The Role of Means of Modern Technology in the Criminal Procedures in Jordan with a Special Focus on Electronic Trial

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Abstract
In recent times, the legal field has not been exempted from the benefits of technology which has surged significantly. Countries have tended to benefit from using the means of modern technology in the legal field. It is noteworthy that the notion of regulating the use of means of modern technology in the criminal procedures in Jordan is relatively new despite its importance. The recent outbreak of coronavirus (Covid-19) has brought about a shift in the way justice can still be carried out, by way of remote court appearances in order to observe social distancing rules. Consequently, the use of means of modern technology in criminal procedures especially conducting electronic trial could be illustrated as an effective alternative under the current situation. This article aims to examine the extent the Jordanian legislations welcome the use of means of modern technology in criminal procedures. The advantages of using the means of modern technology in the Jordanian criminal justice system will also be examined. A combination of various approaches is used for the purposes of this research. This includes a critical analysis approach by analysing the current primary and secondary available sources related to the use of means of modern technology in the criminal procedures in Jordan. The critical analysis approach is also used to identify how the Jordanian legislations have dealt with the use of means of modern technology in the criminal procedures especially the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures. A comparative approach is utilised to compare traditional criminal procedures with criminal procedures that use the means of modern technology. A descriptive approach is engaged to describe the laws and practices in Jordan with regards to the use of means of modern technology. This article concludes that Jordan has made significant efforts to facilitate the use of means of modern technology in criminal procedures. This could be represented by enacting the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures. This article also concludes that the advantages of the use of means of modern technology in the criminal procedures supersede their disadvantages.

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1. Introduction
Law is historically known as a paper-intensive practice. Nevertheless, this has been revolutionised through the implementation of procedural innovations and electronic tools.¹ The criminal justice system has been impacted by technology.² This could be represented by the effect of many technological changes.³ It is worth noting that there is an increase in collecting evidence in criminal cases using technology. This includes cell phones’ audio-video recording and obtaining evidence from social media.⁴ Technology upholds the entire court system and encompasses all stages of a trial.⁵

The role of using the means of modern technology in the criminal justice system in Jordan has increased recently. A vital step towards the use of means of modern technology in the criminal justice system could be demonstrated by enacting the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures in 2018.⁶ This Regulation has been issued in accordance with Article 158 Paragraph two of the Jordanian Code of Criminal Procedures.⁷

This article is written during the coronavirus (Covid-19) pandemic where quarantine, lockdown and self-isolation have become the new norm. The world as of 25th of April 2020 has recorded over than (2.8 million) confirmed cases of coronavirus with more than 199 000 deaths.⁸ The scale of this pandemic has imposed

¹ Jeremy Opolsky and Alexandra Shelley, ‘Electronic Trials’, online at: https://www.torys.com/insights/publications/2017/04/electronic-trials, accessed 18 April 2020.
² Robert Bradley, Science, Technology, and Criminal Justice (Peter Lang 2004) 1.
³ Christopher Smith, Madhavi McCall and Cynthia McCluskey, Law & Criminal Justice: Emerging Issues in the Twenty-first Century (Peter Lang 2005) 36.
⁴ M. R. McGuire and Thomas J. Holt, The Routledge Handbook of Technology, Crime and Justice (Taylor & Francis 2017) 518.
⁵ Steven Lubet and Cynthia Tape, Modern Trial Advocacy: Analysis and Practice, Canadian Fourth Edition (Wolters Kluwer Law & Business 2019) 321; April Pattavina (ed), Information Technology and the Criminal Justice System (SAGE 2005) 17.
⁶ The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018) page 5606 of the Official Gazette (No 5529) dated 2 September 2018.
⁷ The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961) page 311 of the Official Gazette (No 1539) dated 16 March 1961.
⁸ Johns Hopkins University, ‘COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University
restrictions on freedom of movement. In order to continuously guard and provide an impartial administration of justice during this pandemic, it is justifiable to utilise the means of modern technology to facilitate remote court appearances in line with the criminal justice system.

This article is divided into eight sections. The first section serves as an introduction while the second presents the conceptual framework of the article which elucidates some expressions which usually used. The aim of this is to explain the relationship between technology and the criminal justice system. The third section examines the roles governing the use of means of modern technology. In this section, five main questions, in relation to these roles, will be answered. The four main principles which regulate the conducting of criminal trials in Jordan will be examined in the fourth section. The aim of this analysis is to examine whether the traditional trial and the electronic trial use the same principles. The fifth section assesses the use of the videoconferencing in electronic trial by defining videoconferencing and showing how this technology has been dealt with. The sixth section evaluates the use of means of modern technology in the criminal justice system. This evaluation focuses on the benefits of the use of means of modern technology and the challenges facing this use. The seventh section provides the main findings of this article. The eighth section concludes the article and provides a number of recommendations.

