaches tablets are connected via USB cables.

For any connection and configuration problems refer to a local LAN expert, to choose the best Wi-Fi free channel.

Data Project could not verify, support and solve any local transmission problem.

How to chose the best configuration

Taking care that the transmission and elettromagnetic pollution environment is different form a sporthall to another, our suggestion to define the best local configuration and connection architecture, is to follow this approach:

1) Search on the web or locally a good router (2,4GHz and 5GHz)
2) Search on the web or locally a tablet Android with Bluetooth and Wi-Fi
3) install on e-Scoresheet Laptop the router
4) Make some test of the connection and the apllication

Our suggestion is to make first some test with a standard 2.4GHz apparel.   If the connection is not stable it will be possible to switch between the different 2,4GHz available channels (10).
In case a solution will not found a 5GHz tablet is recommended.

These test have to be improved during an official match were are present in the sporthall TV broadcaster, audio wireless apparels, etc.
Enable on e-Scoresheet the Bench Application in the Option and test the Wi-Fi connection on the court, close to the bench.. Move the tablet far from the scorer table, test the connection using the [Test Speed] feature in the Test ES Bench menu.

Wireless

Using the Wi-Fi technology some issues must be considered:

- Wireless communication will reduce the tablet's battery life
- A local network must be approved, considering the DHCP and its compatibility with other wired network, that may be present
- **E-Scoresheet laptop needs to have a fixed IP address**

We suggest, as written in the previous pages, that a powerful router, connected to the e-Scoresheet laptop, be located at the scorer's table, and be as close possible to the team benches and the 2nd referees position.

Once the IP address of the e-Scoresheet laptop has been finalised, in the software you must set [LAN Connection] and the IP address will be visible.
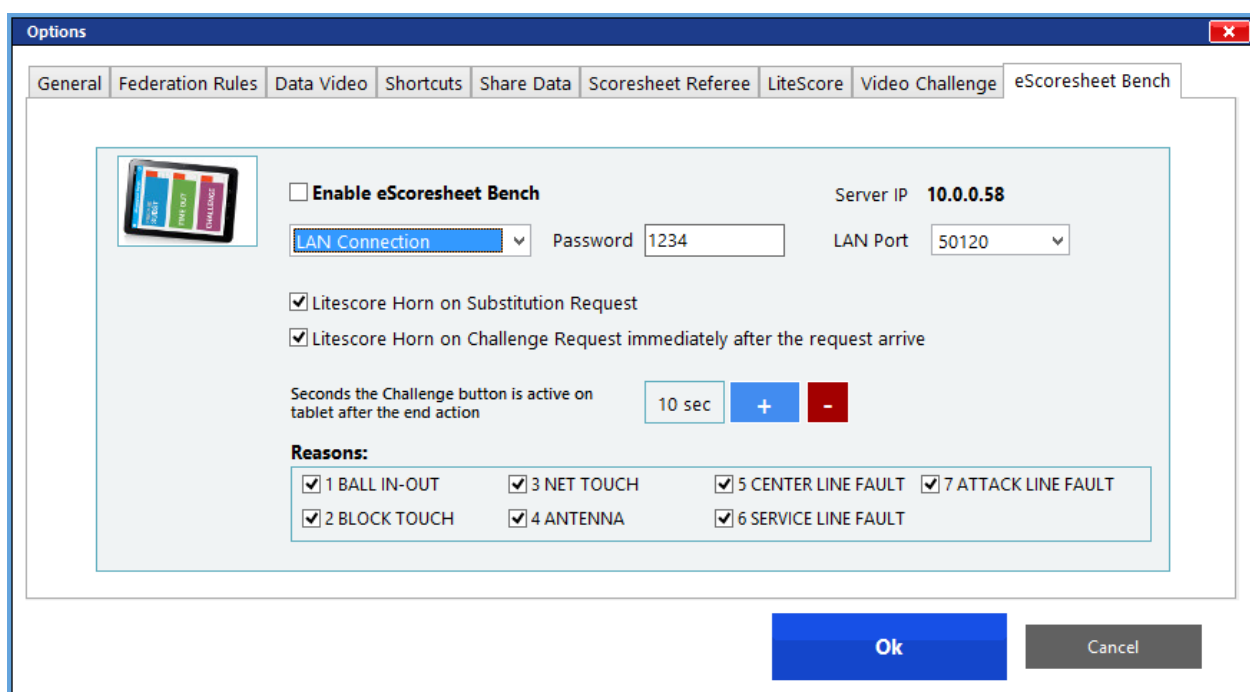
This IP address must be entered on the Tablet app.

Considering that each Tablet App will save this IP address to enable quick connection next time it is used, this IP addressed must also be fixed on the e-Scorers' laptop.

Bluetooth

How to install Microsoft driver for the adapter

Installations must be carried out by the host organiser prior to any technical meeting.

In order for e-Scoresheet to be run via Bluetooth, a **Class 1 Bluetooth adapter** must be installed on the EScoresheet Laptop using the generic windows driver.

Follow the below instructions in order to verify what kind of drivers are installed and, if needed, how to install the correct one.

1. **DO NOT plug in the USB adapter**

2. Go to **Control Panel** -> **Hardware and Sound**
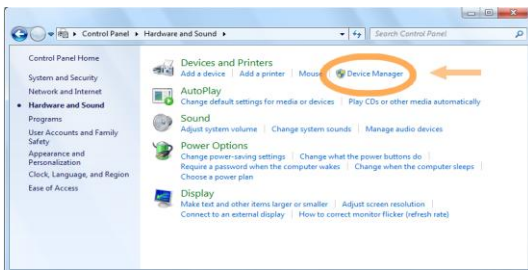
3. Click on **Device Manager**

4. Check to see if the Bluetooth adapter is already installed with a Microsoft driver, like the one circled.

5. Right click on the mouse and select DISABLE then   confirm
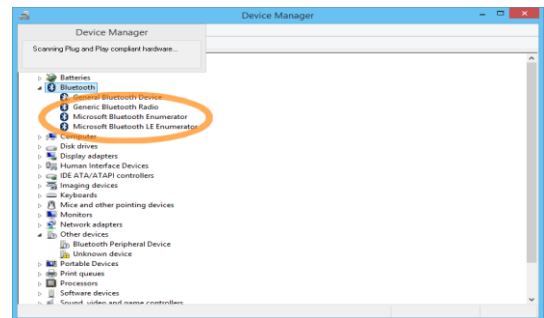
Please note only one Bluetooth adapter should be installed.   It must be a Class 1.

