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Legal implications of critical infrastructure protection; the experience of the Cyprus Cybercrime Center

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Abstract

Cyber related crime is an important aspect of Critical Infrastructure. The recent accession of Cyprus to the EU, its small size and its remoteness are important factors that have influenced its ability to characterize its CI's as well as create (rather harmonize) its legal background. The paper discusses Directive 2011/-93/EU on combating the sexual abuse and sexual exploitation of children and child pornography and its transposition into the Cyprus legal order. The Directive was incorporated in the Cypriot law with the Prevention and Combating of Sexual Abuse, Sexual Exploitation of Children and Child Pornography Law 91(I)/2014, as amended by Law 105(I)/2014 on Legal Aid, aiming at preventing, suppressing and combating crimes of sexual abuse and sexual exploitation of children, child pornography and solicitation of children for sexual purposes.

1. Introduction

This paper focuses on the legal aspects of cyber related Critical Infrastructure Protection. The paper concentrates in the legal basis used for the combat of cyber related offences in relation to Critical Infrastructure. This paper discusses Directive 2011/-93/EU and its transposition into the Cyprus legal order. The analysis is structured as follows. First we shall take a look at key aspects of the Directive. Crucial aspects of the transposing Cypriot law are examined. Subsequently problems of incompatibility between the Union Directive and the Cypriot law are identified. The analysis concludes with some reflections on the Directive and the transposing Cypriot law.

2. Directive 2011/93/EU

Directive 2011/-93/EU of the European Parliament and of the Council of 13 December 2011 on

combating the sexual abuse and sexual exploitation of children and child pornography, and replacing Council Framework Decision 2004/68/JHA (hereinafter 'the Directive'), was published on 17 December 2011 and the deadline for its transposition was 18 December 2013.

The Directive contains provisions concerning not only criminal action against the perpetrators of specific crimes, but also the prevention of those crimes and the protection of the victims.

2.1. Basic categorization of criminal offences and the link to Critical Infrastructure

Cyprus is one of the smallest (in size and population) Member States of the European Union. It is also a remote and isolated island. These facts have an impact in the application of the Critical Infrastructure Protection Directive of the EU of 2008. Understandably its small size and its remoteness (hence the inability to create knock-on effects to

other EU CI's) limit the characteristics of the possible CI threats. This paper focuses on the presentation of the legal tools that can be used in relation to cyber related crime in CI's. An additional element that should also be taken into account is the fact that Cyprus has only been a MS in the EU since 2004, having therefore to harmonize its legal background with that of the EU. The Directive provides for almost twenty criminal offences which can be categorized within the following four basic groupings presented below.

2.1.1. Offences concerning sexual abuse¹

The Directive stipulates that Member States must take the necessary measures to ensure that the following intentional acts, when committed without right, are punishable: causing, for sexual purposes, a child who has not reached the age of sexual consent to witness sexual activities, even without having to participate, shall be punishable by a maximum term of imprisonment of at least 1 year; causing, for sexual purposes, a child who has not reached the age of sexual consent to witness sexual abuse, even without having to participate, shall be punishable by a maximum term of imprisonment of at least 2 years; engaging in sexual activities with a child who has not reached the age of sexual consent shall be punishable by a maximum term of imprisonment of at least 5 years; engaging in sexual activities with a child, where: (i) abuse is made of a recognised position of trust, authority or influence over the child, shall be punishable by a maximum term of imprisonment of at least 8 years if the child has not reached the age of sexual consent, and of at least 3 years of imprisonment, if the child is over that age; or (ii) abuse is made of a particularly vulnerable situation of the child, in particular because of a mental or physical disability or a situation of dependence, shall be punishable by a maximum term of imprisonment of at least 8 years if the child has not reached the age of sexual consent, and of at least 3 years of imprisonment if the child is over that age; or (iii) use is made of coercion, force or threats shall be punishable by a maximum term of imprisonment of at least 10 years if the child has not reached the age of sexual consent, and of at least 5 years of imprisonment if the child is over that age, and finally coercing, forcing or threatening a child into sexual activities with a third party shall be punishable by a maximum term of imprisonment of at least 10 years if the child has not reached the age of sexual consent, and of at least 5 years of imprisonment if the child is over that age.

