

SUSTAINABILITY: EXTENDING THE VIRTUE OF PERSONAL DATA LEGISLATION TO GOODS AND PRODUCTS

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Abstract. This contribution addresses the notion of sustainability and its modalities as an element of public order enabling the European Union to regain its technological sovereignty through the emergence of a possible new environmental measure. Constraining the manufacturers, this measure is compliant with the free markets requirements. Only the intellectual property rights may constitute a real obstacle to its application.

Keywords: sovereignty, European markets, environment, intellectual property.

INTRODUCTION

New technologies have never been so present in our lives, infusing the traditional areas of state sovereignty like defence, security, space (Cilingiroglu, 1975, p. 65). Technological dependence was not yet a subject for most Member States of the European Union (*hereinafter – E.U.*), its institutions and its bodies. The free common market was the goal. The origin of technologies was deemed as a negotiating parameter. Purchases were made anywhere to satisfy immediate needs according to the criterion of the most attractive price. Influenced by geopolitical relationships between States, its traditional acquisition process led to monopolistic practices schemed by suppliers of technical knowledge and modern production processes (Drub and Verna, 1994, p. 82). The example of GAFAM illustrates the dominant position of entities holding personal data and technical knowledge (Barraud, 2019, p. 52). The European desire to claim its technological sovereignty shows a considerable shift in policy. Marked by a consensual imprint, this protectionist trend can be interpreted as the Member States' desire not to completely rely on external resources for strategic areas.

However, the massive use of complex technologies makes this desire for autonomy difficult to achieve. In addition to the political and economic consequences, technological dependence generates collateral damage. The orientation of the economic growth towards the "*greening*" is the opposite of the current state of technological and financial dependence of supplier States on purchaser States. Technologies and environment have a complex relationship. When a technology develops, it does so in response to a major economic challenge. New technologies are supposed to bring progress (forms of energy, manufacturing processes, trades) and participate to make a more sustainable world to solve environmental matters. New fields of research are investing in new growth models that reconcile innovation and the environment, such as low tech and digital ecology, in order to establish the optimal framework and tools which put new technologies at the service of the environment.

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The environmental context needs to be reconciled with entrepreneurial freedom and market rules (Belaidi, 2014, p. 16). Article 37 of the Charter of Fundamental Rights of the E.U. invites private and public actors to rethink economic growth in a disturbed environmental context. Sustainable development has been accompanied by new strategic constraints (Faten, 2009, p. 40). Managerial practices are therefore based on sustainable development as a performance indicator by controlling the life cycle of goods and products.

The extension of the work carried out within the OECD extends the obligations of producers downstream of the consumption of goods and products, making them responsible beyond their life cycle (Thieffry, 2007, p. 12). The eco-design approach proposes to draw inspiration from Nature and to integrate it into technology projects. It pushes to implement a reduction of the waste loads in all the steps of the life cycle, i.e. from the very creation of the product to their recycling (EC, 2020). This openness contributes to the future gains of existing industries. A company that invests in environmental standards encourages the emergence of new and competing markets while ensuring a certain level of satisfaction for stakeholders like NGO, citizens and public authorities (Alchian and Demsetz, 1972, p. 783–784). Decision-makers and industrialists are invited to build “*eco-inspired*” services and to find new production paths that consider the objective of sustainability and the limited availability of natural resources.

Associated with resilience, sustainability is an emerging concept in environmental legislation. European law mentions this principle as a major objective of innovation and a performance driver within managerial practices (management, prevention, control of environmental factors). Suffering from a lack of definition, this notion highlights a relationship with Nature based on the enhancement of its capacities for physical and biological regeneration. Difficult to quantify and measure, it implies the abundance of the exploited resource, at least its “*non-scarcity*”. The rate of extraction does not exceed the rate of renewal (Clark, 1973, p. 631). The use of polluting materials is limited to its strict necessity, or even substituted for environmentally neutral materials. Associated with eco-design, this approach reverses the usual framework that has hitherto ignored natural and social damage by only recognising profit and capital accumulation. In terms of market rules, sustainability is observed in terms of the analysis of the life cycle of an object, a technology or a manufacturing process. Borrowing from the precautionary logic found in major international instruments, such as the 1992 Convention on Biological Diversity, sustainability guides private behaviour from the design stage and encourages the emergence of new trades, new practices and new tools.