Once installed plug in the USB adapter

6. The Bluetooth adapter may install its own drives, they may look like this in the directory
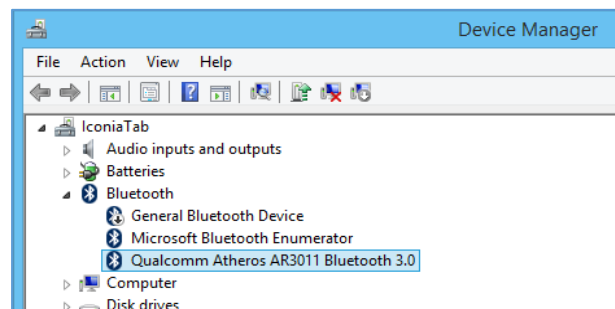
7. **Right click** with mouse on the Adapter name in the list and choose **Properties**.

8. Click on the "**Update Driver**…" button:
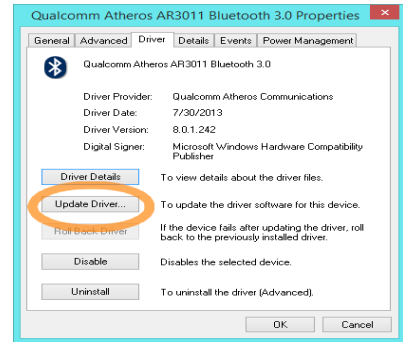
9. Choose to **select the driver manually**:
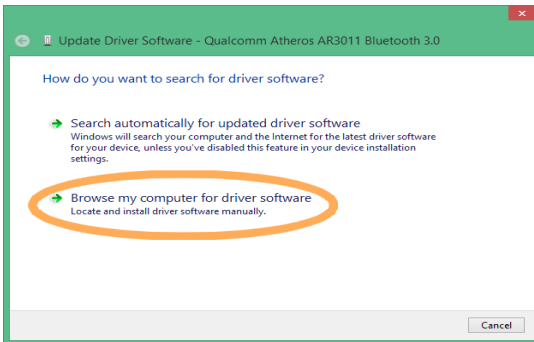
10. Select the driver from the local machine:
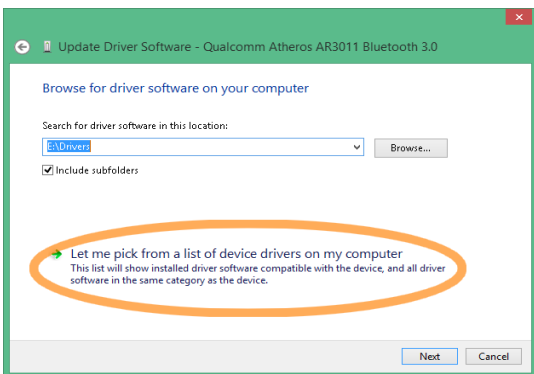
11. Select the **Generic Bluetooth Adapter** driver: and click Next.
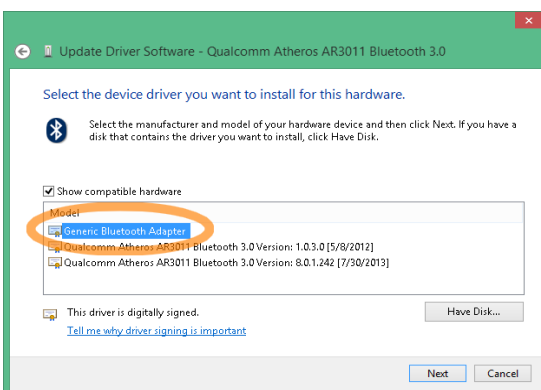
Now the Bluetooth adapter is correctly installed.
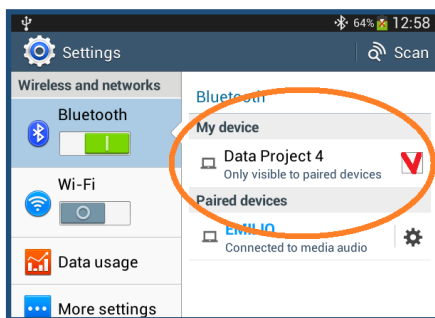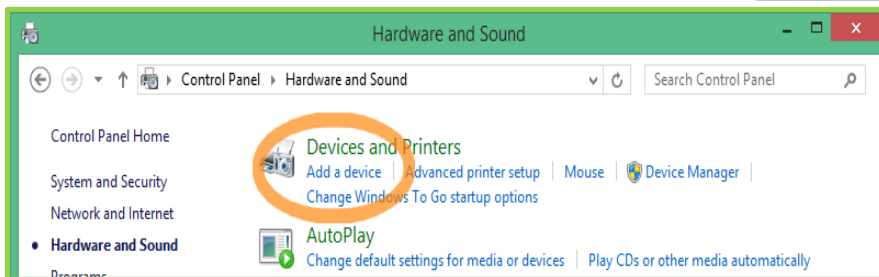
A reboot may be required.
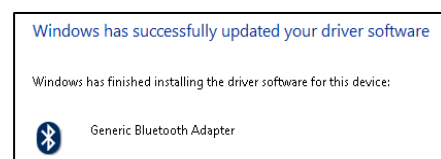
How to pair the Android device.

In order to work with e-Scoresheet the Android device must be paired with windows on the EScoresheet Laptop. This operation should only be needed the first time a device is connected to a PC.

1. On the e-Scoresheet laptop go to **Control Panel** -> **Hardware and Sound**

2. Click on **Add a device**

3. on the Android tablet go to Settings-> Bluetooth and click on the label "**Only visible to paired devices**"
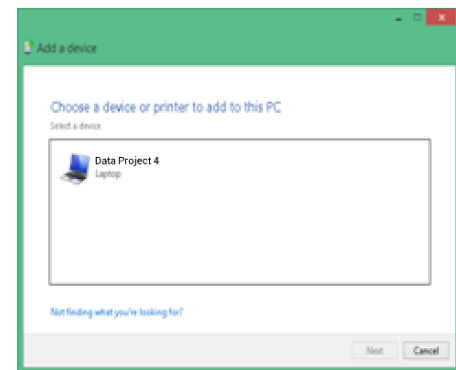
The tablet is now discoverable and it should be listed in the this window on the laptop:
Select the device in the list then click on the "Next" button.

4. A window with a passcode will be displayed.
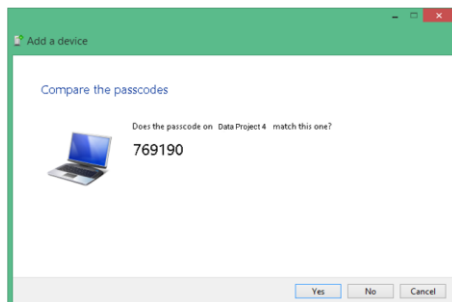
Make sure the same code is displayed on the Android device too then click on **Yes**.

