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Legal Guide for Designing "Regulatory Sandboxes"

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Re: **Legal Framework Guide for Designing "Regulatory Sandboxes."**

We live in an era of the "Fourth Industrial Revolution," characterized by an unprecedented pace and complexity of changes, challenging state institutions in general and regulators in particular. This reality necessitates the regulatory sphere to undergo adaptation and renewal processes to create agile (swift and flexible) regulatory systems that can foster innovation while safeguarding the public interest. The guide addresses one of the key regulatory tools for establishing adaptive and dynamic regulation – the "Regulatory Sandbox."

The guide is an important initiative based on comprehensive work aimed at providing a legal foundation for designing "Regulatory Sandboxes." It presents a balanced and detailed legal framework to address technological innovation while responding to complex regulatory and legal challenges. The guide outlines principles, tools, and insights drawn from both local and international experience, as well as current literature in the field, to assist Israeli regulators in shaping an environment that responsibly fosters innovation.

I would like to express my gratitude to our partners in the Office of Legal Counsel and Legislative Affairs, in various government ministries, the Israel Innovation Authority, and academia, for their comments that contributed to the improvement of this document. Special thanks are due to the team at the Regulation Division within the Legal Counsel and Legislative Affairs (Economic Law), and in particular to Dr. Yuval Roitman, Head of the Regulation Unit, and Dr. Yael Kariv-Teitelbaum, Regulation Officer, who led the drafting of this document, for their thorough and professional work.

At this very time, technological advancements continue to progress rapidly, presenting new challenges, including in the fields of artificial intelligence and machine learning, robotics, autonomous transportation, augmented and virtual reality, blockchain, and cryptocurrency. Looking ahead, there is room to join forces and examine how regulatory experimentation can be promoted, from a holistic governmental perspective, to address the challenges of the time. I hope that the guide will contribute meaningfully to advancing governmental efforts to design progressive, adaptive, and dynamic regulation attuned to the era of technological innovation.

Meir Levin
Deputy Attorney General (Economic Law)

Executive Summary

To address the unprecedented pace of technological development, regulatory systems must evolve into adaptive, flexible, and dynamic systems that incorporate practices of regulatory experimentation. For that end, in recent years there has been an increasing use of the **"Regulatory Sandbox" mechanism, under which the regulator is authorized to grant regulatory reliefs or adjustments for a limited period to companies seeking to develop innovative models, all within a monitored and supervised framework provided by the regulator**. This guide aims to support this development by reviewing the Regulatory Sandbox tool in literature and Israeli law and proposing recommended guidelines for structuring it within Israeli legislation.

Regulatory sandboxes offer numerous advantages. They enable regulators to promote technological innovation without compromising the protection of public interest. Within their framework, regulators can study innovative models based on real-world data, thereby allowing for flexible and continuous regulatory adjustments. For companies, the sandbox reduces regulatory uncertainty, facilitates market entry, and demonstrates the feasibility of innovative models in a real-world environment, encourages investment, and enhances consumer trust. However, alongside their benefits, regulatory sandboxes also present challenges, such as difficulties in predicting risks to protected interests and concerns about potential harm to participants and third parties, the institutional capacity required in terms of resources and expert staff within the regulatory body challenges in data collection, the necessity for cooperation among regulators, ensuring equality and fair competition conditions in the regulated market, ethical challenges, and fears of misuse of the mechanism.

Therefore, when seeking to establish a provision empowering a regulator to grant an exemption for the purpose of conducting a regulatory sandbox experiment, it is important to outline a clear legal framework that addresses the various challenges:

A. Authority to Grant an Exemption

The regulator must be granted **explicit authority to grant an exemption to an experimenter** intending to test the performance of an innovative technology or business model.

B. Setting Conditions and Limitations for Granting the Exemption

The regulator must be granted authority to set conditions for granting the exemption that are necessary to protect public interests, particularly conditions relating to the **scope of the experiment** (e.g., time limitations, geographic scope, and number of participants).

In addition, conditions concerning **the identity of the sandbox participants** (e.g., a registered corporation, principal place of business in Israel, officeholders without criminal indictments); conditions to ensure **compensation for potential aggrieved parties** (e.g., guarantees and engagement with an insurer); and conditions to ensure **regulatory oversight of the experiment** (e.g., periodic reporting) may also be set.

C. Process for Reviewing Exemption Applications

A **public call** for applications should be issued, inviting companies to participate in the regulatory sandbox. It is important **to select candidates based on pre-defined, equitable criteria** and, where necessary, following prior consultation with relevant stakeholders. It may be established in advance that **an application to participate in the sandbox will include: information** about the company and the experimenter; a general description of the experiment and the experimental technology; the requested scope and duration of the experiment; a detailed list of the legal provisions from which an exemption is sought; a description of proposed alternative conditions under which the experiment would be conducted; and any additional information the applicant deems relevant to the request. It is essential to ensure that the mechanism **does not inherently favor large or established companies**.

D. Experiment Management

It is advisable to set out in legislation **the considerations the regulator must take into account when deciding whether to grant an exemption**. In addition, a mechanism for revoking the exemption may be established (for example, in the event that a serious incident occurred during the experiment), along with provisions aimed at minimizing harm to consumers or third parties resulting from such revocation. It is important to **mandate the publication of any decision to grant or revoke an exemption**, in order to ensure transparency and public oversight. In some cases, the experimenter may also be required to inform the participants and even obtain their explicit consent.

E. The "Post-Experiment" Phase

When establishing a regulatory sandbox, it is also necessary to consider the exit strategy from the experiment, and it is appropriate to include a corresponding provision in the enabling section. In this context, attention should be given to **how the transition period between the experimental phase and any permanent regulatory change will be structured**. Furthermore, it is important to consider how to ensure **equal starting conditions, to the extent possible**, for all potential market players at the conclusion of the experiment, in order to avoid conferring an unfair advantage to companies selected to participate in the sandbox. Finally, to the extent the experiment is expected to **impact the public** (such as investors in the financial sector), safeguards must be in place to protect their interests even after the experiment period is over.

In summary, what does the guide include?

- A recommended legislative template for a statutory provision authorizing a regulator to establish regulatory sandboxes.

- Recommendations for outlining a legal framework for the management of regulatory sandboxes.

- In addition, concise overviews of the following: the challenges at the intersection of regulation and technology; key features of the regulatory sandbox; a description of the manner the regulatory sandbox tool has been used in Israel to date; when and how it is appropriate to use a regulatory sandbox; and benefits and challenges of operating regulatory sandboxes.

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Introduction

This document presents the legal infrastructure required for developing a regulatory sandbox program as a tool of regulatory experimentation designed to address technological innovation. A regulatory sandbox is a mechanism that enables a regulator to grant regulatory relief or adjustments, for a limited period of time, to companies seeking to develop innovative models under the regulator's oversight and guidance.

We are living in the age of the "Fourth Industrial Revolution," in which unprecedented technological developments are entering the public sphere around the world at an increasing pace. This wave of technological advancement has accelerated in recent years, particularly in the wake of the COVID-19 pandemic, which necessitated swift and wide-ranging changes. These changes occurred especially in the fields of digitization and technologies based on artificial intelligence. While these developments offer substantial benefits, they also raise concerns about various risks to society and give rise to complex social, legal, and regulatory questions.

Technological advancement presents significant challenges to regulatory systems in several respects: the rapid pace of change, the complexity of emerging technologies and the information gap between regulators and technology companies, the need for coordination among multiple regulators, the global nature of many technologies, and more. To cope with this reality, regulatory systems must evolve into learning, flexible, and dynamic frameworks that integrate practices of regulatory experimentation and foster an environment that encourages technological innovation. For that purpose, in recent years, the regulatory sandbox has increasingly been adopted as a means of promoting such innovation – both globally and in Israel. This guide is intended to support that development and assist regulators in Israel, as well as their legal advisors, in designing regulatory sandboxes aimed at addressing technological innovation.

Alongside a regulatory sandbox primarily intended to address technological innovation, there also exists a model of regulatory sandbox focused mainly on experimenting with regulatory techniques, even in cases where the core issue is not technological innovation. The distinction between these two models is not absolute, and there are numerous interconnections between them. **This guide primarily addresses the regulatory sandbox model designed to respond to technological innovation**.

It should be noted that this guide primarily pertains to **the legal** framework governing the design and implementation of a regulatory sandbox. While this can contribute to fostering a culture of regulatory experimentation among regulators in Israel, significant additional steps are still required. These include: the formulation of a governmental policy that recognizes the importance of promoting a culture of regulatory experimentation and encourages its adoption by regulators; the allocation of necessary resources – both financial and professional – to support the

advancement of regulatory experimentation; the encouragement of collaboration among regulators, and the involvement of academia, civil society, and industry in promoting regulatory experimentation; and more. In addition, there is a need to further develop the practical and professional knowledge required for the actual operation of regulatory sandboxes by regulators, including aspects related to risk management and the process of drawing lessons for improving governmental regulation.

This guidance document is published as a follow-up to the Regulatory Legislation Toolkit (hereinafter: the "**Regulatory Legislation Toolkit**"), which was also issued by the Regulation Unit within the Legal Counsel and Legislative Affairs (Economic Law) at the Ministry of Justice[1]. The Regulatory Legislation Toolkit outlined for public sector legal professionals the key milestones involved in drafting regulatory legislation. It focused on prospective regulation and traditional command-and-control regulatory tools. The present guide focuses on the advanced regulatory tool of the regulatory sandbox, which forms part of the broader approach of regulatory experimentation. Additional documents addressing other regulatory tools are expected to be published in the future.

The structure of this guide is as follows: first, it presents a general overview of the regulatory sandbox and its main characteristics, including a presentation of how this tool has been applied in Israel. Afterwards, the guide outlines the advantages of using the regulatory sandbox as well as the challenges and drawbacks associated with it. The final and principal part of the document offers key considerations for the normative design of a regulatory sandbox in Israel. This includes a description of the commonly used legislative structure for a regulatory sandbox, the conditions and considerations that should be taken into account when establishing it, and the provisions that are important – or may be desirable – to include. Examples from existing law are provided to support the practical design of such regulatory arrangements.

[1] Yaara Lamberger Keynan and Tamara Lotner-Lev **Auxiliary Document for Regulatory Legislation – Part A** (2012) (In Hebrew).

1. Technological and Regulatory Challenges

The Challenge Posed by Technological Advancement to Government Regulation

As early as the beginning of the 2000s, scholars in the field of regulation wrote about the need to transform the regulatory system from one that is rigid, static, and formal into one that is flexible, adaptive, and dynamic[2]. This regulatory approach was also reflected in the OECD's recommendations for promoting innovation through agile regulatory governance – governance that is both swift and flexible[3].

This need arose, among other things, from the massive technological revolution unfolding in recent decades, which many have described as the "Fourth Industrial Revolution."[4] This revolution is characterized by technologies that emerge frequently and are typically adopted quickly and enthusiastically by a wide global user base. Examples are numerous and diverse: artificial intelligence, autonomous vehicles, digital currencies, the Internet of Things, drones, 3D printing, and – looking ahead – the metaverse and quantum computing. These technological changes are unprecedented in their speed, depth, and scale. They have the potential to disrupt the functioning of existing systems and, while they offer considerable benefits to individuals, society, and the economy, they also pose risks and challenges.

The COVID-19 pandemic further accelerated the pace of technological development. Among other things, the pandemic drove the rapid adoption of communication, commerce, and service technologies in digital formats, at a time when physical interaction became less feasible. Many of these developments persisted and even expanded after the pandemic subsided[5].

The challenge of addressing the technological revolution is particularly relevant in the State of Israel. Israel has a unique interest in encouraging and advancing technological innovation within its territory. A significant portion of Israel's economy currently relies on its high-tech industry, which ranks highly in international indices[6]. Against

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[2] Orly Lobel, The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought, 89 MINN. L. REV. 342, 371-404 (2004).

[3] OECD (2021), OECD Recommendations of the Council for Agile Regulatory Governance to Harness Innovation (2021).

[4] The World Economic Forum (2020), Agile Regulation for the Fourth Industrial Revolution: A Toolkit for Regulators 6 (hereinafter: the "WEF Report").

[5] *Ibid*.

[6] The Innovation Authority Annual Report – **The State of Israeli High-Tech** 2023 (In Hebrew). In 2022, among other things, the high-tech sector constituted 18.1% of Israel's total GDP (approximately ILS 290 billion), making it the sector with the largest GDP contribution in the economy. High-tech exports accounted for nearly half of Israel's total exports (approximately 48.3%). Israel ranked first among OECD countries in terms of R&D expenditure as a percentage of GDP (with R&D investment standing at 5.6% of GDP). The percentage of employees in high-tech stands at 14% of all salaried employees in Israel.

this backdrop, the Israeli government's policy is notably focused on promoting technology and the high-tech sector in Israel[7].

In addition, the public and society in Israel tend to adopt new technologies rapidly and favorably. The Israeli market has an interest in promoting the integration of innovative solutions that can expand the range of services accessible to the public, both in the private and public sectors. The entry of new players and new technologies into the Israeli market has the potential to enhance competition, increase efficiency, and improve access to services for consumers.

