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Discussing the Legalisation of Recreational Cannabis Supply Chain: Will It Weaken Drug Trafficking Organisations?

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Abstract

Since the Netherlands' tolerance policy, which allows the purchase of cannabis at 'coffeeshops', has been linked to issues of public order and safety, as well as dangers made by drug trafficking organisations, there has been a long debate regarding legalising cannabis production and supply. It was so decided to launch an experiment with a restricted legal ('closed') cannabis supply chain for recreational use. This has international implications due to the ongoing illegal cannabis exports from the Netherlands, the importance of sharing knowledge about the effectiveness of cannabis policy, and the accumulation of evidence required to review and revise international treaties. We will detail and discuss the experiment's background, general approach, and design.

In this experiment, ten trusted cannabis growers are contracted to manufacture and supply cannabis to coffeeshops in intervention municipalities, with product quality control, legal enforcement against criminal interference, and preventive measures to decrease health hazards in place. The cannabis supply to coffee cafes in participating control municipalities will remain unchanged. A process study will determine if the chain of production to sale in the intervention towns is indeed closed. In a quasi-experimental study comparing intervention and control communities, the chain's effects on public health, cannabis-related crime, safety, and public annoyance will be assessed.

Earlier experiences with medical cannabis in the United States, as well as limited access and production models in Europe, have provided valuable insights. However, these amendments go far further, introducing a new area of cannabis policy. The absence of empirical knowledge on the effects of such measures presents a problem for policymakers. As a result, establishing future legal changes will require a thorough grasp of the specifics of each country. The literature comparing Colorado's and the Netherlands' models is limited. This study is based on a thorough analysis of the policies, regulations, and discussions related to criminal activities common to drug trafficking organizations. The research and analysis presented herein will provide policymakers with a better understanding of the laws and regulations governing legal cannabis in these jurisdictions, as well as highlight some potential impacts and challenges of cannabis reform that require further consideration to ensure public safety and health.

Keywords: recreational cannabis, supply chain, policy transfer

1. Introduction

This paper will explore whether the legalization of the recreational cannabis supply chain can effectively weaken or even completely replace drug trafficking organisations. The focus is on whether the ongoing experiment on the legalization of the recreational cannabis supply chain in the Netherlands is sufficient to deal with the "backdoor problem". It will use Colorado's recreational cannabis supply chain regulatory policy and its research to demonstrate the following three problems. First, preliminary screening of the risks that occur during the process within the recreational cannabis supply chain. Second, the problems that all parties will face in the

supply and regulatory progress of the recreational cannabis supply chain. Third, whether the Netherlands can transfer Colorado's recreational cannabis regulatory policy to its own country to deal with the "backdoor problem", and what the expected effect will be. This paper emphasizes that due to the complete closed loop being difficult to implement and the absence of a unified international environment means that the illegal market cannot be replaced. This also results in current experiments not having a sufficient evidence basis and policy direction to verify and control the legal supply of recreational cannabis nationwide.

2. Background

At present, there are 570 coffee shops in 102 cities in the Netherlands. The government introduced a policy to tolerate the sale of cannabis to consumers in coffee shops in the 1970s but did not issue a policy to permit the cultivation of cannabis or supply cannabis to coffee shops (Zaken, 2021). Therefore, both planting and transportation are illegal. However, public opinion has started a heated discussion on problems brought about by the tolerance policy and asked the government to take measures and ensure that these problems are resolved. For instance, the "back door problem", in the Netherlands, the supply of coffeeshops is often called the "back door". The policy of legalizing recreational cannabis consumption has turned coffeeshops into a complex middle ground between illegal markets and legal sales. With this situation only allowing the consumption but not planting or transportation of cannabis, this has created an unavoidable paradox. Hoorens (2021) points out that coffeeshops need to store supplies on the illegal market, which indirectly helps drug trafficking organisations become one of the main beneficiaries of this model. It has a negative impact on the stability and protection of public order and public health. In addition, in order to ensure an adequate supply, coffeeshops are forced to participate in criminal networks that sell cannabis, both nationally and internationally (Korf, 2020). From this point of view, a single policy aimed at legalizing cannabis consumption has little effect on drug trafficking organisations and may even expand criminal networks and aggravate the illegal drug trade. This result is attributed to the fact that the policy of legalizing cannabis consumption is only part of the regulatory market, not the entire supply chain. Essential characteristics of the closed cannabis chain in the Netherlands is divided into six parts, namely: production, distribution, sales, preventive measures, supervision, and law enforcement (Knottnerus et al., 2023). In order to reduce the problem of cannabis-related crime and its impact on society, the Netherlands' authorities decided to launch an experiment involving the cultivation of recreational cannabis. The experiment mainly involves regulated measures for the cultivation and sale of recreational cannabis. One of the purposes is to explore the impact of the regulated recreational cannabis supply chain on criminal behaviour and public order (Veiligheid & Ministerie van Volksgezondheid, 2018). When regarding other countries and regions that have legalized recreational cannabis, the most striking policy is undoubtedly Colorado's booming "cannabusiness". Many proponents of legalization regard Colorado's regulatory policy as a blueprint for reform (Hoorens, 2017; Obradovic, 2021).