2. The Conceptual Framework

To begin with and for the sake of clarity, it is important to define what is meant by the means of modern technology. According to the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures, the expression ‘the means of modern technology’ has been defined as means of visual or audible modern contact approved in accordance with the provisions of this Regulation for conducting criminal investigation and trial procedures. This definition divides the means of modern technology into visual means and audible means. These in line with this definition, should be approved in accordance with the provisions of the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures. This definition limits the use of means of modern technology to two stages of criminal proceedings: the first stage is the stage of conducting criminal investigation. The second stage is conducting criminal trial.

Another expression which is associated with the use of means of modern technology in the criminal justice system is the expression ‘electronic trial’. Nevertheless, it is vital that the meaning of ‘trial’ is initially understood. Trial is the mechanism of fact-finding which is used for resolving disputes and its process and constitutionally guaranteed. Therefore, electronic trial, also known as ‘E-Trial’ is described as a trial that utilises electronic technology to carry out its intended purposes. This includes hardware and software. Firstly; hardware could include monitors, computers, visual aids, hardware to display evidence. Secondly; software could include programmes, software to enter and house court’s exhibits, a system of cross examining the electronic documents, a system of entering a collection of evidence. Electronic trial uses all documents loaded into a programme that supports litigation in order to create a case which is loaded to trial parties’ computer. In other words, electronic trial or E-Trial is the trial which uses the means of modern technology for conducting it.

One of the expressions, which are usually discussed with regard to the relationship between the use of means of modern technology and the criminal justice system, is the expression ‘E-Justice’. Through E-Justice, jurisdictional process could be conducted via electronic communication. E-Justice could be defined as using new technology in the justice field. The new technology used in the previous definition refers to communication and information technologies. These communication and information technologies are considered technologies that are electronic in nature. Computers and the internet are necessary components for the deployment of these technologies. It is worth noting that the word justice which is used in the expression ‘E-Justice’ is referred to the same justice in the legal field. In light of the above, it could be argued that E-Justice is the ultimate goal in which the use of means of modern technology aims to achieve in the criminal justice system.

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1. The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018), Art. 2.
2. Daniel K Gelb, ‘Using Technology to Prepare for Trial’ (2014) 31 GPSolo 20, 20.
3. What is an Electronic Trial (E-trial)? online at: https://governdernlaw.com/2018/02/e-trial-explained/, accessed 18 April 2020.
4. Steven Lubet and Cynthia Tape, Modern Trial Advocacy: Analysis and Practice, Canadian Fourth Edition (Wolters Kluwer Law & Business 2019) 321.
5. Miklós Kengyl and Zoltán Nemessányi, Electronic Technology and Civil Procedure: New Paths to Justice from Around the World (Springer Science & Business Media 2012) 137.
6. Rocco Moliterni (Contributor), Proceedings of the 11th Toulon-Verona International Conference on Quality in Services (Firenze University Press 2008) 411.
7. Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, “Towards a European e-Justice Strategy”, 30 May 2008, COM(2008) 329 final (pp. 4-5), cited in Miklós Kengyl and Zoltán Nemessányi, Electronic Technology and Civil Procedure: New Paths to Justice from Around the World (Springer Science & Business Media 2012) 137.
3. The Roles in Which are Governing the Use of Means of Modern Technology

The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures has several roles which govern the use of means of modern technology. These roles could be found by answering the following questions:

3.1 What are the Situations in which the Means of Modern Technology are Used
The use of means of modern technology might be compulsory or it might be discretionary. Firstly, the use of means of modern technology becomes compulsory in the event that the victim’s statements are heard in connection with indecent assault related crimes unless that hearing is impossible.¹

Secondly, the use of means of modern technology becomes discretionary in the following situations:²
1- The court may use the means of modern technology proprio motu or at a request of the parties to the lawsuit.³
2- The prosecutor may use the means of modern technology proprio motu or at a request of a member of the judicial control or the competent authority.⁴
3- The court and the prosecutor may use the means of modern technology when such use achieves fast and easy deciding in criminal cases and achieves justice or when such use is required to maintain social security and peace.⁵
4- The prosecutor and the court may use the means of modern technology in investigation and trial procedures, including the following cases:⁶
I - Hearing the testimony of a witness residing outside the jurisdiction of the court or outside the jurisdiction of the prosecutor’s department.⁷
II - Hearing the testimony of an inmate witness residing in one of the correction and rehabilitation centres or in any place designated for keeping the arrested or the convicted persons.⁸
III - Investigation, confrontation, and interrogation procedures with the accused if there is an obstacle that prevents their presence or their presence may constitute a danger or a violation of the order of the sessions.⁹
IV - Procedures to investigate and prosecute children, disabled persons and women whenever there are justifications for that.¹⁰
V - Witness protection.¹¹

In light of the aforementioned, the use of means of modern technology is compulsory in a much smaller number of situations in contrast with the situations where such use is discretionary.

3.2 What are the Safeguards Regarding the Use of Means of Modern Technology
When using the means of modern technology, the prosecutor and the court have the following duties:¹²
1- Verifying the effectiveness of the means of modern technology.¹³
2- Verifying the identity of the concerned person.¹⁴
3- Verifying the availability of legal guarantees for the rightness of the investigation and trial especially the absence of anything that affects the will of the defendant, witness or victim.¹⁵

Accordingly, the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures provides certain safeguards regarding the use of means of modern technology. Therefore, the prosecutor and the court have to follow these duties when they use the means of modern technology.