However, the technological revolution described above presents significant challenges to regulatory systems worldwide, including in Israel. Experience shows that technological developments frequently create points of friction with the regulatory framework. Frequently, such technologies alter the status quo that existed prior to their emergence or change the behavior of individuals and society, thereby raising complex social, legal, and regulatory issues. This phenomenon is sometimes referred to as "disruptive innovation" and "regulatory disruption."[8]

Technological advancement challenges the regulatory system in several key aspects:

First, **the pace of change** – The inherent tension between the rigidity of the regulatory system and the dynamic of technological development creates a twofold challenge. On one hand, regulation often struggles to keep pace with rapid technological advancements and to provide adequate protection against the risks they entail – this has been termed the "pacing problem." Updating or amending regulations is often a lengthy and complex process, whether it requires changes to primary legislation, secondary legislation, or internal rules and guidelines of the regulatory authority. In such cases, regulation "lags behind," leaving a regulatory vacuum in which technological development can proceed without sufficient oversight. On the other hand, the difficulty of updating existing regulations can result in unjustified regulatory barriers that hinder desirable technological advancement. In these situations, regulation – often enacted in a period when the regulator could not have foreseen the technological developments that have since occurred – prevents the use or development of the technology without adequate justification. At the same time, there are cases where the innovation sector does not encounter a regulatory barrier, but nonetheless seeks the establishment of regulation in a particular technological context to build public trust and facilitate the adoption of the technology. In such instances as well, the prolonged timelines for setting new regulations create difficulties. Moreover, in some cases, the rapid pace of change may prompt regulators

[7] See, for example (In Hebrew), Government Resolution No. 212 of the 36th Government, "Program for Promoting Innovation, Encouraging the Growth of the High-Tech Sector, and Strengthening Technological and Scientific Leadership," (1.8.2021).
Also, see Government Resolution No. 173 of the 37th Government, "Strengthening the Technological Leadership of the State of Israel" (24.2.2023), particularly Section 9 of the resolution regarding the program for funding pioneering projects to encourage regulatory experimentation within government ministries.
[8] Nathan Cortez, *Regulating Disruptive Innovation*, 29 BERKELEY TECH. L.J. 175 (2014).

to block a new technology altogether out of concern for the risks it may pose – a decision that could also unnecessarily stifle beneficial innovation.

Second, **Information and Expertise** – The field of technology is characterized by a significant degree of information asymmetry between regulators and technology companies. Technological developments occur frequently and are driven by well-resourced, highly specialized companies that design and possess deep familiarity with the technologies they create. These developments typically take place without regulatory involvement, and technology companies often benefit from the protection of their trade secrets against competitors. Consequently, information about such technologies is generally not accessible to regulators or in their possession. Even in cases where regulators are able to access information from technology companies, the complexity of the technologies often requires a level of technical knowledge and expertise that regulators may lack. In such cases, regulators may struggle to fully understand the technical data or to anticipate the potential impacts of the technology[9].

Third, **the Need for Coordination** – New technologies often raise issues that fall under the jurisdiction of multiple regulators (these may include sector-specific regulators such as the Israel Securities Authority, the Capital Market, Insurance and Savings Authority, and the Supervisor of Banks, as well as cross-sectoral regulators such as the Privacy Protection Authority and the Israel Competition Authority). This reality complicates the regulatory response, as regulators are required to act in coordination with one another. Inter-agency coordination is a general challenge for regulatory systems, and it becomes even more complex when dealing with innovative and technologically sophisticated developments[10].

Fourth, **Globalization** – The global nature of many new technologies – especially those operating primarily in the digital sphere – affects the ability of Israeli regulators to shape domestic regulation that is not aligned with international standards. This also reinforces a general preference for regulatory approaches adopted by developed countries with significant markets, over unique, locally tailored regulations. Moreover, questions regarding the applicability of Israeli regulation to the activities of technology companies, as well as the authority and practical capacity of Israeli regulators to oversee and enforce compliance against international tech companies operating in the digital space frequently arise. Another concern is the potential "flight"

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[9] For a description of the complexity of regulatory work in these contexts, see, for example:
James Bessen, The New Goliaths – How Corporations Use Software to Dominate Industries, Kill Innovation and Undermine Regulation (2022), pp. 118-141.

[10] WEF Report, *supra* note 4, p. 6. For a general discussion of the challenge of coordination among regulators, see: Yuval Roitman, "The Regulatory Reform: Between the Visible and the Hidden," **Law, Society and Culture: Regulating Regulation – Law and Policy** 425, 429 (Yishai Blank, David Levi-Faur & Roy Kreitner, eds., 2016) (In Hebrew). See also section 2(7) of the Principles of Regulation Law, 2021, which provides that optimal regulation is, *inter alia*, regulation established "in a manner that promotes coordination, cooperation, and the exchange of information that may be lawfully shared among regulators, in a way that reduces bureaucratic burden and takes into account relevant applicable regulation."

of such companies in response to enforcement efforts – whether by relocating their research and development centers out of Israel, with all ensuing economic implications, or by discontinuing support for their services within Israel and in the Hebrew language[11].

Fifth, **Regulatory Complexity** – New technologies raise complex legal and regulatory issues, and at times require the creation of entirely new regulation or a fundamental reshaping of existing regulation based on a renewed examination of its objectives, beyond the technological complexity described above. In addition, they require delicate balancing, including between the protection of fundamental rights and public interests and the desire to enable and even promote technological innovation; between unique Israeli regulation and regulation that follows global trends; between ex-ante regulation and regulation that responds to technological developments; between strict regulation and soft regulation; between horizontal, cross-sectoral regulation and sector-specific regulation; and between one-size-fits-all regulation and regulation tailored to specific technologies and based on risk management. These challenges exist in regulatory work in general, but they arise with greater intensity in the context of technology. In addition, regulators may struggle to allocate responsibility for managing the various risks among the diverse actors operating within the dynamic and complex environments created by technological innovation.

Sixth, **Uncertainty** –At times, regulation is called for — or recognized as necessary — at a stage when there is still considerable uncertainty about the uses and implications of the new technology, which in turn affects the ability to regulate it effectively. . Another aspect of this uncertainty is that, in some cases, the developers of the technology are new market players, requiring the formation of new relationships between the regulator and these newly regulated entities. It should also be noted that there is a certain trade-off between understanding the uses and implications of a new technology and the ability to influence its development because, generally, it is easier to regulate a given technology while it is still "young" and not widely adopted – at which point its unforeseen and undesirable consequences often remain hidden; or one may wait until these consequences become clearer, but by then the market may already be entrenched, making the technology more difficult to regulate[12].

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[11] Among others: The Authority for Industrial Cooperation and Promotion of Foreign Investments, **Regulatory Barriers for Foreign Investors** (2018) (In Hebrew); Barry Achiaz et al., **Artificial Intelligence in the Financial Sector**: **Common Uses, Challenges, and a Comparative Review of Regulatory Responses** (submitted to the Economic Department of the Legal Counsel and Legislative Affairs [Ministry of Justice], Faculty of Law, Tel Aviv University), p. 148 (July 18, 2022) (In Hebrew); State Comptroller, **Annual Report 67a: Distortions in the Taxation of the Digital Economy**, p. 200 (2016) (In Hebrew). Similar concerns have also been raised in academic literature with respect to the European Union as a whole. For example: Deirdre Ahern, *Regulatory Lag, Regulatory Friction and Regulatory Transition as FinTech Disenablers: Calibrating an EU Response to the Regulatory Sandbox Phenomenon* (2021), 22 EUR. BUS. ORG. L. REV. 395; or in Australia, for example, Anton N. Didenko, *Australia's Enhanced FinTech Sandbox*, 44 U.N.S.W.L.J. 1078 (2021).

[12] A phenomenon known as the "Collingridge dilemma," first developed by David Collingridge in his 1980 book The Social Control of Technology. Since then, the theory has become central in the academic literature. For example:

Seventh, **Large Scale** – New technologies often enable actions to be carried out on a broad scale and by a large number of users, thereby exerting significant influence across various sectors and fields. In such cases, the risk associated with regulatory error is heightened – whether due to a failure to establish necessary regulation or the adoption of flawed regulation – given the considerable potential for widespread harm.

Regulatory Experimentation Is the Need of the Hour

As a result of the foregoing, there is often a need to adapt existing legal and regulatory rules in response to the emergence of new technologies. In recent decades, decision-makers have engaged in this task with increasing intensity[13]. Typically, such adaptation is carried out in one of the following ways: by reinterpreting existing rules, amending them, or enacting new ones. This is no simple task. Justice Solberg addressed this point, among others, in the **Israeli Internet Association case**[14]:

Wei Han & Cunzhen Huang, *Collingridge Dilemma? The Interaction of Antitrust Law and Data Privacy in China*, 35 ANTITRUST 58 (2020); Ryan Hagemann, Jennifer Huddleston Skees & Adam Thierer, *Soft Law for Hard Problems: The Governance of Emerging Technologies in an Uncertain Future*, 17 COLO. TECH. L.J. 37 (2018).

[13] For example, in recent years, several committees have been formed in Israel to address the adaptation of legal and regulatory frameworks to technological developments. These include, among others: the Subcommittee of the National Initiative for Smart Systems on Ethics and Regulation of Artificial Intelligence (2019); the inter-ministerial working groups for formulating the national artificial intelligence program, led by the Ministry of Innovation, Science and Technology pursuant to Government Resolution No. 212 (2021); the Committee for Adapting the Legal System to the Challenges of Innovation and Technological Acceleration (2021); the Committee for Examining the Regulation of Social Media Activity (2021); the Committee for Developing Measures to Protect the Public and Public Officials from Harmful Activity and Publications, as well as Online Bullying (2020); the Public Committee for Reviewing the Elections (Means of Propaganda) Law, 1959; the Committee for Examining the Regulation of Public Offerings of Decentralized Cryptocurrencies (2019); the professional team for examining the "platform economy" and unique employment models emerging in the labor market, led by the Labor Branch (2022); and the inter-ministerial team for examining the establishment of a regulatory sandbox for financial technology companies (2019).

[14] APA 3782/12 ***Commander of the Tel Aviv - Yafo District in Israel Police v. Israel Internet Association***, 66(2) 159, para. 23 in the judgment of Honorable Justice Solberg (2013) (In Hebrew).

"It is well known that the law lags behind the innovations of the world, and that legislation does not keep pace with the progress of science and its applications. Lawbreakers adapt to progress more quickly than enforcers. This is an axiom. The former face no restraints; the latter do. Many years passed between the invention of the computer and the enactment of the Computers Law, 1995. In computer terms, a generation or two had already gone by, and the law was already outdated, as the legislator did not–and could not–anticipate the technological developments. But it is not only the legal world that stands perplexed. The field of psychology also encounters new phenomena of addiction and psychological harm, and attempts to formulate up-to-date responses 'on the move'; the same is true for sociology and other disciplines in the social sciences, natural sciences, and humanities. It is therefore no wonder that the legal world, too, is not yet equipped with the full range of tools at its disposal."

Among other developments, and in view of the challenges described above, a dedicated professional discipline has emerged, focusing on the adaptation of regulation and legal frameworks to new technologies. Issues relating to the regulation of technology – and to law and technology – have become distinct areas of study and practice, both in academic writing and in the discourse of decision-makers and regulators worldwide[15].

Generally, when a regulator is faced with a new technology that is not compatible with the existing regulatory framework in place prior to its emergence, several key approaches to response are available[16]:

One option is **blockage** of the new technology, whereby the new technology is prohibited through the enactment of legal rules that bar its introduction, or through the interpretation of existing legal rules to the same effect. The second and opposite option is **non-intervention** (free-pass), whereby the new technology is allowed to enter the market without regulatory involvement, following a determination that there is no difficulty or supervisory interest warranting intervention. A third option is the **application of existing regulation** (Old-Regs), i.e., the technology is permitted to enter the market and is governed by the existing legal rules as if it had been part of the pre-existing regulatory reality. A fourth option is **the adoption of new regulation** (New-Regs), meaning the development of a new regulatory framework and dedicated legal infrastructure to govern the introduction of the new technology.

However, in many cases, at the early stages of the development or use of a new technology, regulators lack sufficient tools and knowledge to determine which of the four responses is the appropriate one. Accordingly, in recent decades, as the field of regulatory policy has evolved – both generally and specifically in relation to the

[15] See, for example, Roger Brownsword Law, Technology and Society – Re-Imaging the Regulatory Environment (2019).
[16] Cortez, *supra*, note 8, pp. 182-187.

regulation of technology – regulatory approaches that combine these various options have emerged, thereby enabling and encouraging technological innovation. The underlying idea is to promote innovation while expecting private actors to act responsibly, under the oversight of regulators and government authorities. This is particularly important with respect to new technologies, given the need to manage the risks involved in their development and use, and the general challenge of predicting their consequences. An emerging global trend is the accelerated development of standards and rulemaking in parallel with technological advancement, which has translated into a growing expectation that regulators conduct the necessary processes of assessment, monitoring, and response to new technologies at a relatively fast pace. As a result, there is a need to enrich the regulatory toolkit with instruments that enable learning, examination, and experimentation with the technology, the management of its associated risks, and the adaptation of the regulatory toolkit to address it.

Considering this, the importance of integrating tools and capabilities that enable the regulatory system to become more learning-oriented, dynamic, and flexible is increasingly clear. In particular, there is a growing need for a cultural shift within the regulatory system – one that fosters the adoption of regulatory experimentation capabilities and a willingness to embrace progress[17]. These capabilities have become critical in the current era, which demands an agile and efficient regulatory approach – one that enables the realization of the potential inherent in technological developments, supports and even encourages them, while shaping them in a manner that does not compromise fundamental rights or public interests[18]. A regulatory system that fails to develop such capabilities will struggle to meet the challenges it faces and will be unable to provide the support required by the economy in which it operates. In this sense, regulatory experimentation is the need of the hour.

Against this backdrop, the OECD recommends the development of governance frameworks that facilitate agile regulation, adapted to future challenges, by expanding the use of regulatory experimentation to encourage innovation under regulatory oversight[19].

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[17] Hilary J. Allen, *Regulatory Sandboxes*, 87 GEO. WASH. L. REV. 579 (2019); Dirk A. Zetzsche , Ross P. Buckley, Janos N. Barberis & Douglas W. Arner, *Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation*, 23 FORDHAM J. CORP. & FIN. L. 31 (2017).

[18] Lobel, *supra*, note 2, 371-404.

[19] OECD (2021), Recommendation of the Council for Agile Regulatory Governance to Harness Innovation, p. 4 ("Enabling greater experimentation, testing, and trialling to stimulate innovation under regulatory supervision."