Referring to Colorado's cannabis reform, the surveillance system that ensures that cannabis plants and their products are tracked is an effective measure in Colorado to protect local public health and prevent illegal trade. For example, Metrc, as a track- and-trace platform, allows regulators to see and trace information such as the cannabis' origin, processing, and chain of custody for production and marketing (Metrc, 2015). Gundersen (2021). Maine's former top regulator believes that such comprehensive tracking will help companies and governments achieve monitored cooperation and help regulatory projects make progress. In addition, the commercial regulatory model of the Colorado cannabis market can make the regulatory process transparent, as it has sufficient flexibility and system to reduce the personal and social harm caused by recreational cannabis. However, the commercial cannabis regulatory model cannot completely replace the existence of the illegal market. Subritzky et al. (2016) suggests that pricing and customer choice factors such as exorbitant taxes, illegal cross-regional distribution, consumer costs for entertainment, and other factors are prominent reasons why the illegal market will still exist. Although Colorado's legal market can crack down on illegal markets with lower prices and a larger number of offline pharmacies, it does not completely eliminate drug trafficking organisations. But the centre of business activity in the illegal market is biased towards out-of-state consumers. Meadows (2019) proposed that legalization produced the opposite result as expected. Briar Stewart (2018) also noted that Colorado drug trafficking organisations continued to grow despite more than 500 leisure cannabis pharmacies. The legalization of recreational cannabis provides them with a legal framework to cover up illegal operations. Therefore, drug trafficking organisations will grow cannabis in legitimate jurisdictions and smuggle them to areas that are still illegal at high prices to make high profits.

This paper argues that the legalization of the cannabis supply chain can have a positive impact on transferring the attention of domestic scattered consumers from the illegal market to the legal market. Smuggling activities aimed at countries or regions that are still illegal will become a new operational focus for drug cartels. Such a shift in tendency will pose a threat to the legitimate supply chain and fuel the development of drug trafficking organisations. The main risk is that the legalization of the supply chain includes the operation of drug trafficking organisations in the production, transport, and market of recreational cannabis. Since the illegal supply chain has

many of the same functional attributes as the legal supply chain, corresponding risks arise at the stage of recreational cannabis supply and supervision. (Basu, 2013).

3. Risks of Initial Screening Progress in Recreational Cannabis Supply Chain

The Netherlands' government stressed the need to strictly guard against the interference of criminal acts in the stages of production, distribution, and sales (Knottnerus et al., 2023). As the main actor responsible for production, distribution, and sales, the audit of growers is extremely important. This paper classifies qualification screening for applicants as the initial screening process of recreational cannabis. Strict entry standards can effectively screen growers. Thus, there is no risk of crime entering the legal recreational cannabis supply chain and prevents applicants associated with drug trafficking organisations from using legal protection secrets to support the cultivation and operation of drug trafficking organisations and illegal market activities. For example, discreetly ramping up cannabis cultivation and stocking more than the demand of legal coffeeshops.

Experimental rules set out eligibility requirements for cannabis growers. In addition to supporting materials such as business plans, it is worth noting that the experiment requires growers to complete the probity screening questionnaire as a necessary process for qualification (Ministry of Justice and Security and Ministry of Health, Welfare and Sport, 2019). This questionnaire is often used to review applicants that may present serious risk of abusing their legal credentials to commit criminal activity. Three possible conclusions could be drawn from the questionnaire, namely, "there is no risk that the desired licence will be misused for criminal activities", "the investigation may also reveal that there is a lesser degree of danger" and, "there is a serious risk that the licence will be misused for criminal activities". The government will decide whether to issue a license after reviewing the results of the questionnaire (Bitter, 2023). Although the experimental rules do not specify what standards applicants should meet, they should be required to meet the highest standards according to the risks faced by growing cannabis and the temptation of huge illegal profits. However, it is questionable that such an integrity examination plays an important role in examining the qualifications of applicants. Because, according to the current regulations, audit institutions can only verify their own data provided by the applicant, not the data regarding their past and present business model and practices (Bitter, 2023). Therefore, an integrity review does not guarantee that the applicant has not been exposed to the illegal trade of cannabis or the illegal market. It is not guaranteed whether the past trading experience of cannabis growers poses risks to the production process of legalising the cannabis supply chain. The applicant's possible secret trading experience may provide drug trafficking organisations with cultivation opportunities under the protection of the legitimate supply chain and development opportunities of drug trafficking organisations.