3.3 Where the Means of Modern Technology are Used
The means of modern technology are used in the courts, public prosecution departments, correction and rehabilitation centres, and in any other place where it is allocated to maintain the arrested or convicted persons.¹⁶

In light of the above, it is to be noted that the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures uses a limited list of places in which the means of modern technology could be used.

¹ The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Art. 158(1)(d); The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018), Art. 6(a).
² The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018), Arts. 4, 6.
³ ibid, Art. 4(a)(1).
⁴ ibid, Art. 4(a)(2).
⁵ ibid, Art. 4(b).
⁶ ibid, Art. 6(b).
⁷ ibid, Art. 6(b)(1).
⁸ ibid, Art. 6(b)(2).
⁹ ibid, Art. 6(b)(3).
¹⁰ ibid, Art. 6(b)(4).
¹¹ ibid, Art. 6(b)(5).
¹² ibid, Art. 8.
¹³ ibid, Art. 8(a).
¹⁴ ibid, Art. 8(b).
¹⁵ ibid, Art. 8(c).
¹⁶ ibid, Art. 3(a).
Therefore, these means cannot be used in any other place which is not mentioned by name under this Regulation. However, it can be argued that although the list is limited to these places, it includes all the places needed to achieve the purpose of using the means of modern technology.

3.4 Who Could Use the Means of Modern Technology
The following persons could use the means of modern technology: the complainant, the defendant, the victim, the witness, the lawyer, the expert, the translator, the plaintiff of the personal right and the in charge with money. Consequently, the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures uses a limited list of persons who can use the means of modern technology. Therefore, unless someone is mentioned on this restricted list, he or she is not authorised for the use of means of modern technology, although the list is comprehensive. This can pose problems.

3.5 What is the Role of the Means of Modern Technology regarding Judicial Assistance
In accordance with the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures, the means of modern technology are permissible to be used in order to implement both judicial assistance and deputations with foreign countries according to the bilateral and collective agreements concluded in this regard. In line with this, videoconferencing - as one of the means of modern technology - could be used for the purpose of achieving a mutual legal assistance. Such assistant could be between two different jurisdictions. However, this could create practical and legal issues. One of the issues is ascertaining the relevant laws pertaining taking of testimony between different jurisdictions.

4. The Principles which are Governing the Conducting of Criminal Trial in Jordan:
The use of means of modern technology has transformed certain procedures that occur in courts. The question which needs to be asked here is whether the electronic trial uses the same principles used in the traditional trial. In order to address this question, it is essential to study the principles that oversee the conducting of a traditional criminal trial in Jordan and if these principles can be employed to an electronic trial. Apparently, there are no succinct guidelines overseeing the electronic trial. Therefore, the electronic trial will rely heavily on the traditional way of conducting trials. In this regard, there are certain principles govern trials in Jordan. These principles are:

4.1 Attending Litigant Parties the Trial Procedures
The first principle that governs conducting criminal trials in Jordan is regarding the attendance litigant parties the trial procedures. This principle has been dealt with under the Jordanian Code of Criminal Procedures when it asserts that the accused appears before the court at large without restrictions or chains. However, the necessary guarding takes place. The accused shall not be removed from the trial while their session is being heard except if the accused causes disruption which requires such removal. In this case, the procedures will continue without the accused until such procedures can be carried on with the accused’s presence. The court should inform the accused of the procedures taken place in their absence.

4. The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Art. 212(1).

It is noteworthy that it is not always required for the litigant parties to attend the trial procedures in persons. By way of illustration, the defendant in certain situations - where the crime in question is a misdemeanour - may deputise an attorney to attend the trial on their behalf unless the court decides that the defendant’s presence is necessary to achieve justice.

With this in mind, attendees of the trial procedures could benefit from legal aid in certain situations. However, in order to benefit from legal aid, a number of conditions should be met:

The first condition is that ‘the total monthly income of the applicant’s family must not exceed 400 Jordanian Dinars’.

The second condition is that:

‘The applicant must not possess any immovable property except their residence, or the applicant must not possess any movable property except for the monthly income described in the previous criterion. However, in special and justified cases, the Minister of Justice may approve the provision of legal assistance to those with immovable property’.