Alongside this document, the OECD also published practical recommendations specifically encouraging the use of regulatory sandboxes to promote regulatory experimentation (See: OECD (2021), Practical Guidance on Agile Regulatory Governance to Harness Innovation: "Enabling the controlled experimentation, testing and trialling of new ideas, products or business models, through the use of mechanisms such as regulatory sandboxes, testbeds, innovation spaces and laboratories." In this spirit, see for example the decision adopted by the Council of the European Union: Council Conclusions on Regulatory Sandboxes and Experimentation Sections as tools for an innovation-friendly, future-proof and resilient regulatory framework that masters disruptive challenges in the digital age, 2020/C 447/01.

Just recently, the OECD Regulatory Policy Committee published a detailed guide which found that regulatory experimentation can significantly enhance the effectiveness of regulatory systems:

> **"Regulatory experimentation can contribute significantly to enhance the effectiveness of policies and regulations. In line with the OECD Recommendation for Agile Regulatory Governance to Harness Innovation, it can help enable the transition towards regulatory governance frameworks and practices that will live up to emerging and interconnected regulatory challenges in fast-paced, innovation-dominated environments. If well governed and appropriately integrated into regulatory policy processes, RE also has the potential to enhance the evidence base underpinning decision-making. Moreover, it can act as a powerful vector for institutional co-operation both within and across national borders."[20]**

Within this context, in recent years, there has been a growing global appreciation for the **regulatory sandbox as an important tool for promoting regulatory experimentation in the context of technological developments**. This framework allows the regulator to enable the development of technology on a limited basis – for a defined period, subject to restrictions on the scope of the experiment, and under ongoing regulatory oversight. This response allows the regulator to defer making a final decision on how to address the new technology and to deliberately avoid committing to one of the aforementioned approaches until sufficient information and experience are accumulated to support an informed decision[21]. At the same time, it enables the rapid development of the technology and allows its developers to test it under "real-world" conditions rather than only in "laboratory" settings.

[20] OECD (2024), Regulatory Experimentation: Moving ahead on the Agile Regulatory Governance Agenda 37.
[21] For an extensive review of the tool and the OECD's recommendations for its promotion, see *ibid*.

2. What Is a Regulatory Sandbox?

Definition and Key Characteristics of the Regulatory Sandbox

The regulatory sandbox has various definitions, forms, and evolving objectives[22]. According to the definition proposed by the OECD, a regulatory sandbox is a specific tool of flexible regulation, through which existing regulatory requirements are modified by easing or adapting them in favor of participants in the regulatory sandbox (hereinafter: the "**Participants**")[23]. In this way, participants are allowed to test innovative models under reduced or adjusted regulatory requirements, while receiving regulatory support and oversight. At the same time, the regulatory sandbox enables regulators to learn about the characteristics of the new technology and the impact of different regulatory approaches on its operation and associated risks. A regulatory sandbox is managed on a case-by-case basis by the relevant regulator, and typically includes mechanisms intended to safeguard the public interests underlying governmental regulation[24].

For the sake of illustration, within the framework of a regulatory sandbox, a new market entrant may be allowed to operate in a given field even if it does not meet a certain entry condition, or a specific participant may be exempted from a requirement applicable to others in the same field. The goal is to allow that participant to test an innovative model it proposes, while enabling the regulator to examine the model in

[22] The regulatory sandbox institution was first established in the United Kingdom in the field of financial regulation. From there, it spread to additional countries and sectors. See:
Chang-Hsien Tsai et al., *The Diffusion of the Sandbox Approach to Disruptive Innovation and Its Limitations*, 53 Cornell Int. L. J. 261 (2020).

[23] See also the definition of the Council of the European Union, which describes a regulatory sandbox as:
"a concrete framework which, by providing a structured context for experimentation, enables—where appropriate in a real-world environment—the testing of innovative technologies, products, services or approaches… for a limited time and in a limited part of a sector or area under regulatory supervision, ensuring that appropriate safeguards are in place."
Supra note 19, p. 4. The aforementioned decision also refers to experimentation sections as legal provisions that grant authorities a degree of flexibility with respect to regulatory experimentation in specific contexts of technological innovation, or innovation in products, services, or approaches.

[24] See: OECD (2020), The Role of Sandboxes in Promoting Flexibility and Innovation in the Digital Age, Going Digital Toolkit Policy Note No. 7 (hereinafter: the "OECD Report"):
"'Regulatory Sandbox' refers to a limited form of regulatory waiver or flexibility for firms, enabling them to test new business models with reduced regulatory requirements. Sandboxes often include mechanisms intended to ensure overarching regulatory objectives, including consumer protection. Regulatory sandboxes are typically organized and administered on a case-by-case basis by the relevant regulatory authorities."

accordance with a defined evaluation method. If the removal of the regulatory requirement raises concerns about harm to the public interest, the regulator may impose an alternative condition or, alternatively, closely monitor the experiment to ensure that no significant harm is caused to the public interest.

The regulatory sandbox and its implementation can generally be characterized by several key components:

1. **Defined framework for conducting the experiment** – The regulatory sandbox operates within a confined framework that limits the scope of the experiment to the boundaries of the "sandbox" and no further (this rationale underlies the "sandbox" metaphor – that the experiment is conducted within a defined, limited space). The purpose is to contain the risk inherent in the experiment, which – as noted above – is not yet fully understood by the regulator at this stage. In this context, it is customary to establish conditions such as a maximum duration for the experiment, the number of participants involved, the geographic area in which the experiment may take place, and the scope of the experiment (for example, in a sandbox aimed at testing autonomous vehicles – limitations may be set on the number of vehicles included in the experiment and the locations where the test may be conducted).

2. **Modification of existing regulatory conditions** – In a regulatory sandbox, a change is generally made to the regulation applicable to the innovative model, which would otherwise prohibit or restrict its implementation. In most cases, this involves easing or adapting the applicable regulatory requirements, though other forms of adjustment may be required. The regulatory change is initiated or approved by the regulator and applies solely to the specific experiment. There are regulatory sandbox models that do not require such a change and instead emphasize that the sandbox serves as a governmental support framework intended to assist participants in testing and adapting their innovative model to existing regulatory requirements, without modifying those requirements[25]. However, many models condition participation in a sandbox on the inability to operate under the existing regulatory framework, and this document likewise primarily addresses regulatory sandboxes that involve a modification of existing regulation.

3. **With the aim of testing an innovative model** – within the framework of the regulatory sandbox, the regulatory modification allows for or facilitates the development of a new technology or, alternatively, its use. The intended new technology is not limited in nature and may include innovative products, services, and business models. Thus, the regulatory sandbox is generally intended to address the regulatory challenge that blocks technological development or

[25] See, for example, section 9(2) of the Bill for the Encouragement of Technology Development in the Financial Sector in Israel, 2021, Government Bill No. 5 (hereinafter: the "**Fintech Sandbox Bill**") (In Hebrew).

innovation when such development is desirable[26]. Participants are sometimes required to identify the novelty in the model, such as a new technological development, an innovative use of existing technology, or even the potential for innovative use of existing technology in the relevant market. The experiment will typically be conducted under real-world conditions and in a "live" environment that is identical or similar to the anticipated end-use environment following the experiment, which is generally subject to existing regulation. Participants are also required to identify the positive potential of the innovative model – such as its expected benefits in promoting public interests or improving efficiency (for example, explaining how the introduction of the innovative model could promote social equity, lower costs, or strengthen market competition). Naturally, in some cases, the advantages may be fully identified only after testing the new technology in real-world conditions upon its market entry.

Alongside the regulatory sandbox intended primarily to address technological innovation, there exists a regulatory sandbox model focused primarily on experimenting with regulatory techniques – even in circumstances where the focus is not technological innovation. The distinction between these two models of regulatory sandbox is not clear-cut, and there are numerous interconnections between them. This document focuses on the regulatory sandbox designed to address technological innovation[27].

4. **Subject to specific conditions to be determined** – As a substitute for the regulatory relief granted in relation to existing regulation, the regulatory sandbox will generally include specific conditions set by the regulator to govern the experiment. These conditions will be derived, among other factors, from the way the sandbox has been defined and scoped and the degree of risk posed to the public interest accordingly. The conditions may ensure, among other factors, that despite the deviation from existing regulation, there will be no significant harm to the protected values underlying it. Thus, for example, it is common to include among the specific conditions an "exit" strategy for the conclusion of the experiment, as well as advance notification requirements and periodic reporting. Regulatory sandboxes often include an expectation of increased – if not full – transparency on the part of participants, to allow for effective regulatory oversight (while generally maintaining the confidentiality of the information provided to the regulator). The regulator may also require information from participants in order to learn about the characteristics of the tested technology and to inform the formulation of future regulation. In addition, most regulatory sandboxes include safeguards and mechanisms to achieve the objectives of regulation, including consumer protection and safety. Some sandboxes also limit the types of innovative

[26] Leimüller, G., and Wasserbacher-Schwarzer, S. *Regulatory Sandboxes: Analytical Paper for Business Europe*, 5 (2020).
[27] Sofia Ranchordas, *Time, Timing, and Experimental Legislation*, 3 THEORY & PRAC. LEGIS. 135, 135 (2015).

models that may be tested within them, in order to prevent the realization of significant risks.

Differences Between "Sandbox" and "Pilot," "Temporary Provision," and "Experimental Regulation"

In academic literature and in practice, several regulatory models that are intended to allow technology developers to conduct experiments within a given regulatory environment can be identified. The boundaries between these models are not clear-cut. This document seeks to distinguish between several key models.

First, it is possible to identify differences between the regulatory sandbox and the "**pilot**" model. While both refer to limited-scale experiments conducted under real-world conditions, the regulatory sandbox also involves a modification of the regulatory environment, which includes exemptions from certain regulatory requirements and, in most cases, the granting of regulatory relief. In contrast, pilot programs generally do not involve any changes to existing regulation. If the trial or implementation of the innovative model complies with current regulation and does not present new risks, there is no need for a regulatory sandbox, and its use may in fact delay the model's entry into the market due to the need to meet the conditions of the regulatory sandbox[28].

Second, a distinction must be made between the regulatory sandbox and the mechanism of a **temporary provision**, which limits the validity of a regulatory arrangement in order to assess its impact before it is extended or adopted as a permanent arrangement[29]. A temporary provision allows for the testing of a particular regulatory framework, while accepting a certain degree of risk and ensuring that the arrangement will expire once the prescribed period has elapsed[30]. In some cases, the temporary provision grants authority to an administrative body to

[28] Civil Service College Singapore, Field Guide: Regulatory Sandbox - The What, Why and How, 4 (2020).0

[29] Sofia Ranchordas, Constitutional Sunsets and Experimental Legislation: A Comparative Perspective 73 (2014); Itai Bar-Siman-Tov & Gaya Harari-Heit, "The Heyday of Temporary Legislation? The Rise of Sunset Legislation in Israel and Principles for Its Improvement," **Tel Aviv University Law Review** 41, 539, 564 (2019) (In Hebrew); see, for example: section 8 of the Price Control Order on Goods and Services (Fares on Public Bus Lines and Fares on Local Railway Services) (Temporary Provision), 2003 (hereinafter: the "Price Control Order").

[30] See, for example: section 7(a) of the Retirement Age Law, 2004, which established a temporary provision for a period of six years; regulation 39 of the Public Health Regulations (Sanitary Quality of Drinking Water and Drinking Water Facilities) (Temporary Provision), 2013, CoR 1394 (hereinafter: the "Public Health Regulations"), which established a temporary provision for a period of six years; section 224A of the National Insurance Law (Amendment No. 132 – Temporary Provision),2012, which established a temporary provision for one year; section 65 of the Economic Policy Law for the 2004 Fiscal Year (Legislative Amendments), 2004, which established a temporary provision for six years.

extend its validity[31] or to establish it as a permanent arrangement, thereby preventing its expiration on the stated date. At the same time, a temporary provision may stem from the desire of the regulating authority (The Parliament , a minister, or a regulator) to closely monitor the exceptional arrangement, requiring renewed approval for any extension or for its establishment as a permanent regulatory framework[32].

Although the regulatory sandbox includes a component of limited temporal applicability, a temporary provision differs in that it generally has a broader, more inclusive scope and is directed at all relevant stakeholders, whereas the regulatory sandbox is more narrowly tailored and applies only to the entities participating in it. That said, a temporary provision may include limitations regarding the scope of its applicability. For example, it may stipulate that a "pilot" will be conducted with a specific test group[33], in certain designated geographic areas as determined by an administrative decision[34], or in accordance with the particular need specified in the temporary provision. In other cases, a broader regulatory arrangement may be established, one that applies to the general public, while allowing the regulated entities the choice of whether to participate in the experiment or to remain subject to the previous regulatory framework[35]. In contrast, the regulatory sandbox is generally structured as an exemption granted to a specific regulated entity.

In some cases, an experimental arrangement established by way of a temporary provision will include a requirement to conduct an accompanying study or perform specific evaluations during the experiment[36], and in certain instances, a dedicated professional body is established for this purpose[37]. At times, the temporary provision will also stipulate a duty to report on the progress of the experiment, to ensure oversight and accountability[38]. This is intended to support a structured process of review and evaluation at the end of the period, which would serve as the basis for

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[31] Section 43(b) of the Law for the Protection of Literature and Authors in Israel (Temporary Provision), 2013; section 41(5) of the Inclusion of Biometric Identification Measures and Biometric Identification Data in Identification Documents and in a Database Law, 2009.

[32] See, for example: sections 133A–1331F of the Criminal Procedure Law [Consolidated Version] (Temporary Provision), 1982, enacted following the outbreak of the coronavirus to enable the conduct of criminal proceedings in courts via visual conferencing; sections 319–319A of the Insolvency and Economic Rehabilitation Law (Temporary Provision), 2018, enacted in response to the coronavirus crisis to support and encourage the reaching of settlements as an alternative to initiating insolvency proceedings.