To reduce the pressure and potential risk of auditing growers who have no criminal experience during the initial supply phase, Colorado's approach can be used for reference. According to Kamin (2019), Colorado has incredibly strict barriers to entry for legal recreational cannabis. All licensed employees are required to undergo background checks, and, unlike the Netherlands, Colorado's background check program includes whether applicants have records of drug-related crimes. This can effectively reduce the risks and threats of operators. Adopting strict entry thresholds as the first screening link also provides guarantees for subsequent production, distribution, and sales activities. Growers unaffiliated with drug trafficking organisations play a crucial role in isolating the legal market from the illegal market. The good reputation of cannabis supply practitioners can increase consumers' trust in the legal market and reduce the flow of consumers towards the illegal market, thereby achieving the purpose of weakening drug trafficking organisations.

4. Risks of Supply and Supervision Progress in the Recreational Cannabis Supply Chain

Rather than simply relying on the legitimate supply chains to obtain resources such as cannabis plants, drug trafficking organisations have entire illicit supply chains of their own. Moreover, there are overlaps and intersections between the illegal supply chain and the legal supply chain, which puts pressure on supervising legal supply chains and cracking down on drug trafficking organisations. (Maihold, 2022). A high degree of autonomy and flexible coping methods can keep the illegal cannabis supply chain of drug trafficking organisations away from government regulation (Weisburd et al., 2020). In other words, the autonomy and coping methods of the illegal market show outstanding adaptability in the face of government supervision. Bouchard (2007) argues that the illegal drug market can be sustained by adjusting its structure and finding loopholes in the regulatory process to protect its components from attack. Moreover, there are significant differences in the supervision of the legal and illicit supply process of recreational cannabis, and these differences may have an impact on illegal supply activities, which is the modus operandi of drug trafficking organisations. Desroches (2007) demonstrates that the proliferation of illegal drug trade in the Netherlands is mainly affected by the openness of the market and the informal relationship between suppliers and customers.

Therefore, when considering the fight against drug trafficking organisations by opening regulated legal markets, attention needs to be paid to the supply process of cannabis plants and products, the completely closed nature of the market, and opposition to the use of imported cannabis plants and products. Currently, between twenty and

thirty percent of the cannabis sold in coffeeshops in the Netherlands is mainly imported from Morocco (Korf, 2020). This shows that the current Netherlands recreational cannabis market is not entirely cannabis plants and products provided by local growers. The Netherlands' experiment with a controlled recreational cannabis supply chain requires growers to proactively report where the cannabis is grown, quality controls and how coffee shops are being met (Ministry of Justice and Security and Ministry of Health, Welfare and Sport, 2019). Cannabis growers must understand that the work they are responsible for, such as planting, testing, packaging, and transportation, needs to be ethically and socially acceptable. Meanwhile, Spence and Bourlakis (2009) propose that supply chain responsibility is the consideration and response to the entire supply chain, in order to achieve economic benefits and other non-economic benefits represented by social benefits. The growers of the recreational cannabis supply chain are expected to transform their social responsibility into overall supply chain responsibility. Such a requirement is also expected to be overseen by the powerful regulators it works with. If there are no corresponding serious supervisory agencies, then once the supply chain responsibility of the grower is no longer clear, the supervisory body will not be able to monitor nor take action on potential illegal activities.