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1 ibid, Art. 3(b).
2 ibid, Art. 11.
3 United Nations Office on Drugs and Crime (UNODC), ‘The technical and legal obstacles to the use of videoconferencing’ (2010) CTOC/COP/2010/CRP.2, Fifth session, Vienna, Para. 17.
4 The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Art. 212(1).
5 ibid, Art. 168(1).
6 Muath Al-Zoubi, ‘Legal Aid in the Criminal Matters in Jordan’, Journal of Law, Policy and Globalization 93 (2020) 77, 82.
7 The Jordanian Regulation of Legal Aid (No 119 of 2018) page 6675 of the Official Gazette (No 5541) dated 1 November 2018, Art. 3(a)(1)
8 Muath Al-Zoubi, ‘Legal Aid in the Criminal Matters in Jordan’, Journal of Law, Policy and Globalization 93 (2020) 77, 82.
9 The Jordanian Regulation of Legal Aid (No 119 of 2018), Art. 3(a)(2); Muath Al-Zoubi, ‘Legal Aid in the Criminal Matters in Jordan’, Journal of Law, Policy and Globalization 93 (2020) 77, 82.
The third condition is that ‘the type of the crime that the applicant is being tried for must be a felony’.1 The fourth condition is that ‘the applicant must not have been convicted through judicial judgment with a felony or misdemeanour’.2

To return to an earlier point, it is important to examine whether the electronic trial uses the principle of attending litigant parties the trial procedures. It might be argued that this principle can be applied on the electronic trial depending on the following grounds:

Firstly, the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures affirms that the means of modern technology should take into account a number of matters. One of these matters is attending the trial procedures.3

Secondly, the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures highlights the situations in which the defendant attends in person when the means of modern technology are used. These situations are:4

The first situation is when the defendant attends in person in the interrogation stage. In this stage, the defendant under interrogation via the use of means of modern technology could ask the prosecutor to appear in person during the interrogation. In this case, the prosecutor, based on justified reasons, has two options. The first option is to accept the request of the defendant. The second option is to reject the request of the defendant. The decision of rejection is subject to appeal. Therefore, if the defendant wants to appeal the decision of rejection, this appeal should be made within three days from the date of their knowledge of the decision of rejection. This appeal should be submitted to the Attorney General. Within the same period of time – three days - from the date the file reaches the Attorney General’s office, the Attorney General shall decide on this appeal.5

The second situation is when the defendant attends in person in the trial stage. At this stage, if it has been agreed that the trial would be conducted through the means of modern technology, the defendant may request to appear in person before the court for the first session of their trial, irrespective of any degree of litigation. In this case, the court has two options. The first option is to accept the request of the defendant to appear in person before the court. The second option is to reject such request. In both options, the decision of the court whether to accept or reject the request is final and not subject to appeal.6

4.2 Public Hearing
The second principle that governs conducting criminal trials in Jordan is public hearing. In this regard, the Jordanian Constitution clearly states that courts’ sessions are public unless the court decides to conduct them in secret in order to preserve public order or morals. However, in all cases, the pronouncement of judgment is made in a public session.7 In the same vein, the Jordanian Code of Criminal Procedures addresses the principle of public hearing when it asserts that the trial is conducted publicly unless the court decides to conduct it in secret, in order to preserve public order or morals. However, in all cases, juveniles or a certain group of people can be prevented from attending the trial.8 In light of the aforementioned, it can be noticed that the principle of public hearing has been dealt with in both the Jordanian Constitution and the Jordanian Code of Criminal Procedures. Therefore, such principle should be followed in all trials unless otherwise provided. Additionally, both legislations affirm that courts sessions and trials should be conducted publicly unless they contradict with public order or morals.

In light of the above, it can be argued that the technology of videoconferencing – as one of the means of modern technology - satisfies the requirements of the principle of public hearing; as the hearing will be screened. Hence, the public can still follow the proceedings if they are allowed into the courtroom.9

4.3 Recording the Trial Procedures
The third principle that governs conducting criminal trials in Jordan is the recording of trial procedures. This principle has been dealt with under the Jordanian Code of Criminal Procedure when it affirms that the court’s clerk records all the facts of the trial in the minutes of the session at the order of the president of the court. The minutes of the session should be signed by the board of judges and the court’s clerk.10

It is noteworthy that by examining a number of decisions by the Jordanian Cassation Court which has dealt

1 The Jordanian Regulation of Legal Aid (No 119 of 2018), Art. 3(a)(3); Muath Al-Zoubi, ‘Legal Aid in the Criminal Matters in Jordan’, Journal of Law, Policy and Globalization 93 (2020) 77, 82.
2 The Jordanian Regulation of Legal Aid (No 119 of 2018), Art. 3(a)(4); Muath Al-Zoubi, ‘Legal Aid in the Criminal Matters in Jordan’, Journal of Law, Policy and Globalization 93 (2020) 77, 82.
3 The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018), Art. 5.
4 ibid, Art. 7.
5 ibid, Art. 7(a).
6 ibid, Art. 7(b).
7 The Jordanian Constitution (1952) page 3 of the Official Gazette (No 1093) dated 8 January 1952, Art. 101(3).
8 The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Art. 171.
9 Van der Vlis, E.-J., ‘Videoconferencing in criminal proceedings’ (2011). In Braun, S. & J. L. Taylor (Eds.), Videoconference and remote interpreting in criminal proceedings. Guildford: University of Surrey 11, 21.
10 The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Arts. 214.
with the principle of recording the trial procedures, there is a contradiction among them. In this regard, the Jordanian Cassation Court in one of its decision indicates that as the minutes of the conducted trial of the accused came without the signature of the presiding judge, the board of judges and the court’s clerk, the trial procedures were absconded and considered nullified.\(^1\) Whereas in other decisions, it is stated that the absence of some of the minutes from the signature of the presiding judge does not result in the nullification of the procedure due to not being one of the procedures that the law considers to be under the penalty of nullification.\(^2\) It is also specified that the absence of signatures from some of the board of ruling judges does not annul the minutes as such signing is not a requirement under the penalty of nullification.\(^3\)