[33] Section 8 of the Control Order, *supra* note 29.

[34] Section 59 of the Economic Policy Law, *supra* note 30.

[35] Section 224A(b)(2) of the National Insurance Law (Temporary Provision); section 3(a) of the Biometric Identification Measures Order, *supra* note 31.

[36] Section 60(b) of the Economic Policy Law, *supra* note 30; section 7(b) of the Retirement Age Law, *supra* note 30; regulation 39(3) of the Public Health Regulations, *supra* note 30; section 133F(b) of the Criminal Procedure Law, *supra* note 32.

[37] Section 10(d) of the Order for the Inclusion of Biometric Identification Means and Biometric Identification Data in Identification Documents and Databases (Trial Period), 2011 (hereinafter: "Biometric Identification Means Order"); Regulation 39(2) of the Public Health Regulations, as stated in note 30 above; Section 38(a) of the Writers' Law, as stated in note 31 above.

[38] Regulation 39(3) of the Public Health Regulations, as stated in note 30 *supra*; Sections 7(b)-(c) of the Retirement Age Law; Section 38(c) of the Writers' Law, as stated in note 3 *supra*.

determining whether it is appropriate to establish the arrangement as a permanent one. The temporary provision technique is better suited to experiments concerning regulation itself, as opposed to experimentation intended to address technological innovation.

Third, an additional legislative mechanism used for the purpose of conducting experiments, which must be distinguished from the regulatory sandbox, is the mechanism of **experimental regulation**. This mechanism is typically applied in specific fields where a significant part of the industry is based on experimentation, and regulation is required to protect certain public interests within those fields[39]. In some cases, such experiments aim to examine the efficiency of an existing service[40], while in others they are intended to test the possibility of introducing a given product into the market on a broader scale[41], recognizing that the technology in the relevant field is continually evolving. This mechanism is used in areas where experimentation occurs frequently and is an integral part of routine activity, sometimes even forming part of the licensing process for the regulated entity, to ensure compliance with relevant conditions – for example, aircraft, pharmaceuticals or innovative treatments, and new construction methods. In these cases, there is a higher degree of certainty regarding the nature of the experiments, and they are not conducted for the purpose of enabling the regulator and the regulated entity to learn about a new field.

In some instances, primary legislation authorizes the regulator to enact rules governing the conduct of the experiment and to require the performance of the experiment as a condition for granting permanent permission to use the tested product in the market[42]. Under the experimental regulation mechanism, the regulator does not conduct the experiments itself, but merely regulates the manner in which the regulated entities conduct them.

As noted, this document does not address these mechanisms in detail, and focuses instead on the primary legislative mechanism for anchoring experimentation in the field of technological innovation: the regulatory sandbox.

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[39] See, for example: Regulation 16 of the Aviation Regulations (Aircraft and Parts Documentation Procedures), 1977; Animal Cruelty Law (Experiments on Animals), 1994; Public Health Regulations (Medical Experiments on Humans), 1980; Regulation 33(a)(18) of the Planning and Building Regulations (Building Licensing), 2016; Regulations 3-6 of the Seeds Regulations (Genetically Engineered Plants and Organisms), 2005 (hereinafter: "Seeds Regulations").

[40] Regulation 2 of the Electricity Market Regulations (Tests and Measurements for Conducting Efficiency Experiments), 2000. No unnecessary sentences please

[41] See the definition of "New Construction Method" in Regulation 1 of the Planning and Building Regulations; Regulation 16(a) of the Aviation Regulations.

[42] Section 54(2) of the Aviation Law, 2011; Regulation 16(b) of the Aviation Regulations (Aircraft and Parts Documentation Procedures); Aviation Regulations (Aircraft Operation and Flight Rules), 1981, governing the conduct of experiments on aircraft; Aviation Regulations (Flight Time Limitations in Air Transport Services), 1971.

How has the regulatory sandbox tool been used in Israel to date?

The regulatory sandbox tool is also gaining traction in Israel, and in recent years, several regulatory sandbox programs have been advanced in the country, most notably a law that established a regulatory sandbox in the field of autonomous vehicles[43], and a bill seeking to establish a regulatory sandbox in the fintech sector[44]. This tool has also featured prominently in recent governmental discourse regarding appropriate ways to address the rapid technological developments in the field of artificial intelligence[45].

The Regulatory Framework for Autonomous Vehicles

The regulation of autonomous vehicle activity in Israel serves as an example of the adoption of experimental regulatory tools, particularly that of a regulatory sandbox. At the outset, in light of the emerging industry in Israel focused on the development of autonomous driving technology, an amendment was made to the Traffic Regulations, 1961, establishing a framework that allows, under certain conditions, the granting of exemptions to experimenters for the use of new technology or new uses of existing technology, for the purpose of evaluating its performance.

The arrangement set forth in the regulations was limited in scope and permitted the granting of exemptions from provisions contained in a specific chapter of the Traffic Regulations. Based on this arrangement, various experiments with autonomous vehicles have been conducted – and continue to be conducted – across the country, with a safety driver seated behind the wheel. Subsequently, in light of technological advancements, the question arose as to whether it was appropriate to establish a permanent regulatory framework for the operation of autonomous vehicles in Israel. It was decided that, given the technology's lack of full maturity, a permanent framework should not yet be established. Instead, the experimental framework was expanded through an amendment to primary legislation, allowing for pilot testing of fully driverless autonomous vehicles, including the transportation of passengers, whether for payment or not. The assumption is that, at a later stage, it will be necessary to establish permanent regulation applicable to autonomous vehicles.

Alongside these programs, Israeli legislation contains numerous statutory provisions that enable regulatory experimentation and grant regulators the authority to conduct

[43] Law for the Amendment of the Road Traffic Ordinance (No. 130), 2022.
[44] The Fintech Sandbox Bill, *supra*, note 26.
[45] See, for example: Artificial Intelligence in the Financial Sector – Interim Report for Public Comments, 177-180 (5.11.2024) (In Hebrew).

experiments in specific areas[46]. This trend is both desirable and, in fact, necessitated by the circumstances of the present era. The primary aim of this document is to assist sectoral regulators in developing additional regulatory sandbox programs within their respective areas of responsibility. This objective also aligns with Government Resolution No. 173 dated February 24, 2023 on "Strengthening Israel's Technological Leadership," under which the government instructed the advancement of a "program to fund pioneering projects (a Regulatory Pioneer Fund) to encourage technological experimentation within government ministries and subordinate units..."

In addition to concrete initiatives to promote regulatory sandboxes in specific contexts, the report of the Inter-Ministerial Task Force on Smart Regulation – titled "A National Plan for Regulatory Policy as a Tool for Economic Recovery Post-COVID-19" – recommended, in Government Resolution No. 218 dated August 1, 2021, the enactment of a cross-sectoral statutory framework empowering the establishment of dedicated sandboxes via secondary legislation. This was intended for "the evaluation of appropriate regulation for the use of innovative technologies" and "regulatory improvement, namely, assessment of the impact of new regulation and the extent of its success." Concurrently, Government Resolution No. 212 dated August 1, 2021 regarding the "Program to Promote Innovation, Encourage the Growth of the High-Tech Sector, and Strengthen Technological and Scientific Leadership" stipulated the need to promote "a general regulatory framework that will enable regulatory testing environments."

[46] For example: Regulation 7B of the Water Regulations (Prevention of Water Pollution) (Use and Disposal of Sludge), 2004; Regulation 16A of the Traffic Regulations, 1961; section 126H of the Fire and Rescue Authority Law, 2012; and others.

3. When and How to Use the Regulatory Sandbox

When is it appropriate to use a regulatory sandbox?

As described, when facing an innovative technological or business model, the regulator may choose between three main courses of action: to maintain the existing regulation, to create new regulation, or to employ regulatory experimentation tools such as a regulatory sandbox. As a rule, it is advisable to consider using a regulatory sandbox when the developing field is characterized by a lack of sufficient information, local or international experience, or theoretical foundation; when permanent regulation of the field may lead to undesirable consequences; when there is sufficient time to examine the development through experimentation; and when there is no ethical barrier to conducting an experiment in the field.

Within the framework of the decision whether the sandbox approach is appropriate, it is useful to assess what value may still be derived from the experiment even if it fails – for example, the benefit of expanding the regulator's knowledge base. After evaluating the failure scenario, the regulator can assess the potential benefit in the best-case scenario. In addition, before deciding to implement a regulatory sandbox, it is important to compare it to alternatives. Considerations should include feasibility, costs, timing, the expected scope of knowledge gained, the ethical and legal implications of the available options, and the potential benefit to the public. In some cases, it may be found preferable to apply the existing regulation framework in full from the outset, without a preliminary trial period[47].

As noted, in general, a regulatory sandbox is designed to address situations where existing regulatory rules require **adaptation** in order to enable the development of an innovative business or technological model[48]. Hence, the first step is to identify which specific regulatory rules are blocking or restricting the intended development. This is because, in some cases, it may become clear that there is no need to adjust the regulatory rules, but rather that the existing regulation can be interpreted in a way that accommodates the new technology, or that guidance and clarification may be provided in order to explain how the intended activity is permitted under the current regulatory framework. It is important to note that there may be situations in which a

[47] OECD (2024), Regulatory experimentation: Moving ahead on the agile regulatory governance agenda, 27-30

[48] An innovative business model – for example, Uber. An innovative technology – for example an autonomous vehicle.

regulatory sandbox is required even when it is unclear whether a regulatory barrier exists due to legal ambiguity. In such cases, the regulatory sandbox may offer an accompaniment track under which the regulator clarifies to the company, upon request, that the activity is permitted for the purposes of the experiment, subject to conditions[49].

In addition, there may be situations in which it is clear that no regulatory barrier exists, yet the company still requires regulatory support in conducting the experiment (a "reverse sandbox"). In these cases, the regulatory sandbox may offer a support track in which the regulator may oversee the experiment subject to conditions[50]. That said, the clearest use case for a regulatory sandbox is where it becomes evident that adaptation of the regulatory rules is indeed necessary. When it is determined that the intended activity is not permitted under the existing rules, it is important to identify whether those provisions were established in primary legislation, secondary legislation, or in procedures such as guidelines or license conditions set by the regulator. As the Talmudic proverb, "the mouth that forbade is the mouth that permits." It is important to determine the normative level at which the rules were set, in order to assess whether there is authority – at the same normative level – to deviate from the rule for the purpose of regulatory experimentation, or whether a new legal framework must be established.

For example, when experiments with autonomous vehicles first began in Israel, it was necessary to overcome regulatory provisions established in the regulations, such as regulation 28 of the Traffic Regulations[51], which requires the driver of a vehicle to hold the steering wheel. This was since, in the initial experiments, although a test driver was seated in each vehicle as a safety measure, he naturally did not hold the steering wheel of the autonomous vehicle. In addition, it was necessary to overcome the provisions of regulation 282, under which vehicles could only be registered and licensed if they met international standards[52], whereas at that time no international standard for autonomous vehicles existed. Against this backdrop, it was decided to amend the Traffic Regulations and add regulation 16A, which conferred on the Supervisor of Transportation the authority to exempt experimental technological[53] uses from the provisions of the regulations. Subsequently, when there was interest in expanding the experiments to include autonomous vehicle operation without test drivers, a broader deviation from existing legal norms was required, including

[49] For example, by means of a no-action letter clarifying that, notwithstanding the provisions of the law or regulations, no enforcement measures will be taken during the experiment period, subject to defined conditions; or through a pre-ruling in which the regulator provides the company with a prior opinion stating that, according to its interpretation, the activity in question is not subject to the regulation under its authority or, on its face and subject to conditions, does not contradict it. Another option is to grant a "letter of support," under which the regulator is authorized to permit the activity subject to conditions (see, for example, in a slightly different context, section 17 of the Fintech Sandbox Bill, *supra*, note 26, which applied an arrangement addressing the concerns of participants in the support track regarding anti-money laundering).

[50] See note 66 below.

[51] Regulation 28 of the Traffic Regulations, 1961.

[52] *Ibid*, regulation 282.

[53]

provisions established in primary legislation, such as the obligation for a driver to be present in the vehicle. Accordingly, a broader amendment to primary legislation was promoted, culminating in the enactment of the Road Traffic Ordinance Amendment Law (No. 130), 2022.

After mapping the relevant regulatory provisions, the second stage involves examining whether there is a need for relaxation, flexibility, adaptation, addition, or tightening of the existing regulation. This is because, generally, the regulatory sandbox is suited to three main scenarios[54]:

a) **A need for relaxation, flexibility, or adaptation of existing regulation in a regulated market** – The most common use case for the regulatory sandbox is to amend existing regulation for the benefit of participants. That is, when an existing regulatory requirement prohibits or restricts the development or use of an innovative model, the regulatory sandbox may offer a temporary waiver or limitation of such a condition. This waiver enables testing of the innovative model under real-world conditions. A similar scenario is where adaptation of the existing regulation is required, and thus, the sandbox permits changes that are not necessarily more lenient or reduced, but rather are better tailored to the size and specific characteristics of the innovative model.

