

Access Denied. Technical Problems in the Virtual Shareholder Meeting from a Dutch, German and Swiss Perspective



by

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Virtual shareholder meetings may be disrupted or even hampered by technical issues. How should the chair of the meeting deal with this? And what consequences should such issues have for resolutions affected by them? This article draws from Dutch, German and Swiss law to analyse these questions and to advise legislators around Europe when implementing (or courts applying) a regulatory framework regarding virtual-only shareholder meetings. It is argued that suspension of the meeting may soon be legitimate, whereas reforms of the law on defective resolutions are necessary to avoid the risk of null or voidable resolutions.

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Note: Some parts of this article – par. III.5 notably – are inspired by *Olivier Oost/Koen van Vught*, “De digitale algemene vergadering. Hinweise aus Deutschland”, *Ondernemingsrecht* 2023/46, 331.

1. Introduction

The virtual-only shareholder meeting is on the rise. Many European legislators have been inspired by the positive experiences during the COVID-19 pandemic and are either considering or have already enshrined virtual-only meetings in law.¹ These meetings are seen as more accessible for shareholders, particularly those based abroad. They are also more accessible, cheaper, and more environmentally friendly to organise. Virtual meetings typically uphold the rights of shareholders as long as certain safeguards are in place. In 2023 and 2024, many DAX-listed German companies held their annual shareholder meetings entirely virtually.²

One of the issues to consider is how to deal with technical problems. What if a massive DDoS attack occurs, shareholders cannot reach the meeting portal, or some votes are not counted? At the start of the pandemic, it was feared that technical issues could render passed resolutions null or voidable. Companies might postpone shareholder meetings indefinitely out of *Anfechtungsangst* – a fear of contested resolutions.³ This led many legislators to limit or even exclude challenges to shareholder resolutions temporarily.⁴ After COVID-19, one could question whether such limitations should be implemented in permanent regulations of virtual meetings. Though not very common, technical problems

1 For an overview, see *Piotr Pinor*, “Impact of the COVID-19 Pandemic on Company Law. Shareholders’ Meetings and Resolutions”, *European Company and Finance Law Review* 2022, 100, 107–112; *Dirk Zetsche/Linn Anker-Sørensen/Roberta Consiglio/Miko Yeboah-Smith*, “Enhancing virtual governance: comparative lessons from COVID-19 company laws”, *Journal of Corporate Law Studies* 2022, 115, 116–118.

2 *Andreas Merkner/Friedrich Schulenburg/Philipp Elixmann*, “Beobachtungen zur Handhabung der neuen Regelungen zur virtuellen Hauptversammlung durch die DAX-40-Unternehmen”, *Die Aktiengesellschaft* 2023, 643, 644; “Virtuelle Hauptversammlungen dominieren auch 2024 im Dax”, *Handelsblatt* 25 April 2024.

3 Cf. *Ulrich Noack/Dirk Zetsche*, “(Virtuelle) Hauptversammlung mit und nach Corona. Überlegungen zur modernen Aktionärsteilhabe”, *AG* 2020, 721, 724. This ‘fear’ was expressly mentioned by the German legislator in March 2020. See *Bundestagdrucksachen* (Bulletin of the German Bundestag) 19/18110, 27. In a similar vein, the Dutch legislator in *Kamerstukken II* (Parliamentary Papers) 2019/20, 35 434, nr. 3, 9.

4 See *infra* par. 2 and 4.1 on the Dutch and German regulations. A less far-reaching limitation can be found in the Austrian ‘Gesellschaftsrechtliche COVID-19-Verordnung’ (§ 2 VI, *Bundesgesetzblatt* (Federal Law Gazette) II, Nr. 140/2020). This limitation – that deals expressly with technical issues leading to defective resolutions – does, however, also apply in ‘normal times’. See § 120 V of the Austrian *Aktiengesetz*.

do occur. Several of Germany's largest companies faced disruptions or even impairments at their 2023 annual shareholder meeting.⁵

This article explores the permanent regulation of virtual shareholder meetings. Two questions are examined. First, what should the chair of a general meeting do when a technical problem arises? Second, what are the implications for passed resolutions?

A comparative approach is taken to draw lessons relevant to other European jurisdictions. Lawmakers face the challenging task of balancing the protection of shareholders' rights, the company's interest in legally sound decision-making and society's interest in the legal correctness of resolutions.⁶ Dutch, German and Swiss law were selected. These jurisdictions have enshrined the virtual-only shareholder meeting in statutory law or plan to do so. All three impose roughly the same requirements on such meetings while having similar rules on the validity of resolutions in general. This makes a comparison fruitful, as these three jurisdictions each have their peculiarities in dealing with technical issues in the virtual shareholder meeting. The Swiss *Obligationenrecht* (OR) entails a special provision for the suspension of the meeting. The German *Aktiengesetz* (AktG) still expressly limits the annulment of resolutions passed in virtually held shareholder meetings. Both are included in the proposed changes to the Dutch *Burgerlijk Wetboek* (BW), but in a softer form.

For brevity, only entirely virtual shareholder meetings are addressed here – although the rules on hybrid meetings are usually very similar. The emphasis will be on public companies. The rules for private companies, associations and other entities vary, particularly in Germany.⁷

I begin with an overview of the virtual shareholder meeting in the three jurisdictions (par. 2). Next, I address which technical problems may occur in a virtual meeting, describing their possible impact on decision-making and analysis-

5 See A. Kröner, "Technische Probleme überschatten Commerzbank-Hauptversammlung", *Handelsblatt* 31 May 2023; T. Gürtler, "Das war schon an der Grenze des Zumutbaren", *Wirtschaftswoche* 30 June 2023.

6 See, inter alia, Markus Fehrenbach, Der fehlerhafte Gesellschafterbeschluss in der GmbH, 2011, p. 113–116; Philip Dornbach, Die aktienrechtliche Anfechtungsklage zwischen subjektivem Rechtsschutz und objektiver Rechtskontrolle, 2013, p. 77 et seqq; Koen van Vught, *Het besluit van de rechtspersoon*, 2020, p. 100–102.

7 In the Netherlands and Switzerland, the same rules apply for private limited companies. See the proposed art. 2:227a *Burgerlijk Wetboek* (Dutch Civil Code; BW) and art. 805 *Obligationenrecht* (Swiss Code of Obligations; OR) respectively. § 48 I *Gesetz betreffend die Gesellschaften mit beschränkter Haftung* (German Act on Limited Liability Companies) gives a different, very rudimentary provision on virtual shareholder meetings.

ing what the selected jurisdictions require the chair of the shareholder meeting to do if they appear (par. 3). Furthermore, I review the consequences after the fact, i.e. the (potential) invalidity of resolutions (par. 4). There is a brief synopsis at the end (par. 5).

2. Overview

2.1. Virtual Meetings post-Covid-19; the Mirror Principle

After the pandemic, both the German and the Dutch legislators vowed to enact the possibility of a virtual-only shareholder meeting in law. Such a meeting should approach or even mirror its old-school face-to-face pendant. Shareholders should be able to exercise their rights in a virtual meeting “equally and largely comparable”, as the German legislator puts it.⁸ In this respect, both legislators seek to build on pandemic experiences while raising the bar post-COVID-19. The German law on virtual meetings passed swiftly and came into force on 27 July 2022.⁹ In the Netherlands, a legislative proposal was submitted in January 2024 and will most likely pass parliament swiftly. The new law is expected to take effect in 2025.¹⁰

Meanwhile, the Swiss *Aktienrechtsrevision* had been debated for several years and was coincidentally adopted by the summer of 2020. As of 1 January 2023, Swiss companies may hold shareholder meetings virtually.¹¹ Shareholders should be able to actively participate in such a meeting, submit motions, and form their opinions on the basis of the discussions of the meeting, as is noted in the explanatory memorandum. However, broadcasting the meeting via video is not required, “even though participation in the meeting is therefore somewhat limited”.¹² One could argue that this implies the Swiss legislator does not adhere to the ‘mirror principle’ or even deviates from it. The legislator, however,

8 BT-Drucks. 20/1738, 14. Similarly the explanatory memorandum of the Dutch proposal, Kamerstukken II 2023/24, 36 489, nr. 3, p. 1-2 and 13.

9 *Gesetz zur Einführung virtueller Hauptversammlungen von Aktiengesellschaften und Änderung genossenschafts- sowie insolvenz- und restrukturierungsrechtlicher Vorschriften vom 20.7.2022*, BGBl. I, 1126.

10 See Kamerstukken II 2023/24, 36 489, nr. 2.

11 Obligationenrecht (Aktienrecht). Änderung vom 19. Juni 2020 (Aktienrechtsrevision 2020), Amtliche Sammlung des Bundesrechts (Official Compilation of Swiss Federal Legislation) 2020, 4005.

12 Botschaft vom 23. November 2016 zur Änderung des Obligationenrechts (Aktienrecht), BBl 2017, 399, 559. See *David Ballmer/Joel Fischer*, “Die hybride und virtuelle Generalversammlung”, *Zeitschrift für Gesellschafts- und Kapitalmarktrecht* 2023, 172, 180–181.

had a joint phone call in mind between shareholders in small companies.¹³ Non-simultaneous communication – such as chats, apps or emails – is most likely still not allowed. The ‘*Unmittelbarkeitsprinzip*’ or ‘principle of immediacy’, which finds strong emphasis in Swiss law, prescribes that shareholders should express their opinions, debate and interact in a joint meeting.¹⁴ Non-simultaneous meetings are inconsistent with that, as they do not equal in-present meetings in this regard.¹⁵

In sum, all three jurisdictions seek to replicate the in-present shareholder meeting online and let this ‘mirror principle’ guide their regulations for the virtual shareholder meeting. This seemingly makes sense. Unlike the hybrid meeting, shareholders have no choice but to participate online – and thus, the online meeting should grant them at least the same rights as its offline equivalent. At second glance, however, one could question why this would require the online shareholder meeting to look like its old-school variant taking place in indistinct congress halls. Why not facilitate different types?