Repeat this process for all the Android devices needed.
The "pairing" process should only be initiated the first time a device is used with a laptop, however if different laptops or tablets are used they must paired as above.
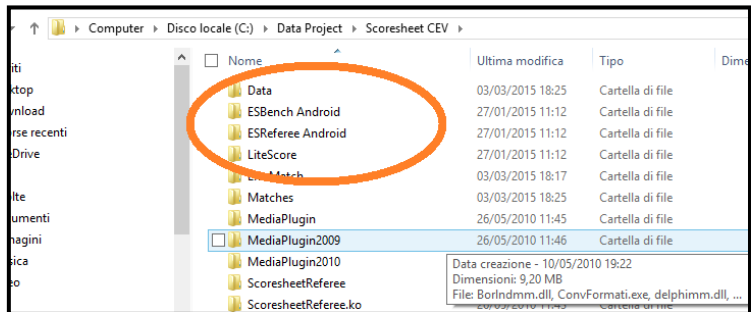
How to install the first time the App on the tablet

Install e-Scoresheet on the laptop (or open and download a new version). The new files will be downloaded to the folder **C:\Dataproject\Scoresheet CEV.** You will see two folders

- **ESBench Android**
- **ESReferee Android**

In each will be a specific application file, with extension **.apk.**

Copy these application files to each tablet that is to be used.

Then:

1. Connect the tablet with the USB cable to the e-Scoresheet laptop
2. Click on one the new folders the first .apk file
3. Paste the .apk file into the tablets file system **>Tablet > Download** folder
4. Repeat this procedure for both files
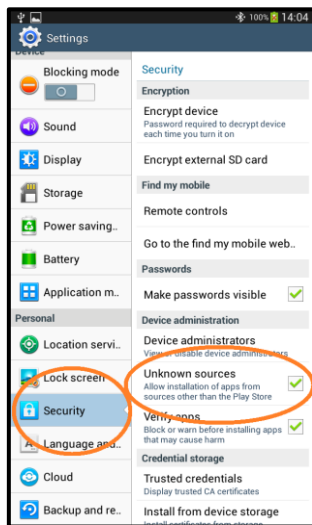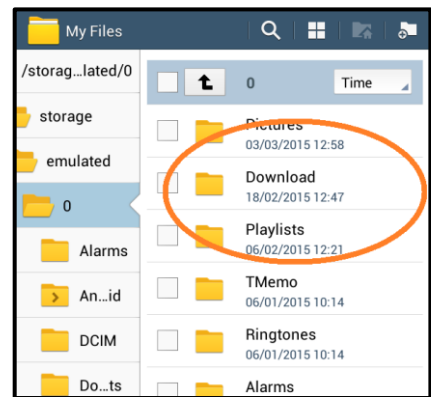
After that, on the Tablet home page check in the folder **Setting>Security** to see if it is possible to install applications from Unknown sources.

On the Tablet, enter the file system (My File icon) and install both ES Applications.

- Enter the Download folder
- click on each apk file (ES Bench and ES Referee)
- confirm the installation.

This procedure must be followed the first time an ES App is installed on a new Tablet.

And every time there is a e-Scoresheet automatic update: if running the ES Bench or ES referee app a white windows will advise that the app version is not compatible with the e-Scoresheet release, the previous procedure has to applied.

Finally it is recommended to place the ES Beach and ES Referee icons in a clear and useful position on the home screen of each tablet.

How to connect the Tablet to e-Scoresheet
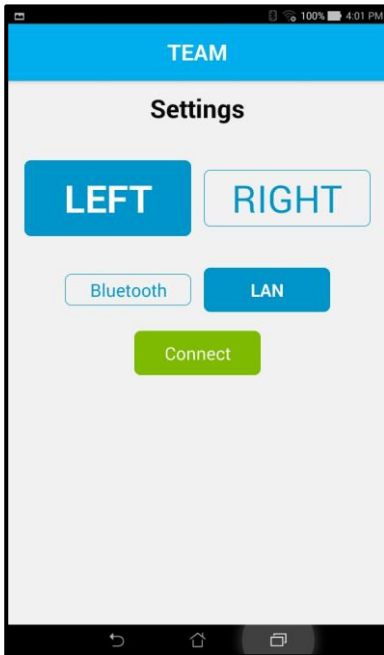
Entering the Tablet application, either Bench or Referee, you must choose either **Bluetooth** or **LAN**

Given the tablets now remain at the benches and do not follow the teams you must also define if the tablet will be located on the **left bench** or on the **right bench**.

As the tablets will remain with on the respective sides of courts (at the team benches) e-Scoresheet that will automatically switch the team's data onto the correct tablets.

LAN CONNECTION

In the next window you must type IP address of the e-Scoresheet laptop.

It will be possible to connect more than two ES Referee Apps (e.g. for the Video Challenge referee, and/or the Referee Delegate), but only two ES Bench Apps - one for each team.
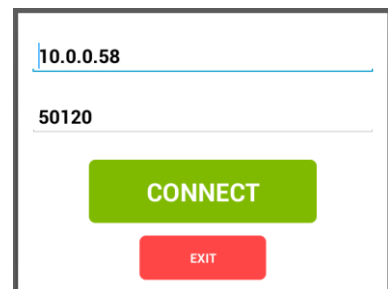
BLUETOOTH CONNECTION

Selecting this connection protocol, once you click on [Connect] the App will search for all the devices that are available.

When the e-Scoresheet laptop's name appears, all you will need to do is click on it (the laptop name) and wait for the pairing procedure (be patient as it will take time and may need 2/3 attempts).

The first time any Tablet App is connected to the e-Scoresheet laptop a password is required.