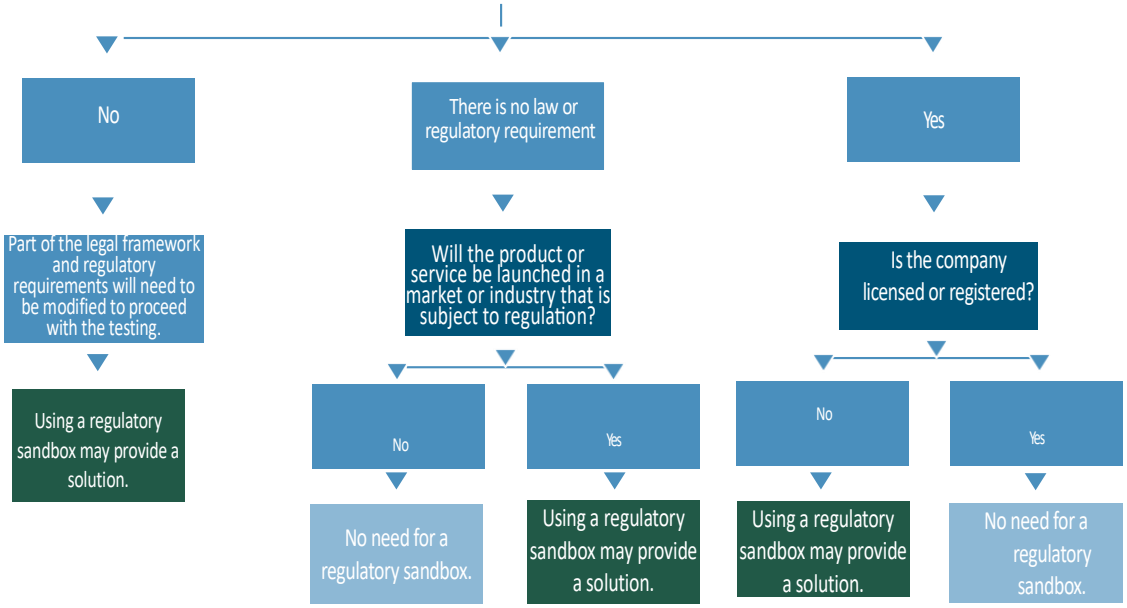
b) **A need for addition or tightening of regulation in an unregulated market** – Another scenario, sometimes referred to as a "reverse regulatory sandbox,"[55] involves the use of a regulatory sandbox to introduce conditions that restrict the development or use of an innovative model, as an alternative to imposing a more rigid and permanent prohibition or restriction. For example, in some cases participants seek to introduce a new technology into the market that presents previously unregulated risks, which may nevertheless be regulated in the future. In such circumstances, the regulator – subject, of course, to its authority and adherence to administrative law procedures – may propose that participants operate within a reverse regulatory sandbox, allowing the regulator to study the technology and its implications, and potentially to establish tailored conditions to prevent harm to protected supervisory interests. In exchange, the regulator may refrain from imposing immediate and rigid regulation that would entirely prevent or restrict the development and use of the technology at this stage.

c) **A need for temporary authorization of activity pending confirmation of compliance with existing regulation** – A further, slightly different, scenario arises when participants in the regulatory sandbox wish to operate in a regulated market under licenses, and the innovative model they seek to introduce complies with the existing regulatory requirements, but they have not yet been granted the

[54] Civil Service College Singapore, *supra*, note 28, p. 7.
[55] For example, Jon Truby Rafael Dean Brown, Imad Antoine Ibrahim and Oriol Caudevilla Parellada, *A Sandbox Approach to Regulating High-Risk Artificial Intelligence Applications*, 13(2) EUR. J. RISK REG.270 (2022).

required license. During this interim period, while the regulator examines whether the participants and their innovative model indeed meet the existing regulatory conditions and are eligible for a license, it may be possible to allow them to operate within the framework of a regulatory sandbox until the final license is issued.

Figure 1: When Is It Appropriate to Use a Regulatory Sandbox?



How is a regulatory sandbox implemented?

An African proverb says, "It takes a village to raise a child." Similarly, to make use of a regulatory sandbox in a way that maximizes the benefit it can offer, a comprehensive supporting system is required. This system must treat the experiment as part of an integrated process.

The "life cycle" of the regulatory sandbox generally includes several actions from the regulator's perspective, which can be divided into four main stages:

In the first stage, which precedes the experiment, the regulator must examine whether the innovative model and the relevant field are suitable for handling through a regulatory sandbox. This examination should take into account, among other factors, the objectives of the regulatory sandbox and its common components as reviewed above, the level of risk associated with applying a regulatory sandbox in the specific case, and the scope of the experiment and the regulatory relief required. In addition, the regulator must assess whether the supervised entities are suitable to participate in a regulatory sandbox, taking into consideration the maturity of their innovative model (for example, ensuring it has passed the initial development stage and is ready for testing), their relationship with the regulator (given the regulator's authority and supervisory capabilities over the participants and any prior familiarity with their activities), and their ability to carry out the experiment.

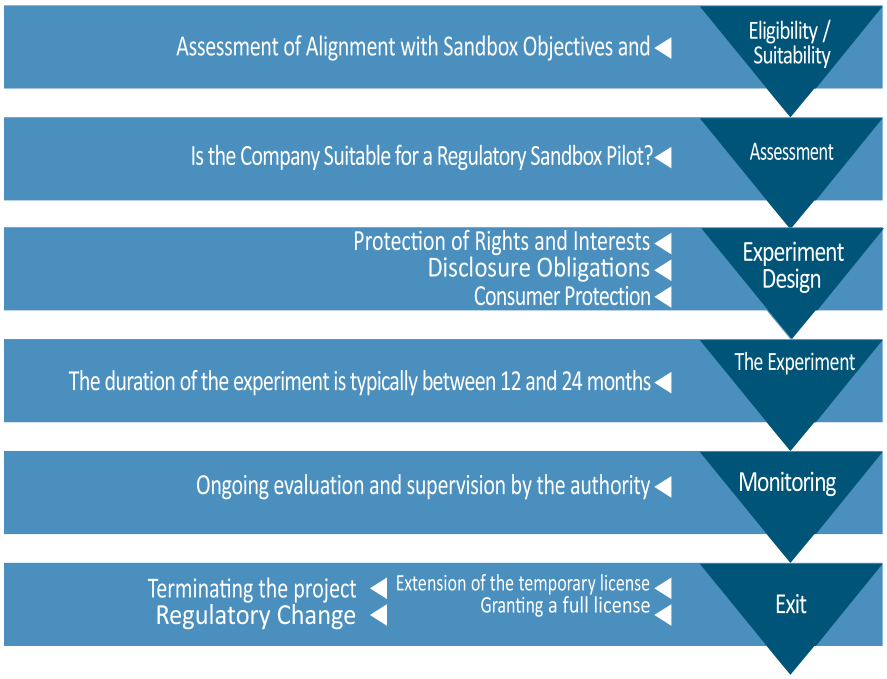
In the second stage, leading up to the experiment, the regulator must formulate and design a practical plan for carrying out the experiment (a testing plan), including, among other factors, addressing and responding to the risks associated with the experiment, the regulator's authority to deviate from existing regulatory requirements, the specific conditions to be set, and the regulator's oversight plan during the testing period. As part of this, it is advisable for the regulator to predefine an "exit strategy" for the end of the testing stage and, where appropriate, consider how the transition from the sandbox to a permanent regulatory framework might occur.

In the third stage, the testing phase, the experiment may commence for the defined duration and under the agreed conditions. During this phase, the regulator will monitor and oversee the process, typically also relying on reports submitted by the participants.

In the fourth stage, following the conclusion of the experiment, the regulator must draw lessons and conclusions from the process. In addition, the regulator will be required to adapt the predefined exit strategy as needed, implement it, and decide whether and how to proceed with a permanent framework. The regulator will generally face four options: (a) Extend the temporary authorization for activity within the regulatory sandbox; (b) Grant permanent approval to the participants without changing the existing regulation (for example, if the experiment reveals that the innovative model is already permissible under current regulation); (c) Terminate the experiment and cancel the regulatory arrangement tested; (d) Establish a new permanent framework that alters the existing regulation[56].

[56] World Bank Group (WBG) (2020), How Regulators Respond to Fintech Evaluating the Different Approaches—Sandboxes and Beyond 24 (2020).

Figure 2: The "Lifecycle" of a Regulatory Sandbox



In many cases, this process is supported by the establishment of an advisory committee, which may be established either through authorizing legislation or by the regulator's procedures, and may operate within a single ministry or across multiple ministries. The role of such a committee is to advise the regulator, based on a comprehensive view of the experiment. The committee may review applications for participation in the experiment, receive and discuss reports from the participants, assist in developing an exit strategy, and make recommendations for regulatory changes based on the experiment results and conclusions of the. Even in the absence of an advisory committee, it is advisable to consider incorporating these elements.

For example, the Ministry of Transportation and Road Safety operates the Committee for Reviewing Experiments in Traffic Arrangements, which was established under a ministerial procedure based on the authority granted in Regulation 16A of the Traffic Regulations, 1961, which allows the Supervisor of Transportation to exempt from regulatory provisions for the purpose of conducting an experiment[57].

The "life cycle" of a regulatory sandbox can be regulated through a guiding procedure to be published to the public, detailing the various processes within the scope of

[57] Ministry of Transportation Procedure "Procedure for Conducting Experiments on Roads in the Context of Traffic Arrangements – Second Edition" (26.5.2023) (In Hebrew).

exercising the authority, including the submission process of a request for an exemption, the approval process for the experiment, the considerations for approving the request, the course of the experiment (implementation of the experiment and cessation of the experiment), reporting, the regulator's activities to promote the field in which the experiment was conducted, and public disclosure [58].

It is important to note that, alongside the creation of appropriate mechanisms and institutions to support the implementation of the sandbox, a regulatory culture of experimentation and a willingness to manage risk is required. Government Resolutions No. 212 and 218 have been advanced in order to promote the establishment of a comprehensive support system for regulatory experimentation. At the same time, a recent amendment was made to Directive 2.37 of the State Attorney, titled "Prosecution Policy Regarding Decisions to Prosecute for Offenses of Negligent Homicide and Negligent Injury." As part of this amendment, the chapter on "Prosecution of Regulators Acting Within the Scope of Their Duties" was revised to state that when legislation or regulations authorize a regulator to temporarily and conditionally permit experiments involving new technologies or new uses of existing technologies for the purpose of evaluating performance, the act of permitting an experiment based on risk management will not be considered an unreasonable risk. In other words, a broad protection from criminal liability has been established for regulators seeking to operate a regulatory sandbox.

[58] See, for example, *ibid*.

4. Advantages and Challenges in the Use of a Regulatory Sandbox

The use of a regulatory sandbox is intended to address the various challenges that arise from the desire to integrate new technologies or other innovative models into the market – particularly the challenge of dealing with regulation that impedes desirable technological advancement, even when such advancement holds benefits for society or the economy.

Advantages

From the regulators' perspective, the first and primary advantage of creating and utilizing a regulatory sandbox lies in its ability **to promote technological advancement and innovation, while maintaining protection of the rights and interests under their oversight**[59]. Second, the regulatory sandbox **allows the regulator to closely study** the innovative model and its implications, by receiving information from participants before and during the experiment, as well as through direct professional dialogue between the regulator and the participants (and sometimes other relevant parties), to deepen understanding of the innovative model. The regulatory sandbox is intended to assist the regulator in fulfilling its mandate just as much as it is intended to benefit the participants. Third, during the experiment, the regulatory sandbox **enables the regulator to examine and adapt the regulation** within its area of responsibility to fit the technological developments and innovations, allowing for the evolution of relatively flexible regulation that continuously learns and improves[60]. At the same time, the regulator's close oversight and the specific conditions it can impose allow it to carry out its duties effectively and protect its designated interests. Fourth, after the experiment, a regulator who has acquired knowledge and expertise regarding the innovative model and gained an in-depth understanding of how it is regulated will be better equipped to establish higher-quality regulation based on real-world experience. **According to the results in the experiment, the regulator may set tailored, data-driven regulations to serve as a permanent framework**. Fifth, due to early involvement in the development or use of the innovative model, **the regulator may be able to influence the model from the outset and encourage "responsible" development** and use aligned with the purposes of regulation in its domain. Sixth, international experience shows that using a regulatory sandbox also **enhances coordination among regulators** and fosters

[59] Wolf-Georg Ringe & Christopher Ruof, *A Regulatory Sandbox for Robo Advice*, European Banking Institute Working Paper, No. 14 (2019).
[60] Radostina Parenti, *Regulatory Sandboxes and Innovation Hubs for FinTech: Impact on innovation, financial stability and supervisory Convergence*, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament (2020).

communication between regulators and the regulated entities, as a result of the feedback emerging from the experiment[61].

From the participants' perspective, first, the primary advantage of joining a sandbox lies in the fact that **they are granted changes to existing regulatory conditions** – often in the form of exemptions or relief – which allows them to operate during the testing period. During this time, participants **can test their innovative model in a "real-world"** setting, prove its feasibility and advantages, and improve it.

Second, the regulatory sandbox **helps overcome uncertainty** regarding the regulatory environment[62]. When regulated entities are unsure about regulatory requirements or their ability to align an innovative model with such requirements, they may refrain from pursuing innovation. The sandbox can help prevent such "missed opportunities" by providing a controlled environment for testing, thereby reducing regulatory uncertainty. Third, **participants benefit from the expectation that the final regulation adopted following the sandbox process will be of higher quality and more efficient**, taking into account their activities, the broader impact on society and the economy, and only the actual (rather than theoretical) risks involved.

Finally, fourth, regulatory oversight and the conditions established by the regulator may **enhance consumer trust** and influence their decision to adopt the innovative model developed. Operating under tailor-made regulation may also **reduce market entry costs**. Furthermore, experience shows that the regulatory sandbox **encourages investors** to invest in the innovative model being tested, as it is perceived as both cutting-edge and desirable[63].

Challenges

Alongside its advantages, the sandbox also raises a series of challenges and concerns. First, it is generally difficult to foresee all the risks involved in an untested innovative model, and improper risk management may undermine the very objectives for which regulation was originally established, particularly the rights and interests of users involved in the pilot[64]. There is also concern about damage to public trust in the innovative model resulting from such harm[65].