It is to be argued that the principle of recording the trial procedures is used in the electronic trial. In this sense, the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures stresses that the Ministry of Justice is providing the following services regarding the use of means of modern technology:\(^4\)

1. Providing the necessary facilities for the use of means of modern technology;
2. Taking all necessary measures to protect the use of means of modern technology;
3. Maintaining the use of means of modern technology;
4. Sustaining the work of means of modern technology;
5. Preserving the information recorded on the means of modern technology.\(^5\)

In fact, these services support the principle of recording the trial procedures. Subsequently, several factors need to be ascertained and established. Firstly, the legal status of the recorded information and legal status of information derived from the means of modern technology have been determined as legal and confidential in nature. Additionally, permission from the prosecutor or the competent court, as appropriate, is required in order to circulate, view or copy such information from the electronic information system.\(^6\)

Secondly, there is documentation available for electronic trial’s procedures. In this regard, the procedures conducted through the means of modern technology will be documented in different forms. These forms of documentation include minutes, paper documents or electronic documents. This documentation is subjected to the discretion of the court or the prosecutor. It is noteworthy that documenting the procedures conducted through the means of modern technology is approved as it is without the need to sign them from related parties.\(^7\)

Thirdly, it is established that precautions and protective measures are taken into account with the usage of modern technology in the electronic trial. In this respect, these tools which include tapes and CDs are subjected to protective measures. These protective measures have not been addressed under the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures. However, the Regulation indicates that the aims of these protective measures are to preserve the confidentiality of the modern technology’s tools used in the electronic trial and to preserve the privacy of the witness and inmate.\(^8\)

### 4.4 Oral Trial Procedures

The fourth principle that governs conducting criminal trials in Jordan is the oral trial procedures. According to the Jordanian Code of Criminal Procedure, the judge depends on the presented evidences during the trial in which such evidences have been discussed by the litigant parties publicly.\(^9\) The principle of the oral trial procedures has been addressed by the Jordanian Cassation Court. The Court affirms that the evidence in which was not presented to the court and discussed by the litigants cannot be relied upon.\(^10\)

It can be stated that the principle of oral trial procedures could be satisfied in the electronic trial. This is because, under the electronic trial, evidences will be presented during the trial. These evidences will be presented via the means of modern technology. Additionally, the litigant parties could discuss these evidences via the means of modern technology publicly. Therefore, the judge can depend on these evidences.

### 5. The Use of the Videoconferencing in Electronic Trial

This section aims to explain what is meant by videoconferencing. The importance of this explanation is that videoconferencing might be considered as the main means of modern technology in which is used in conducting the electronic trial.

To begin with, it is significant to explain what the expression ‘videoconferencing’ stands for. In this regard, videoconferencing has been defined as follows:

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\(^1\) The Jordanian Cassation Court in its criminal capacity, Decision (No 565/2019) dated 21 February 2019.

\(^2\) The Jordanian Cassation Court in its criminal capacity, Decision (No 661/2015) dated 4 June 2015.

\(^3\) The Jordanian Cassation Court in its criminal capacity, Decision (No 565/2019) dated 21 February 2019.

\(^4\) The Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures (No 96 of 2018), Art. 9(b).

\(^5\) ibid, Art. 9 (b).

\(^6\) ibid, Art. 9(c).

\(^7\) ibid, Art. 10(a).

\(^8\) ibid, Art. 10(b).

\(^9\) The Jordanian Code of Criminal Procedures, as amended (No 9 of 1961), Art. 148(1).

\(^10\) The Jordanian Cassation Court in its civil capacity, Decision (No 223/2013) dated 1 August 2013.
The use of interactive telecommunications technologies for witness testimony via simultaneous two-way video and audio transmissions. This technology allows for a witness to testify from a room adjoining the courtroom via closed-circuit television or from a distant or undisclosed location through an audio-visual link. In the courtroom setting, a judge, the defendant, the defence counsel and the prosecutor can ask questions of the witness and see and hear the witness’ answers and demeanour in real time transmission.\footnote{Fredric Lederer, *The legality and practicality of remote witness testimony*, p. 20, cited in United Nations Office on Drugs and Crime (UNODC).}

This definition focuses on only one of the uses of videoconferencing which is witness testimony. Moreover, in accordance with this definition, questions could be asked for the witness by the litigant parties via videoconferencing.