This notion could be compared to the legal framework related to personal data. Through its *ratione loci* application throughout the European territory, this latter right fulfils a digital public order mission strengthening the sovereignty of the Member States. The extension of the scope of the controller’s responsibilities in favour of the rights granted to the data subject initiates the transition towards production, consumption and management methods converging with the principle of sustainable development. In addition to the unprecedented questions it raises about the activities of manufacturers and industrialists, introducing sustainability, both as a production objective and as a design tool, calls for consideration of its impact on the rules organising the movement of goods

and products within Europe. In view of the geopolitical stakes in relation to new technologies, how could sustainability be inspired by the European legislation applicable to personal data to constitute a budding argument in favour of the technological sovereignty of Member States?

1. SUSTAINABILITY, A TOOL FOR SOVEREIGNTIST REGULATION OF THE CIRCULATION OF E.U. GOODS AND PRODUCTS

New business models could emerge by integrating sustainability both as a stand-alone approach through standardisation (1.1) and as a tool for regulating the European market (1.2).

1.1 Sustainability as defined by soft law

The usual reflex of innovation is to improve the performance of products and processes available on the market without seeking to reduce the resources consumed and waste produced. Standardisation has proposed the approach of biomimicry as a *“framework for the development of materials, structures, surfaces, components and industrial technologies”* (ISO/TC 266 18457, 2015). Emphasising the integration of sustainable development as a primary motivation, this approach integrates sustainability, both as a new tool and a design method. Sustainable biomimicry is based on the observation of nature’s inventions and the principles of living organisms in order to adapt them to human activities. The ISO TC/266 - 18457 standard proposes to use the major strategies of the living world as methodologies for sustainable innovation. The ISO TC/266 - 184458 standard offers efficient tools such as the reasoned use of resources, the control of resources, interdisciplinary and the synergy of expertise.

The innovative approach of biomimicry provides substance to the methodologies developed by European data law. Our *“sustainability by design”* approach is inspired from the *“privacy by design”* approach. Article 25 of the GDPR n°2016/679 provides that the controller must implement, prior to the processing, the measures that ensure a high level of protection for personal data *“by default”*. With regard to the guidelines 4/2019 on article 25, these measures must be taken in the light of the specific sector involved, the state of the art, their costs, the nature of the processing and the risks to the individual rights and freedoms. This new influence makes it possible to include sustainability *“by default”* in business and production practices. Our approach to *“sustainability by design”* refers to preventive practices aimed at reducing the environmental impact of new goods and products, from their conception to the end of their life cycle. Taking into account the health and safety of consumers, it encourages the implementation of a principle of reparability *“by default”* of the good or product.

A restrictive or rigid legislative framework exposes the good or product to a planned obsolescence. Standardisation could be a response in terms of processes and organisations. It is an anchor that translates sustainability into concrete action plans and technical expertise adapted to the latest technological innovations. This normative process promotes the free movement of products by helping industries to manage the impact of their activities on the environment. Most organisations have realised that sustainable policy and profitable growth are intricately linked. The *“17 Sustainable*

Development Goals” proposed by the United Nations in 2015 to solve the world’s climate problems have been endorsed by various ISO standards. The ISO 37101 standard is based on 12 questions and 6 sustainability objectives which highlight the need to place the production of goods and products in a logic of continuous improvement and industrial ecology.

Standardisation promotes the harmonisation of Single Market rules and sectoral practices. In addition to rules defining essential requirements (safety, health, environmental protection, consumer protection) and design specifications left to the discretion of the manufacturer, products manufactured in accordance with technical standards expressly mentioned in regulations are presumed to comply with these requirements. As encouraged by the EU Council Resolution of 7 May 1985, a regulatory text makes the presumption of conformity of a product subject to compliance with all or part of a technical standard. This conformity covers two alternatives: either the manufacture conforms to the standards cited by the public authorities for the correct application of the national text, or the manufacture conforms to a model proposed by a third party certification body. The use of these standards, whether of Community or national origin, may come from a European technical harmonisation text, a directive or a regulation specific to product categories or a safety risk. A mutual recognition clause for goods legally marketed in another Member State must be included in these regulations in order to ensure a level of safety equivalent to that of the national system and not to create obstacles to the free movement of products.

The European Commission has introduced the “*New Approach*” as a method for drawing up directives and unifying the legislation of the Member States. In order to lighten the work of the European legislator, this approach involves delegating the production of technical standards to European organisations. Technical standards meet the requirements of professionals and take into account the specific features of the sectors identified. These guidelines let companies choose the most appropriate means to integrate them into the manufacturing processes. For the technical aspects of the product, they refer directly to the harmonised E.U. standards when it is placed on the market.

