The Law of Crypto Assets

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certificates stipulating his or her position as the legally rightful heir and the actual death of the deceased.[72]

In the **United Kingdom**, it is recommended to include **lists of digital accounts and passwords to assert the deceased's will**, even though this might create conflicts with existing terms of service.[73] From a **Belgian** perspective, legal relationships with providers of digital services constitute contracts. According to Art. 1122 of the Belgian Civil Code, the deceased's **legal successor inherits every contract** the deceased formerly concluded, unless the contract's wording or nature prevents it. Thus, it is argued that digital service contracts and therefore digital assets can be part of the estate.[74] An accompanying right to information would only be consequent. In the end, in every jurisdiction with inheritance laws based on the principle of universal succession, these considerations should be transferable.

Since contracts with a token trading platform primarily grant property rights positions with almost no personal content, these **considerations can be transferred accordingly**. Since the heir obtains the contractual rights and obligations of the deceased and takes his or her place, he/she has a right of access to the account and consequently also a corresponding right to information.

The platform agreement might also state an obligation to **maintain permanent accessibility of the platform's website** for users. In many cases, however, intermediaries try to exclude the permanent accessibility in their general terms and conditions in order to avoid claims, e.g., for compensation, by users in the event of technical issues.[75] This includes access to the platform's structure and, particularly with off-chain intermediaries, the retrieval of account balances. 55

Additionally, the platform and especially off-chain intermediaries have extensive **obligations to cooperate**. Due to the fiduciary elements of the underlying contracts, the platform is obligated to manage its users' account balances. To ensure the actual execution of user contracts, it is imperative that the off-chain intermediary adjusts the account balances according to the contract concluded between users. 56

However, not only the platform, but also the **user** may be subject to additional contractual obligations. In this respect, the user must comply with the **restrictions and trading conditions** set forth by the trading platform in (permissible) general terms and conditions to enable correct transaction processing. But, as the website interface, i.e. the design of the homepage and its inherent restrictions, is usually adapted to the platform's general terms and conditions, users are mostly not able to diverge.[76] Additionally, the user must keep **his or her password secret** and is obligated to **provide correct data** upon registration on the intermediary's website.[77] 57

[72] From a Dutch perspective Berlee, 'Digital Inheritance in the Netherlands' [2017] *Journal of European Consumer and Market Law*, 256 (260).

[73] Harbinja, 'Digital Inheritance in the United Kingdom' [2017] *Journal of European Consumer and Market Law*, 253 (254 et seq.).

[74] Maeschaelck, 'Digital Inheritance in Belgium' [2018] *Journal of European Consumer and Market Law*, 37 (40).

[75] Thus Biallaß, 'Aspekte des Vertragsschlusses bei Internet-Auktionen', in Borges (ed), *Rechtsfragen der Internet-Auktion* (2014), 13 (19).

[76] Možina, 'Retail business, platform services and information duties' [2016] *Journal of European Consumer and Market Law*, 25 (26); Grundmann and Hacker, 'Digital Technology as a Challenge to European Contract Law' (2017) 13 *European Review of Contract Law*, 255 (274).

[77] Biallaß, 'Das Vertragsverhältnis zwischen Plattformbetreiber und Nutzer', in Borges (ed), *Rechtsfragen der Internet-Auktion* (2014), 61 (67 et seq.); for formal requirements upon registration from an Estonian perspective see Kull, 'The Adequacy of Existing Estonian Laws for the Platform Economy' [2016] *Journal of European Consumer and Market Law*, 52 (53).

D. Defaults and Breach of Contractual Obligations

58 As in any other legal relationship, the parties of a contract might not be able or willing to fulfil their obligations. Hence, defaults or other kinds of breach of contract may occur. Within the crypto-trade business, a variety of different legal contracts between different parties exist and, thus, may be breached. However, only those infringements resulting from the contractual relationships between the intermediaries and their users are of further interest in this chapter. As for contracts between users, claims against the platform operator can only be raised if the terms and conditions of the platform agreement contain any specific provisions such as **warranties or guarantees**.[78] Therefore, the trading platform generally is **not liable** for any **defaults in user to user relationships**.[79] Since users and platforms conclude at least one legal relationship, i.e. the platform agreement, an underlying contractual basis always exists. However, a distinction must be made between platform categories.