¹ Article 3, Directive 2011/93/EU

2.1.2. Offences concerning sexual exploitation²

The Directive contemplates that Member States must take the necessary measures to ensure that the following intentional acts, when committed without right, are punishable: causing or recruiting a child to participate in pornographic performances, or profiting from or otherwise exploiting a child for such purposes shall be punishable by a maximum term of imprisonment of at least 5 years if the child has not reached the age of sexual consent and of at least 2 years of imprisonment if the child is over that age; coercing or forcing a child to participate in pornographic performances, or threatening a child for such purposes shall be punishable by a maximum term of imprisonment of at least 8 years if the child has not reached the age of sexual consent, and of at least 5 years of imprisonment if the child is over that age; knowingly attending pornographic performances involving the participation of a child shall be punishable by a maximum term of imprisonment of at least 2 years if the child has not reached the age of sexual consent, and of at least 1 year of imprisonment if the child is over that age; causing or recruiting a child to participate in child prostitution, or profiting from or otherwise exploiting a child for such purposes shall be punishable by a maximum term of imprisonment of at least 8 years if the child has not reached the age of sexual consent, and of at least 5 years of imprisonment if the child is over that age; coercing or forcing a child into child prostitution, or threatening a child for such purposes shall be punishable by a maximum term of imprisonment of at least 10 years if the child has not reached the age of sexual consent, and of at least 5 years of imprisonment if the child is over that age; and engaging in sexual activities with a child, where recourse is made to child prostitution shall be punishable by a maximum term of imprisonment of at least 5 years if the child has not reached the age of sexual consent, and of at least 2 years of imprisonment if the child is over that age.

2.1.3. Offences concerning child pornography³

The Directive dictates that Member States must take the necessary measures to ensure that the following intentional acts, when committed without right, are punishable: acquisition or possession of child pornography shall be punishable by a maximum term of imprisonment of at least 1 year; knowingly obtaining access, by means of information and communication technology, to child pornography

² Article 4, Directive 2011/93/EU

³ Article 5, Directive 2011/93/EU

shall be punishable by a maximum term of imprisonment of at least 1 year; distribution, dissemination or transmission of child pornography shall be punishable by a maximum term of imprisonment of at least 2 years; offering, supplying or making available child pornography shall be punishable by a maximum term of imprisonment of at least 2 years; and production of child pornography shall be punishable by a maximum term of imprisonment of at least 3 years.

2.1.4. Solicitation of children for sexual purposes⁴

According to the Directive Member States shall take the necessary measures to ensure that the following intentional conduct is punishable: the proposal, by means of information and communication technology, by an adult to meet a child who has not reached the age of sexual consent, for the purpose of committing any of the contemplated offences, where that proposal was followed by material acts leading to such a meeting.

In addition, Member States must take the necessary measures to ensure that an attempt, by means of information and communication technology, to commit the contemplated offences by an adult soliciting a child who has not reached the age of sexual consent to provide child pornography depicting that child is punishable.

3. Child pornography on the web⁵

Pursuant to the Directive Member States shall take the necessary measures to ensure the prompt removal of web pages containing or disseminating child pornography hosted in their territory and to endeavour to obtain the removal of such pages hosted outside of their territory.

The Member States may take measures to block access to web pages containing or disseminating child pornography towards the Internet users within their territory. These measures must be set by transparent procedures and provide adequate safeguards, in particular to ensure that the restriction is limited to what is necessary and proportionate, and that users are informed of the reason for the restriction. Those safeguards shall also include the possibility of judicial redress.

4. Investigation and prosecution⁶

The Directive makes clear that the investigations into

or the prosecution of the contemplated offences must not be dependent on a report or accusation being made by the victim or by his or her representative, and that criminal proceedings may continue even if that person has withdrawn his or her statements.

The national authorities must also possess effective investigative tools, such as those which are used in organised crime or other serious crime cases. Those authorities must be equipped to be able to identify the victims of the contemplated offences, in particular by analysing child pornography material, such as photographs and audiovisual recordings transmitted or made available by means of information and communication technology.

5. The Cypriot transposing law

The Directive was incorporated in the Cypriot law with the Prevention and Combating of Sexual Abuse, Sexual Exploitation of Children and Child Pornography Law 91(I)/2014 (hereinafter 'Law'), as amended by Law 105(I)/2014 on Legal Aid. The Law aims at taking measures to prevent, suppress and combat crimes of sexual abuse and sexual exploitation of children, child pornography and solicitation of children for sexual purposes. At the same time, it seeks to protect and support the victims of the said offenses, the victimization of children, the creation of control and surveillance mechanisms promote international cooperation in the implementation of the measures provided for therein. It is useful to address key aspects of the Law and specifically the designated age of sexual consent, the planned crimes, the penalties imposed, consensual sexual acts and record keeping.