Standardisation is a means of technological independence as a constraint on third countries. They have to comply with it to distribute their products in the EU. In order to ensure public authorities’ control over these technical standards, their scope must be monitored, in particular if health, safety and the protection of public interests are concerned.

In addition, there is strong confidential standardisation activity outside the formal structures. It is often the same stakeholders who produce these standards on the one hand and benefit from them on the other. At the same time, formal standardisation systems deserve more openness, transparency and accessibility for other stakeholders who consider themselves insufficiently taken into account (environmental protection actors, local public authorities, small businesses). The European Commission is trying to take the necessary steps to ensure that these mechanisms meet the criteria of clarity and representativeness of the parties involved in the creation of the standard (Van den Abele, 2009, p. 8).

As part of the liberalisation of trade between the E.U. and foreign States, the incorporation of the rules of international trade law into state law modifies the binding force of the rules of soft law.

Through the substitution effect, E.U. shares the competence with the Member States at the WTO. The E.U. judge may deny a company the right to avail itself of the corpus of international trade law, relegating it to the same rank as soft law (CJEC, 1972, C-21-24/72). As soft law, WTO rules can only be invoked if they are recognised within an EU rule. However, these rules don't escape the control of the European judge, who can automatically lift public order to oppose their application on EU territory. Once a court recognises a rule as being a part of public order, any foreign rules or standards are deprived of any effect within its sphere of jurisdiction. International trade rules may be derogated from for public order reasons, integrating sustainability into its environmental component.

1.2 The impact of sustainability on the free movement of goods and products

The precautionary principle, enshrined in Article 191 of the TFUE, aims to ensure a high level of environmental protection. In the event of uncertainty, this principle of action requires public authorities to take all necessary measures to prevent damage from occurring (ECJ, 2018, C-528/16). The objectives of protecting health and the environment takes precedence over any other interest (ECJ, 2010, C-343/09). National legislators are bound by this duty. In order to protect the environment from any harmful substances, an assessment procedure has to be done. Once the impact and the extent of the risks have been assessed, the measures must be strictly proportionate to the aims pursued in the scope of the current state of scientific knowledge and the resources mobilised (General Court, 2011, T-409/09).

The notion of sustainability questions the E.U. freedom of movement. With direct effect, the provisions of Articles 34 and 35 of the TFEU prohibit any non-tariff barriers on all quantitative import and export (ECJ, 2008, C-205/07; ECJ, 2016, C-15/15) restrictions as well as all measures having equivalent effect within the Member States (ECJ, 1979, C-15/79; ECJ, 1974 C-8/74). As an exception, Article 36 of the TFEU authorises the maintenance of prohibitions or restrictions if justified on grounds of "*public morality, public policy, public security, the protection of health and life of humans, animals or plants*". Strictly interpreted, this article can only be applied to non-economic situations as a safeguard to those only objectives (ECJ, 1979, C-34-79).

Only a harmonisation directive can discard the possibility for Member States to summon the exception provisions. While all quantitative restrictions and measures having equivalent effect may be examined in the light of the provisions of Article 36, only measures restricting the free movement of goods may benefit from the exceptional arrangements for imperative requirements in the general interest established by the ECJ on the basis of Article 34 (ECJ, 1981, C-113-80; ECJ, 2009, C-132-08; ECJ, 2015, C-354/14). The principle of mutual recognition provides that any product lawfully manufactured and marketed in a Member State is deemed to be lawful and marketed in the territory of another Member State. The commercial rules of the destination State may not be invoked against it. Henceforth, "*obstacles to intra-Community movement resulting from disparities in national legislation on the marketing of products (...) must be accepted in so far as such requirements can be recognised*

as necessary to satisfy imperative requirements, relating in particular to the effectiveness of fiscal controls, the protection of public health, fair trading and the protection of consumers" (ECJ, 1979, C-120/78). Coming significantly closer to the justifications provided by Article 36, the benefit of a mandatory requirement is only possible in a situation characterised by the absence of measures for the approximation of national legislation. The reasons raised must also lie on an economic nature. Finally, measures affecting the free movement of goods must satisfy the components of the proportionality test. The contested measure must be appropriate, consistent, necessary and strictly proportionate to the objective pursued (ECJ, 2016, C-244/15). The obstacle resulting from the implementation of that measure must be minimalistic and not going beyond what is necessary to achieve the said objective (ECJ, 2010, C-108/09). Failure to satisfy this two-prong test will result in cancellation of the measure.