The Ministry of Justice and Security and Ministry of Health, Welfare and Sport (2019) states that a monitoring system will be put into use during the experiment. The focus of monitoring is on the grower group. Specific usage requires growers to record their own production and supply to coffee shops and other data, and that the recording process is actively monitored. However, this paper argues that monitoring should shift from growers to cannabis plants and products to ensure tightness throughout the supply chain. Because instead of relying on growers who cannot fully ensure that they can report without concealment, it is better to monitor every cannabis plant and product from the cultivation and production stages. For the monitoring practices of each cannabis plant, Colorado provides a relatively complete practice, which can be used as a reference. Pflueger et al. (2019) explained that to create a completely closed legal cannabis market, the Colorado Division of Cannabis Enforcement uses METRC, a system that is able to track all players and products throughout the whole supply chain. This system can recognise that when each plant reaches a viable plant state, the identification tag containing the unique batch number and growers' information will be affixed to each plant. In the subsequent links of harvest, processing, transportation, sale, and others, the identification tag is also updated and associated with the label in front of it. This provides new regulatory thinking for the Netherlands experiment. Using a unified tracking system ensures that no cannabis plants and their products will flow out of the legitimate recreational cannabis supply chain and into the illegal market. This not only facilitates the statistics and supervision of growers, transporters, coffee shops and regulators, but also helps to build a complete closed-loop supply chain.

5. Effects of Policy Transfer from Colorado to Netherlands to Deal with the "Back Door Problem"

In order to improve the effectiveness of policy instruments, policymakers often use policy transfer to expand available sources of information and practical experience (Dolowitz & Marsh, 2000). Based on the above analysis, the "booming cannabusiness" in Colorado is one of the effective commercialization models of recreational cannabis at present. Moreover, the policy direction of Colorado in regulatory processes of the recreational cannabis chain is worth fully exploring and drawing lessons from by the Netherlands' authorities and other stakeholders.

The recreational cannabis business model in Colorado was legalized in 2012 and succeeded in seizing a large portion of the state market from illegal growers and importers (Kleiman, 2017). As one of the countries that tolerate the sale of recreational cannabis, the Netherlands is a large supplier within the recreational cannabis market. According to Murphy et al. (2022), whilst not excluding figures from the illegal market, Netherlands sales are expected to exceed 225 million euros in 2023, with the market value expected to reach almost 500 million EUR by 2026. Therefore, a legal and strictly regulated recreational cannabis supply chain is the policy direction of the Netherlands to effectively divert consumers from the illegal market to the legal market. The currently regulated cannabis supply chain experiment has lagged behind Colorado in the international situation of allowing recreational cannabis to be legalized, so the policy transfer of the Colorado drug regulatory process can be taken into consideration. In order to have strong regulation of the entire supply chain, Colorado emphasizes attention to all key actors involved in the regulatory process. This should not only be the participation of policymakers but also the participation of interest groups representing the people affected by said policies. Stakeholder representatives such as exporters, non-governmental organizations, growers, and retailers are all active agents and capable supervised persons (Carnevale et al., 2017). To reduce the incentives of these capable agents from operating illegally, a stricter regulatory process is required even though this process may take away some of the agents' freedom to operate. Carnevale et al. (2017) also explained that the purpose of this strict regulatory process is to prevent criminal companies from benefiting from the legitimate cannabis industry and to prevent teenagers from being exposed to cannabis. This could complement the motivation of the Netherlands experiment. For example, the cultivation, production, and processing of recreational cannabis are strictly controlled by scientifically predicting supply and demand, preventing excess supply from exceeding

demand, causing excess legally grown cannabis to leave the regulated supply chain and become raw materials for drug trafficking organisations to flow into the illegal market.

When it comes to drug trafficking organisations, carrying out illegal activities with a high risk of being apprehended by law enforcement agencies is potentially disparaging. This feature determines that in the face of a new policy, drug trafficking organisations will choose to change their operating methods. This will cause said organisations to change their trading patterns so that their criminal process is not as easily detected during a legal background check (Fiedler & Specht, 2015). Using such changes like this to seek breakthroughs that can continue to make profits means that this is precisely what policies should focus on and suppress. The main issue of the "backdoor problem" in the Netherlands is that coffeeshops buy supplies from drug trafficking organisations to maintain operations. Although legitimate and regulated supply chains can ensure the supply of coffee shops by regulating production and transportation, this legalization can only be effectively controlled domestically. A similar situation also occurred in Colorado. Fiedler and Specht (2015) states that illegal markets and drug traffickers are growing rapidly in Colorado for legal reasons such as at-home cultivation and possession. According to the police, the legalization of recreational cannabis may lead to increasing trade in illegal market transactions. That is, legalizing the cannabis supply chain instead creates a protected environment for cannabis cultivation. After the legal background check, there may be clandestine ways to grow, sell, and transfer surplus crops to other illegal areas for high profits. From the perspective of international recreational cannabis smuggling, in the long run, the effectiveness of the Netherlands' controlled cannabis supply chain experiment in the fight against drug trafficking organisations remains to be solved.