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[61] World Bank Group (WBG) (2020), *Global Experiences from Regulatory Sandboxes, Finance Competitiveness & Innovation Global Practice*, Fintech Note No.8, 38 (2020). **OECD Report**, *supra*, note 25, p. 12.
[62] Wolf-Georg Ringe & Christopher Ruof, *Regulating Fintech in the EU: The Case for a Guided Sandbox*, 11 EUR. J. RISK REG. 604 (202o).
[63] Brian R. Knight & Trace E. Mitchell, *The Sandbox Paradox: Balancing the Need to Facilitate Innovation with the Risk of Regulatory Privilege*, 72 S. C. L. REV. 445, 450 (2020).
[64] Jacob S. Sherkow, *Regulatory sandboxes and the public health*, 2022 U. ILL. L. REV., 357, 369 (2022).
[65] *Ibid*, p. 370.

Second, the design and operation of a regulatory sandbox require the allocation of significant resources by the regulator, who must replace a uniform policy with risk management and a framework tailored to the supervised entities on an individual level[66]. Third, since regulators have limited resources and it is not feasible to establish a dedicated regulatory sandbox for every supervised entity, prioritization among different applications is necessary, which may raise equality-related difficulties. The regulatory reliefs often also translate into economic advantages, and the sandbox may provide participants with a favorable starting point in a competitive market, increasing the likelihood of attracting investors to the innovative model being tested (which is perceived as cutting-edge and desirable). In addition to the potential harm to equality, these characteristics may confer market power upon participants in the regulatory sandbox, which may translate into market distortions and harm to competition and the public[67]. Fourth, there are difficulties in data collection due to the costs involved and in preparing reports, especially as potential participants may fear information leakage (which generally constitutes sensitive trade secrets) to external entities and competitors[68]. Fifth, difficulties sometimes arise in fields regulated by more than one regulator, due to the need for cooperation between regulators in order to enable the operation of the regulatory sandbox. In some cases, cooperation is required between the regulator and other state entities that are not regulatory authorities[69]. Sixth, significant and complex work is required on the part of the regulator in formulating an exit strategy from the regulatory sandbox, which will prevent the emergence of substantial market power in the hands of participants – power that could negatively impact competition and the public interest as a result of regulatory accommodations to their activity – and must also include preparations for transition to a permanent regulatory framework and work thereon.

Seventh, there is a challenge in finding the right balance between designing a regulatory sandbox that is, on the one hand, sufficiently attractive to encourage participation by companies that genuinely need it, and, on the other hand, prevents misuse. In this context, there is concern about abuse of the regulatory sandbox mechanism by supervised entities with bargaining power over regulators, who may seek regulatory relief under existing frameworks without a substantive justification for the use of the sandbox. Conversely, poorly designed regulatory sandboxes – for example, requirements for excessive disclosure of trade secrets or overly burdensome conditions – may create disincentives, turning the sandbox into a "dead letter" or a mechanism primarily used by companies for which regulatory oversight is less warranted. Eighth, a complex ethical concern arises from the fact that, in a certain sense, users of the innovative model within the sandbox – such as consumers of the

[66] *Ibid*.
[67] Knight, *supra*, note 58, p. 465.
[68] *Ibid*, p. 448.
[69] For example, at times, there is a request to advance a regulatory sandbox that requires the allocation of land for the experiment, which necessitates cooperation between the regulator and the Israel Land Authority, the body managing state-owned lands.

new technology being tested – effectively serve as test subjects during the trial, not always with their knowledge or informed consent.

These challenges and concerns have been extensively discussed in literature and in international reports, and various solutions have been proposed. For example, in response to concerns about harm to interests protected by regulation during the trial, it is expected that the regulator will, where necessary, set specific conditions such as limits on the trial's duration, the number of participants, and the geographic scope in which it will take place. In fact, limiting the scope of the trial to reduce the risks involved is the original justification for employing this model.

In addition, it is expected that the regulator will, where necessary, conduct close oversight over the implementation of the trial. Regarding equality, it has been proposed that the regulator publish a broad competitive process open to all relevant supervised entities, allowing them to apply for participation in the regulatory sandbox, or that applicants whose submissions were rejected be permitted to reapply after making the required adjustments.

Regarding concerns about the potential creation of significant market power resulting from participation in the regulatory sandbox, it has been suggested that the regulator design the specific conditions to be established for the trial period, taking into account the impact on competition and ensuring that the regulation does not create a competitive barrier; that participation of small and medium-sized players be encouraged; that the inclusion of multiple participants be permitted; and that an "exit strategy" be predetermined to account for the potential impact of the sandbox on market structure. To address concerns of abuse, it has been proposed to establish a supervisory mechanism (such as a high-level trial committee) to review regulatory decisions, or to require public disclosure of the intention to use the regulatory sandbox in a way that would enable public oversight.

Regarding overlapping regulatory jurisdictions, it has been proposed to create a regulatory sandbox involving multiple regulators (such as a sandbox in the financial regulatory domain including banking, securities trading, insurance, and investments), enabling coordinated management where regulation overlaps.

Finally, the ethical concern described above may be addressed in appropriate cases by informing users of the innovative model about the trial and obtaining their consent to participate.

5. Key Considerations Regarding the Normative Design of a Regulatory Sandbox in Israel

In many cases, the preferred path for regulating the conduct of experiments through legislation is by establishing a regulatory sandbox framework. Within such a framework, it is possible to create a regulatory "testing environment" that enables the examination of the suitability of regulation to a specific market or technology, and in particular, to create favorable conditions for technological development. Within a statutory framework of a regulatory sandbox, the regulator is typically authorized to exempt from existing regulatory requirements while setting alternative conditions. This is intended to allow the operation of supervised entities or companies using innovative technologies or business models in a controlled, limited, and time-bound manner.

As detailed above, in recent years Israeli legislation has shown increasing use of the regulatory sandbox technique. Prominent examples include the sandbox arrangement for autonomous vehicles, described in detail above, as well as the initiative to create a framework for a regulatory sandbox in the fintech sector, the legislation for which has not yet been completed[70]. In the fintech field, it was found that there is significant activity in Israel, but existing regulation constitutes a major barrier for companies operating in this domain and delays its development in the country. Consequently, a bill aiming to create a regulatory framework adapted to the fintech sector and to enable companies to operate in Israel in order to encourage market development was formulated[71]. Alongside these detailed frameworks, one can identify in Israeli legislation various degrees of regulatory experimentation embedded within normative provisions, particularly in primary and secondary legislation. As a general matter, the current legal framework reflects a wide range of detail in regulatory sandbox arrangements – ranging from detailed provisions as noted above, to narrow, minimal arrangements consisting of a single section or regulation granting the authority to exempt a supervised entity from legal provisions for the purpose of conducting a trial.

In this concluding chapter, we aim to offer guidance on how legislative provisions intended to regulate a regulator's authority to establish small to medium-scale "sandboxes" should be structured. The reference is not to highly complex frameworks that justify the drafting of very detailed arrangements in primary legislation, as discussed above, but rather to "intermediate" and lower-level frameworks in which a general enabling provision must be established to allow for exemption for the purpose of experimentation.

The following are **the five fundamental pillars for the establishment of the legal framework for a regulatory sandbox**: (a) the authority to grant exemptions for

[70] Fintech Sandbox Bill, *supra*, note 26 (In Hebrew).
[71] P. 205 of the Commentary on the Fintech Sandbox Bill, *ibid* (In Hebrew).

experimental purposes; (b) establishing conditions and limitations for the exemption; (c) the process for reviewing exemption requests; (d) management of the experiments; (e) and the "day after" the regulatory sandbox.

A. The Authority to Grant Exemption for Experimental Purposes

Authority to Grant Exemption:

One of the main legal barriers facing regulatory experimentation is the issue of authority. In many cases, there is a need to temporarily authorize an experiment intended for technological development, but the regulator lacks the authority to approve it because the experiment would require actions that are contrary to legal requirements – primarily in primary or secondary legislation. In other cases, the normative provision from which deviation is sought is enshrined in a license within the regulator's authority, but even then, the regulator may prefer to establish a regulatory sandbox arrangement to govern the conduct of the experiment.

Therefore, the core of the commonly accepted legal structure for a regulatory sandbox is the granting of authority to the regulator to allow the conduct of an experiment that involves a certain degree of override of regulatory provisions. This is typically done by **conferring the authority to grant a conditional exemption** from regulatory requirements to the party conducting the experiment, or alternatively, by granting authority to issue a permit, license, or temporary approval for the purpose of conducting the experiment. The provision granting the authority to exempt from regulatory requirements must be established at least at the same normative level as the substantive provision from which the exemption is sought (for example, if the exemption is from a provision set in regulations, then the authority to grant the exemption must be established, at a minimum, in regulations).

At the same time, there are cases in which companies may promote an experiment that is not in violation of legal requirements, yet still seek regulatory accompaniment (for example, due to difficulty in operating in the field without regulatory oversight or due to legal uncertainty regarding the applicability of legal requirements). In such situations, the regulator is typically authorized to provide such support within the scope of its general powers and as part of its regulation of the relevant market. When formal authority is required for this, it is also possible to **confer power upon the regulator to accompany** a company conducting an experiment that is not impeded by a regulatory barrier or where there is legal uncertainty regarding the applicability of regulation to the activity, by way of setting conditions for the activity[72].

[72] See, for example, Sections 9(2) and 17 of the Fintech Sandbox Bill, *supra*, note 26 (In Hebrew), which proposed the establishment of a guidance track, after it was found that even fintech companies whose

Naturally, the authority granted to the regulator to provide conditional exemptions for experimental purposes pertains only to exemptions from regulatory requirements that fall within the regulator's jurisdiction (and not to exemptions from obligations set out in other legislative acts beyond the regulator's authority or from international obligations).

The Identity of the Competent Authority:

In most cases, **the authority to grant an exemption is typically vested in the regulator himself, in order to allow maximum flexibility in the exercise of that authority**. As a rule, it is recommended not to establish a framework that allows the regulator to delegate this sensitive and complex authority. In appropriate cases, the regulator may be permitted to delegate this authority to a senior official under their direct supervision .

It is important to note that granting authority to the regulator does not prevent the regulator, of course, from making the decision in practice following consultation with other professional or technological experts, and it is also possible to regulate a decision-making mechanism of this kind in a formal procedure. **In appropriate cases**, where the experiment may have significant implications for the responsibilities of another regulator, **it may be advisable to include in the authorizing provision a requirement for consultation** with another relevant professional body. In complex cases, **authority may even be conferred upon a committee** that includes, in addition to the regulator, several representatives, in order to facilitate coordination, a range of expertise, or balancing of differing interests.

activities are not subject to a permit or supervision encounter significant difficulties in their operations in Israel (such as difficulty in dealing with the banking system due to the lack of a regulatory framework in the field of anti-money laundering and counter-terrorism financing, which significantly increases the risk of their activities from the perspective of the banking system). The purpose of the track was to address the challenges faced by financial technology companies, including by applying an anti-money laundering and counter-terrorism financing regime through a dedicated anti-money laundering order.

Example – Consultation with an Additional Authority in Granting an Exemption:
Pursuant to the Water Regulations (Prevention of Water Pollution) (Use and Disposal of Sludge), 2004, the authority of the Supervisor to grant an exemption for experimental use of stabilized sludge requires consultation with the Health Supervisor:

> "7B. (a) An operator may transfer stabilized sludge for use in an experiment aimed at developing or testing additional uses for sludge that pose a lesser risk to water sources or the environment, if approval for such is granted by the Supervisor and in accordance with the conditions of the approval; the Supervisor shall grant the approval after consulting with the Health Supervisor, as defined in the Public Health Regulations (Standards for Treated Wastewater and Rules for Wastewater Treatment), 2010."

Definition of "Experiment"

In addition to conferring authority, **it is important to define the term "experiment"** in a manner that clarifies that it refers to a temporary examination intended to test the use of an innovative technology or an innovative business model[73], which is made possible due to technological advancement. Moreover, since innovation can manifest in various ways, it is advisable to draft the provision in a manner that grants authority to approve an exemption not only for experiments aimed at developing innovative technology, but also for those involving a new use of existing technology, and even for experiments whose purpose is the development of a new business model.

Beyond that, innovation may serve to advance the objectives of the regulator itself (for example, technological development aimed at reducing pollutant emissions), or to improve the operational processes of the supervised entities (for example, technological development intended to lower the cost of pollutant filtering processes). As further detailed below, in the management of the regulatory sandbox – given that its operation often requires significant resources and may necessitate prioritization among various applications – it is possible, retrospectively, to prioritize experiments that align with the regulator's needs. However, with regard to the conferral of the authority to grant an exemption, it is recommended that the provision be drafted broadly, so as to permit the granting of an exemption both for trials intended to develop technology that advances regulatory objectives and for trials intended to streamline internal work processes.

[73] Innovative technology – e.g., autonomous vehicle; innovative business model – e.g., Uber.

Example – Authorization to Grant Exemption for the Purpose of Conducting Experiments in Autonomous Vehicles:

Through an amendment to the Traffic Regulations (Amendment No. 12), 2018, the National Transportation Supervisor was authorized to decide on the granting of exemptions from the provisions of the regulations for the purpose of conducting an experiment:

> "16A. (a) The National Transportation Supervisor may, for the purpose of conducting an experiment… decide to grant an exemption to the experimenter or to a person acting on his behalf, from the provisions of one or more of the regulations in Chapter Two of Part B of these Regulations, with or without conditions, as applicable. […]
>
> In this regulation, 'experiment' means: the use of new technology, or a new use of existing technology, for the purpose of testing its operation on a road, as defined in section 1 of the Ordinance."

Proposed Section for Granting Authority to Exempt an Experimenter under Sandbox Legislation:

[The Supervisor / the Minister, or whomever they authorize for this purpose] may, for the purpose of conducting an experiment, [in consultation with another relevant authority], decide to grant an exemption to the experimenter from one or more provisions of [this Law / these Regulations], with or without conditions, if all of the following conditions are met and subject to the provisions of [the section stipulating the conditions for exemption]:

"Experiment" – the use of a new technology or a new business model, or a new use of an existing technology or existing business model, in a limited and temporary manner, for the purpose of testing its functionality.