5.1. The age of sexual consent

The age of sexual consent is set in Cyprus at 17 years. That age does not coincide with that of becoming adult, i.e. 18 years. As a consequence a number of acts are not criminalized if they are not committed against a child of over 17 years of age (see for example the *solicitation of children for sexual purposes*).

5.2. Contemplated offences

The Law reproduces the categorization of offences found in the Directive. The following offences are therefore contemplated: *offences concerning sexual abuse, offences concerning sexual exploitation, offences concerning child pornography and the solicitation of children for sexual purposes*.

With respect to child pornography, the Law covers the acquisition, the possession, the distribution, the dissemination, the transmission, offering, supplying,

⁴ Article 6, Directive 2011/93/EU

⁵ Article 25, Directive 2011/93/EU

⁶ Article 15, Directive 2011/93/EU

making available and the production of child pornographic material as well as knowingly obtaining access by means of information technology to child pornographic material. It is also noted that Cyprus does not criminalize the production of child pornographic material, if such an act has been committed (1) between children of the age of thirteen and seventeen, (2) between children that are close to the age of sexual consent and “young adults” and (3) between an adult and his/her underage spouse.

It is also interesting to note that the Law defines ‘child pornography’ as including any material that visually depicts a child engaged in real or simulated sexual conduct; any depiction of sexual character of the sexual organs of a child; any material that visually depicts any person appearing to be a child engaged in real or simulated sexual conduct or any depiction of the sexual organs of any person appearing to be a child; or realistic images of a child engaged in sexual conduct or realistic images of the sexual organs of a child. The above definition is broader than that of the Directive.

5.3. Imposed penalties

Some interesting observations can be made regarding the penalties imposed by the Law in case of committing the contemplated crimes. First, the Law penalties are more severe than those which the Directive contemplates as a minimum ceiling. So, while the Directive sets a higher minimum of ten (10) years, under the Law the culprit faces a prison sentence ranging, depending on the offense, from ten (10) years to twenty five (25) years or even lifelong imprisonment.

Moreover, the severity of sentences is based on two criteria, namely the gravity of the offense and the age of the victim. Regarding the gravity of the crime, it is useful to examine the prison sentences provided for sexual abuse offenses. More specifically, inviting a child who has not reached the age of consent to witness sexual acts or display sexual acts is a crime punishable with imprisonment not exceeding ten (10) years. If the child finally witnesses sexual abuse or sexual abuse images, the offense is serious and the perpetrator is liable to imprisonment not exceeding fifteen (15) years. The maximum penalty is increased further and reaches twenty (20) years in the case of sexual intercourse with a child who has not reached the age of consent.

Regarding the age of the victim, different terms of imprisonment are provided for perpetrators depending on the age of the victim at the time of the offense. In particular, the Law distinguishes three age groups: (a) a child who has reached the age of sexual consent, i.e. between 17 and 18 years, (b) a

child who has not reached the age of sexual consent and is above 13 years, i.e. between 13 and 17 years, and (c) child under thirteen (13) years. The above age scaling applies to all sexual offenses of the Law and therefore three different penalties are provided for the same offense category. Thus in child prostitution, if the child is over the age of consent, the culprit faces imprisonment not exceeding fifteen (15) years. If the child is below the age of consent and has completed 13 years, the penalty reaches up to twenty five (25) years. Finally, if the child is under the age of thirteen (13) years of age when the crime was committed, the culprit is confronted with imprisonment for life.

In that regard it is stressed that the claim that the accused was unaware or did not believe that the victim was a child who had not reached the age of sexual consent is not an acceptable defence. The same applies to the claim of the accused that at the time of committing the act there was consent of the child who had not reached the age of sexual consent.

5.4. Consensual sexual activities

Cyprus has applied the option of consensual sexual activities. In particular consensual sexual activities as specified in the Law between two children who have not reached the age of consent and with similar age and similar degree of psychological and physical development or maturity, and which activities do not involve any abuse or violence or exploitation or coercion do not constitute a criminal offense under this Law. The same applies to cases of consensual sexual activities between an adult and a child who has not reached the age of consent, where the age difference between the two does not exceed three (3) years and which activities do not involve any abuse or violence or exploitation or coercion.