6. Conclusion

The analysis of this paper shows that the legalization of the recreational cannabis supply chain helps to weaken drug trafficking organisations in domestic areas, and its international impact remains to be further investigated and studied. Strict regulatory processes help monitor all aspects of recreational cannabis from cultivation to distribution suggesting that the government should strive to exercise severe supervision in the legalization of the recreational cannabis supply chain. For example, while strictly monitoring the actions of growers, processors and coffeeshops stakeholders, governments should consider adding supervision of cannabis plants and products through a tracking system to ensure that there are no plants or products being moved out of the legal supply chain. Given these results, it is surprising that the controlled recreational cannabis supply chain experiment in the Netherlands did not consider the supervision of cannabis plants and products. One possible explanation is that governments and policymakers may have considered the difficulty of monitoring funding and finding a suitable full-tracking system. Although, this may cause obstacles to the monitoring process of recreational cannabis plants and products. The above conclusion is subject to some restrictions. For example, the current experiment cannot include data collection and analysis of drug trafficking organisations' separate supply chains. Legal and illegal markets have different supply chains for recreational cannabis. Therefore, the legalization of the recreational cannabis supply chain requires further research and verification as to whether it can completely replace the recreational cannabis provided by drug trafficking organisations.

References

Basu, G., (2013). The role of transnational smuggling operations in illicit supply chains. *Journal of Transportation Security, 6*(4), 315–328. doi:10.1007/s12198- 013-0118-y.

Bitter, M., (2023). Probity screening for Dutch business license | Blenheim. Blenheim — We take care of our clients. Available at: https://www.blenheim.nl/blog/probity-screening-for-dutch-business-license/ (Accessed: 24 April 2023).

Bouchard, M., (2007). On the Resilience of Illegal Drug Markets. *Global Crime, 8*(4), 325–344. doi:10.1080/17440570701739702.

Briar Stewart, (2018). Inside Colorado's booming black market for marijuana | CBC News. Available at: https://www.cbc.ca/news/world/colorado-marijuana-black-market-1.4647198 (Accessed: 24 April 2023).

Carnevale, J.T., Kagan, R., Murphy, P.J., et al., (2017). A practical framework for regulating for-profit recreational marijuana in US States: Lessons from Colorado and Washington. *International Journal of Drug Policy, 42*, 71–85. doi:10.1016/j.drugpo.2017.03.001.

Desroches, D.F., (2007). Research on Upper Level Drug Trafficking: A Review. *JOURNAL OF DRUG ISSUES*.

Dolowitz, D.P. and Marsh, D., (2000). Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making. *Governance, 13*(1), 5–23. doi:10.1111/0952-1895.00121.

Duijn, P.A.C., Kashirin, V. and Sloot, P.M.A., (2014). The Relative Ineffectiveness of Criminal Network Disruption. *Scientific Reports, 4*(1), 4238. doi:10.1038/srep04238.

Fiedler, M. and Specht, J., (2015). Colorado's Legalization of Marijuana and the Impact on Public Safety: A

Practical Guide for Law Enforcement. doi:10.13140/RG.2.1.4687.3766.

Giommoni, L., Berlusconi, G. and Aziani, A., (2022). Interdicting International Drug Trafficking: a Network Approach for Coordinated and Targeted Interventions. *European Journal on Criminal Policy and Research*, *28*(4), 545– 572. doi:10.1007/s10610-020-09473-0.

Gundersen, E., (2021). Erik Gundersen, Director, Maine Office of Marijuana Policy — Metrc. Available at: https://www.metrc.com/testimonial/erik-gundersen-director-maine-office-of-marijuana-policy/ (Accessed: 23 April 2023).

Hoorens, S., (2017). The Future of Cannabis in the Netherlands. Available at: https://www.rand.org/blog/2017/02/the-future-of-cannabis-in-the- netherlands.html (Accessed: 23 April 2023).

Hoorens, S., (2021). Green Light for Cannabis Legalisation in Germany Is Not a Clear-Cut Decision. Available at: https://www.rand.org/blog/2021/12/green-light- for-cannabis-legalisation-in-germany-is.html (Accessed: 23 April 2023).

Kamin, S., (2019). COLORADO MARIJUANA REGULATION FIVE YEARS LATER: HAVE WE LEARNED ANYTHING AT ALL? 96.

Kamin, S., (2023). What California Can Learn from Colorado's Marijuana Regulations.