B. Establishing Conditions and Limitations for Granting the Exemption

As described in detail in Chapter 4 above, alongside the many advantages of the regulatory sandbox tool, there are also significant challenges. Therefore, it is important to design a legal framework that outlines an orderly process capable of addressing the various challenges – particularly the need **to protect consumers** participating in the experiment **and third parties** who may be affected by it; to mitigate harm to **protected interests** under the responsibility of the regulator; to ensure **equality and fair competition** in the controlled market; and to facilitate the regulator's **learning** of the innovative domain.

Accordingly, when designing the legal framework that grants the authority to issue an exemption for experimental purposes, it is important to include within it the necessary conditions and limitations that will serve to address all of these aspects. Limitations must be established in order to manage the risks associated with the experiment and to contain its potential harms within the boundaries of the "sandbox." Therefore, it is essential to include in the provision a general-level authorization for the Supervisor to set conditions, as necessary, to prevent harm to protected interests. At the same time, there are several specific conditions and limitations that should be considered for explicit inclusion within the scope of the authorizing provision.

First, in every regulatory sandbox, it is important to set a maximum time limit for the conduct of the experiment and for its possible extension, to ensure that the framework remains a temporary trial and not a permanent arrangement.

Example – Time Limitation for Conducting the Experiment:
Pursuant to the Water Regulations (Prevention of Water Pollution) (Use and Disposal of Sludge), 2004, alongside the authorization to grant an exemption for the removal of stabilized sludge, limitations on the exemption are also included. As stated in section 7B(c), the exemption is granted for a period of up to one year, and the Supervisor is authorized to extend it for a total period not exceeding 3 years:

> "7B. (a) An operator may remove stabilized sludge for use in an experiment aimed at developing or testing additional uses for sludge that pose lesser harm to water sources or the environment, provided that approval is granted by the Supervisor and in accordance with the conditions of the approval; ...
>
> (b) In the approval under subsection (a), the Supervisor shall set conditions, as necessary, to prevent harm to the environment or to public health, as applicable.
>
> (c) The approval under subsection (a) shall be granted for a period of up to one year, and the Supervisor may extend it for additional periods, each not exceeding one year, provided that the total duration shall not exceed three years."

Second, it is important, in appropriate cases, to establish additional limitations on the scope of the experiment in order to contain its potential harm. Such limitations may include: restricting the geographic area in which the experiment will be conducted[74]; limiting the number of participants, and the experiment budget cap[75].

[74] See, for example, section 224A(b)(1) of the National Insurance Institute Law.
[75] See, for example, section 21 of the Rehabilitation in the Community of Persons with Mental Disabilities Law, 2000.

Example – Limiting the Number of Participants in the Experiment:

With respect to autonomous vehicles without a driver, the Road Traffic Ordinance sets forth a list of conditions limiting the authority of the National Transportation Supervisor to issue operating permits for experimental purposes. Among these conditions, it is stated that:

> "16F. […] (d) The number of autonomous vehicles that the National Transportation Supervisor may authorize for operation under this section shall not exceed 500; the Minister, after consulting with the Minister of Finance and with the approval of the Knesset Economic Affairs Committee, may, by order, amend the said number, taking into consideration, *inter alia*, the experience accumulated from the experimental operation of an autonomous vehicle under this Article."

In this case, the purpose of limiting the number of participants in the experiment is to monitor the level of risk posed by the experiment to the general public. Accordingly, authority was granted to the Minister to increase the number of participants by order, after sufficient experience has been accumulated from the experimental operation of autonomous vehicles that may serve to reduce the level of risk.

Example – Limiting the Experiment Budget:
The Rehabilitation in the Community of Persons with Mental Disabilities Law, 2000, authorizes the Minister or anyone acting on his behalf to approve the operation of rehabilitation services that are not included in the rehabilitation basket, for the purpose of assessing their rehabilitative benefit, but limits the total cost of operating these experimental services.

> "21. The Minister, or whomever he authorizes for this purpose, may approve the operation of rehabilitation services that are not included in the rehabilitation basket, on an experimental basis, for the purpose of assessing their rehabilitative benefit, provided that their total operating cost shall not exceed 5% of the annual rehabilitation budget under this Law."

Third, limitations regarding the identity of the exemption applicant may be set. In this context, it is recommended not to restrict the identity of the applicant such that the opportunity to be included in the regulatory sandbox is limited only to a supervised entity operating within its existing activities, or, conversely, only to a new entrant not yet operating in the same market – except in appropriate cases[76]. Likewise, it is

[76] See the definition of "Applicant" in section 7(d)(1) of the Electricity Market Regulations (Criteria for the Level, Quality, and Reliability of Service Provided by an Essential Service Provider), 2018 (hereinafter: the

possible to impose limitations intended to facilitate oversight of the applicant, such as requiring the applicant to be a registered corporation, with its principal place of business in a country, and with officers who have not been charged with criminal offenses.

Fourth, limitations to protect participants in the experiment may be established. These limitations will generally relate to the identity of the experiment participants – for example, restricting participation to a specific age group, or only to those who have given affirmative consent to participate in the experiment[77], or only to individuals who were presented with a clear choice not to participate[78]. In addition, limitations may be set to ensure compensation for potential harm – such as requirements for guarantees, insurance arrangements, and similar measures.

Example – Limiting Participant Characteristics and Geographic Area:
In conducting dependency assessments under a pilot program pursuant to the National Insurance Law [Consolidated Version], 1995, it was stipulated that participants in the experiment must fall within a defined age range and reside in an area predetermined by the Minister by order.

> "224A. […] (b) Notwithstanding the provisions of section 422(c), during the pilot period, a dependency assessment may be conducted by a specialist physician, as defined in the said section, as part of his work in a medical institution in accordance with that section, for an insured person who has reached the age of 80 but not yet 90, within the framework of a pilot program and subject to all of the following:
>
> (1) The insured person resides in an area designated by the Minister by order; the number of such designated areas shall not be fewer than six; […]"

Finally, conditions may be established to ensure the regulatory oversight necessary for monitoring the progress of the experiment and learning from its outcomes, such as the obligation to submit periodic reports to the regulator. In these contexts, it is important to balance the regulator's need to obtain any information essential for the supervision and evaluation of the innovative model, against the risk of excessive disclosure that may include trade secrets and internal materials.

Below is a proposed section for setting conditions and limitations on exemptions granted under sandbox legislation:

"Electricity Market Regulations"): "Applicant" – a person other than an Essential Service Provider, who has received approval from the Chief Scientist at the Ministry of Energy that the activity proposed to be carried out by him constitutes a pilot.

[77] Section 224A(b)(2) of the National Insurance Institute Law, *supra*, note 68.

[78] Section 9 of the State Education Law, 1953.

[The Supervisor / the Minister, or whomever they authorize for this purpose] may, for the purpose of conducting an experiment, [in consultation with another relevant authority], decide to grant an exemption to the experimenter from one or more provisions of [this Law / these Regulations], with or without conditions, if all of the following are met and subject to the provisions of [the section stipulating conditions for the exemption]:
[The following are examples of conditions for the exemption:]

(a) The applicant is a company incorporated in Israel under the Companies Law, 1999 (in this section – the "Companies Law"), with its principal place of business in Israel, or is a company lawfully incorporated outside of Israel with its principal place of business in Israel;

(b) The applicant, a controlling shareholder of the applicant, or an officer thereof has not been convicted of a criminal or disciplinary offense which, by its nature, severity, or circumstances, renders the applicant unfit to conduct an experiment, and no indictment or disciplinary complaint has been filed against them for such an offense; for this purpose, "officer" – as defined in the Companies Law;

(c) The applicant has submitted a detailed experimental plan to the [Competent Authority] and demonstrated its ability to carry out the plan;

(d) The applicant, during the planning of the experiment, conducted a documented risk management process in which measures were taken to mitigate risks;

(a) The [Competent Authority] shall make the exemption subject to conditions necessary for the protection of [the protected interest], including, among others: [see exemplary conditions]

(1) Conditions regarding the duration of the experiment, provided that the duration of the experiment shall not exceed [two years]. Upon the lapse of [one year] from the start of the experiment, the Supervisor may extend it for one additional period of [two years] only;

(2) Conditions regarding the scope of the experiment, including the number of participants and the geographic area in which the experiment shall take place, as applicable;

(3) Conditions regarding the submission of periodic reports by the experimenter on the progress of the experiment, and additional conditions required to ensure the [Supervisor's] oversight of the experiment's progress and the ability to learn from its outcomes;

(b) The Supervisor may establish additional conditions necessary for the conduct of the experiment and for the protection of the protected interest, including:

(1) Conditions aimed at promoting competition in [the field of the experiment];

(2) Conditions aimed at ensuring public safety;
(3) Conditions relating to the requirement to purchase an insurance policy and its terms.

C. Review Process for Exemption Applications

Regulating the Submission of Exemption Requests for the purpose of Conducting an Experiment:

It may be stipulated that the application shall include: information about the company and the experimenter; a general description of the experiment and the experimental technology; the requested scope and duration of the experiment; a detailed list of the legal provisions from which exemption is sought; proposed alternative conditions for conducting the experiment; and any other information the applicant deems relevant to the request.

For example, in order to examine new technology or a new use of existing technology expected to improve or enhance the performance of the electricity sector, the Electricity Authority is authorized to approve deviations from the instructions set forth in the criteria. To this end, the applicant must submit a request in accordance with the conditions set forth in the Regulations[79].

Additionally, as described, regulatory sandbox legislation may include provisions intended to preserve equality among market participants. The regulator must allow similar companies to receive similar conditions for their operations. However, there are instances in which it is appropriate to limit the number of companies participating in the experiment, in order to define its boundaries and scope, due to the risks involved. A balance between these considerations can be achieved by issuing a public call inviting companies to submit exemption requests in specific areas, or by publishing the granting of an exemption and allowing the submission of similar

[79] Section 7(d)(3) of the Electricity Market Regulations, *supra*, note 70: "(c) Submission of an Application for Deviation from the Provisions of the Criteria for the Purpose of a Pilot. An Applicant who wishes not to comply with one of the provisions of the Criteria set forth in these Regulations, as detailed in subsection (b), shall submit to the relevant Essential Service Provider (ESP) Segment an application that shall include all of the following: (1) A general description of the pilot and the pilot technology; (2) The anticipated benefit to the electricity market and to the relevant ESP segment from conducting the pilot; (3) The scope and duration of the requested pilot; (4) The period for which the deviation from the provisions of the Criteria is required; (5) A specification of the Criteria from which the Applicant wishes to deviate, whether partially or entirely, and the reasoning for why the requested deviation from the Criteria meets the conditions set forth in subsection (b); (6) A specification of the alternative arrangements to the Criteria required for conducting the pilot; (7) Any additional information that, in the opinion of the Applicant, is relevant to the request for approval of the Applicant's deviation from the Criteria.")

requests when the initiative originates from the market and not from the regulator (with selection among applicants based on equal criteria).

Such a mechanism can be included in the authorizing legislation, although it may in some cases be implemented outside of it. It is important to ensure that the mechanism is structured in a way that does not inherently favor large or established businesses. In view of the significant resources often required to operate a regulatory sandbox, in deciding which applications to approve and how to prioritize them, the regulator is authorized to consider, among other factors, the resources needed to ensure proper supervision and oversight.

Example – Authorization to Approve Experiments for Efficiency in the Electricity Sector:
Under the Electricity Sector Regulations (Testing and Measurement for Conducting Efficiency Experiments), 2009, the Director of the Electricity Administration at the Electricity Authority is authorized to approve the conduct of an efficiency experiment by an essential service provider, aimed at identifying methods and techniques for improving efficiency in the electricity sector:

> "2. An essential service provider may conduct an efficiency experiment in accordance with these regulations.
> 3. The essential service provider shall determine, with the approval of the Director, the manner of conducting the efficiency experiment, its duration, the consumers and the consumption sites or premises that will participate in it, and any other matter required for that purpose; the experiment shall be conducted subject to the conditions of said approval."

The Director's approval must include conditions relating to the manner in which the experiment will be conducted, its duration, the consumers and locations that will participate in it, and any other matter necessary for its execution. In certain cases, the experiment is conditional upon prior notice to the consumer, who is entitled to refuse participation."

Below is a proposed section for regulating the manner of submitting an exemption request under sandbox legislation:

(a) A person seeking to conduct an experiment shall submit a request for an exemption to the [Competent Authority]; the [Competent Authority] shall prescribe the manner in which the request shall be submitted, including submission by digital means.
(b) Without derogating from subsection (a), a request for an exemption as stated shall include all of the following:

(1) A general description of the experiment and the experimental technology;
(2) The expected benefit of conducting the experiment;
(3) The requested scope and duration of the experiment;
(4) A description of the measures that will be taken to ensure the safety of the experiment;
(5) A detailed list of the provisions of [the Law / the Regulations] from which the applicant seeks full or partial exemption, and the justification for why the requested exemption is necessary for conducting the experiment;
(6) The period of time for which the exemption from the provisions of [this Law / these Regulations] is required;
(7) A description of the alternative arrangements to the provisions of [the Law / the Regulations] required for conducting the experiment;
(8) Any additional information that the applicant deems relevant to the request for exemption approval.

Applications Review Procedure

A specific procedure for the exemption process that would ensure consideration of additional interests may be established. For example, as described above, it is possible to prescribe a duty to consult with another ministry, with a professional body, or with a committee composed of various representatives.

Example – Establishing a Duty to Consult:
Regulation 16A(a) of the Road Traffic Regulations, 1961, allows the National Transportation Supervisor to exempt an experimenter from certain provisions, in consultation with the Licensing Authority and a police officer:

> "16A. (a) The National Transportation Supervisor may, for the purpose of conducting an experiment, in consultation with the Licensing Authority and a police officer, decide to grant an exemption to the experimenter or to someone on his behalf, from one or more of the regulations in Chapter Two of Part B of these Regulations, with or without conditions, as applicable."