I. On-Chain-Intermediary

1. Trading Platform

59 As for centralised crypto-to-crypto and crypto-to-fiat-exchanges, there are no specific characteristics which need to be considered. In those cases, the platform is the contractual partner in user transactions. Therefore, general rules apply, and the platform is **liable for any contractual interruptions, defaults or a breach of contract**.[80] However, the situation differs for decentralised platforms. If users conclude contracts and transactions via the platform, the decentralised exchange gains the right to a **transaction fee**. In this case, it might be relevant to state the exact time upon which the intermediary is entitled to its fee. This is particularly relevant if a user contract concluded via the platform is **not executed**. Therefore, it is necessary to determine which service provided by the intermediary constitutes its right to the fee. If the transaction fee is granted just for any kind of matchmaking between users, the platform would be entitled with the conclusion of the user contract. If, on the other hand, the fee is paid for a successful transaction and, thus, as a fee for the platform's assistance in the process, the digital infrastructure or confirmations, it can only be demanded if these services are provided in a successful transaction. If the users fail to execute, the platform did not provide billable services.

60 This question needs to be resolved by **interpreting** the contracts concluded between the intermediary and the user. Generally, the platform will desire a claim for the transaction fee upon **effective conclusion of contract** between the users. The platform will regularly not be willing to accept the risk of the contract's execution, which depends

[78] Maultzsch, 'Contractual Liability of Online Platform Operators: European Proposals and established Principles' [2018] *European Review of Contract Law*, 209 (211); Možina, 'Retail business, platform services and information duties' [2016] *Journal of European Consumer and Market Law*, 25 (29) see also Busch, Schulte-Nölke, Wiewiórowska-Domagalska and Zoll, 'The Rise of the Platform Economy: A New Challenge for EU Consumer Law?' [2016] *Journal of European Consumer and Market Law*, 3 (8 et seq.), discussing additional criteria for a liability of the platform.

[79] Kull, 'The Adequacy of Existing Estonian Laws for the Platform Economy' [2016] *Journal of European Consumer and Market Law*, 52 (56); Twigg-Flesner, 'Legal and Policy Responses to Online Platforms – A UK Perspective', in Blaurock, Schmidt-Kessel and Erler (eds), *Plattformen* (2018), 139 (158).

[80] See in detail Tereszkiewicz, 'Digital Platforms: Regulation and Liability in the EU Law' (2018) *26 European Review of Private Law*, 903 (908 et seq.).

on third-party behaviour and hence cannot be influenced. As the effective execution of contracts with on-chain intermediaries also requires, by its very nature, the cooperation of the other network participants in the blockchain, the platform would agree to major uncertainties. Therefore, the claim for the transaction fee should regularly arise upon formation of contract between users.

2. Users

From a user's point of view, claims against the intermediary may arise in the event of **contractual infringements**. However, the user can only obtain claims against the platform if the claim itself arises from an actual legal contract with the intermediary. Therefore, the user only has additional claims against the intermediary if the default occurs in this contractual relationship, i.e. the platform agreement. In the case of default or breach of contract within any user (token exchange) contract, the user must adhere to his or her respective contractual partner. General claims against the intermediary are mostly unfeasible, unless additional contractual agreements, for example in the form of guarantees, have been made.[81] **61**

If the user frequents an on-chain-intermediary, who records the users' account balances with a public key on the blockchain, there is a risk that stored tokens might get lost due to a **cyberattack**. In this respect, the user might want to **claim damages** from the on-chain intermediary. But the user can only substantiate claims for damages if the intermediary did not take sufficient precautions against such cyberattacks. This might be the case if the platform had unsuitable or insufficient security measures. **62**

These cases show similarities to the (in-)famous cyberattack on a blockchain platform called '**The DAO**'. 'The DAO' was one of the most successful crowdfunding projects of all time. It was launched via the Ethereum blockchain and quickly raised funds in the amount of about 60 million EUR. However, 'The DAO' was hacked due to a breach in the programming and the investors' funds could only be secured with a so-called **hard fork**.[82] As a further example, the cryptocurrency exchange **Binance** shows that secondary crypto-trading platforms are not spared by hackers. Binance became the target of a cyberattack in early May 2019. In the process, the crypto exchange suffered a loss of 7,000 Bitcoins which equalled about 40 million USD at the time. The stolen Bitcoins had been stored in a so-called hot wallet, which is connected to the Internet.[83] **63**