As Swiss law does with its emphasis on immediacy, Dutch and German law are designed with a rather traditional view of the shareholder meeting in mind. The Dutch legislator implicitly refers to the 1968 landmark case of *Wijsmuller*, characterising the shareholder meeting as “the place where discussion, accountability and decision-making takes place”.¹⁶ And while his German counterpart goes as far as acknowledging that “the shareholder meeting is often not the one central moment for shareholder communication” – as shareholders get

13 Botschaft 2016 (fn. 12), 559.

14 *Benjamin Enz/Michael Hochstrasser*, “Technische Probleme bei der virtuellen Generalversammlung (Art. 701f revOR) – Teil 1”, *Schweizerische Juristen-Zeitung* 2021, 719, 725; *Jean-Pascal Stoll*, “Das neue Schweizerische Recht der virtuellen Generalversammlung im Lichte anderer Rechtsordnungen”, *Zeitschrift für juristische Weiterbildung und Praxis*, 30, fn. 10; *Nina Reiser*, “Neuerungen bei der Durchführung von Generalversammlungen”, *GesKR* 2020, 229, 230, 233; *Brigitte Tanner*, “Moderne Formen der Generalversammlung im revidierten Aktienrecht 2020”, *Schweizerische Zeitschrift für Wirtschaftsrecht* 2021, 589, 591. Cf. Bundesgericht (Federal Supreme Court) 17 December 1941, Entscheidungen des Schweizerischen Bundesgerichts 67 I 342, 347. See *Hans Caspar von der Crone/Thomas Crob*, “Die virtuelle Generalversammlung”, *Schweizerische Zeitschrift für Wirtschafts- und Finanzmarktrecht* 2018, 5, 13: “Das Unmittelbarkeitsprinzip soll sicherstellen, dass die Meinungsbildung in einem diskursiv-interaktiven Prozess erfolgt, in dem die Aktionäre und der Verwaltungsrat im gegenseitigen Informationsaustausch miteinander Beschlüsse fassen können.”

15 *Von der Crone/Crob* (fn. 14), 15; *Reiser* (fn. 14), 233; *Tanner* (fn. 14), 599; *Roland Müller/Fabian Akeret*, “Die Generalversammlung nach revidiertem Aktienrecht”, *SJZ* 2021, 7, 15.

16 Explanatory memorandum (fn. 8), 5; Hoge Raad (Supreme Court), 15 July 1968, *Nederlandse Jurisprudentie* 1969, 101 (*Wijsmuller*).

their information beforehand via direct, informal meetings with the board or investor days – he also stresses that the shareholder meeting should retain its function as the most important decision-making body and as a forum for investors.¹⁷ The shareholder meeting goes virtual but is not reformed. It thus stays either short and rather dull (which usually is the case in the Netherlands, at least in large-sized companies¹⁸) or very lengthy and quite often flooded with irrelevant or detailed questions (like in Germany¹⁹).

Apart from one Swiss novelty – the ‘*multilokale Generalversammlung*’ of art. 701a III OR, a meeting held in various locations simultaneously – the opportunity to rethink or improve the shareholder meeting was missed. Firstly, some features are only made available for the virtual shareholder meeting, whereas they could be equally useful when meeting in the old-fashioned, physical way. If shareholders could be required to submit their questions in advance of the virtual shareholder meeting, as German law allows for, why not extending this to the traditional shareholder meeting as well? Secondly, legislators should face the reality that the shareholder meeting as ‘centre of lively debates’ is long gone. For one thing, they might opt to facilitate a ‘shareholder meeting spread in time’ as is proposed in scholarly literature and is even already laid down in the German law for cooperative associations.²⁰

2.2. Prerequisites

Virtual shareholder meetings need a basis in the articles of association (art. 2:117a (1) BW; § 118a I AktG; art. 701d I OR). There is no specific majority requirement to opt in; a resolution to amend the articles may be passed by the shareholder meeting with the usual majority. By default, this implies a

17 BT-Drucks. 20/1738, 15. This was critically received in the doctrine. See *Tobias Tröger*, in: Ulrich Noack/Dirk Zetsche (ed.), *Kölner Kommentare zum Aktiengesetz*, 4th ed., 2023, § 118a AktG mn. 1, fn. 5, with further references. Cf. *Christian Gehling*, “Recht der Hauptversammlung – Reformbedarf erledigt?”, AG 2022, 800 et seqq.

18 Cf. *Hélène Vletter-van Dort*, “De aandeelhoudersvergadering: relikwie of innovatief forum voor dialoog?”, *Ondernemingsrecht* 2017/55, 315; *Rients Abma/Diana van Kleef/Niels Lemmers/Mieke Olaerts*, *De algemene vergadering van Nederlandse beursvennootschappen*, 2017, p. 215 et seqq.

19 *Julian Redeke*, “Virtuelle Hauptversammlungen börsennotierter Aktiengesellschaften ‘Virtual Insanity’”, AG 2022, 98, 101; *Klaus Hopt*, “The German Law on Virtual General Meetings 2022”, ssrn.com/abstract=4240280 (last accessed: 5 May 2025), 3.

20 See, inter alia, *Bas de Jong*, “Modernisering van de algemene vergadering: volledig virtueel en in de tijd gespreid vergaderen”, *Ondernemingsrecht* 2021/81, 488, 496–497 and § 43b I *Genossenschaftsgesetz*, that provides for a ‘Versammlung in gestreckten Verfahren’.

simple majority or, in Germany, a majority of three-quarters of the represented share capital (art. 2:130 (1) BW; § 179 II AktG; art. 703–704 OR).²¹ German law imposes two limitations. First, the authorisation for virtual meetings only lasts five years. If shareholder meetings are to be continued virtually after that, the articles must be amended again to guarantee shareholders still support this.²² Second, the authorisation to meet virtually cannot be restricted to specific resolutions (i.e. no ‘major resolutions’) or specific conditions.²³ One could question the necessity of these limitations. If the virtual meeting is based on shareholder legitimacy, why not let shareholders decide how long and to what extent the authorisation should reach? Dutch and Swiss law opt for flexibility in this regard.²⁴

The articles of association may either provide that shareholder meetings are held in virtual form or that the board is authorised to decide so.²⁵ If the latter option is implemented in the articles, the board could freely decide whether to convene physically or digitally. Under the Dutch proposal and Swiss law, the articles may, however, limit board competence, i.e. stipulating that 10 per cent of shareholders may ask for the meeting to be held in person.²⁶ Once again, German law seemingly takes a more rigid approach. Most scholars stress that the decision to meet digitally lies within the “Ermessen des Leitungsorgans”,

21 Usually, the articles of German *Aktiengesellschaften* allow for a simple majority. See *Jens Koch*, *Aktiengesetz*, 18th ed., 2024, § 118a mn. 8; *Nikolaos Paschos*, in: Martin Henssler (ed.), *beck-online.de.GROSSKOMMENTAR*, 2023, § 118a AktG mn. 29.

22 § 118a V AktG. See BT-Drucks. 20/1738, 27. *Gerald Regner/Timm Gaßner*, “Die neue virtuelle Hauptversammlung – ein Überblick“, *Recht Digital* 2022, 396, 398, find it uncertain whether a simple confirmation resolution (without meeting the requirements for an amendment of the articles) also suffices. The paragraph’s wordings indicate, though, that the five-year period commences when the amendment to the articles is filed at the Commercial Register. See *Tröger* (fn. 17), § 118a AktG mn. 19; *Paschos* (fn. 21), § 118a mn. 36.

23 BT-Drucks. 20/2653, 31. See *Paschos* (fn. 21), § 118a mn. 30–33; *Axel Hoppe*, “Die Transposition der virtuellen Hauptversammlung in die Satzung der AG”, *Neue Zeitschrift für Gesellschaftsrecht* 2023, 587, 589.

24 See the Dutch explanatory memorandum (fn. 8), 11–12; *Olivier Oost/Koen van Vught*, “De digitale algemene vergadering. Hinweise aus Deutschland”, *Ondernemingsrecht* 2023/46, 331, 332–333. The Swiss legislative text and accompanying *Botschaft* 2016 (fn. 12), 557 et seqq. presumably permit such flexibility, though not expressly. See *Dieter Dubs*, *Berner Kommentar*, 2023, § 12 mn. 15.

25 See § 118a I AktG and the Dutch explanatory memorandum (fn. 8), 30. Under Swiss law, other variants are possible since this is left entirely to the articles of association. See *Dubs* (fn. 24), § 12 mn. 15.

26 Explanatory memorandum (fn. 8), 30; *Botschaft* 2016 (fn. 12), 559 (“if the articles of association are silent, the board decides on the use of electronic means”).

meaning that the articles cannot bind the board.²⁷ Anyhow, when deciding on the shareholder meeting's format, the board must – in all three jurisdictions – act in the interests of the company, and it should take the interests of shareholders into account. This implies a decent level of board discretion, as courts will review cautiously and as no strict rules are in place, i.e. that meetings should be held virtually when many shareholders are foreign-based.²⁸

Next to the requirement of a basis in the articles, Swiss *Obligationenrecht* lists just one other prerequisite for a virtual shareholder meeting. Under art. 701d OR the board must designate an independent proxy for the convenience of shareholders unless the company is not listed and the articles state otherwise. Dutch and German law both sum up quite a few more preconditions. Art. 2:117 (2) BW stipulates that a virtual meeting requires that shareholders can be identified, vote, take note of the deliberations, and participate therein. These elements are all “conditions” for such meetings, as the explanatory memorandum states.²⁹ § 118a I AktG adds and specifies the shareholders’ right to propose, amend, ask questions, file statements before the meeting, speak, raise an objection concerning a resolution,³⁰ and access the ‘board message’ seven days before the meeting. Each is mentioned as “Voraussetzungen” or preconditions.