If it has not been modified in the e-Scoresheet Option the password will be : **1234**

Before the match

SETTING UP THE E-SCORESHEET TOOL

The EScorer must enter "Options" in EScoresheet and enable this function:

- Set the LAN or Bluetooth connection
- Set the Litescore options
- Set the Video Challenge requests
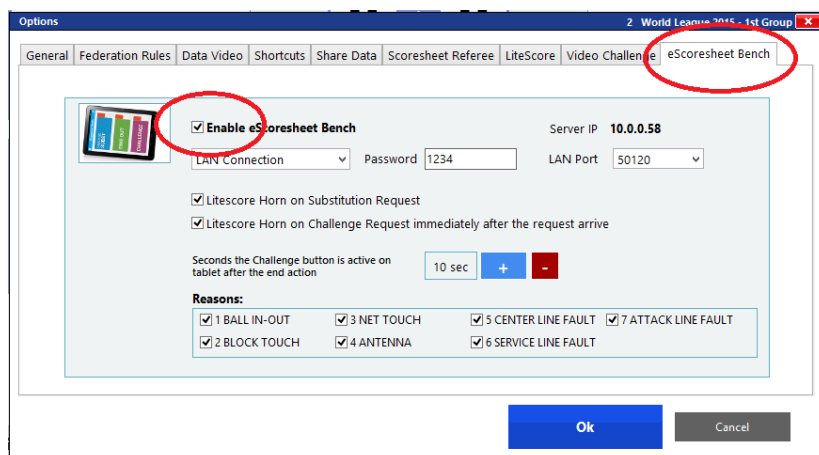
CONNECTING THE TEAMS TABLETS TO E-SCORESHEET LAPTOP

1. The e-Scoresheet Bench App "**ES Bench**" must have been previously downloaded onto the (android) tablets
2. The scorer must first run e-Scoresheet on their laptop from the e-Scorers workstation
3. each tablet must be connected to e-Scoresheet laptop: one as the **Left** team and one as **Right**.
4. Once connected, they must stay on the respective bench for the duration of the match.
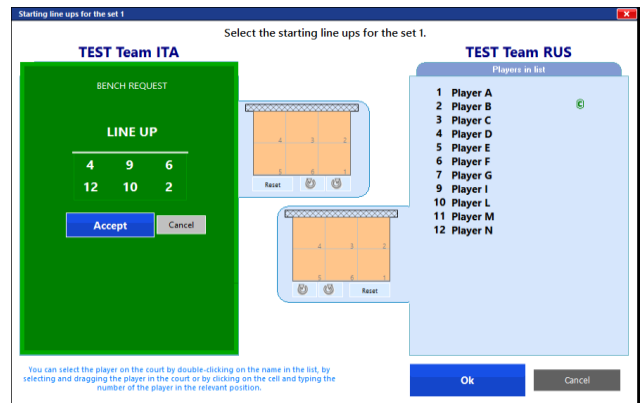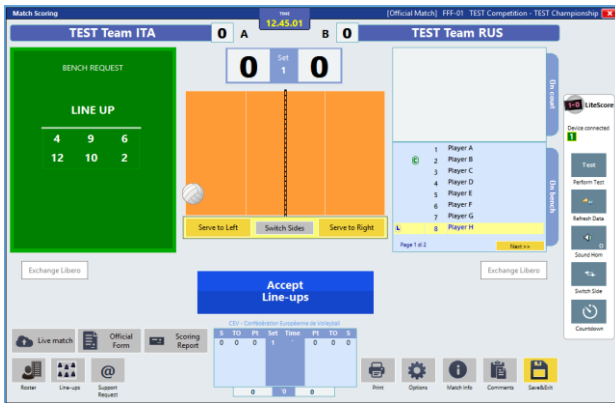
STARTING LINE-UPS

1. The Coaches or nominated Bench personnel member must transmit the starting line up to the e-Scorer via their paired tablets.
2. Line ups from each team must be visible on the e-Scoresheet and Referees tablet at least 12 minutes before the match. This image will also be shown on the CEV Supervisors monitor. .
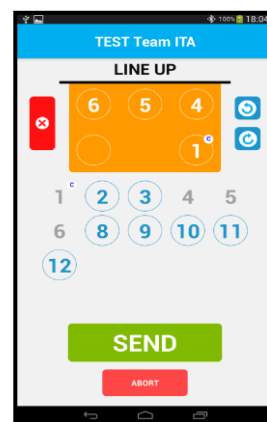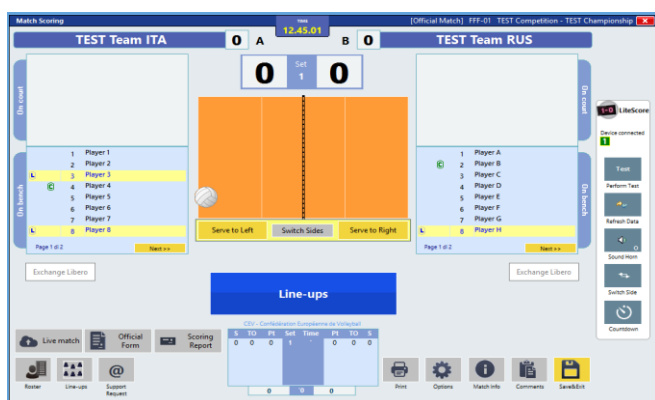
3. The Coach or nominated Bench personnel member presses the LINE UP button and enters the starting line-up.
4. He/she can change the player's number or, in any case, click on the red button (X) and reset the entire Line Up previously entered.

5. This is confirmed and transmitted by pressing "SEND".

The starting line ups will show as below

6. The eScorer can then choose to accept the submitted line-up in the main window
7. The starting Libero will be permitted to enter the court in the usual way after checking by the second referee
8. The first libero to enter the court is considered to be the starting Libero.
9. The Captain on court will be recorded by the e-Scorer following instructions from the 2nd referee
10. The 2nd Referee will use his/her tablet before the match to check each team's line up. Should modifications be needed following a mistake or requested correction, these must follow the FIVB Rules in force at the time.
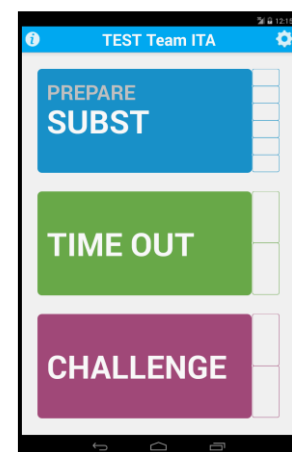11. The 1st Referee will also be able to view the line ups on his/her tablet fixed to the post.

During the match

During the match the tablet will have 3 buttons indicating Substitutions, Timeout and Challenge. Each of the buttons has a "progress" bar showing the number of requests made for each action.