Internationally, there has been an increase in the use of the technology of videoconferencing. This could be illustrated through firstly; the international criminal tribunals’ work. These international criminal tribunals include:\footnote{United Nations Office on Drugs and Crime (UNODC), *The technical and legal obstacles to the use of videoconferencing* (2010) CTOC/COP/2010/CRP.2, Fifth session, Vienna, Para. 8.}

1. The work of the International Criminal Court.\footnote{The work of the International Criminal Court has been addressed in accordance with the Rome Statute of the International Criminal Court, \cite{Rome Statute of the International Criminal Court, Art. 69(2).}

2. The work of the International Criminal Tribunal for Rwanda.\footnote{The work of the International Criminal Tribunal for Rwanda has been addressed in accordance with the Convention on the Statute of the International Criminal Tribunal for Rwanda (entered into force 8 November 1994) UN Doc. S/RES/955.}

3. The work of the International Criminal Tribunal for the former Yugoslavia.\footnote{The work of the International Criminal Tribunal for the former Yugoslavia has been addressed in accordance with the Statute of the International Criminal Tribunal for the Former Yugoslavia (entered into force 25 May 1993) UN Doc. S/RES/827, and amended by UN Doc. S/RES/1166, 13 May 1998.}

4. The work of the Special Court for Sierra Leone.\footnote{The work of the Special Court for Sierra Leone has been addressed in accordance with the Statute of the Special Court for Sierra Leone, Agreement between the United Nations and the Government of Sierra Leone and Statute of the Special Court for Sierra Leone, 16 January 2002.}

5. The work of and the Extraordinary Chambers in the Courts of Cambodia.\footnote{The work of the Extraordinary Chambers in the Courts of Cambodia has been addressed in accordance with Law on the Establishment of the Extraordinary Chambers, with inclusion of amendments as promulgated on 27 October 2004 (NS/RKM/1004/006).}

An example of the work of international criminal tribunals is the work of the International Criminal Court which has been addressed under the Rome Statute of the International Criminal Court. This Statute has dealt with the issue of remote court appearances on two occasions. Article 63 of the Statute, which is entitled ‘trial in the presence of the accused’, states in paragraph two that:

‘If the accused, being present before the Court, continues to disrupt the trial, the Trial Chamber may remove the accused and shall make provision for him or her to observe the trial and instruct counsel from outside the courtroom, through the use of communications technology, if required. Such measures shall be taken only in exceptional circumstances after other reasonable alternatives have proved inadequate, and only for such duration as is strictly required’.\footnote{Rome Statute of the International Criminal Court, (adopted by the United Nations Diplomatic Conference of Plenipotentiaries on the Establishment of an International Criminal Court on 17 July 1998, entered into force 1 July 2002) ISBN No. 92-9227-227-6, Art 63(2).}

Additionally, Article 69 of the same Statute, which is entitled ‘evidence’, in paragraph two states that:

‘The testimony of a witness at trial shall be given in person, except to the extent provided by the measures set forth in article 68 or in the Rules of Procedure and Evidence. The Court may also permit the giving of viva voce (oral) or recorded testimony of a witness by means of video or audio technology, as well as the introduction of documents or written transcripts, subject to this Statute and in accordance with the Rules of Procedure and Evidence. These measures shall not be prejudicial to or inconsistent with the rights of the accused’.\footnote{ibid, Art. 69(2).}

Secondly, the United Nations Convention against Transnational Organized Crime\footnote{United Nations Convention against Transnational Organized Crime (entered into force 29 September 2003) G.A. Res. 25, annex I, U.N. GAOR, 55th Sess., Supp. No. 49, at 44, U.N. Doc. A/45/49 (Vol. I) (2001).} has addressed the use of videoconferencing in two occasions. Article 18 of the Convention, which is entitled ‘mutual legal assistance’, states in paragraph 18 that:

‘Wherever possible and consistent with fundamental principles of domestic law, when an individual is in the territory of a State Party and has to be heard as a witness or expert by the judicial authorities of another State Party, the first State Party may, at the request of the other, permit the hearing to take place by video conference if it is not possible or desirable for the individual in question to appear in person in the territory of the requesting State Party. States Parties may agree that the hearing shall be conducted by a judicial
authority of the requesting State Party and attended by a judicial authority of the requested State Party*.\textsuperscript{1} Article 24 of the same Convention, which is entitled ‘protection of witnesses’, in its second paragraph, states that: ‘Providing evidentiary rules to permit witness testimony to be given in a manner that ensures the safety of the witness, such as permitting testimony to be given through the use of communications technology such as video links or other adequate means’.\textsuperscript{2}

Therefore, it is evident that videoconferencing has been utilised for remote court appearances in international criminal tribunals’ proceedings. This use also has been addressed in accordance with the United Nations Convention against Transnational Organized Crime, when this Convention has dealt with mutual legal assistance and protection of witnesses.