2.3. Participation

Starting from the premise that the virtual-only shareholder meeting should be equivalent to its in-present version, all three legislators seek to safeguard shareholders’ rights to participate. The approach taken is roughly similar. In all three jurisdictions, shareholders must be able to follow the meeting live, ask questions, speak, and vote. The extent of regulation differs, nevertheless. While – for instance – Dutch and German law require the transmittance of the meeting via video and sound (art. 2:117a (2) BW; § 118 I 1 AktG), Swiss law merely demands direct transmittance of the meeting (see *supra* par. 2.1).

27 Hartwin Bungert/Oliver Rieckers/Eric Becker, “Virtuelle Hauptversammlung 3.0 – Praktischer Umgang mit der Neuregelung”, *Der Betrieb* 2022, 2074, 2075; Paschos (fn. 21), § 118a mn. 31; Tröger (fn. 17), § 118a mn. 57; Ralph Schilha/Timm Gaßner, “Die neue virtuelle Hauptversammlung”, *Zeitschrift für Wirtschaftsrecht* 2022, 2357, 2358 et seq.

28 This point is solely addressed in the (extensive) German literature; see, inter alia, Paschos (fn. 21), § 118a mn. 39; Tröger (fn. 17), § 118a mn. 57.

29 Explanatory memorandum (fn. 8), 11.

30 Pursuant to § 245 I 1 AktG, shareholders need to raise an objection (“Widerspruch”) at the meeting in order to being authorized to bring an action of annulment.

Moreover, the need for specific provisions is apparently felt differently. The Dutch proposal gives provisions for the virtual meeting only if the more general provisions do not suffice. When it comes to the right to ask questions, to speak and to vote, the proposal falls back on the provisions for the shareholder meeting in general, as for these rights it is irrelevant whether the meeting takes place virtually or physically. On the contrary, § 118a and 130a AktG spell out virtual shareholders' rights. This is superfluous in some ways, though these provisions do make some alterations compared to those applicable to in-present meetings.

I now touch on some particularities. The first two are German. First, the board can oblige shareholders to file questions three days before the meeting (§ 118a I 4 in conjunction with 131 Ia AktG). The amount, length or duration of such questions may be limited appropriately (§ 131 Ib AktG). If filed in time, the board must publish the answer the day before the meeting. If it does, it may refuse to answer these or similar questions during the meeting (§ 131 Ic AktG). Shareholders have the right to ask follow-up questions during the meeting, even other shareholders than those that have filed the questions concerned (§ 131 Id-e AktG). The obligation to pre-submit questions could be explained by the desire to somewhat limit the duration of – from a comparative perspective – lengthy shareholder meetings. It does not go as far as during COVID-19, but one might question why limitations as these are still appropriate. They seem at odds with the aforementioned 'mirror principle'. Dutch and Swiss law do not permit the requirement of filing questions in advance. On the other hand, the German right to ask follow-up questions has a broad scope – as it includes questions concerning the answers given by the board – and presumably still gives ample opportunity for shareholder questioning.³¹

Second, § 118 II AktG demands board members to be physically present at the meeting. The legislator emphasises that shareholders should see the board on a stage,³² presumably to see board members' non-verbal responses, to ensure board members can fulfil their duties at the meeting and to stress that board members have to face the shareholders.³³ The same applies to members of the supervisory board. However, it is argued that they may sit in an adjoining room and be present virtually if the articles of association allow this.³⁴ Neither Dutch nor Swiss law requires board members to be present. Although there is merit in enabling shareholders to see the board, I doubt this implies that board

31 Hopt (fn. 19), 6.

32 BT-Drucks. 20/1738, 26.

33 Johannes Ahlswede, "Zur Anwesenheitspflicht der Mitglieder des Aufsichtsrats in der virtuellen Hauptversammlung", AG 2023, 14, 16; Tröger (fn. 17), § 118a mn. 62.

34 Ahlswede (fn. 33), 17–19; Paschos (fn. 21), § 118a mn. 63; Tröger (fn. 17), § 118a mn. 64.

members must be present in a physical room. And what about a virtual stage? The requirement of a physical stage might be counterproductive, as expressions of individual board members could be more challenging to see on a small device.³⁵

Third, the Dutch proposal refers to the existing law on hybrid shareholder meetings, stating that “a contribution [may] be required towards the additional costs incurred by the company for opening up the electronic way”. Such contribution should not, however, be excessive nor unnecessarily impede shareholders’ access to the meeting.³⁶ Arguably, this ‘meeting tax’ should not be allowed in any form, as each shareholder has the right to participate by virtue of his shares. The analogy with hybrid meetings fails, as shareholders cannot choose to be present physically in virtual-only meetings.³⁷

3. *Dealing with Technical Problems*

3.1. *Technical Problems*

Digital meetings require some digital platform – like Teams or Zoom but usually a designated portal – accessible for shareholders via browser, software or app. There needs to be an internet connection, devices, servers, and a system for logging in and identifying shareholders.³⁸ Problems may result in the transmission of information, speeches or votes being impeded in any way.³⁹ For instance, the platform is out of service, shareholders have problems logging in, no sound, etc.

Technical problems differ in scope, scale and sphere. They may occur due to the software used and the servers or devices used by shareholders. The *scope* is larger when problems arise with the former two. In spring 2023, TUI AG had to suspend its meeting for two and a half hours when the portal went down, and shareholders could neither view nor take part in the meeting. According to a statement on the company’s website, an outage occurred at a third-party pro-

35 *Paschos* (fn. 21), § 118a mn. 65; *Tröger* (fn. 17), § 118a mn. 62.

36 Explanatory memorandum (fn. 8), 38.

37 This choice was the main argument to allow for a contribution when electronic participation and, thus, hybrid meetings were enshrined in law. See *Kamerstukken II 2004/05*, 30 019, nr. 3, 7.

38 See in more detail *Enz/Hochstrasser* (fn. 14), 722 et seqq; *Günther Rensen/Raoul Hagens*, “Hybride AV heeft de toekomst”, *Ondernemingsrecht* 2019/88, 488; *Christopher Finn Walter*, *Die virtuelle Haupt- und Gesellschafterversammlung*, 2021, p. 179 et seqq.

39 Cf. *Enz/Hochstrasser* (fn. 14), 721.

vider.⁴⁰ On the other hand, shareholders at the 2023 Commerzbank AG meeting could view the livestream, but their contributions were barely audible and cut off repeatedly.⁴¹ In a similar vein, the *scale* of an irregularity may vary. Technical problems may affect all shareholders but could also hit some or even a few. The 2023 shareholder meeting of Siemens Energy AG proceeded smoothly, even though at least 130 shareholders could not log in.⁴²

Lastly, technical problems differ in *sphere*. As will be shown, this is where the selected jurisdictions put the emphasis. Technical problems could fall clearly within the sphere of shareholders – shareholders forget to charge their devices, fail to have them updated or rely on a shaky internet connection. Other irregularities fall plainly within the company's sphere: if at least 130 shareholders cannot log in, it is likely a company-level problem. One could also identify a third category: a massive DDoS-attack, power blackout or widespread internet downfall is rather to be considered an external factor than in the sphere of either the shareholders or the company.⁴³ It is worth mentioning that the boundaries between these spheres could be drawn subjectively or objectively. Even if a server breakdown is a case of force majeure for which the company is not at fault, one could still put this in the company's sphere by way of non-fault responsibility. And in which sphere is a portal problem only affecting shareholders who did not update their devices to the latest software version?

What should happen if technical issues arise? Next, I will consider when suspension (par. 3.2), adjournment (par. 3.3) and repetition (par. 3.4) of the shareholder meeting is required.

3.2. Suspension

While using electronic means is a board responsibility, it is up to the chair – commonly the supervisory board chair – to ensure the general meeting is conducted orderly.⁴⁴ This implies the obligation to monitor the IT systems, ensuring that shareholders can exercise their right to follow, participate and vote. Ideally, the board and the chair cooperate closely, instructing assisting person-

40 TUI, "Statement zur Hauptversammlung", 14 February 2023.

41 Kröner (fn. 5).

42 Gürtler (fn. 5).

43 Fischer/Ballmer (fn. 12), 184.

44 The Netherlands: *Gerard van Solinge/Marco Nieuwe Weme*, Mr. C. Assers Handleiding tot de beoefening van het Nederlands burgerlijk recht. 2. Rechtspersonenrecht. Deel IIB. NV en BV. Corporate Governance, 2019, mn. 68. Germany: *Hartmut Wicke*, in: Martin Henssler (ed.), *beck-online.de.GROSSKOMMENTAR*, 2023, § 129 AktG mn. 50. Switzerland: *Peter Böckli*, *Schweizer Aktienrecht*, 5th ed., 2022, § 8 N 323.

nel and external service providers. For these purposes, the chair tends to attend the meeting at the company's premises or the (physical) place at which it is being held, as is in Germany required under § 118a II AktG.