What is more consensual is that sexual activities do not constitute a criminal offense under the Law, if a marriage is concluded between the child and the person who committed the activity and if that activity does not involve any abuse or violence or exploitation or coercion.

The above exceptions do not apply in cases where any of the children involved are under the age of thirteen (13) years.

5.5. Record keeping and other measures

According to the Law, Police maintains a Record that contains information in relation to natural or legal persons convicted for any of the contemplated offenses, or for which notification is received that they have been convicted for such offenses abroad in accordance with the provisions of the Framework Decision 2009/315/ JHA or any international treaty

which Cyprus has signed. Any person intending to employ a person for professional or organised activities or voluntary activities, which involve regular contact with children, has an obligation to refrain from such employment of any person unless that person presents a certificate that he not included in the Record. Failure to comply with that obligation is a criminal offense, punishable by imprisonment not exceeding three (3) years or a fine not exceeding one hundred and seventy thousand Euros (€ 170.000) or to both such fine and imprisonment.

The Law also provides that, without prejudice to the rights of the defence of accused persons, the Cypriot law enforcement authorities shall take the necessary measures to ensure that in criminal investigations relating to any of the offences referred to in the Law interviews with the victim take place without unjustified delay after the facts have been reported either to the Social Welfare Services or to the law enforcement authorities; interviews with the victim take place, where possible, in premises designed or adapted for this purpose; interviews with the victim are carried out by or through professionals trained for this purpose or with their help, and by persons of the same gender; the same persons, if possible, conduct all interviews with the victim; the number of interviews with the victim is as limited as possible and interviews are carried out only where strictly necessary for the purpose of criminal investigations and proceedings; the victim may be accompanied by his or her representative who is appointed on the basis of the present Article or, where appropriate, by an adult of the child's choice, unless a reasoned court decision has been made to the contrary in respect of that person.

It is also contemplated that the involved services shall take all necessary measures within their powers, to assist and support children who are victims in the short and long term, within the framework of their physical and psychosocial rehabilitation, following an individual assessment of the personal circumstances of the child, taking due regard of his views, depending on the age, mental and cognitive condition, needs and concerns with a view to finding lasting solutions for the child. Additionally, the involved services are obliged to promote the regular training for officials likely to come into contact with children, victims of abuse or exploitation, including the police officers working on the front line, with a view to enabling them to identify victims and potential victims of sexual abuse or exploitation.

Finally it is worth noticing that the Ministry of Education and Culture and the Commissioner for Children's Rights Commissioner, in cooperation with the involved services shall organise awareness campaigns in the Republic regarding sexual abuse

and sexual exploitation of children, child pornography and solicitation of children for sexual purposes; issue pamphlets on sexual abuse and sexual exploitation of children, child pornography and solicitation of children for sexual purposes; inform and educate the mass media; and organise campaigns and take measures to educate and sensitise society to discourage the demand that fosters sexual exploitation and child pornography.

6. Compatibility issues

The analysis so far has focused on the EU Directive and the transposing Cyprus Law. It is interesting to look now at the success of the overall transposition of the Directive into Cypriot law. The transposition is satisfactory except from the following points:

Firstly, it is noted that Cyprus has not transposed the Directive on time. The relative deadline was December 18, 2013. The bill was tabled with the Cypriot Parliament on May 29, 2014, after the European Commission has already issued a letter of formal notice dated January 28, 2014. The Law and its amendment was finally adopted and took effect on 4 and July 11, 2014 respectively. Therefore there was a delay of about eight months.

Furthermore, the definition of child pornography in the Law is broader than that of the Directive. More specifically, while the Law refers to 'any material that visually depicts a child engaged in real or simulated act of a sexual nature', the Directive refers to 'any material that visually depicts a child engaged in real or simulated sexually explicit conduct'. Moreover, while the Law refers to 'any depiction for sexual purposes of the sexual organs of a child', the Directive refers to 'any depiction for primarily sexual purposes of the sexual organs of a child'. It is obvious that the Cyprus Law, unlike the Directive, incorporates into the conceptual scope of the term 'child pornography' elements which are not of explicit sexual nature or are not related to primarily sexual purposes. Since the term 'child pornography' affect the constituent elements of sexual offenses in the Directive, it is clear that the above-described conceptual expansion is contrary to one of the key objectives of the EU text, i.e. the introduction of a uniform definition of the contemplated offenses throughout the European territory.