Kleiman, M.A.R., (2017). Legal Commercial Cannabis Sales in Colorado and Washington: What Can We Learn? *Journal of Drug Policy Analysis*, *10*(2). doi:10.1515/jdpa-2015-0020.

Knottnerus, J.A., Blom, T., van Eerden, S., et al., (2023). Cannabis policy in The Netherlands: Rationale and design of an experiment with a controlled legal ('closed') cannabis supply chain. *Health Policy*, *129*, 104699. doi:10.1016/j.healthpol.2022.12.007.

Korf, D.J., (2020). *Coffeeshops in the Netherlands: Regulating the front door and back door*. 1st ed. Abingdon, Oxon; New York, NY: Routledge, 2020. |: Routledge. doi:10.4324/9780429427794.

Maihold, G., (2022). "Shadow supply chains and criminal networks." In Brombacher, D., Maihold, G., Müller, M., et al. (eds.) *Geopolitics of the Illicit*. Nomos Verlagsgesellschaft mbH & Co. KG. pp. 53–82. doi:10.5771/9783748935940-53.

Meadows, W. J., (2019). Cannabis Legalization: Dealing with the Black Market. *SSRN Electronic Journal*. doi:10.2139/ssrn.3454635.

Metrc, (2015). Track and Trace Technology: Hardware & Software | Metrc. Available at: https://www.metrc.com/track-and-trace-technology/ (Accessed: 23 April 2023).

Ministry of Justice and Security and Ministry of Health, Welfare and Sport, (2019). Rules for the experiment with a controlled supply of cannabis to coffee shops. Available at: https://www.government.nl/topics/drugs/documents/reports/2019/10/31/rules-for-the-experiment-with-a-controlled-supply-of-cannabis-to-coffee-shops.

Murphy, S., Pastori, B. and O'Brien, C., (2022). The European Cannabis Report: 7th Edition | Reports. Available at: https://prohibitionpartners.com/reports/the- european-cannabis-report-7th-edition/ (Accessed: 26 April 2023).

Myran, D.T., Staykov, E., Cantor, N., et al., (2022). How has access to legal cannabis changed over time? An analysis of the cannabis retail market in Canada 2 years following the legalisation of recreational cannabis. *Drug and Alcohol Review*, *41*(2), 377–385. doi:10.1111/dar.13351.

Obradovic, I., (2021). From prohibition to regulation: A comparative analysis of the emergence and related outcomes of new legal cannabis policy models (Colorado, Washington State and Uruguay). *International Journal of Drug Policy*, *91*, 102590. doi:10.1016/j.drugpo.2019.11.002.

Parker, K.A., Di Mattia, A., Shaik, F., et al., (2019). Risk management within the cannabis industry: Building a framework for the cannabis industry. *Financial Markets, Institutions & Instruments*, *28*(1), 3–55. doi:10.1111/fmii.12104.

Pflueger, D., Palermo, T. and Martinez, D., (2019). "Thinking Infrastructure and the Organization of Markets: The Creation of a Legal Market for Cannabis in Colorado." In Kornberger, M., C. Bowker, G., Elyachar, J., et al. (eds.) *Thinking Infrastructures*. Research in the Sociology of Organizations. Emerald Publishing Limited. pp. 233–253. doi:10.1108/S0733-558X20190000062015.

Spence, L. and Bourlakis, M., (2009). The evolution from corporate social responsibility to supply chain responsibility: the case of Waitrose. *Supply Chain Management: An International Journal*, *14*(4), 291–302. doi:10.1108/13598540910970126.

Subritzky, T., Pettigrew, S. and Lenton, S., (2016). Issues in the implementation and evolution of the commercial recreational cannabis market in Colorado. *International Journal of Drug Policy, 27*, 1–12.

Veiligheid, M. van J. en and Ministerie van Volksgezondheid, W. en S., (2018). Controlled cannabis supply chain experiment — Drugs — Government.nl. Available at: https://www.government.nl/topics/drugs/controlled-cannabis-supply-chain-experiment (Accessed: 23 April 2023).

Weisburd, D., Savona, E.U., Hasisi, B., et al. (eds.), (2020). *Understanding Recruitment to Organized Crime and Terrorism*. Cham: Springer International Publishing.

Zaken, M. van A., (2021). Background and design of the controlled cannabis supply chain experiment - Drugs - Government.nl. Available at: https://www.government.nl/topics/drugs/controlled-cannabis-supply-chain-experiment/background-and-design-of-the-controlled-cannabis-supply-chain-experiment (Accessed: 23 April 2023).