Among these imperative reasons of general interest is the protection of the environment. While the list of exceptions in Article 36 is limited, the list of mandatory requirements can be developed in a praetorian manner. It is therefore conceivable the objective of sustainability could be identified as a legitimate reason to justify barriers to free EU trade. Moreover, certain barriers have a legitimate interest to justify a restriction on a fundamental freedom guaranteed by the Treaty (ECJ, 2008, C-244/06). The compatibility of State legislation infringing the economic freedom of movement must be examined in the light of the exceptions provided by the EU's laws or Court's case law. In the area of environmental protection, the Court adopts a reasoning by examining jointly those based on public health and the imperative need to protect the environment (ECJ, 2011, C-28/09). These key cross-cutting objectives of the E.U are closely interlinked to limit the health risks associated with environmental degradation.

Finally, the hypothesis of damage to the environment has a stretching effect which may go beyond the borders of the Union in the case of multi-localized damage. Article 5(3) of Regulation 44/2001 provides that "*a person domiciled in a Member State may be sued in another Member State (...) in the courts for the place where the harmful event occurred or may occur*". The Court of Justice interprets the concept of the place of the harmful event as meaning the place where the damage occurred or the place where the event giving rise to the damage occurred (ECJ, 1976, C-21/76). Opening an option of jurisdiction to the plaintiff when these two places are dissociated, this jurisdiction makes it possible to apply the U.E's rules on the environment and to extend the effects of sustainability to territories outside Europe.

If sustainability has its pitfall in a sovereignty that regulates the circulation of goods and products on the territory, it also finds its echo as a modality of empowerment on the components of goods and products.

2. SUSTAINABILITY, A MODALITY OF EMPOWERMENT OF THE COMPONENTS OF GOODS AND PRODUCTS

Our "sustainability by design" approach suggests the consecration of a consumer right to the replacement of components (2.1). Its main limitation would be traditional intellectual property rights (2.2).

2.1 Towards the consecration of a consumer right to component replacement

Planned obsolescence is the deliberate reduction of the life or use of products to encourage their replacement. It forces consumers to acquire the successive new versions. Sustainability seeks to optimise the performance of goods and products and suggests that they take the path of self-renewal. There are several indicators that point in this direction.

As part of the guarantee of conformity, maintenance, maintenance comes in two forms: corrective and evolutionary. It organises the monitoring of the good or product to be maintained in its state for as long as possible. Evolutive maintenance works in favour of the “*sustainability by design*” approach by allowing the good or product to evolve according to its environment through new updates and by improving existing functionalities. To avoid the electronic waste, E.U. Parliament has adopted an environmental perspective by establishing a list of minimum resistance criteria. However, some Member States, such as France, have addressed this issue through economic law. This question was considered in consumer law concepts such as informing the consumer about the durability and reparability of products by the seller. A French decree of 2014 directs the buyer towards repairable products by requiring the seller to inform the buyer in writing of the availability of spare parts.

However, the putting into circulation of spare parts, authorised by Directive n°98/71 of 1998, calls into question the exclusive nature of the intellectual property (*hereinafter – IP*), rights of design holders. Article 110 of Regulation n°6/2002 enshrines the repair clause. It expressly excludes the exclusive right for parts of complex products intended to repair the product and restore its original appearance. This clause was initially adopted by the E.U. institutions to limit the monopoly of manufacturers and equipment manufacturers on the aftermarket for spare parts. It deprives the holder of a design for a spare part from exercising his right to prevent the circulation by a third party of spare parts intended for the repair of a complex product and to restore its original appearance. However, this right is limited to any spare part, visually identical to the original, with a view to restoring the original appearance of the complex product when it is placed on the market. Furthermore, the replacement part is only intended to restore the complex product to its original appearance (ECJ, 2017, C-397/16 and C-435/16). At the risk of being penalised for counterfeiting models or even brands, the manufacturer and/or seller of parts must make clear and visible markings on the parts or their packaging and put in place the appropriate contractual instruments.

The national courts strictly interpret the notion of complex parts in favour of the producers. For its part, the Court of Justice does not limit the concept of complex parts to those whose form is dictated solely by their technical function. The appearance of the complex product conditions the protected model: the spare part must have an appearance visually identical to that of the original part. Finally, the manufacturer or seller of the part of a complex product must clearly inform the consumer that the part incorporates a design of which he is not the owner and that it is exclusively intended to enable the product to be repaired in order to restore its original appearance (Kahn, 2018, p. 4). These provisions do not respond favourably to the situation where manufacturers of repair parts claim possible protection under design law.