A procedure may also be established for specific stages of the process, for example, for the extension of the experiment period.

Example – Extension of an Experiment Period:
Under the Fire and Rescue Authority Law, 2012, the Minister of National Security was granted the authority to issue a temporary provision regulating an innovative or experimental field for a period not exceeding one year, and was also granted the authority to extend it following consultation:

> "126H. (b) […] (3) The Minister may, in consultation with the Regulatory Advisory Committee, extend the validity of the provision referred to in paragraph (2) for additional periods not exceeding one year in total."

D. Management of Experiments

Outlining the Considerations in the Decision to Grant an Exemption:

Within the legislation, **it is advisable to outline in advance the considerations that should be taken into account when deciding whether to grant an exemption**. For example, relevant considerations may include ensuring the safety of experiment participants, minimizing the effects or damages that may occur to the environment outside the experiment during its course, maximizing the ability to guarantee compensation in the event of potential harm, and handling emergency situations during the experiment. One can distinguish between considerations that **it is important** for the regulator to take into account and considerations that the regulator **may** take into account.

Example – Considerations to Be Taken Into Account When Deciding on the Grant of an Exemption for Conducting an Autonomous Vehicle Pilot:

Regulation 16A(b) of the Road Traffic Regulations, 1961 (hereinafter: the "Road Traffic Regulations"), sets forth the considerations to be taken into account by the National Supervisor of Transportation, and provides as follows:

"16A. (b) In a decision under subsection (a), the National Supervisor of Transportation shall consider the potential impact of the pilot on traffic, including the following considerations:

(1) Ensuring the safety of road users during the pilot, including the safety of participants in the pilot;

(2) Minimizing any disruption to the flow of traffic on roads that may result from the execution of the pilot;

(3) Providing for emergency events that may occur during the execution of the pilot."

Proposed Section – Considerations for Granting an Exemption to a Pilot Operator under Sandbox Legislation:

In deciding whether to grant an exemption under this section, the [Competent Authority] shall consider, *inter alia*, the following: [the following are examples of considerations]
(a) The expected impact on the [protected interest] resulting from the pilot;
(b) The safety of pilot participants and individuals likely to be directly and significantly affected by the pilot;
(c) Responding to exceptional events that may occur during the course of the pilot;
(d) The potential of the pilot to promote the development or implementation of technology and to encourage technological innovation in Israel;
(e) The preservation of a competitive market and the impact of the exemption on the entry of new market participants.

Revocation Mechanism for the Exemption

It is proposed to authorize the authority that granted the exemption to revoke, restrict, or suspend the exemption. Such authorization shall specify the circumstances justifying revocation and regulate the revocation procedure. The authority shall also be empowered to issue instructions to the exemption holder aimed at minimizing harm to consumers or the public resulting from the revocation. In accordance with principles of administrative law, the exemption holder shall be granted a right to be

heard prior to revocation, and such right shall be enshrined in the enabling provision[80].

Proposed Section – Revocation or Restriction of an Exemption under Sandbox Legislation:

(a) The [Competent Authority] may, at any time, revoke an exemption granted under section 3, or any of its conditions, or restrict or suspend such exemption, in any of the following cases, provided that the exemption holder has been given an opportunity to present its arguments:

(1) Upon written request by the pilot operator;

(2) The pilot operator has violated a provision set forth in or under this [Chapter/Subchapter];

(3) The pilot operator has materially breached a condition of the exemption, or has repeatedly breached a non-material condition or an instruction issued pursuant thereto, and has failed to remedy the breach as directed by the [Competent Authority];

For this purpose, "repeated breach" includes breaches of different non-material conditions;

(4) A condition required for obtaining the exemption no longer exists in respect of the pilot operator;

(5) The exemption was granted based on false, erroneous, misleading, or incomplete information;

(6) A serious incident occurred during the pilot, or there is a real concern that such an incident may occur.

(b) Notwithstanding subsection (a), if the [Competent Authority] determines that there is an urgent need to revoke, restrict, or suspend the exemption in order to prevent immediate danger to the [protected interest], it may do so with immediate effect, provided that the exemption holder is given an opportunity to present its arguments as soon as possible after such revocation or suspension, and no later than [__] days from the date of the decision.

(c) If the [Competent Authority] decides to revoke, restrict, or suspend an exemption granted under section [__], as stated in subsection (a), it may issue instructions to the pilot operator aimed at ensuring protection of the [protected interest / public affected by the pilot].

[80] See, for example, section 16K(a) of the Road Traffic Ordinance [New Version].

Publication of Information to the Public and Pilot Participants

As part of the provisions of the regulatory sandbox, it is important to establish a duty to publish to the public the decision to grant the exemption[81], as well as any subsequent decisions concerning its revocation or suspension. This is to ensure transparency and public oversight. Transparency is required to allow the public to comment on and scrutinize the regulator's actions and derives from the general duty of the regulator to act transparently. At the same time, it is also necessary to take into consideration the need to withhold information whose confidentiality is essential to the companies, such as trade secrets.

[81] Regulation 7(b)(d) of the Water Regulations, *supra*, note 45 ("(d) If the approval of the supervisor as mentioned in subsection (a) is granted, the supervisor shall publish the approval and its terms on the Ministry's website").

Example – Publication of Information to the Public – General Transparency Obligation Applicable to the Regulator:

From the Road Traffic Ordinance [New Version], regarding the conduct of autonomous vehicle pilots:

> 16P "(a) The National Supervisor of Transportation shall publish to the public, on the website of the Ministry of Transportation and Road Safety, the following information, and may also publish additional details regarding the operation of autonomous vehicles which he deems necessary to bring to public attention, or publish all or part of them through other means:
> (1) Information on valid operating permits, including, *inter alia*, for each permit, the details of the permit holder, the operational area of the autonomous vehicle to which the permit applies, the areas in which the pilot operation is permitted under the permit, the number of autonomous vehicles covered by the permit, the validity period of the permit, and the material conditions set therein;
> (2) Notice of revocation, suspension, restriction, or refusal to renew an operating permit, under sections 16(k) and 16O(f).
> (b) In the event of a serious safety incident, the National Supervisor of Transportation shall, as soon as possible after the occurrence of the incident, publish information regarding the incident, including details which he considers should be brought to the public's attention.
> (c) The National Supervisor of Transportation shall not publish, under this section, any details that constitute information a public authority is prohibited from disclosing under section 9(a) of the Freedom of Information Law, 1998, and may refrain from publishing any details under this section that constitute information a public authority is not obligated to disclose under section 9(b) of this Law.

In addition, in appropriate cases, transparency toward individuals who may be affected by the pilot is required. The more significant the potential impact on the individual, the greater the duty to inform the individual of the existence of the pilot and to provide an option to decline participation. Where the potential for harm is high, the default should be modified such that affirmative consent to participate in the pilot is required[82], rather than mere notification with the option to refuse. In this context, it is further appropriate that, in the event of a serious safety incident, the regulator shall be required to publish information about the incident to the public.

[82] Section 7D(d) of the Electricity Sector Regulations, *supra*, note 70.

Example – Publication of Information to the Public – Duty of Transparency Toward the Individual:

The Electricity Sector Regulations (Testing and Measurement for Conducting Efficiency Experiments), 2009, provide as follows:

> "5. (a) An Essential Service Provider shall notify a consumer at whose registered place of consumption an efficiency pilot is expected to be conducted, of the conduct of the pilot and its purpose; upon receiving such notice from the supplier, the consumer may inform the supplier of his refusal to participate in the efficiency pilot, no later than 21 days prior to its scheduled commencement.
>
> (b) Notwithstanding subsection (a), an Essential Service Provider may refrain from notifying the consumer of the efficiency pilot in the following cases:
>
> (1) The conduct of the pilot does not require entry into the place of consumption or the consumer's premises and does not adversely affect the quality of electricity supplied to the consumer;
>
> (2) The conduct of the pilot does require entry into the place of consumption or the consumer's premises, and giving notice of the pilot may affect its results, provided that the supplier has obtained the consumer's consent to enter the place of consumption for the purpose of performing testing and measurement under section 46(a) of the Law."

Proposed Section – Publication of Information to the Public under Sandbox Legislation:

(a) Where the [Competent Authority] has notified a pilot operator of the grant of an exemption, it shall publish the decision to grant the exemption, including the conditions set forth therein.

(b) The [Competent Authority] shall publish on its official website the following information, and may also publish additional details it considers should be brought to the public's attention, or publish them, in whole or in part, through additional means:

(1) Information on valid exemptions granted under section [...], including the identity of the pilot operator, the number of consumers it may serve, the geographic area in which the pilot is to take place, to the extent such conditions were specified, the exemption period, and the material conditions set therein;

(2) Notice of revocation, suspension, restriction, or refusal to renew an exemption;

(3) In the event of a serious safety incident, the [Competent Authority] shall, as soon as possible following the incident, publish information about the incident, including details it considers should be brought to the public's attention.

(c) The [Competent Authority] shall not publish under this section any information which a public authority is prohibited from disclosing pursuant to section 9(a) of the Freedom of Information Law, 1998, and may refrain from publishing information under this section which a public authority is not required to disclose under section 9(b) of the said Law.

E. The "Day After" the Pilot

(a) Transition to a Permanent Regulatory Framework:

In any establishment of a regulatory sandbox regime, it is important that the regulator will consider an exit strategy from the pilot phase. This applies both to assessing the need for amending existing regulation and to evaluating the broader market effects of the sandbox "on the day after," and to the long-term impact of the specific approved pilot on the public. In some cases, it may be necessary to include a corresponding provision in the enabling legislation.

Accordingly, consideration must be given to how **the transition from the pilot period to a change in regulation** – if such a change is required or recommended based on insights from the pilot – should be conducted. It is preferable to pursue a structured process to allow for a smooth exit from the pilot and to determine how conclusions may be translated into regulatory reform. Upon receipt of the final report near the conclusion of the pilot period, the regulator should act within a timeframe

that avoids leaving the market or the pilot participant in a state of uncertainty regarding the applicable regulatory status.

Since a regulatory sandbox operates with a closed list of participants, those involved may enjoy an advantage over other market players upon transition to a permanent framework. While the model has clear merits justifying its use, the regulator must take into account the impact on market equality and preemptively examine ways to avoid anti-competitive consequences. In formulating the exit strategy, the regulator must address the various options available upon conclusion of the pilot and transition to permanent regulation, such as terminating the pilot and revoking the tested regulatory framework, or establishing a new permanent framework that modifies the existing regulation. Moreover, as the regulatory sandbox may provide a structural advantage to a particular operator whose exemption request was approved, it is important to consider how to ensure, to the greatest extent possible, **a level playing field** for all potential market participants "on the day after" the pilot.

In addition, the impact of the specific pilots approved within the sandbox on the general public or the relevant affected public must be taken into account, and the public's interests must be adequately addressed. For example, in the context of a financial regulatory sandbox, the interests of the investing public that participated through the tested innovative technology must be protected. Where appropriate, the investing public should be informed **in advance** of the arrangement that will apply following the conclusion of the pilot period.

Proposed Section – Transition to a Permanent Framework under Sandbox Legislation:

(a) If the [Competent Authority/Minister] determines that a permanent regulatory framework should be established, he may, during the […] days prior to the end of the pilot, order that, for the purpose of amending the provisions of the [Law/Regulations], the exemption shall be extended for one additional period beyond the periods specified in section 4(a)(1), provided that such extension shall not exceed [one year].

(b) Where the [Competent Authority/Minister] has so ordered under subsection (a), he may amend existing conditions and may prescribe additional conditions, as required, based on the following considerations:

(1) Ensuring the existence of a competitive market;
(2) Publication to the public of the pilot results.

(c) A directive under subsection (a) shall be published to the public.

(b) Supervision and Enforcement:

Generally, and consistent with the authority to grant exemptions or temporary permits in other regulatory contexts, the supervisory powers by virtue of which the regulator may take action in the field of compliance with regulatory provisions shall also apply to the supervision of entities granted an exemption from such provisions for the purpose of conducting a pilot. Where heightened oversight is required for pilots conducted within the sandbox framework, this may be achieved through the imposition of conditions attached to the exemption or temporary permit. In exceptional cases, it may be appropriate to consider granting specific supervisory powers in the enabling primary legislation (e.g., authority to enter premises or seize movable property if necessary).

In the context of enforcement powers, each case must be examined individually, in accordance with the structure of the relevant legislation and the specific enforcement mechanism applicable to violations of the provisions from which the exemption was granted.

In some cases, existing enforcement powers may suffice – for example, where the exemption is from provisions of regulations and the primary legislation includes a general penal provision applying to any breach of such regulations[83]. In other cases, it may be necessary to explicitly ensure that a breach of an exemption condition shall be treated as a breach of the original provisions from which the exemption was granted.

In certain scenarios, tailored enforcement mechanisms may be required, including the addition of a specific offense section for failure to request an exemption or for violation of its conditions. For example, where the exemption relates to regulations that include defined violations which cannot appropriately be applied to breaches of exemption conditions, or where such application is possible but it is necessary to adjust the amounts of the monetary sanctions for the specific context, or in the case of a support track for companies that do not require an exemption but seek regulatory guidance during the pilot[84].

[83] For example, when Regulation 16A was added to the Traffic Regulations, 1961 (authorizing the Supervisor of Transportation an exemption for the purpose of conducting a technological development experiment), existing enforcement powers would have sufficed. This is because Section 67 of the Road Traffic Ordinance established a general penal provision (imprisonment or fine) for any violation of the regulations, including the exemption provision added to the regulations.

[84] See, for example, sections 24-26 of the Bill for the Encouragement of Technology Development in the Financial Sector in Israel, 2021, Bill 1390.

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