Dealing with a technical problem ultimately lies within the power of the chair, commonly the supervisory board chair. The chair decides on suspending the meeting or not. This decision needs no approval of the shareholder meeting itself, nor can the shareholder meeting overrule the chair's decision. The chair has inherent powers not derived from the meeting. He enjoys the discretion to take all measures that are necessary and reasonable.⁴⁵ All three jurisdictions start from these very same principles, regardless of whether the shareholder meeting takes place virtually or not.⁴⁶ As the German legislator has emphasised, the chair of a virtual meeting plays a "meaningful role".⁴⁷

The chair may thus suspend the meeting in the event of technical mayhem. Is he also required to do so? Swiss law starts from a firm position. Art. 701f I OR requires the meeting to be repeated if it cannot be duly conducted due to technical problems. It follows that the chair should suspend the meeting whenever a technical problem emerges since proceeding would be fruitless.⁴⁸ This is acknowledged in the explanatory memorandum, which states that the meeting must be suspended briefly (or even postponed) when a significant nationwide telecommunication disruption occurs.⁴⁹ The Dutch legislator puts it less sternly: "It is logical" that the chair suspends or even ends the meeting if he signals connection problems and it does not appear to be just a disruption of a shareholder's connection.⁵⁰ In Germany, no particular attention was paid to a (potential) duty to suspend. When mentioned, scholars tend to argue that a

45 Cf. Bundesgerichtshof 11 November 1965, *Neue Juristische Wochenschrift* 1966, 43, 44; BGH 9 October 2018, *NJW* 2019, 669, 674: "Der Versammlungsleiter hat für die sachgemäße Erledigung der Geschäfte der Hauptversammlung zu sorgen. Bereits aus dieser Aufgabenzuweisung folgt, dass der Versammlungsleiter alle Rechte hat, die er braucht, um die Hauptversammlung ordnungsgemäß abzuwickeln."

46 The Netherlands: *Van Solinge/Nieuwe Weme* (fn. 44), mn. 68; *Abma/Van Kleef et al.* (fn. 18), p. 201 et seqq; Explanatory memorandum (fn. 8), 17. Germany: *Wicke* (fn. 44), § 129 AktG mn. 50; *Dietmar Kubis*, *Münchener Kommentar zum Aktiengesetz*, 5th ed., 2022, § 119 AktG mn. 144; *Koch* (fn. 21), § 129 AktG mn. 23. Switzerland: *Böckli* (fn. 44), § 8 N 323, 327. It should be noted, though, that not all of these principles are uncontroversial. For instance, some scholars believe that the shareholder meeting is actually able to override the chair's decision to suspend (see *Böckli* (fn. 44), § 8 N 323, 327, fn. 1070; *Tröger* (fn. 17), § 119 AktG mn. 68).

47 BT-Drucks. 185/22, 34.

48 See *Walter* (fn. 38), p. 198; *Ballmer/Fischer* (fn. 12), 186.

49 Botschaft (fn. 12), 560.

50 Explanatory memorandum (fn. 8), 17.

duty to suspend only exists if the problem lies within the company's sphere – thus severely limiting this duty.⁵¹

The Swiss approach is underpinned by the assertion that shareholders are entitled to a meeting devoid of any technical problems. As the memorandum puts it, “shareholders have an indispensable right that votes and elections on agenda items are conducted formally correctly”.⁵² This may seem fair – ensuring shareholders enjoy their rights thoroughly – but it does not come without costs. Shareholder meetings might be held up disproportionately, prolonging the meeting *even if* technical problems are minor in scope and scale and *even if* these problems do not affect the proceedings at the meeting more than marginally. Unsurprisingly, some Swiss scholars seek ways of softening the bold approach envisioned by the legislator. Even though it is expressly noted in the explanatory memorandum that the company cannot rely on the proposition that technical problems did not influence the outcome of the votes,⁵³ they argue that the chair should indeed consider the proportionality of measures taken.⁵⁴

Undoubtedly, shareholders should be able to exercise their rights to the fullest extent possible. If technical problems do not allow for this, the chair should suspend the meeting to investigate and resolve these problems or – if it is an external problem – wait until they are gone. A brief suspension will be proportionate in any case, as this will not jeopardise the decision-making process and should have been prepared for by the company. This is only different if problems lie without doubt within the sphere of shareholders and only affect a negligible part of them. And even this cannot be considered reasonable in all circumstances: carrying on and taking important decisions without one of the three shareholders in a small company might soon be inappropriate.⁵⁵

Longer or further suspensions will be, in any case, proportionate (and required) if minimum requirements for a virtual meeting cannot be met and a considerable amount of shareholders are affected. The meeting is then, in fact,

51 *Matthias von Holten/Tobias Bauerfeind*, “Die digitale Revolution im Aktienrecht?”, AG 2015, 489, 492; *Jan Lieder*, “Die Bedeutung des Vertrauensschutzes für die Digitalisierung des Gesellschaftsrechts”, NZG 2020, 81, 91; *Kubis* (fn. 46), § 118 mn. 99, § 119 mn. 144. *Alexander Walch/Stephanie Häuslmeier*, Die “neue” virtuelle Hauptversammlung, Deutsche Notar-Zeitschrift 2023, 106, 111 think suspension is ‘precautionary recommended’. Cf. *Walter* (fn. 38), p. 179 et seqq., in particular p. 183.

52 *Botschaft* (fn. 12), 560.

53 *Botschaft* (fn. 12), 560.

54 *Dubs* (fn. 24), § 12 N 113; *Ballmer/Fischer* (fn. 12), 187; *Rolf Watter/Florian Schweigenhofer*, “Die Durchführung einer hybriden Generalversammlung in der Praxis”, 281, 290.

55 See *Ballmer/Fischer* (fn. 12), 187. Cf. HR 30 October 1964, *Jurisprudentie Onderneming & Recht* 2021/233 (Mante).

non-existent.⁵⁶ In other cases, it is up to the chair to weigh several factors.⁵⁷ First, the chair should consider the scale and scope of the technical issues. If only minor functionalities are affected – i.e., there is audio and video, but not wholly without interruptions – the chair may decide to continue the meeting. And if just a few minority shareholders of a large listed company are affected, a suspension would be somewhat exaggerated. Second, the chair needs to consider whether the company, shareholders or others have a pressing interest in a decision to be taken on the agenda items – the meeting should be allowed to proceed if, for instance, shares need to be issued urgently or if it is vital to appoint a new board member. Other factors may also be relevant, such as the likelihood of the problems being resolved in due time.

I do not think the emphasis here should be on the sphere of issues at hand. Apart from problems for which individual shareholders are to blame – such as non-updated devices or wacky internet connections – the sphere bears no relevance. Shareholders should be able to exercise their rights effectively, as the Swiss legislator stressed. If they cannot, the meeting should be suspended (or even adjourned), as issue-free decision-making should be guaranteed. Even if the company bears no blame at all, the company (the chair) could wait until the problems disappear. It is hard to see why the company would only be subject to a ‘best-efforts obligation’ in this regard, as German law and the Dutch proposal suggest.⁵⁸ Doing your best gets you no free pass to ignore technical issues. Different from hybrid meetings, shareholders cannot choose to participate offline to avoid potential technical issues. Moreover, the possibility of proceeding even with technical issues would distinguish virtual meetings substantially from offline meetings – which is at odds with the principle of equivalence as embraced in all three jurisdictions (*supra* par. 2.1). Notably, there is no justification for externalising technical issues to a service provider as German and Dutch law seem to allow. Whether services are delivered by the company

56 Cf. *Walter* (fn. 38), p. 201.

57 In a similar vein *Thomas Jutzi/Luca Yousef*, “Die Wiederholung hybride rund virtueller Generalversammlungen”, *GesKR* 2023, 292, 295: “Die Frage, unter welchen Umständen eine unmittelbare Wiederholung noch möglich und für die Betroffenen zumutbar ist, kann indes abstrakt nicht beantwortet werden. Es dürfte eine durch den Verwaltungsrat vorzunehmende Einzelfallbeurteilung erforderlich sein, ob anlässlich der jeweiligen Generalversammlung lediglich ein (kurzer) Unterbruch mit unmittelbarer Wiederholung oder doch ein Abbruch angezeigt ist, wobei bei letzterem ein Ersatztermin im Rahmen des Ermessens des Verwaltungsrates anzusetzen ist.”

58 In the Netherlands and Germany, this is argued analogous to the limited grounds for nullification of resolutions affected by technical problems (see *infra* par. 4.5). Cf. *Koen van Vught*, “Duitsland gaat digitaal”, *Weekblad voor Privaatrecht, Notariaat en Registratie* 2023/7439, 909, 911 and see *Walter* (fn. 38), p. 179 et seq.; *Kubis* (fn. 46), § 118 AktG mn. 91.

itself or by an external contractor is irrelevant from the shareholder perspective.

Neither should there be a 'causality requirement'.⁵⁹ There may well be a duty to suspend when it is unlikely or ruled out that the meeting outcome will be affected. Even though shareholders hindered by technical issues might not be able to influence the vote – as they constitute a minority and the majority will push it through anyway – they are entitled to participate in the meeting, to give their view and thus to exercise their lawful rights. There are two exceptions, though. If technical difficulties only occur during voting, the company may proceed if it can rule out that the votes of affected shareholders will be decisive. While it is important to safeguard the right to take part in the deliberations, there is no point in casting non-influential votes. Secondly, a suspension may be refrained from if the technical issue undoubtedly has no or only a very irrelevant effect on shareholder participation. All of this is consistent with the law on nullification in at least the Netherlands and Germany.⁶⁰

All in all, the Swiss approach seems the most attractive. Shareholder's rights should prevail. A brief suspension will soon be required, while further suspensions could only be refrained from if the technical issues at hand are minor in scale and scope or if decision-making is urgent. This may sometimes be impractical, but that is the price for meeting virtually. Next, it does not follow otherwise from the fact that the chair is granted discretion in taking all measures he considers reasonable and necessary. The chair must do so in compliance with the law, thus in conformity with the rights of shareholders granted by the law. He enjoys discretion to safeguard these rights, not to undermine them. Suspension will soon be reasonable and necessary in light of shareholders' rights.

3.3. Adjournment

Multiple or prolonged suspensions – such as the two-and-a-half-hour suspension at TUI's shareholder meeting – do not fall within what shareholders should reasonably expect. If the meeting is (expected to be) suspended for long periods or if it is impossible to provide shareholders with adequate informa-

59 See similarly *Walter* (fn. 38), p. 201; *Botschaft* (fn. 12), 560. Differently as to Swiss law *Ballmer/Fischer* (fn. 12), 187; *Enz/Hoschstrasser* (fn. 14), 727.