Currently, no national jurisdiction stipulates special liability for damages caused by cyberattacks on blockchain networks.[84] Therefore, a solution must be found via the general **64**

[81] Regarding the discussion on extended liability of platforms Maultzsch, 'Verantwortlichkeit der Plattformbetreiber', in Blaurock, Schmidt-Kessel and Erler (eds), *Plattformen* (2018), 223 (224 et seq.); Maultzsch, 'Contractual Liability of Online Platform Operators: European Proposals and established Principles' [2018] *European Review of Contract Law*, 209 (211); Možina, 'Retail business, platform services and information duties' [2016] *Journal of European Consumer and Market Law*, 25 (29) see also Busch, Schulte-Nölke, Wiewiórowska-Domagalska and Zoll, 'The Rise of the Platform Economy: A New Challenge for EU Consumer Law?' [2016] *Journal of European Consumer and Market Law*, 3 (8 et seq.), discussing additional criteria for a liability of the platform.

[82] For more information about 'The DAO' and the respective cyberattack see Mehar and others, 'Understanding a Revolutionary and Flawed Grand Experiment in Blockchain: The DAO Attack' (2017) 21 *Journal of Cases on Information Technology*, 19 et seq.

[83] Cf. Böhm, 'Binance loses Bitcoin worth 40 million dollars', available at https://www.spiegel.de/netzwelt/web/binance-populaere-kryptoboerse-verliert-bitcoin-im-wert-von-40-millionen-dollar-a-1266307.html (accessed 30.3.2021); Bernegg, 'Crypto exchange hacked!', available at https://www.deraktionaer.de/artikel/aktien/krypto-boerse-binance-gehackt-die-wichtigsten-fragen-und-antworten-477580.html (accessed 30.3.2021).

[84] Weber, 'Liability in the Internet of Things' [2017] *Journal of European Consumer and Market Law*, 207 (209); for a legal criminal point of view Drăgan, 'Illegal Access to a Computer System from the Standpoint of the Current Criminal Code' (2019) 23 *Journal of Legal Studies*, 33–43.

provisions of the respective national law of obligations, contract or in some cases tort law.[85] In any event, the intermediary would be liable for user tokens lost through such attacks. Insufficient security measures generally lead to **breach of duty** and **liability for damages.** In practical terms, users' losses are usually replaced at least by the larger, reputable intermediaries. To hedge risks, explicitly of cyberattacks, Binance launched a so-called **Secure Asset Fund for Users** (SAFU) in July 2018, in which 10 % of its transaction fees are collected in a separate 'cold', i.e. offline, wallet. Those funds are deemed a **contingency reserve** to compensate losses explicitly caused by unforeseeable cyberattacks.[86]

II. Off-Chain Intermediary

65 In general, there are no substantial legal differences between on-chain and off-chain intermediaries with respect to further obligations. In these cases, **general legal rules for breach of contract** apply as well. Since the transactions are not tracked via blockchain, but only through bookkeeping of the intermediary, off-chain intermediaries do not have similar problems of unwinding contracts as on-chain intermediaries. If a user wants to withdraw from or terminate the contract, the tokens can be **refunded** without further ado. The off-chain intermediary is also contractually obliged to do so. In advance of a refund, the off-chain intermediary can demand proof of the (legitimate) withdrawal. But since the users interact exclusively via the platform, this will not be an obstacle: Either the platform's infrastructure provides a corresponding mechanism or communication between users can serve as proof.

66 From a user's perspective, claims against the platform may primarily arise as **claims for damages** due to the loss of user tokens. Although tokens only exist on a book-keeping level and are only stored as a booking status on the off-chain intermediary's website, the equivalent of the tokens allocated to the users is often actually held by the off-chain intermediary. Depending on the type of wallet chosen for these 'safety' tokens, involuntary losses are possible as well. For example, cold wallets can simply be stolen or lost. Additionally, hot wallets can be hacked. Depending on the specific contractual obligations of the platform agreement, the user could have claims for damages or an unlimited contractual redemption claim against the intermediary.

E. General Terms and Conditions

67 By registering on the platform, the user is forced to accept a comprehensive catalogue of **general terms and conditions.** These terms are pre-formulated and unilaterally provided by the platform operator. The user has no influence on their substance. Therefore, they qualify as contractual terms which have not been individually negotiated according to Art. 3 para. 1 and 2 of the GTC-Directive. They become part of the platform contract between user and intermediary and define the rights and obligations of the parties in more detail.