1. A major change is that the eScorer must click on "START RALLY" when the 1st referee blows their whistle.
2. Pressing the "START RALLY" button will disable the Time Out and Challenge requests (Substitution preparations can still be made) on the coaches tablets.
3. Whilst enabled to prepare substitutions during a rally a request can only be made when a point has been awarded and the rally ended.
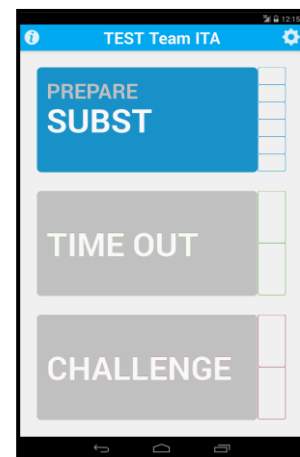

4. When a point is recorded, the buttons' "START RALLY", "TIME OUT" and "CHALLENGE" will be enabled once more.
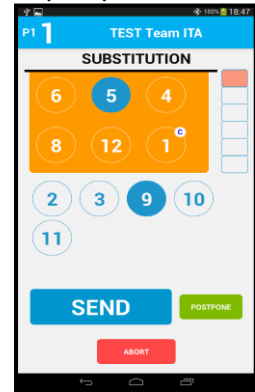
SUBSTITUTIONS

1. The bench personnel press the "PREPARE SUBST" button on their tablet (see above)
2. A window with the current line-up will appear with the players eligible for substitution.
3. Using the tablet coaches request substitutions by clicking on the numbers of the players entering and leaving the court. They are then highlighted.
4. It's possible to enter 2 or 3 or more substitutions at the same time, in this window. It is not possible to enter another substitution once sent or one has been postponed.
5. If the players have been previously involved in a substitution the partner player will be automatically highlighted.
6. Once entered, the team can choose to send the substitution to the eScorer (if the rally is running) or postpone the request.
7. The pending substitution will be displayed in the "SUBST" button.
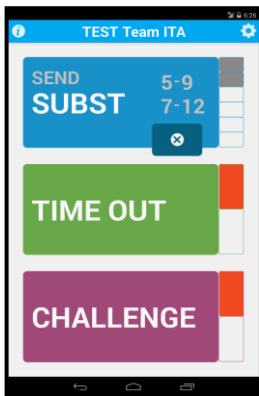
8. The team can also cancel pending substitutions by clicking "X" on the "SUBST" recap button
9. At the end of the rally, by clicking on the "SUBST" Send button again the coach can "SEND"
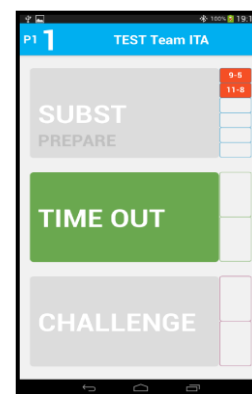10. If used the LiteScore unit will sound and show the player's number to be substituted on the LED display.
11. the scorer will only accept a substitution request if the players enter the substitution zone and begin the quick substitution process.
12. The e-Scorer upon seeing the players entering the substitution zone will "accept" the app request.
13. The substitute(s) must still enter the substitution zone without delay and with the appropriate paddle(s) raised high showing the player(s) to leave the court.
14. The official "REQUEST" for a substitution is the entrance of the substitute(s) into the substitution zone.
15. The Coach or Game Captain does not need to make a signal (Note: in case of a forced substitution due to injury the coach or indeed the game captain may, of course, make the substitution signal to the second referee who will authorise the substitution in this case.)
16. The quick substitution process must not be delayed in any way.
17. The substituting player goes immediately to the side-line close to the net post within the substitution zone, to make the paddle-exchange with the player on court. This process is observed by the 2nd Referee who will only intervene if the players create a delay or the coach does not send the information via the Tablet app – hence creating a delay – which will be signalled by the scorer again by use of a buzzer.
18. Once a player enters the substitution zone with the numbered paddle, and the buzzer/whistle is sounded, a substitution must be completed.
19. Once the buzzer/whistle sounds, a team which retracts its request for substitution automatically causes a delay, and a delay sanction will be charged against the team.
20. In the case where the player(s) enter but the coach has not sent this information via the tablet and a delay is caused, the substitution(s) are denied (refused) and the team is sanctioned for "delay".

21. The instant the substitute player(s) enter the substitution zone, <u>with the appropriate numbered paddle(s)</u> the e-Scorer:
    a) Then the e-Scorer will raise both arms to indicate that he/she is ready for the next rally. (Note: there is no necessity for the e-Scorer to raise one hand to signify at the start of the process that the substitution event has been recognized – the sounding of the buzzer carries out that function).
22. Using the eScorer bench app a coach cannot request an illegal substitution (please see below for exceptional substitution) however a substitution can still be denied should the wrong players enter of leave or a delay in the process occur.
    a) The e-Scorer pushes the buzzer (again) and indicates the illegality of the substitution by waving one hand back and forth.
    b) The Second Referee will blow the whistle to indicate the illegality of the substitution to the 1st Referee, who gives the team the appropriate delay sanction.
    c) The substitution is rejected automatically in this instance.
23. In the case of multiple substitutions by the same team, all must be made at the same time.
24. In the case of both teams making a request, the e-Scorer will indicate which team should complete their substitution first.
25. In all cases, the 1st Referee has the right to authorise the next service after having seen the e-Scorer's two-handed "READY" signal at the completion of all team substitutions and both teams are ready to play.
26. The number of completed substitutions, and the player's numbers, will be indicated by the lighting of the progress bar slots in red.
27. The e-Scorer must report the 5th & 6th substitution of each team to the 2nd Referee, who will pass this information to the team Coach and the 1st Referee as per the Official Rules of the Game (24.2.7)
28. For the 5th substitution a yellow square will surround the Substitution button on the respective tablet.
29. Upon reaching 6 (or the maximum available) the substitution button will automatically be deactivated.
30. Should a coach need to make an exceptional substitution as provide for in the rules of the game this can be done by pressing the "EXCEPTIONAL" button.