60 Swiss law is not unequivocal at this point. See *infra* par. 4.4. I would, nevertheless, think that even if strict causality were to be required for nullifying resolutions this would not apply for suspending the meeting. Generally, suspension is less invasive than nullification.

tion, the meeting should be adjourned.⁶¹ It is then clear that, at a later date, the meeting will resume or a new meeting will be held – which is substantially the same.⁶²

Contrary to suspension, whether the chair could decide on adjournment is not apparent. It is commonly understood that once the meeting has started, the chair must complete the agenda, and only the meeting itself can take items off it. As adjournment amounts to the same, the decision to adjourn would thus not be a matter for the chair but for the meeting itself, deciding by majority.⁶³

This line of thinking is not very convincing. Firstly, adjournment does not necessarily mean agenda items are retracted; it is more obvious that they should be discussed (further) when the meeting is resumed, as discussed below. Secondly, having the meeting decide on its adjournment would be highly impractical as the meeting is hampered by technical issues, and the shareholders might not be able to decide. It would also be undesirable to put the decision on adjournment in the hands of the unaffected shareholders, possibly a tiny minority. Arguably, the chair could be more trusted to decide a way that respects the rights of the shareholders affected by the technical mishaps, and there is no compelling logic to put the decision to adjourn somewhere else other than the decision to suspend.

It should thus be assumed that the chair is also authorised to adjourn the meeting when technical problems require this. When would this be the case? The chair should take the duration of suspensions into account. Multiple or lengthy suspensions – such as the two-and-a-half-hour suspension at TUI's shareholder meeting – are not to be reasonably expected by shareholders. The chair should adjourn if the meeting cannot be resumed within a reasonable time.⁶⁴ What is reasonable depends on the circumstances. One can think of the time of day, the time already spent, the information available to shareholders, and

61 See *Watter/Schweigenhofer* (fn. 54), 290.

62 Cf. *Van Solinge/Nieuwe Weme* (fn. 44), mn. 68; *Evert-Jan Breukink*, *De agenda en het agenderingsrecht bij vennootschappen*, 2022, p. 14.

63 Germany: BGH 30 June 2015, NZG 2015, 1227, 1230; *Wicke* (fn. 44), § 129 AktG mn. 57; *Kubis* (fn. 46), § 119 AktG mn. 145; *Koch* (fn. 21), § 129 AktG mn. 23. In the Netherlands, opinions differ. See *Breukink* (fn. 62), p. 14 who argues that only the meeting may adjourn, contrary to *Van Solinge/Nieuwe Weme* (fn. 44), mn. 68 and *Abmal/Van Kleef et al.* (fn. 18), p. 203 according to whom adjournment falls within the chair's competences. In Switzerland, the prevailing view seems to be that the chair may decide to adjourn contrary to the will of the majority only if extraordinary circumstances require so. See *Böckli* (fn. 44), § 8 N 327; *Dubs* (fn. 24), § 12 N 113. Cf. *Ballmer/Fischer* (fn. 12), 185 who infer the chair's competence to adjourn from art. 701f OR.

64 See in a similar vein *Van Solinge/Nieuwe Weme* (fn. 44), nr. 68; *Ballmer/Fischer* (fn. 12), 187; *Watter/Schweigenhofer* (fn. 54), 290.

the likelihood that the problems will be resolved quickly. It is conceivable that the chair would not want to adjourn lightly, given the practicalities involved with it. On the other hand, long and perhaps confusing blackout periods are undesirable. It is for the chair to consider these factors.

3.4. Repetition

Art. 701f I OR states that the meeting must be held again if technical problems arise during the shareholder meeting. This implies a duty to repeat all agenda items which could not be dealt with due to the disruption. The same duty applies when technical problems come to light after the meeting.⁶⁵ Decisions taken before the technical problems arose are not affected, as art. 701f II OR stipulates. If the meeting was suspended or adjourned, under Swiss law, it could be resumed without formalities. The meeting may be resumed at shorter notice than required by statutory law or the articles of association, provided the agenda remains unchanged. According to the explanatory memorandum, it is sufficient if the new meeting date is set so that the majority of shareholders are not excluded from taking part at the outset.⁶⁶

Neither Dutch nor German law are as detailed as Swiss law. A duty to repeat could nevertheless be inferred from the fact that technical difficulties could render decisions null or void. As the chair (as well as the board) is responsible for a proper decision-making process and should aim for valid decisions, the chair subsequently has a duty to repeat the process if it was influenced by technical issues also under Dutch and German law. It is unclear whether agenda items *must* be repeated; is it allowed to take items off the agenda after the meeting is suspended or adjourned? While the latter seems possible under Swiss law – despite the wordings of art. 701f OR⁶⁷ – the former could follow from the principle that the chair is bound to follow the meeting agenda. Furthermore, it is argued, at least under Dutch law, that as the resumed meeting is, in fact, a new meeting, items could be taken off by whoever has put them on the agenda.⁶⁸ Arguably, the middle road should be followed here. While there is no point in a strict duty to repeat, it is also undesirable that the board could retract agenda items just because technical problems have occurred (otherwise, it could not have done this). Hence, taking items off the agenda

65 *Ballmer/Fischer* (fn. 12), 185.

66 *Botschaft* (fn. 12), 560.

67 According to *Botschaft* (fn. 12), 560 the agenda may be altered, which could imply that items may be taken off the agenda. Swiss literature does not address this point.

68 See *Breukink* (fn. 62), p. 14.

after a suspension or adjournment needs a sound justification and should be reasonable given the circumstances.

Swiss law facilitates the possibility of resuming the meeting shortly after its adjournment since the regular period for convincing the meeting should not be observed. This avoids complex discussions on whether the meeting was adjourned or just suspended – this vague distinction is rendered irrelevant. It grants the board leeway in dealing with a suspension or adjournment. Given the circumstances, the board may consider resuming the following day or respecting the regular notice period (in Switzerland: 20 days).⁶⁹ First and foremost, the board should consider at what moment as many shareholders as possible would be able to participate in the repetition meeting. As is pointed out in Swiss literature, this follows from the board's duty of care concerning the shareholders – which duty exists notwithstanding the *option* to resume the meeting swiftly.⁷⁰ With this in mind, the Dutch and German legislators should consider allowing for repetition without obeying all formalities for convening a shareholder meeting. It is anyhow advisable to clarify this, as it is in doubt.⁷¹

4. *Technical Problems and the Validity of Resolutions*

4.1. *Nullity and Voidability in general*

If technical issues were not adequately dealt with or if such issues come to light after the meeting, this may affect the validity of resolutions passed by the shareholder meeting. This gives rise to some questions. First, it is not entirely clear if and what consequences technical irregularities have or should have. New laws on virtual meetings and their requirements do not perfectly fit in the pre-existing system of validity. Second, the nullity or annulment of resolutions may be limited since companies might not be in control and bear no blame for the occurrence of technical issues. Under German emergency legislation, for instance, resolutions passed in a virtual meeting were almost fully shielded

⁶⁹ Jutzi/Yousef (fn. 57), 296.

⁷⁰ Jutzi/Yousef (fn. 57), 296.

⁷¹ Although it is commonly argued in the Netherlands that, after adjournment, the meeting must be convened again with a newly made agenda, it is deemed possible to suspend for a longer period without re-do all formalities. See Breukink (fn. 62), p. 14; Abma/Van Kleef (fn. 18), p. 203. German literature is not elaborate on this matter, though I suspect formalities must be repeated after adjournment.

from nullity or annulment.⁷² The Dutch legislator took a similar but less far-reaching approach.⁷³ Should there still be limitations after COVID-19?

The three selected jurisdictions share roughly the same system of nullity and annulment. Dutch and Swiss rules on the matter could be traced back to German doctrine, though they have evolved since. Nowadays, articles 2:14–2:16 *Burgerlijk Wetboek* and 706–706b *Obligationenrecht*, respectively, could most certainly be considered better laws than the patchy, complex and rigid rules laid down in § 241–257 of the German *Aktiengesetz*. It is commonplace even in Germany that the German rules are in dire need of reform.⁷⁴ Anyway, it is fruitful to compare the three jurisdictions, which may inspire other jurisdictions that deal with defective resolutions similarly.⁷⁵

I start with an outline of the system in three aspects (par. 4.2). Connected to these aspects are three specific topics that relate to technical problems and the validity of resolutions: the possibility of resolutions being null and void (par. 4.3), the causality requirement (par. 4.4) and the limitation of annulment (par. 4.5).

4.2. Three Key Aspects

The system has three distinctive features that need consideration here. First, a distinction is made between nullity and voidability. Nullity renders a resolution invalid by operation of the law, so it has no effect from the outset. Voidability means a resolution is valid unless the court squashed it (which decision works retroactively). The action for voidability should be brought within a limited time frame (one month in Germany, two months in Switzerland, and

72 § 1 VII Gesetz zur Abmilderung der Folgen der COVID-19-Pandemie im Zivil-, Insolvenz- und Strafverfahrensrecht (COVMOG), BGBl. 2020 I, 569. See *Kristina Cyglakow*, Die virtuelle Hauptversammlung, 2021, p. 103–104; *Samuel Wunderlich*, Die Digitalisierung der Hauptversammlung, 2022, p. 213–217; *Walter* (fn. 38), p. 48–49.

73 Art. 11 (1) Tijdelijke wet COVID-19 Justitie en Veiligheid, Staatsblad (Official Gazette) 2020, 124. See *Koen van Vught*, “De geldigheid van besluiten onder de coronaspoedwet”, *Ondernemingsrecht* 2020/62, 338, 339–341.