68 Lately, the EU released the Regulation on promoting fairness and transparency for business users of online intermediation services (**P2B-Regulation**).[87] The Regulation

[85] For an Indian perspective on cyberattacks Aravindakshan, 'Cyberattacks: a look at evidentiary thresholds in International Law' [2020] *Indian Journal of International Law*, available at https://doi.org/10.1007/s40901-020-00113-0 (accessed 30.3.2021).

[86] Cf. the description of SAFU, Binance-Academy Secure Asset Funds for Users (SAFU), available at https://www.binance.vision/glossary/secure-asset-fund-for-users (accessed 30.3.2021).

[87] Regulation (EU) No. 2019/1150.

not only reaffirms the need for terms and conditions drafted in **plain and intelligible language**. It also redefines additional obligations considering availability of said terms and conditions as well as the availability of information regarding any respective changes. Any non-compliant provisions are deemed null and void according to Art. 3 para. 3 P2B-Regulation.[88] However, the Regulation is **limited to platform-to-business relations**. Thus, the Regulation will not have a deep impact on secondary crypto trade. Nevertheless, the extension of a fairness control of standard terms to business to business relationships is a remarkable new step.[89]

69 The provisions of the general terms and conditions do not simply state the rights and obligations of the user or the intermediary. Rather, they set an additional framework for any future transaction concluded and implemented via the platform's infrastructure. These so-called framework agreements contain binding obligations which may result in the formation of further contracts, usually between the same parties, whose provisions are determined by the (firstly formed) framework agreement.[90] Therefore, the legal implications for any subsequent agreements between user and platform are determined by the platform's terms and conditions. This **'legal framework"** enables the intermediary to set all terms for any future contracts carried out and concluded in its ongoing business relationship with its user.[91]

70 Additionally, further provisions stated by the general terms and conditions **have direct impact** on user contracts. Although the platform's general terms and conditions accepted within the platform agreement are set between intermediary and user, they directly affect user's legal transactions (→ para. 57, 73). If user contracts or legally relevant behaviour of users' need to be interpreted, the platform's framework can be an indication and need to be considered when interpreting the behaviour of and contractual relationships between users.[92] Thus, the platform's provisions are indirectly included into these contracts, unless the users explicitly deviate from these regulations.[93]

[88] In more detail Busch, 'Towards Fairness and Transparency in the Platform Economy? A First Look at the P2B Regulation', in De Franceschi and Schulze (eds), *Digital Revolution – New Challenges for Law* (2019), 57 et seq.; Anagnostopoulou, 'The EU Digital Single Market and the Platform Economy', in Nikas (ed), *Economic Growth in the European Union: Analyzing SME and Investment Policies* (2020), 43 (48 et seq.); Busch, Dannemann, Schulte-Nölke, Wiewiórowska-Domagalska and Zoll, 'The ELI Model Rules on Online Platforms' [2020] *Journal of European Consumer and Market Law*, 61 (64 et seq.).

[89] Falkhofen, 'Car Data Platforms and the EU Acquis for Digital Services – How the digital transformation of the car interacts with EU data protection, cybersecurity and competition law' [2018] *Computer Law Review International*, 165 (169 et seq.).

[90] Wójtowicz, 'Law applicable to Distribution Contracts and Contracts of Sale–Relationship between Framework Agreement and Application Contracts' (2018) 14 *European Review of Contract Law*, 138 (143) with further references.

[91] Maultzsch, 'Contractual Liability of Online Platform Operators: European Proposals and established Principles' [2018] *European Review of Contract Law*, 209 (211); Grundmann and Hacker, 'Digital Technology as a Challenge to European Contract Law' (2017) 13 *European Review of Contract Law*, 255 (273 et seq.); from a UK perspective Twigg-Flesner, 'Legal and Policy Responses to Online Platforms – A UK Perspective', in Blaurock, Schmidt-Kessel and Erler (eds), *Plattformen* (2018), 139 (147 et seq.); Možina, 'Retail business, platform services and information duties' [2016] *Journal of European Consumer and Market Law*, 25 (26).