The technology of videoconference allows the remote participation for trial parties. This includes judges, witnesses and counsel.\textsuperscript{3} Hearing persons through using the technology of videoconferencing could be illustrated by the creation of a direct live sound and image connection among the litigant parties who are not existent in the same place. However, they can hear and see each other. It is noteworthy that hearing litigant parties is not the same as recording a hearing on video for the purpose of playing this recorded video on a later stage. This is because hearing in accordance with the technology of videoconferencing happens directly, whereas recording a hearing on video is mostly not broadcast directly.\textsuperscript{4} Hearing which is conducted via the technology of videoconferencing defers from the traditional hearing in the courtroom in the sense that in the hearing which uses the technology of videoconferencing not all litigant parties are present physically. It is to be noted that in the hearing conducted via the technology of videoconferencing, there is a right for the defendant to participate in the hearing in an active way. This participation enables the defendant to ask questions as well as to consult their lawyer using the technology of videoconferencing.\textsuperscript{5}

6. Evaluating the Use of Means of Modern Technology in the Criminal Justice System

This section aims to evaluate the use of means of modern technology in the criminal justice system by highlighting the benefits and challenges of such use.

6.1 The Benefits of Using the Means of Modern Technology in the Criminal Justice System

Using the means of modern technology in the criminal justice system has the following benefits:

1- Saving cost;\textsuperscript{6} It is believed to be cost-effective should technology will be used appropriately. Technology also becomes more affordable.\textsuperscript{7} In this regard, it has been stated that E-Trial costs less than traditional trial.\textsuperscript{8}

2- Helping witnesses; witnesses in the electronic trial might be allowed to give their testimony live through the technology of videoconferencing especially if they are not able to attend the trial in person due to their disability or illness.\textsuperscript{9} The use of videoconferencing could play a significant role for witnesses. This includes providing better protective measures for vulnerable witnesses, witnesses who would otherwise have to travel long distance to provide their testimony, as well as witnesses who have severe disabilities.\textsuperscript{10}

3- Providing practicality; in line with this practicality, the use of means of modern technology saves time in the trial.\textsuperscript{11} Additionally, the use of means of modern technology in the trial could help in decreasing defendants’ movement.\textsuperscript{12}

4- Providing convenience; to be more precise, with the electronic trial, the same documents can be seen from all

\textsuperscript{1} ibid, Art. 18(18).
\textsuperscript{2} ibid, Art. 24(2)(b).
\textsuperscript{3} M. R. McGuire and Thomas J. Holt, The Routledge Handbook of Technology, Crime and Justice (Taylor & Francis 2017) 527.
\textsuperscript{4} Van der Vlis, E.-J., ‘Videoconferencing in criminal proceedings’ (2011). In Braun, S. & J. L. Taylor (Eds.), Videoconference and remote interpreting in criminal proceedings. Guildford: University of Surrey 11, 12.
\textsuperscript{5} ibid, 21.
\textsuperscript{6} Steven Lubet and Cynthia Tape, Modern Trial Advocacy: Analysis and Practice, Canadian Fourth Edition (Wolters Kluwer Law & Business 2019) 322; Sheryl Jackson, ‘Court-Provided Trial Technology: Efficiency and Fairness for Criminal Trials’ (2010) 39 Comm L World Rev 219, 220, 236; Van der Vlis, E.-J., ‘Videoconferencing in criminal proceedings’ (2011). In Braun, S. & J. L. Taylor (Eds.), Videoconference and remote interpreting in criminal proceedings. Guildford: University of Surrey 11, 25; United Nations Office on Drugs and Crime (UNODC), ‘The technical and legal obstacles to the use of videoconferencing’ (2010) CTOC/COP/2010/CRP.2, Fifth session, Vienna, Para. 15.
\textsuperscript{7} United Nations Office on Drugs and Crime (UNODC), ‘The technical and legal obstacles to the use of videoconferencing’ (2010) CTOC/COP/2010/CRP.2, Fifth session, Vienna, Para. 15.
\textsuperscript{8} Jeremy Opolsky and Alexandra Shelley, ‘Electronic Trials’, online at: https://www.torys.com/insights/publications/2017/04/electronic-trials, accessed 18 April 2020.
\textsuperscript{9} Steven Lubet and Cynthia Tape, Modern Trial Advocacy: Analysis and Practice, Canadian Fourth Edition (Wolters Kluwer Law & Business 2019) 322.
\textsuperscript{10} Van der Vlis, E.-J., ‘Videoconferencing in criminal proceedings’ (2011). In Braun, S. & J. L. Taylor (Eds.), Videoconference and remote interpreting in criminal proceedings. Guildford: University of Surrey 11, 25.
\textsuperscript{11} Steven Lubet and Cynthia Tape, Modern Trial Advocacy: Analysis and Practice, Canadian Fourth Edition (Wolters Kluwer Law & Business 2019) 322.
\textsuperscript{12} Van der Vlis, E.-J., ‘Videoconferencing in criminal proceedings’ (2011). In Braun, S. & J. L. Taylor (Eds.), Videoconference and remote interpreting in criminal proceedings. Guildford: University of Surrey 11, 25.
people at the same time in the courtroom. Moreover, the use of means of modern technology could help in enabling the hearing of defendants residing abroad.