74 See, among many others, *Jens Koch*, Empfiehlt sich eine Reform des Beschlussmängelrechts im Gesellschaftsrecht?, *NJW-Beil* 2018, 50; *Mathias Habersack*, “Ein hoffentlich bald erfülltes Versprechen: Reform des Beschlussmängelrechts!”, *NZG* 2023, 957.

75 Particularly Austria, Italy, Greece, and Spain. Cf. *Holger Fleischer*, “Reformperspektiven des aktienrechtlichen Beschlussmängelrechts im Lichte der Rechtsvergleichung”, *AG* 2012, 765–783; *Dominik Skauradszun*, Der Beschluss als Rechtsgeschäft, 2020, p. 29–39.

one year in the Netherlands).⁷⁶ Nullity is the exception, reserved for the most severe defects, whereas annulment is the more common sanction.⁷⁷

Disruptions due to technical problems will typically lead to the latter. Affected resolutions may be challenged on the ground that their making was contrary to the law, in particular when shareholders were hindered in exercising their rights vested in the law, such as their right to follow the live stream, to ask questions or to speak.⁷⁸ Next to this, the way a technical issue was dealt with at the shareholder meeting may constitute grounds for annulment. In particular, resolutions are voidable if the chair was aware of the issue and still wrongly continued the meeting (see *supra* par. 3.2).⁷⁹ Exceptionally, though, resolutions may be ruled null and void. This might be the case if the shareholder meeting has been severely disrupted and effectively has ceased to qualify as such. The range of this exception is unclear and will be explored further (*infra* par. 4.3).

A second key element is that a wide range of actors could invoke the invalidity of resolutions. A declaration of nullity may be requested by anyone,⁸⁰ while an action of voidability may be brought forward by – at least – the management board as well as every shareholder.⁸¹ Under Dutch law, the latter action is more broadly available to “anyone with a legitimate interest in the compliance with the requirement which has not been observed” (art. 2:15 (3)

76 Art. 2:15 (5) BW; § 246 I AktG; art. 706a I OR.

77 This finds emphasis particularly in Swiss and German law. See Böckli (fn. 44), § 8 mn. 622–624; Benjamin Enz/Michael Hochstrasser, “Technische Probleme bei der virtuellen Generalversammlung (Art. 701 f revOR) – Teil 2”, SJZ 2021, 778, 781; Patrick Schmidt/Matthias Müller, “Beschlussmängel bei der virtuellen Generalversammlung”, in: Alexandra Dal Molin-Kränzlin/Anne Schneuwly/Jasna Stojanovic (ed.), Digitalisierung – Gesellschaft – Recht, 2019, p. 261, 269–270; Kevin Müller, Die Einheit der Materie bei Generalversammlungsbeschlüssen, 2021, p. 161 and – for Germany – Fehrenbach (fn. 6), p. 70; Ingo Drescher, in: Martin Henssler (ed.), beck-online.de.GROSSKOMMENTAR, 2023, § 241 AktG mn. 48.

78 Art. 2:15 (1)(a) BW; § 243 I AktG; art. 706 I OR.

79 Cf. the Dutch case of Rechtbank Gelderland (District Court) 18 May 2022, JOR 2022/278 (Chainpoint). See also Ballmer/Fischer (fn. 12), 185.

80 Notwithstanding specific provisions regarding nullity proceedings (particularly § 249 AktG) it is possible for everyone with a certain interest to request a declaratory decision (“Feststellungsklage”). See art. 3:303 BW; § 256 Zivilprozessordnung (Germany); art. 88 Zivilprozessordnung (Switzerland).

81 See art. 2:15 (3) BW; § 245 AktG; art. 706 I OR. Under German law, a shareholder is only authorised to bring an action if he was present at the meeting – i.e. participated virtually – and raised an objection concerning the resolution and had this objection recorded in the minutes (§ 245 I 1 AktG). Under Swiss law, a shareholder that voted affirmative cannot bring an action (BGer 3 April 1973, BGE 99 II 57).

BW).⁸² The wide availability of the relevant actions suggests nullity and annulment aim to protect the legitimacy of decision-making, next to (or rather than) the applicant's position. This explains why, in principle, a single shareholder could render resolutions passed by 99 per cent in a listed company invalid for all. This shareholder does not just represent his own interests but serves as an 'unsalaried police officer' guarding the general interest of legally correct resolutions. One could question the desirability of this, as it could lead to trivial actions disproportionate to the interests of the company and others involved.⁸³ This debate is most relevant here, as will be shown (*infra* par. 4.4-4.5).

There is a third aspect to consider here. Even though the system of nullity and voidability is composed of 'dogmatic' concepts, the way it operates in practice is related to adjacent legal institutions, practicalities, and even path-dependent customs.⁸⁴ In the Netherlands, for instance, the vast amount of corporate litigation finds its way to inquiry proceedings brought before the 'Onderneemingskamer' (Enterprise Division) of the Amsterdam Appeal Court. This division is quick, specialised, and focused on solving 'the actual problem'. At the same time, the regular courts – where actions for nullity and voidance must be brought – are perceived as the opposite and are thus less popular. In Germany, on the other hand, nullity and voidability of resolutions are more litigious matters. The strictness of the law and the high prevalence of actions are still infamous, even though the problem of 'Berufskläger' (professional querulants) has diminished since 2009 due to changes in the law.⁸⁵ Unsurprisingly, the German legislator sought to curb the invalidity of resolutions possibly arising out of

82 See *Annette Klein Wassink*, *Toetsing van besluiten in het rechtspersonenrecht*, 2012, p. 74; *Van Vught* (fn. 6), p. 132 et seqq. Dutch law does not share the exceptions mentioned in the previous footnote.

83 Cf. *Van Vught* (fn. 6), p. 100–102; *Fehrenbach* (fn. 6), p. 113–116; *Dornbach* (fn. 6), p. 77 et seqq.; *Dirk Zetsche*, in: Ulrich Noack/Dirk Zetsche (ed.), *Kölner Kommentar zum Aktiengesetz*, 3rd ed., 2017, § 243 AktG mn. 6.

84 Cf. *Konrad Zweigert/Hein Kötz*, *Einführung in die Rechtsvergleichung auf dem Gebiete des Privatrechts*, 1996, p. 33–34: "Das methodische Grundprinzip der gesamten Rechtsvergleichung (...) ist das der *Funktionalität*. Unvergleichbares kann man nicht sinnvoll vergleichen, und vergleichbar ist im Recht nur, was dieselbe Aufgabe, dieselbe Funktion erfüllt. (...) Manchmal wird ein bestimmtes Bedürfnis durch Sitte und soziale Gewohnheit befriedigt; die Lösung hat nie eine faßbare rechtliche Form gefunden. Ähnlich liegt es, wenn das Bedürfnis nach einer bestimmten rechtlichen Regelung aus Gründen der fremden Sozialstruktur verneint wird."

85 See *Walter Bayer/Thomas Hoffmann*, "Beschlussmängelklagenmonitor 2021/2022", AG 2023, 141, 143. *Fleischer* (fn. 75), 779 calls it a 'German disease' and notes 'Berufskläger' are uncommon in Switzerland.

technical problems at virtual shareholder meetings, as will be elaborated on further (*infra* par. 4.5).

4.3. Nullity as the Exception

In exceptional cases, technical problems may lead not just to voidability but to nullity. That leaves resolutions hanging in the air indefinitely, uncertain whether someone will ask for a declaration of nullity or whether the shareholder meeting will ratify them (if possible). No causality is required, nor is nullity limited in any way as annulment is (see *infra* par. 4.4 and 4.5). A ‘nullity ghost’ wandering around promotes legal uncertainty, making companies more vulnerable to technical problems.⁸⁶ On the other hand, nullity may be proportionate if the meeting is severely disrupted.

There is room for nullity. As for Dutch law, resolutions contrary to the law or the articles of association are null and void except for defects “in the making of resolutions” (art. 2:14 (1) and 2:15 (1)(a) BW). As the exception is not strictly delineated, there is a grey area. It is, for instance, widely acknowledged that *fundamental* defects in procedure result in nullity, particularly the lack of a required majority or a quorum.⁸⁷ In addition, an irregular meeting is commonly understood as a ground for nullity – i.e. adopting resolutions outside a meeting without a basis in the articles of association as required by law.⁸⁸ Both categories might be applicable if shareholder participation is impeded due to technical issues. If many shareholders are affected, there may arguably be a ‘fundamental flaw’ or a failure to meet the prerequisites for having a virtual meeting (meaning the meeting does not exist as such and resolutions adopted in it are null and void). The explanatory memorandum suggests otherwise, but not in a comprehensive manner.⁸⁹ Next to this, nullity may be the consequence if a technical disruption causes a quorum to be no longer present. As per the explanatory memorandum, when a shareholder leaves the meeting prema-

86 *Lieder* (fn. 51), 89 et seqq; *Walter* (fn. 38), 56–58, 160–161.

87 *Maarten Kroeze*, Mr. C. Assers Handleiding tot de beoefening van het Nederlands burgerlijk recht. 2. Rechtspersonenrecht. Deel I. De rechtspersoon, 2021, mn. 304.

88 See *Bastiaan Assink/Wiek Slagter*, Compendium ondernemingsrecht. Deel 1, 2013, p. 833; *Van Solinge/Nieuwe Weme* (fn. 44), mn. 87–88; *Peter van Schilfgaarde/Jean Schoonbrood/Jaap Winter/Jan Berend Wezeman*, Van de BV en de NV, 2022, mn. 95.