TIME OUTS - REQUESTED BY THE TEAMS - 30 SECONDS

1. During the rally the Time Out button will be silver.
2. Once the request is made using a Tablet, the LiteScore unit will sound and a flashing LED light will indicate the team requesting the time out.
3. The LiteScore unit will sound and a flashing LED light will indicate the team requesting the time out.
4. One or two LED lights on the LiteScore will indicate the number of time outs a team has taken.
5. A countdown clock will display the remaining seconds of the time out.
6. A second time out or new request by the opposing team will be authorised during the same stoppage according to the official rules.
7. Any subsequent request must be made using the tablet and confirmed by the e-Scorer.
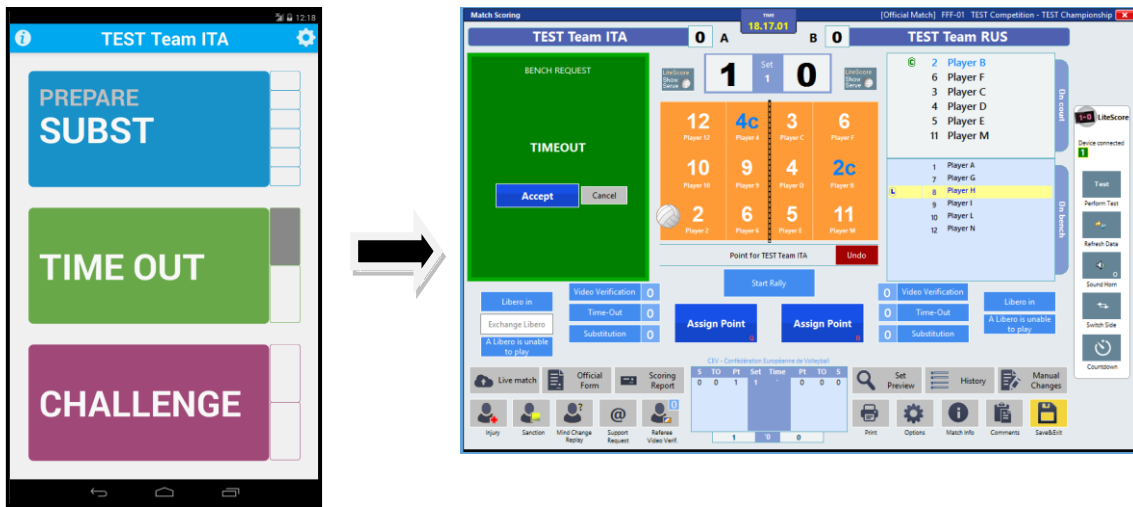

8. Once accepted the progress bar will indicate in red the number time outs taken
9. Upon reaching the teams requested time outs (two) the button will be deactivated.
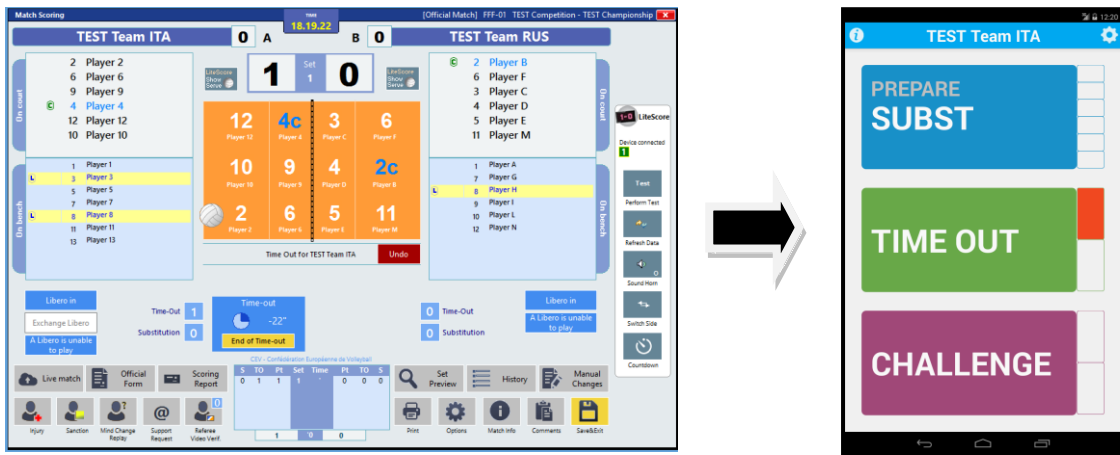
CHALLENGE SYSTEM

The CEV Challenge System regulations in force at the time will be applied. The e-Scoresheet bench application in conjunction with LiteScore can be used to indicate a challenge as below.

Before the match the eScorer enters the options menu and turns on Challenge system
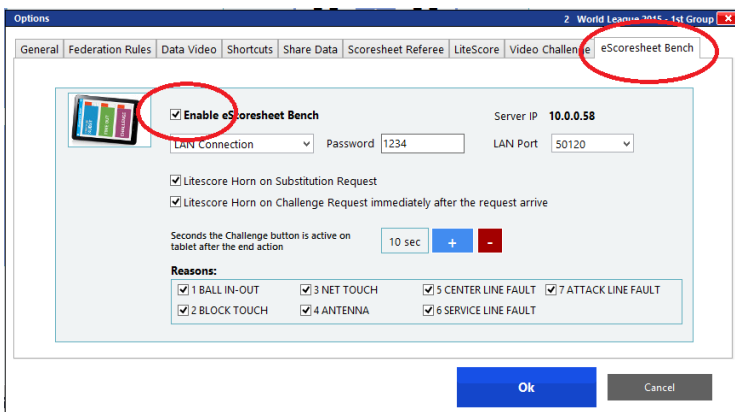
E-Scoresheet will have within it a function that will allow the type of Challenge system that is being used and will in turn ensure the correct configuration is shown on each tablet.

1. During the rally the Challenge button will be silver.
2. When a challenge is requested by a coach on their tablet the progress bar will change colour to silver indicating the request has been acknowledged.
3. A second window will appear where the coach must indicate the nature of the challenge they are making.

4. A request will appear on e-Scoresheet which the e-Scorer (directed by the reserve referee) can accept or deny.
5. Following a review of the video, should the challenge be denied then the progress bar for challenge will indicate red on the coach's tablet?
6. Upon reaching two incorrect challenges (progress bar red for both) the "CHALLENGE" button for this coach will be deactivated.
7. If the challenge is agreed then the silver progress bar indicator will become clear once more.
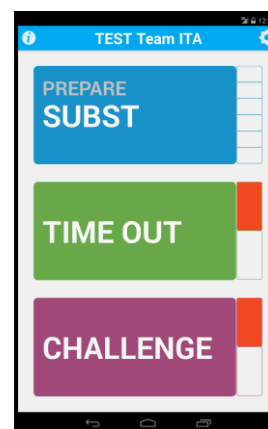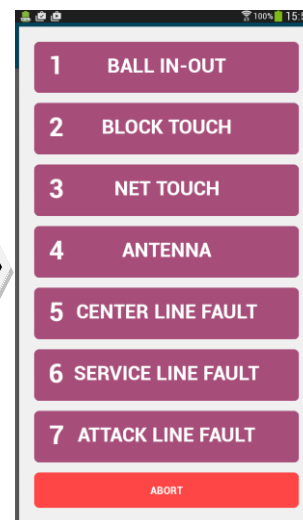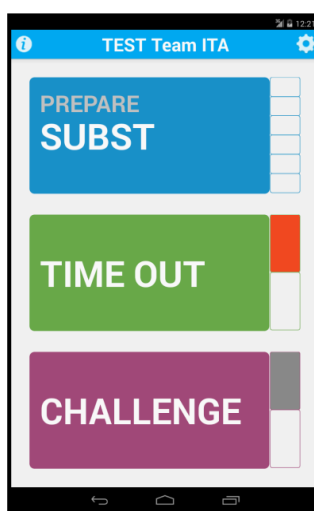
Referee Application

On the post of the 1st and 2nd referees it is expected to fix two tablets where will run the ES Referee Application.