[92] Similar Zumbansen, 'Contracting in the Internet: German Contract Law and Internet Auctions' (2001) 2 *German Law Journal*, E1, marg. 6 et. seq.; for German rulings see BGH 15 February 2017 – VIII ZR 59/16 – (2017) *Neue Juristische Wochenschrift*, 1660 (1661); 10 December 2014 – VIII ZR 90/14 – (2015) *Neue Juristische Wochenschrift*, 1009 (1010); 24 August 2016 – VIII ZR 100/15 – (2017) *Neue Juristische Wochenschrift*, 468 (468 et seq.).

[93] For a detailed discussion on the effects of the general terms and conditions of a platform operator/intermediary in the user relationship Meyer, 'Einbeziehung und Geltungsbereich von AGB', in Borges (ed), *Rechtsfragen der Internet-Auktion* (2014), 36 (46 et seq.); see also Grundmann and Hacker, 'Digital Technology as a Challenge to European Contract Law' (2017) 13 *European Review of Contract Law*, 255 (274) and Engert, 'Digitale Plattformen' (2018) *Archiv für die civilistische Praxis* 218, 304 (344 et seq.).

I. Frequently Used General Terms and Conditions within Platform Agreements

71 Platform agreements between intermediary and user often introduce clauses which (should) lead to **limitations or exclusions of liability** for the benefit of the platform. These clauses might be regarded as unfair according to Art. 3 para. 1 GTC-Directive and its Annex I, para. 1 (a) and (b). Therefore, these terms are subject to legal considerations for general terms and conditions,[94] without any particularities. In this context, general terms and conditions may be used to limit or describe the intermediary's obligations in greater detail. Terms stating that the intermediary does not provide any advisory services were already popular and frequently used within crowdfunding schemes and are likewise implemented by token trading platforms.[95] Such terms are used to limit the platform's liability: If it is not obligated to provide a specific service, it cannot be held liable in case of 'breach of duty'. Whether these clauses can effectively limit the platform's obligations has not yet been conclusively determined by the courts. However, scholars doubt the lawfulness of this practice, especially if the platform creates expectations about a specific obligation.[96]

72 The intermediary's general terms and conditions will also often contain agreements on jurisdiction or the right to choose a jurisdiction. The validity of such clauses must be assessed in each individual case (→ § 3 para. 17 et seqq, 46).

II. General Terms and Conditions with Implication for User Contracts

73 As mentioned above, the general terms and conditions often contain provisions with **implications for the contracts** concluded exclusively **between users**. For instance, most platforms regularly determine which behaviour constitutes a binding offer. In practical terms, users will mostly not be able to deviate from these provisions. The interface of the intermediary's website is regularly programmed accordingly. Therefore, an arbitrary deviation from the intermediary's specifications is hardly feasible.[97]

[94] For the general admissibility of liability exclusions from a European perspective Loos, 'Standard terms for the use of the Apple App Store and the Google Play Store' [2016] *Journal of European Consumer and Market Law*, 10 (13); from a German perspective Grundmann, in *MüKoBGB*, § 276, para. 183 et seq. with additional references; see Schulze, in Dannemann and Schulze (eds), *German Civil Code (BGB)*, §§ 276 para. 12.

[95] Kull, 'The Adequacy of Existing Estonian Laws for the Platform Economy' [2016] *Journal of European Consumer and Market Law*, 52 (55); similar considerations apply to Airbnb, see Mak, 'Private Law Perspectives on Platform Services' [2016] *Journal of European Consumer and Market Law*, 19 (20 et seq.).

[96] Cf. on this problem in the context of crowdfunding Hoch, 'Crowdfunding, Bitcoins, Initial Coin Offerings – Rechtliche Herausforderungen für den Gesetzgeber im Zeitalter der Digitalisierung', in Husemann and others (eds), *Strukturwandel und Privatrecht* (2018), 215 (221 et seq.) with additional references; Spindler, 'Crowdfunding und Crowdinvesting – Sach- und kollisionsrechtliche Einordnung sowie Überlagerung durch die E-Commerce-Richtlinie' [2017] *Zeitschrift für Bankrecht und Bankwirtschaft*, 129 (135) with additional references; similar Meschkowski and Wilhelmi, 'Investorenschutz im Crowdinvesting' [2013] *Betriebs-Berater*, 1411 (1414); Sørensen, 'Private Law Perspectives on Platform Services' [2016] *Journal of European Consumer and Market Law*, 15 (18) for Uber, but transferable to this specific topic.