89 Explanatory memorandum (fn. 8), 18. It says that if shareholders have not been able to participate or to vote due to a technical failure for which the company is responsible, this is considered a procedural defect possibly resulting in annulment. The memorandum illustrates this with a failure of the company’s server resulting in the loss of the video connection. So the memorandum does not explicitly exclude the grounds for nullity that are mentioned in-text.

turely – “whether or not because his connection was severed” – this does not affect the quorum.⁹⁰ It is unclear whether this remark is still valid if multiple shareholders lose connection due to widespread technical failure.⁹¹

Ambiguity also characterises Swiss law on this matter. Art. 706b OR presents a non-exhaustive list of grounds for nullity, some of which are open-ended. Resolutions shall be null and void, for instance, if they “disregard the basic structures of the company” (art. 706b 3 OR).⁹² No wonder the Swiss boundaries between voidability and nullity are somewhat vague. It is widely understood (and confirmed in case law) that serious procedural defects may result in nullity, but what these entail is not abundantly clear.⁹³ As for the virtual meeting, Böckli refers to non-shareholders breaking into the meeting and casting a decisive vote as well as – more generally – technical problems disrupting the orderly cause of the meeting “significantly and not only temporarily”.⁹⁴ If that is true, nullity is never far away. Especially the latter category seems at odds with established case law of the Swiss *Bundesgerichtshof*, according to which “nullity is to be assumed with restraint”.⁹⁵

Even though some grounds for nullity are phrased no less broadly, German law takes a stricter view. § 241 3 AktG, in particular, is interpreted as if provi-

90 Explanatory memorandum (fn. 8), 16.

91 Cf. *Tom Salemink/Claartje Bulten*, *De digitale algemene vergadering van aandeelhouders*, in: Corjo Jansen/Ben Schuijling/Irene Aronstein (ed.), *Onderneming en digitalisering*, 2019, p. 223, 247; *Oost/Van Vught* (fn. 24), 337.

92 Next to this, there is extensive debate in the Swiss literature on whether art. 701f OR entails a ground for nullity in itself. I will skip this debate here, as neither the legislative text nor the *Botschaft* gives any indication in this direction. See *Jutzi/Yousef* (fn. 57), 297 et seqq; *Ballmer/Fischer* (fn. 12), 186; and – distuingishly – *Schmidt/Müller* (fn. 77), 275 et seqq. I will also leave aside whether there may be a ‘Nicht-Beschluss’ (a non-resolution) in the event of gross technical failure, as this category is nowadays understood as being almost fully absorbed by the grounds for nullity and is therefore considered obsolete. See *Drescher* (fn. 77), § 241 AktG mn. 97–98; *Frank Schäfer*, in: Wulf Goette/Mathias Habersack (ed.), *Münchener Kommentar zum Aktiengesetz*, 5th ed., 2021, § 241 AktG mn. 11; *Van Vught* (fn. 6), p. 79 et seqq. In Swiss law, the category is seemingly only relevant for ‘Universalsammlungen’ as defined in art. 701 OR. Cf. *Böckli* (fn. 44), § 8 mn. 624; *Schmidt/Müller* (fn. 77), 277.

93 *Böckli* (fn. 44), § 8 mn. 624; *Müller* (fn. 77), p. 158.

94 *Böckli* (fn. 44), § 8 mn. 624. See similarly *Böckli* (fn. 44), § 8 mn. 659; *Schmidt/Müller* (fn. 77), 277 et seqq; *Müller/Akeret* (fn. 15), 20; *Enz/Hochstrasser* (fn. 77), 785. See also *Ballmer/Fischer* (fn. 12), 187 (): “For example, nullity could be assumed if the electronic means would not allow the participants of a virtual general meeting to submit motions and participate in the discussion.”

95 See, inter alia, BGer 15 August 2011, BGE 137 II 465; BGer 21 January 2021, 4A_98/2020.

sions that serve the public interest must be breached.⁹⁶ So, violating shareholders' rights is not enough for nullity, nor is it not fulfilling the prerequisites for a virtual meeting or not meeting a quorum. Grounds for nullity must be demarcated strictly. Nullity is not appropriate whenever shareholders can request the annulment of resolutions.⁹⁷ Even if a cyberattack corrupted the meeting and decision-making, falsified resolutions are not null and void. § 241 AktG does not entail a specific ground on this point, and the grounds mentioned cannot be interpreted broadly.⁹⁸

There is a lot to say in favour of the German approach. As the virtual meeting is to be treated equally, the risk of invalid resolutions should not be too high. Nullity promotes legal uncertainty since everyone may invoke it, the courts must apply it *ex officio*, and there is no time limit on it (see par. 4.1). In addition, there is no causality requirement (*infra* par. 4.4), and it is inconsistent to limit voidability – as German and Dutch law do (*infra* par. 4.5) – but to have extensive grounds for nullity. Anyway, voidability and nullity should be clearly demarcated. Relying on the 'fundamentalness' or seriousness as a decisive criterion does not suffice, nor is it clear when one could say that 'there is effectively no shareholder meeting' because of a technical issue.⁹⁹ In this regard, neither Dutch nor Swiss law come across as favourable.

It is principally justified to require shareholders to bring an action for annulment instead of having nullity around. This makes more sense than, as Dutch and Swiss law do, linking nullity to how grave the defect is that resolutions suffer from or to the number of shareholders affected by it.¹⁰⁰ It is vital, though, that shareholders can effectively contest resolutions – so they should be aware that certain resolutions were passed and need to be granted a reasonable time. Nullity is therefore justified if shareholders are not properly convened and if resolutions were not recorded as required by the law – as § 241 1–2 AktG prescribes. Preferably, though, the time limit for annulment only

96 § 241 3 AktG starts off by stating that resolutions are null and void if they run counter 'the nature of the stock company' – very similar to art. 706b 3 OR – but the emphasis is laid on what follows next (resolutions violating 'provisions that exclusively or primarily were instituted for the protection of the company's creditors or that otherwise serve the public interest'). See *Schäfer* (fn. 92), § 241 AktG mn. 49; *Drescher* (fn. 77), § 241 AktG mn. 226.

97 See *Schäfer* (fn. 92), § 241 AktG mn. 59; *Drescher* (fn. 77), § 241 AktG mn. 234–235, 237–250.

98 *Walter* (fn. 38), p. 189–190.

99 Cf. *Bertrand Schott*, *Aktienrechtliche Anfechtbarkeit und Nichtigkeit von Generalversammlungsbeschlüssen wegen Verfahrensmängeln*, 2009, § 11 mn. 23 et seqq.

100 See for the latter, inter alia, *Kaspar Theiler*, "Gedanken zur Zulässigkeit und Durchführbarkeit der virtuellen Generalversammlung de lege lata", *Aktuelle juristische Praxis* 2012, 69, 78.

starts to run after sufficient publicity was given to the resolution or if the shareholder in question knows – like art. 2:15 (5) BW arranges for. This solution does not require nullity.

All in all, nullity should be applied with restraint or not at all. Should there be an exception, though, for massive cyberattacks that result in false votes being cast? Applying only annulment seems problematic here: without a challenge, corrupted resolutions will live on without a way to remove them.¹⁰¹ Nevertheless, I do not see compelling reasons for an exception. It would be necessary to codify this exception as a ground for nullity, and doing so will be difficult without creating confusion and further legal uncertainty, as in the Swiss debate on art. 701f OR has proven.¹⁰² An exception for cyberattacks may not be needed anyway. In the event of such attacks, the board or the chair must and most likely will suspend or adjourn the meeting. I do not see why the board would not want to repeat the decision-making process when a cyberattack has affected not just some shareholders but the meeting in general.

4.4. Causality

As stated above (par. 4.2), basically all shareholders could start proceedings leading to the annulment of resolutions. The court will nullify a resolution when it finds that it is defective in any way, meaning that any violation of shareholders' rights due to a technical problem will result in annulment. There is an exception, though: all three jurisdictions require some causal link between the defect and the eventual resolution adopted.

Swiss law is the most illustrative. Under art. 691 III OR a resolution cannot be challenged if the company proves that the participation of non-shareholders in the vote exerted no influence on the decision made. This rule was usually extended to *all* procedural irregularities, but many scholars have reverted from this and have since emphasised that what matters most is the influence on the decision-making process as such, not on the voting.¹⁰³ So the question is whether a technical problem has hampered shareholders in bringing forward their opinions, listening to others and submitting motions or amendments. Dutch and German law have gone through the same development. In Germany, causality is even replaced by relevance, as the emphasis is put on a normative assessment of the decisionmaking requirement that was

101 Cf. *Walter* (fn. 38), p. 189.

102 See *supra* fn. 92.

103 See *Böckli* (fn. 44), § 8 mn. 653, with references.

breached.¹⁰⁴ Hence, causality is only relevant when technical issues interfere with voting.

Without a strict causality requirement, *any* procedural defect leads to annulment, with no discretion for the court. There is nevertheless an exception, but it is limited to trivial or bagatelle defects. Suppose, for instance, the audio system malfunctions and the deliberations could not be heard in the back of the room. In that case, resolutions will not be nullified when no shareholder complained during the meeting.¹⁰⁵ This exception seems to be at hand for minor technical problems only, such as a short interruption of sound or video. The reach of this exception is minimal for sure.

4.5. *Limitation of Annulment*

Given that discretion for the court, a causality requirement, and a strong exception for futile defects are absent, nullification because of technical problems is anything but illusory. One could embrace this from the perspective of shareholders' rights, but there is a downside. It may lead to a flood of actions for nullification, which brings costs and uncertainty for the company and is often disproportionate to the gravity of resolution defects and the harm done to shareholders. This has happened in Germany. As mentioned, 'Berufskläger' (professional querulants) brought many actions claiming nullification for futile defects. They did so particularly before 2009 and still do, but with a reduced amount.¹⁰⁶ The 'fear' of nullification may cause companies not to meet virtually.