Tablets, same characteristics as the previous one used for the Bench App (Android OS, 7" display, Wi-Fi and Bluetooth), will be fixed on the post with special supports and elastics.

By the way any solution adopted to fix in a good and solid condition is welcome.

The App will be installed on the tablets in the same way described above.
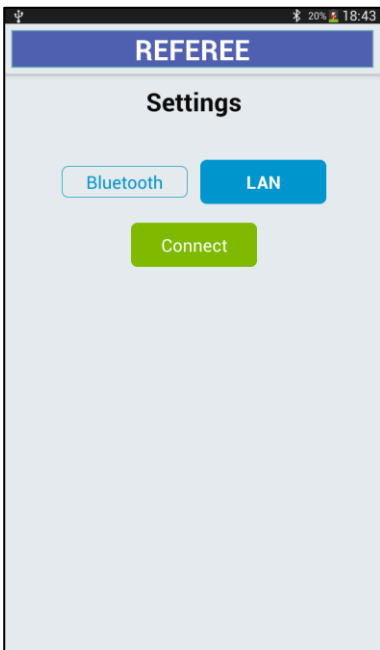
Entering the Tablet application it has to be choses [Bluetooth] or [LAN], as in the ES Bench App.

And then, in the next windows, has to be selected the recognized e-Scoresheet laptop or typed his IP address.

It will be possible to connect more than two ES Referee app (e.g. for the Video Challenge referee, or for the Referee Delegate), but only 2 Bench App one for each team.
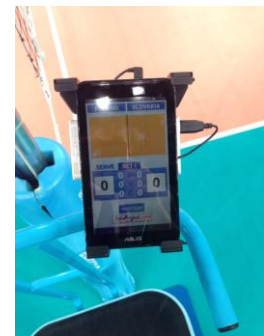
Once connected, it will be presented the main windows with all the data regarding the team rotations, the score and the requests

- S (substitutions)
- T (timeouts)
- C (challenges).

The referee has only to [Switch Team] side, eventually, just at the beginning of the match.
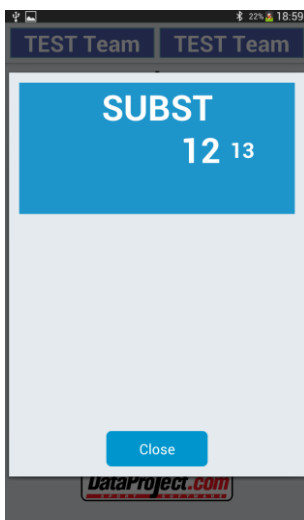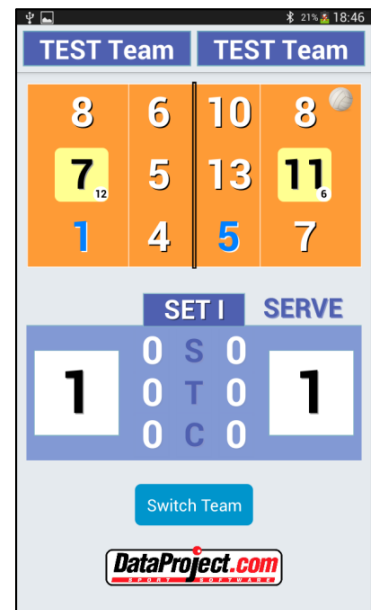
When there is a request from the Coach, using the Bench Tablet, a window with all the relevant information will appear on the Tablets of the Referees.

They have to close this windows when the request is completed.

In case of simultaneous requests from both benches (e.g. Substitutions) a double sided window will appear.

LITESCORE

LiteScore is a portable scoring system that is connected to e-Scoresheet. It automatically displays the official score, sets won, the number of time outs and substitutions for each team. During the match it can display:


- The score of a volleyball match
- Indicate the serving team with a light below the respective teams score
- Show the number of the player serving upon request
- Sets won - indicated by LED lights
- Time outs - indicated by LED lights (flash during requested stoppage)

LITESCORE INTEGRATION WITH E-SCORESHEET

LiteScore is designed to work with e-Scoresheet and display in real time the score and data of a match. Once LiteScore is successfully connected, via a USB stick, to the e-Scoresheet laptop (and the driver is correctly installed), a vertical box (see right) with information buttons will appear on the right of the e-Scoresheet main window. The functionality of each button is clearly shown and is easy to understand. These functions are clearly described in the e-Scoresheet handbook.

When the background colour of this box turns red it indicates that LiteScore is disconnected or turned off. Once LiteScore is reconnected or turned on, e-Scoresheet will rebuild the connection in just a few seconds.
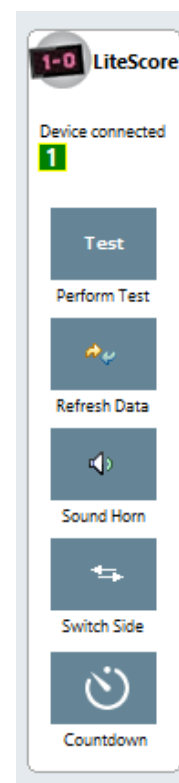
LITESCORE INTEGRATION WITH DATA VOLLEY

LiteScore Manager is a windows based software that enables an interface between Data Volley and the LiteScore software - this means it can also receive the score directly from the statistical software

It's enough to run LiteScore manager in the background and to define in the [Option windows] the path of the Data Volley Share folder on the Data Volley laptop for the systems to work.