[97] Schweitzer, 'Digitale Plattformen als private Gesetzgeber: Ein Perspektivwechsel für die europäische 'Plattform-Regulierung'' [2019] *Zeitschrift für Europäisches Privatrecht*, 1 (3 et seq.); Možina, 'Retail business, platform services and information duties' [2016] *Journal of European Consumer and Market Law*, 25 (26); Hellgardt, 'Privatautonome Modifikation der Regeln zu Abschluss, Zustandekommen und Wirksamkeit des Vertrags' (2013) *Archiv für die civilistische Praxis* 213, 760 (774); Engert, 'Digitale Plattformen' (2018) *Archiv für die civilistische Praxis* 218, 304 (320).

Many general terms and conditions **prohibit the user to withdraw from or unwind** 74
exchange/purchase agreements. This is common practice in blockchain-related platforms and transactions. The technical reason for this frequently used term is the fundamental immutability of the blockchain: Once a transaction has been included in a block, it is no longer possible to retroactively delete it. The inclusion of a transaction on the blockchain is therefore permanent. Instead, a reversal (→ § 1 para. 14) can only be achieved by means of a second, opposing transaction, which in turn incurs transaction costs.[98]

To avoid these practical difficulties and additional costs, especially on-chain inter- 75
mediaries include provisions that **exclude the users' right of withdrawal**. However, such clauses can be problematic under the GTC-Directive if the user qualifies as a consumer. As a result, such terms can be deemed unfair according to Art. 3 para. 1 GTC-Directive. More specifically, a term shall be regarded as unfair if, contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer. The Annex of the GTC-Directive lists examples for unfair terms. For instance, a clause which enables the supplier of services to increase his or her price without giving the consumer the corresponding right to cancel the contract, is deemed void. The actual evaluation is subject to a case-by-case decision and deeply influenced by national law. Therefore, depending on individual circumstances, single terms might be non-binding for the user according to Art. 6 para. 1 GTC-Directive.

[98] In more detail to unwinding blockchain-based contracts Meyer, 'Stopping the Unstoppable: Termination and Unwinding of Smart Contracts' [2020] *Journal of European Consumer and Market Law*, 17 (20 et seq.).