6.2 The Challenges of the Use of Means of Modern Technology in the Criminal Justice System

Using the means of modern technology in the criminal justice system has the following challenges:

1- Challenges regarding the use of means of modern technology; one of the challenges facing the use of technology in the trial is that experience and time are needed in order to make judges and lawyers comfortable familiar using such technology in the trial. However, this level of comfort could be achieved through practice and familiarity. In this sense, it is possible to argue that the simplest way to achieve this comfort level is to use the means of modern technology in trials. Judges and lawyers who are new to such technology need to familiarise themselves with the use of means of modern technology. Moreover, a litigation support firm may assist by providing services which include electronic courtroom coordination, daily issues’ assistant, and training and preparation for judges and lawyer. Another challenge that faces the use of means of modern technology in the trial is associated with the use of videoconferencing. In this regard, using videoconferencing in the court needs a familiarity with such use taken into consideration the rapid advancing of technology.

2- Challenges regarding technicality; using technology could be affected, sometimes, by technical failure. This will have resulted in time-wasting. Another technical difficulty is that using technology requires technical support staff to assist regarding any problems needed such technical support. This requires additional cost.

3- Challenges regarding criminal procedures; a direct confrontation would be better to show the witness’s body language.

7. Findings

Having reviewed the role of means of modern technology in the criminal procedures in Jordan, this article has reached the following findings:

1- Using the means of modern technology in criminal procedures needs certain legal requirements. Consequently, in order for the means of modern technology to be used in criminal procedures in Jordan, they should have a legal basis. This could be represented by legislations that regulate the situations in which the means of modern technology can be used. These legislations should also find a common ground between conventional means and modern means in criminal proceedings. The legal base for using the means of modern technology in criminal procedures could be found in the Jordanian Code of Criminal Procedure and the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures.

2. There is a noticeable and continuous development in the legal field. This might require certain changes in traditional criminal procedures by using more of modern technology’s means in the trial procedures. This development aims at achieving criminal justice and E-Justice.

3. The use of means of modern technology should not contradict with the guarantees of fair trial whether the ones stated in the Jordanian legislations or in the international conventions concerning the fair trial.

4. Electronic trial achieves certain goals such as maintaining privacy, saving time, and cost. However, it has been argued that running E-Trial requires additional expenses, such as the expenses of hardware and software, in addition to the expenses of running and setting up the electronic equipment used in the E-Trial. Additionally, it has been stated that the use of technology requires technical support staff who assist if any technical problems
arise, which then results in added costs. Videoconferencing could be used for different purposes. It could be used by judges, prosecutors, advocates, witnesses, the defendants and the defence counsel. The use of videoconferencing could be under normal conditions or in exceptional circumstances.

6. The outbreak of coronavirus (Covid-19) presents difficulties facing the procedures followed by criminal courts; as not all courts have the ability to use the means of modern technology in conducting remote court appearances procedures and not all people could attend such procedures. This will be resulted in the inability of these courts to operate in the way that they normally do.

8. Conclusion
The technological environment has changed the conducting of litigation today. This even includes traditional trials that now use technology commonly. Courts could benefit from the means of modern technology in trials. In fact, court efficiency and functions have been improved by technology. Appropriate implementation of the use of technology will have a positive impact resulting in shorter and more accurate trials compared to traditional proceedings.

This article has examined the role of means of modern technology in the criminal procedures in Jordan. In doing so, this article clarifies a number of expressions that link to the use of means of modern technology and the criminal justice system. Then, certain roles in relation to the use of means of modern technology have been examined in accordance with this article. Afterwards, the relationship between traditional and electronic trial concerning specific principles have been discussed. Subsequently, videoconferencing as a means of modern technology has been defined. Next, this article has evaluated the benefits and challenges accompanying the use of means of modern technology.

As this article has concluded its findings, a number of recommendations concerning the use of means of modern technology in the criminal justice system have emerged.

It has been recommended to firstly identify the needs regarding court management. Subsequently, these needs are met by ascertaining suitable technological solutions. This recommendation can be incorporated through accurate research to determine how much is needed to use the means of modern technology in criminal procedures.

It is recommended to provide proper technical training for judges, prosecutors, lawyers, legists, clerks or any other person whose work involves using the means of modern technology in the criminal procedures.

It is recommended not to use limited lists of the places in which the means of modern technology could be used or of the persons who can use the means of modern technology in accordance with the Jordanian Regulation of the Use of Means of Modern Technology in Criminal Procedures. This is because using these limited lists will result in restrictions being imposed on the use of means of modern technology.

It is recommended to produce guidelines for the effective handling of the use of means of modern technology in the criminal procedures.

It is recommended that courts should stay open during the coronavirus (Covid-19) pandemic for essential functions, emergency cases and the most serious criminal cases through using the means of modern technology to facilitate remote court appearances. However, these courts should comply with the public health and safety requirements and concerns.

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2 *ibid*, 321.
3 M. R. McGuire and Thomas J. Holt, *The Routledge Handbook of Technology, Crime and Justice* (Taylor & Francis 2017) 518.
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