Another problematic point of the Cyprus harmonisation concerns the consensual sexual activities, which, as already mentioned, are not subject to criminal punishment. On the one hand it is recalled that the Law exempts consensual sexual activities if, inter alia, marriage is concluded between a child and the person who carried out the act and if the action does not include any abuse or violence or

exploitation or coercion. On the other hand, the Directive refers to production, acquisition or possession of material involving children who have reached the age of sexual consent where the production and possession of such material has occurred with the consent of those children and only for the private use of the specific persons, insofar as the acts did not involve any abuse. It is clear that in the Law no mention is made to either cases where the child has reached the age of sexual consent, i.e. between 17 and 18 years, or to the use itself, as the Directive contemplates.

Another issue arises with the provisions of the Law regarding the seizure and confiscation of specific items. In particular, the Directive requires Member States to take the necessary measures to ensure that their competent authorities are entitled to seize and confiscate instrumentalities and proceeds from the offenses of sexual abuse, sexual exploitation and child pornography. The Law considers inter alia the offenses of sexual exploitation and child pornography predicate offenses and any income arising from the commission of these offenses are confiscated under the provisions of the Prevention and Suppression of Money Laundering Activities Law. It appears that the Law in violation of the Directive fails to include the abovementioned provision and the offenses of sexual abuse.

Problem also arises in the transposition of the provision for the protection of child victims in criminal investigations and proceedings. The Directive requires Member States to adopt the necessary measures to ensure that in criminal investigations of any of the sex offenses 'interviews with the child victim take place, where necessary, in premises designed or adapted for this purpose'. Unlike the above wording the Law provides that 'interviews with the victim are carried out, where possible, in premises designed or adapted for this purpose'. The necessity of the Directive in the version of Law is converted into an option resulting in the fact that in Cyprus the intended protection is not provided to the child victim, where this is not possible despite the fact that it may be necessary. That scenario clearly violates the letter and spirit of the Directive.

Improvement can also be achieved with regards to the provision dealing with measures against websites containing or disseminating child pornography. In particular, the Law provides that Internet providers who offer services on the Internet or access within the Cypriot territory, undertake when they gain knowledge or when they are informed by the concerned government agency of the existence of child pornography on any site, to take immediate appropriate action for the interruption of access by

Internet users. Breach of this obligation is a criminal offense. However the Law does not provide any substantive or procedural safeguard to prevent improper use of block access to websites by the Cypriot authorities.

Furthermore, the transposition in the Cyprus legislation of the provision concerning preventive or intervention measures is not free from trouble. The Directive requires Member States to take the necessary measures to ensure that persons who fear that they might commit a sexual offense can have access, where appropriate, to effective intervention programs or measures designed to evaluate and prevent the risk of committing such offenses. Within that context the Law entrusts the Social Welfare Services with the coordination, in cooperation with all the agencies concerned, of all the necessary preventive or intervention measures to reduce the commission of sexual offenses. Although legislative provision exist for the taking of such measures, in practice they have not been adopted and therefore the requirement of the Directive is not respected.

7. Conclusion

The foregoing analysis provides a series of useful conclusions, which need no recapitulation. We will focus our attention on two elements that are particularly interesting. The first concerns the Cyprus transposing Law, and the second the Directive itself.

On one hand, with the Prevention and Combating of Sexual Abuse, Sexual Exploitation of Children and Child Pornography Law 91(I)/2014, the Cypriot legislature attempts successfully to create a strong legal net for child protection against sexual offenses, which is further enhanced with the introduction of protection and support measures for children in case of victimisation. However, as is clear from the analysis, specific paragraphs of the Law could benefit from a significant improvement.

On the other hand, the possibilities offered by technology, in terms of committing, as well as the limitation of offenses envisaged, played a key role in the preparation and transfer of specific articles of the Directive. However the technology is a dynamic concept. The development of technology may offer new opportunities for offenders and new tools to combat crimes contemplated in the Directive. Therefore, even if neither the Directive nor the Cyprus transposing law do not refer to a specific type of technology, that should not lead to the wrong conclusion that there will be no need for any revision of the Directive and its transposing national legislation in the future in order to combat effectively child pornography and related offenses.

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