§ 6
Data Protection

Literature: Article 29 Data Protection Working Party, 'Opinion 4/2007 on the concept of personal data' (20.7.2007), WP 136, 01248/07/EN, available at https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2007/wp136_en.pdf (accessed 26.8.2021); Article 29 Data Protection Working Party, 'Opinion 1/2010 on the concepts of 'controller' and 'processor'' (16.2.2010), WP 169, 00264/10/EN, available at https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2010/wp169_en.pdf (accessed 26.8.2021); Bechtolf and Vogt, 'Datenschutz in der Blockchain – Eine Frage der Technik – Technologische Hürden und konzeptionelle Chancen' (2018) 8 *Zeitschrift für Datenschutz*, 66; Berger, 'Blockchain – Mythos oder Technologie für die öffentliche Verwaltung?' (2017) 132 *Deutsches Verwaltungsblatt*, 1271; Blockchain Bundesverband, 'Blockchain, data protection, and the GDPR' (25.5.2018), available at https://www.bundesblock.de/wp-content/uploads/2019/01/GDPR_Position_Paper_v1.0.pdf (accessed 26.8.2021); Böhme and Pesch, 'Technische Grundlagen und datenschutzrechtliche Fragen der Blockchain-Technologie' (2017) 41 *Datenschutz und Datensicherheit*, 473; Commission Nationale Informatique & Libertés (CNIL), 'Blockchain – Solutions for a responsible use of the blockchain in the context of personal data' (2018), available at https://www.cnil.fr/sites/default/files/atoms/files/blockchain_en.pdf (accessed 26.8.2021); Drescher, *Blockchain Basics – A Non-Technical Introduction in 25 Steps* (Springer Science+Business Media, New York, 2017); Ehmann and Selmayr (eds), *Kommentar zur Datenschutz-Grundverordnung (DS-GVO)* (2nd edn, Munich, 2018); Erbguth, 'Datenschutz auf öffentlichen Blockchains' (2018), available at https://erbguth.ch/Erbguth_DatenschutzBlockchains.pdf (accessed 26.8.2021); Erbguth and Fasching, 'Wer ist Verantwortlicher einer Bitcoin-Transaktion? – Anwendbarkeit der DS-GVO auf die Bitcoin-Blockchain' (2017) 7 *Zeitschrift für Datenschutz*, 560; European Economic Area Joint Committee, 'Decision No 154/2018' (6.7.2018), available at https://www.efta.int/sites/default/files/documents/legal-texts/eea/other-legal-documents/adopted-joint-committee-decisions/2018%20-%20English/154-2018.pdf (accessed 26.8.2021); European Union Blockchain Observatory and Forum, 'Blockchain and the GDPR' (18.10.2018), available at https://www.eublockchainforum.eu/sites/default/files/reports/20181016_report_gdpr.pdf (accessed 26.8.2021); Feiler, Forgó and Weigl, *The EU General Data Protection Regulation (GDPR): A Commentary* (Globe Law and Business Ltd, UK, 2018); Finck, 'Blockchain and the General Data Protection Regulation' (2019), available at https://www.europarl.europa.eu/RegData/etudes/STUD/2019/634445/EPRS_STU(2019)634445_EN.pdf (accessed 26.8.2021); Finck, 'Blockchains and Data Protection in the European Union' (2018) 4 European Data Protection Law Review, 17; Gassner, 'Blockchain in EU E-Health – Blocked by the barrier of data protection?' (2018) 2 *Compliance Elliance Journal*, 3; Gola (ed), *Kommentar zur Datenschutzgrundverordnung (DS-GVO)* (2nd edn, Munich, 2018); Haffke, Fromberger and Zimmermann, 'Cryptocurrencies and anti-money laundering: the shortcomings of the fifth AML Directive (EU) and how to address them' (2019) 21 *Journal of Business Research*, 125, available at https://doi.org/10.1057/s41261-019-00101-4 (accessed 26.8.2021); Hofert, 'Blockchain-Profiling – Verarbeitung von Blockchain-Daten innerhalb und außerhalb der Netzwerke' (2017) 7 *Zeitschrift für Datenschutz*, 161; Janicki and Saive, 'Privacy by Design in Blockchain-Netzwerken – Verantwortlichkeit und datenschutzkonforme Ausgestaltung von Blockchains' (2019) 9 *Zeitschrift für Datenschutz*, 251; Krupar and Strassemeyer, 'Datenschutz auf der Blockchain – die Innovationsfeindlichkeit der DS-GVO' (2018) *Deutsche Stiftung für Recht und Informatik Tagungsband*, 343; Kühling and Buchner (eds), *Kommentar zur Datenschutzgrundverordnung (DS-GVO) und zum Bundesdatenschutzgesetz (BDSG)* (3rd edn, Munich, 2020); Kühling, Klar and Sackmann, *Datenschutzrecht* (5th edn, C.F. Müller, Heidelberg, 2021); Kuner, Bygrave and Docksey (eds), *The EU General Data Protection Regulation (GDPR) – A Commentary* (UK, 2020); Martini and Weinzierl, 'Die Blockchain-Technologie und das Recht auf Vergessenwerden – Zum Dilemma zwischen Nicht-Vergessen-Können und Vergessen-Müssen' (2017) 36 *Neue Zeitschrift für Verwaltungsrecht*, 1251; Pesch and Böhme, 'Datenschutz trotz öffentlicher Blockchain? – Chancen und Risiken bei der Verfolgung und Prävention Bitcoin-bezogener Straftaten' (2017) 41 *Datenschutz und Datensicherheit*, 93; Peters, 'Strafbarkeitsrisiken beim Betrieb einer Blockchain – Als Transaktionen verkleidete strafrechtlich relevante Daten' (2018) 21 *Multimedia und Recht*, 644; Quiel, 'Blockchain-Technologie im Fokus von Art. 8 GRC und DS-GVO – Ein Zwiespalt zwischen Innovation und unionalem Datenschutzrecht?' (2018) 42 *Datenschutz und Datensicherheit*, 566; Schmid, *Die Nutzung von Cloud-Diensten durch kleine und mittelständische Unternehmen – Eine datenschutzrechtliche Betrachtung der Auslagerung von Kunden-, Personal- und Mandantendaten* (Duncker & Humblot, Berlin, 2017); Schrey and Thalhofer, 'Rechtliche Aspekte der Blockchain' (2017) 70 *Neue Juristische Wochenschrift*, 1431; The Washington Post, 'Venezuela launches the 'petro', its cryptocurrency' (2018), available at https://www.washingtonpost.com/news/worldviews/wp/2018/02/20/venezuela-launches-the-petro-its-cryptocurrency/