LiteScore Manager can be used to manually change the score and the other LED fields that are connected to LiteScore
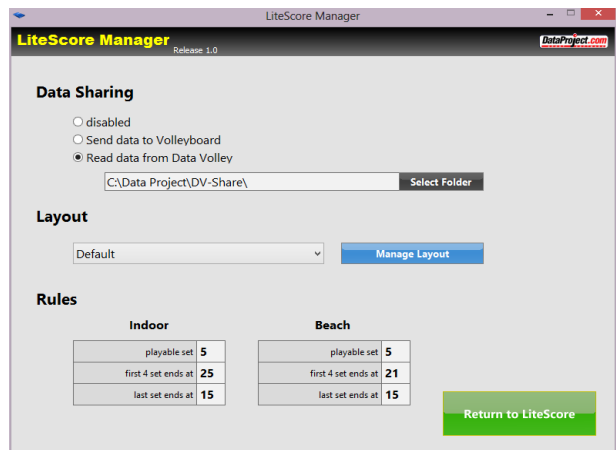
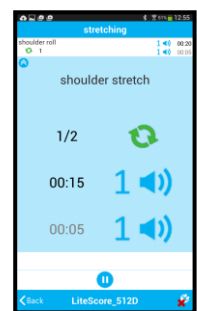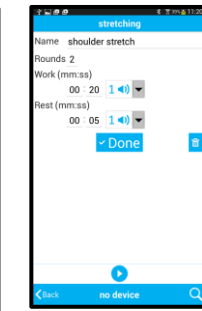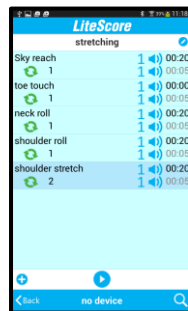
LITESCORE VIA BLUETOOTH

The Android LiteScore App to drive the LED data with any Android Smartphone is available for free in the Google app store. This is a great tool to support coaches during training sessions and friendly matches.
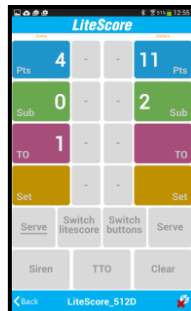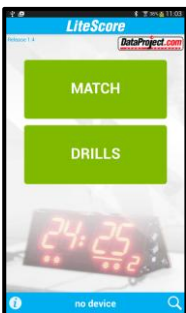
MATCH   **DRILLS**

CEV E-SCORESHEET TABLET / APP – INSTRUCTIONS FOR TEAMS

ES BENCH & ES REFEREE

Index

Before the match

1.1. CONNECTING THE TEAMS TABLETS TO THE E-SCORESHEET LAPTOP

1. Once connected, each tablet must stay with the respective coaches/teams, irrespective of the court they occupy for the duration of the match.

1.2. STARTING LINE-UPS

1. The Coaches or nominated Bench personnel member must transmit the starting line up to the e-Scorer via their paired tablets.

2. Line ups for the team must be sent to the e-Scorer at least 12 minutes before the match.

3. The coach presses the LINE UP button and enters the starting line-up by clicking on the players numbers.

4. They will appear in the positions on court starting with position 1, then 2 etc.

5. This is confirmed and transmitted by pressing "SEND".

During the match

During the match the tablet will have 3 buttons indicating Substitutions, Timeout and Challenge.

Each of the buttons has a "progress" bar showing the number of requests made for each action.

During a rally the buttons Time Out and Challenge requests will be disabled. Substitution preparations however can still be made on the teams tablets.

Whilst enabled to prepare substitutions during a rally, a request can only be made when a point has been awarded and the rally ended.

When a point is recorded, the buttons' "START RALLY", "TIME OUT" and "CHALLENGE" will be enabled once more.

1.3. SUBSTITUTIONS

1. The bench personnel press the "PREPARE SUBST" button on their tablet (see above)

2. A window with the current line-up will appear with the players eligible for substitution.

3. Using the tablet coaches request substitutions by clicking on the numbers of the players entering and leaving the court. They are then highlighted.

4. It's possible to enter 2 or 3 or more substitutions at the same time in this window. It is not possible to enter another substitution once sent or one has been postponed.

5. If the players have been previously involved in a substitution the partner player will be automatically highlighted.

6. Once entered, the team can choose to send the substitution to the eScorer (even if the rally is running) or they can postpone the request.

7. The pending substitution will be displayed in the "SUBST" button.

8. The team can also cancel pending substitutions by clicking "X" on the "SUBST" recap button.

9. At the end of the rally, by clicking on the "SUBST" Send button again the bench personnel can press "SEND"

10. The e-Scorer will only accept a substitution request if the players enter the substitution zone and begin the quick substitution process.

11. The e-Scorer upon seeing the players entering the substitution zone will "accept" the app request.

12. The substitute(s) must still enter the substitution zone without delay and with the appropriate paddle(s) raised high showing the player(s) to leave the court.

13. The official "REQUEST" for a substitution is the entrance of the substitute(s) into the substitution zone.

14. The Coach or Game Captain does not need to make a signal or to use the sound device. (Note: in case of a forced substitution due to injury the coach or indeed the game captain may, of course, make the substitution signal to the second referee who will authorise the substitution in this case.)

15. The quick substitution process must not be delayed in any way.

16. The 2nd Referee will only intervene if the players create a delay or the coach does not send the information via the Tablet app – hence creating a delay – which will be signalled by the scorer again by use of a buzzer.

17. Once a player enters the substitution zone with the numbered paddle, and the buzzer/ whistle is sounded, <u>a substitution must be completed</u>.

18. In the case of multiple substitutions by the same team, all must be made at the same time.

19. In the case of both teams making a request, the e-Scorer will indicate which team should complete their substitution first.

20. The number of completed substitutions, and the player's numbers, will be indicated by the lighting of the progress bar slots in red.

21. For the 5th substitution a yellow square will surround the Substitution button on the respective tablet.

22. Upon reaching 6 (or the maximum available) the substitution button will automatically be deactivated.

23. Should a coach need to make an exceptional substitution as provide for in the rules of the game this can be done by pressing the "EXCEPTIONAL" button.

1.4. TIME OUTS - REQUESTED BY THE TEAMS - 30 SECONDS

1. During the rally the Time Out button will be silver.
2. Once the request is made using a Tablet, the LiteScore unit will sound and a flashing LED light will indicate the team requesting the time out.
3. One or two LED lights on the LiteScore will indicate the number of time outs a team has taken.
4. A countdown clock will display the remaining seconds of the time out.
5. Any subsequent request must be made using the tablet and confirmed by the e-Scorer.
6. Upon reaching the teams requested time outs (two) the button will be deactivated.

1.5. CHALLENGE SYSTEM

The CEV Challenge System regulations in force at the time will be applied.

The e-Scoresheet bench application in conjunction with LiteScore will be used to indicate a Challenge as below.

1. During the rally the Challenge button will be silver.

2. When a challenge is requested by a team on their tablet the progress bar will change colour to silver indicating the request has been acknowledged.

3. A second window will appear where the team personnel must indicate the nature of the challenge they are making.

4. Following a review of the video(s), should the challenge be denied then the progress bar for challenge will indicate red on the teams tablet.

5. Upon reaching two incorrect challenges (progress bar red for both) the "CHALLENGE" button for this coach will be deactivated.

6. If the challenge is agreed then the silver progress bar indicator will become clear once more.