For these reasons, German law starkly limits the voidability of resolutions passed virtually.¹⁰⁷ Under the terms of § 243 III AktG, a technical disruption will render resolutions voidable only 'if the company is to be charged with having acted grossly negligent or intentionally'. The provision is applicable when shareholders could not exercise their rights (to vote, to question the board, to speak, etc.) fully or when video or sound was interrupted due to some technical problem.¹⁰⁸ It will not be easy to meet the mark of gross negligence or intent in practice, as the burden of proof rests on the claimant, not on the company. Moreover, gross negligence or intent 'cannot be assumed if a

104 See for Dutch law *Van Vught* (fn. 6), p. 138–139 and for German law *Zetsche* (fn. 83), § 243 AktG mn. 60; *Schäfer* (fn. 92), § 243 AktG mn. 28; *Koch* (fn. 21), § 243 AktG mn. 13.

105 *Zetsche* (fn. 83), § 243 AktG mn. 70; *Van Vught* (fn. 6), p. 140.

106 See *Bayer/Hoffmann* (fn. 85), 143.

107 See BT-Drs. 20/1738, 37.

108 See the (not easy to read) list in § 243 III in conjunction with § 118a I 2 AktG.

professional service provider was commissioned with the technical realisation of the meeting' as the explanatory memorandum says.¹⁰⁹ As almost all companies of a certain size will hire an external provider,¹¹⁰ nullification will be difficult, if not impossible.

The Dutch legislator has followed suit. The company has a 'best-efforts obligation' to run the virtual meeting smoothly; it must take 'all reasonable measures'. If a professional service provider has been hired, 'it can be assumed' that the company fulfilled this obligation.¹¹¹ Neither the law nor the memorandum explicitly states that meeting the standard frees the company from actions for voidability – but it looks like it does.¹¹² Nullification is not possible anyway if the technical problem occurred in the shareholder's sphere, not in the company's.¹¹³

It seems all too legitimate to limit voidance due to technical problems. The German and Dutch legislators have understandably balanced the interests of the company against those of shareholders and others who may want to challenge resolutions. The risk of minor or fault-free disruptions squashing resolutions may hinder companies from organising their shareholder meeting virtually. This is particularly the case for Germany, with its strict laws on annulment of shareholder resolutions. Bear in mind that nullification *ex-post* is something rather different than suspension or adjournment. While the former involves legal proceedings and puts resolutions passed in doubt, the latter is less invasive, generally less costly and thus required sooner (*supra* par. 3.2).

One may question, though, why it would be up to the claimant to prove that the company acted in gross negligence, with intent or – as to Dutch law – did not meet its obligations. This may be very hard, as the company (or even the external provider) has all the technical information, and the shareholder does not. Should it not be the other way round, that it is for the company to prove that it has taken all technical measures that could be reasonably expected? I think so.¹¹⁴ The courts could at least apply the principle that the party holding

109 BT-Drs. 20/1738, 37–38.

110 In 2021, all DAX-listed companies did so. See *Christopher Danwerth*, "Die zweite Saison der virtuellen Hauptversammlung der Unternehmen der DAX-Indexfamilie", AG 2021, 613, 626.

111 Explanatory memorandum (fn. 8), 17.

112 See *Oost/Van Vught* (fn. 24), 337.

113 Explanatory memorandum (fn. 8), 18.

114 See also *Wolfgang Sturm/Jassem Imsameh*, "Zum Gesetz zur Einführung virtueller Hauptversammlungen", NZG 2022, 1327, 1332; *Jan-Erik Schirmer*, "Virtuelle Hauptversammlung: dreifacher Ausbesserungsbedarf", AG 2023, 19, 23.

the information (the company) is, in some circumstances, obliged to present it in court.¹¹⁵

It may be viewed even more critically that hiring an external provider exempts companies from nullification. Should that be enough? The rule is at odds with the principle, well-known in civil law, that hiring a servant ('auxiliary person') is at risk and expense of the debtor, in this case, the company, and that there is a duty to carefully oversee the servant's activities.¹¹⁶ So, the company should at least check whether the external service provider has taken the necessary precautions and has followed a thorough procedure. Just hiring does not suffice. Anyway, from the shareholders' perspective, it is irrelevant that an external provider was involved. It does not seem right to exempt companies from liability here.¹¹⁷

One could, more fundamentally, question the German requirement of gross negligence or intent as well as the Dutch best-efforts obligation as such. Considering nullifying resolutions an instrument aimed at safeguarding the purity of the decision-making process, it is doubtful that it should matter at all whether the company is to blame for the technical disruption. Apart from disruptions clearly arising from the shareholder's sphere – i.e. a malfunctioning device or connection – the company has an obligation not to rely on resolutions hampered by technical issues. As we have seen, it should repeat the decision-making process when appropriate (*supra* par. 3.5). Moreover, proceedings on the validity of resolutions centre around the question of whether resolutions have been passed in conformity with the law; it is viewed – at least in the three jurisdictions – as a way to scrutinise resolutions objectively.¹¹⁸ Even though these proceedings are formally launched against the company, the question is not whether the company is at fault but whether the resolutions passed are legally correct. To require faulty conduct of the company in the event of a technical disruption does not match the law on validity of resolutions in general.

While decreasing the risk of resolutions being nullified due to technical problems may be desirable, this can be done in other ways. The actual problem stems from the law on the validity of resolutions as such: resolutions being nullified because of defects relatively small compared to the interests of the company and others involved. So, instead of requiring fault on the company's side, one may rather seek to reform the law in a different way. One could think

115 This principle is known in both Dutch and German civil procedural law. See *Sturm/Imsameh* (fn. 114), 1332; *Schirmer* (fn. 114), 23; *Oost/Van Vught* (fn. 24), 338.

116 See art. 6:76 BW; § 278 *Bürgerliches Gesetzbuch* (Germany); art. 101 OR.

117 In a similar vein *Sturm/Imsameh* (fn. 114), 1332; *Schirmer* (fn. 114), 23.

118 See *supra* par. 4.2.

of granting the court more discretion. Nullification does not need to follow automatically when a resolution is found to be defective; it may well be abstained from after carefully weighing interests and with compensation in cash for the shareholder that is harmed. Another – perhaps more feasible – solution entails broadening the ‘futile defects exception’. Like it is argued in Switzerland, one could extend its scope: requiring the procedural defect to have seriously harmed shareholders’ rights and to have been capable of influencing the decision of the “average well-informed shareholder”. This would then need to be proven by the shareholder that challenges a resolution.¹¹⁹ All these solutions would arguably be better placed than requiring the company to be at fault.¹²⁰

5. Synopsis

As the virtual-only shareholder meeting is gaining ground, legislators throughout Europe should carefully consider how technical issues should be dealt with. Ill-conceived rules on this may be “a playground for creative PhD students and litigious lawyers”, as a Swiss commentator has noted,¹²¹ but they may as well lead to legal uncertainty, complicated proceedings, and unwelcome accidents. Setting clear and effective rules is not easy, though. For one thing, the so-called mirror principle and the sometimes strict rules on decision-making dictate that technical problems can and should soon have consequences for proceeding shareholder meetings and, thereafter, for the resolutions passed. On the other hand, the company and others involved have a well-founded interest in solid and sound decision-making; nullifications and even disruptions could well have a negative impact on the company’s affairs.

Assessing Dutch, German and Swiss law delivers at least some insights on the matter. First, tackling technical issues during the meeting is to be preferred over handling them *ex post* with actions of nullity and voidability. It follows that suspension should soon be required if a technical issue arises. It should not be linked to causality, the company’s sphere or the company’s fault, as shareholders can nevertheless claim for the decision-making process to be settled in

119 Böckli (fn. 44), § 8 mn. 660; Schott (fn. 99), § 3 mn. 53 et seqq. Cf. BGer 2 November 2005, BGE 132 II 71.

120 See for other solutions from an international perspective, varying from introducing a quorum to even a complete rethink of the law on validity of resolutions: Fleischer (fn. 75), 777 et seqq. See also the extensive German literature on this, as summarized by Koch (fn. 74).

121 Peter Kunz, “Generalversammlungen von AG: Landsgemeinden oder Chatrooms?”, SZW 2020, 297, 305: “Ein Tummelfeld für *kreative Dissertanten* und *streitlustige Rechtsanwälte* findet sich in Art. 701f E-OR 2016 [...]. M.E. dürfte sich das Bundesgericht über Jahre hinweg mit dieser Bestimmung befassen (müssen).”

a correct way, respecting their rights. Suspension and, on occasion, adjournment of the meeting is a fair price to pay for the company that holds its shareholder meetings virtually. Swiss law in particular, provides for a well-thought rule on this. It is important, though, to grant the chair of the meeting and the board a decent degree of discretion in this, as only they are capable of acting swiftly when technical issues occur. This is more or less emphasised in all three jurisdictions.

Second, small adjustments or even a rethink is required when it comes to the rules on nullity and voidability of resolutions. Technical problems may render resolutions passed by the shareholder meeting null and void, with detrimental consequences for the company. The so-called causality requirement, as it is known in the three jurisdictions, is not equipped to mitigate the risk of void resolutions. Given that the bar of voidability is generally low, that all shareholders and, in many cases, others may initiate proceedings, and that there is a risk of querulants (particularly in Germany), it is advisable both to apply nullity with restraint and to limit annulment somehow.

One may consider only allowing for annulment if the company bears some blame for the technical disruption that has taken place, as is done in German law and – to a lesser extent – in Dutch law, provided that companies should not be allowed to hide behind external service providers and should be obliged to be transparent on the technical course of the shareholder meeting as not to render actions for voidability illusory. Taking a more fundamental perspective, it is better to mitigate the risk of unjust nullifications in other ways, such as granting the courts some degree of discretion and widening the scope of the ‘futile defects exception’. This would entail a reform of the law on faulty resolutions in general – which is justified, as technical problems should be dealt with no differently than other procedural defects. More work is to be done here, as the law on defective resolutions is largely still uncharted territory for comparative scholars.¹²²

122 See in a similar vein *Fleischer* (fn. 75), 765; his article is a notable exception.