The “*sustainability by design*” approach would overcome this difficulty by encouraging better consumer information. Going beyond labelling, the information envisaged is aimed at the components and plans of a good or product, specifying the existence of devices for replacing components. This high degree of transparency for sellers promotes this right of redress and stabilises these secondary markets. Without prejudice to the exclusive industrial property rights of its holder, information can be made available and then reprocessed for these specific frameworks. Franchise distribution and repair networks already exist and are expressly authorised for this purpose.

This transparency is part of the sustainability approach. At the time of purchase, producers, importers and distributors on the electronic equipment market communicate freely to purchasers the product’s repairability index and the parameters and criteria (reliability, robustness, etc.) used to establish it (E.Parliament, 2017, Resolution n°2016/2272). This information shall be transmitted by means of marking, labelling, display of the durability index of these products. This labelling obligation for tangible products extends to intangible assets.

2.2 The limits of the right to repair

The “*sustainability by design*” approach questions I.P rights in the age of the 3D printer. Because of the spread of this technology, 3D printing is a manufacturing technology whose use would infringe all IP rights. Encouraging local production, it also stimulates the international marketing of creative designs, while raising issues of legal liability.

3D printing makes it possible to reproduce various parts, components or even objects in their entirety without the owners’ knowledge, permission or financial compensation. The undue use of this technology may represent a loss of revenue and a discouragement investment in R&D. Classically, I.P rights are regulated by contract. However, the object reproduced may already be protected by an I.P right owned by a right holder. The latter has an exclusive monopoly over the exploitation of its creation. An authorised reproduction, even partial, a protected work constitutes an IP infringement.

The “*sustainability by design*” questions the author’s extended liability for damage caused by an object created in whole or in part by a printable reproduction process. In the event of a damage, liability for a defective product could simultaneously fall on the many players such as the seller of the 3D file, the producer of the 3D printer or its firmware, the supplier of the material used, or finally the producer of the object himself.

Thus, a specific liability regime is currently being considered. Nevertheless, the creation of approved secondary markets could clarify this. Primary market players will have to offer *by default* to their users / customers the appropriate measures to anticipate the life cycles of assets and direct them towards the secondary markets for maintenance and evolution. Users are generally not in a position to provide a solution to any problems that may arise from such use. Maintenance is an indispensable service for the peaceful enjoyment of any equipment, even if secondary markets already exist. To structure this market, certain independent sellers must be authorised to market spare parts and / or produce identical ones and must have the skills to ensure the maintenance and repair of the products.

The existence of two distinct markets is discussed. The first is the so-called “*primary*” market: it allows complementary purchases made on a second autonomous market called “*secondary*”. A tangible electronic good is qualified as primary; the acquisition of parts required for repairs including service with replacement is a secondary good. There are therefore many markets in which two complementary products are needed to obtain the service of the whole and form a “*system good*”. The purchase of the primary good limits the spectrum of choice for the secondary good. In fact, the consumer cannot put several suppliers in competition at the secondary purchasing stage. The lifetime of the primary good is locked into the purchases made on the secondary market, which is thus conditioned by the primary market.

In some cases, “*generic*” parts or parts manufactured under license by different manufacturers are available and compete with the original parts. Sometimes only original parts from the primary distributor are available. Final consumers have no choice but to obtain the spare parts from the supplier of the primary good (General Court, 2011, T-296/09). Whether the primary and secondary markets form a single market subject to the same competition rules or whether the primary undertakings exercise market power on the secondary market is analysed on a case-by-case basis. The answer lies in the behaviour of final consumers and their choice to continue sourcing from the same supplier, at least for the life cycle of the primary product. To change this paradigm, consumers need to be able to anticipate the entire life cycle of the product. This presupposes a number of conditions relating to the reliability and integrity of information and transparency. Consumers must no longer think in terms of successive and fractionated purchase costs, but in terms of a globalisation of costs in relation to the life cycle of the product. Consumers are often insufficiently informed about the probability of a breakdown, the lifespan or the methods of replacement of original parts. The dissemination of information is therefore imperfect and asymmetrical.

Encouraging the emergence of such secondary markets would mean abandoning the assignment of exclusivity, or at least regulating it by delimiting the elements of IP that could be the subject of circulation from those that require the prior approval of the owner. If new sub-sectors emerge, their autonomy requires anticipating all questions relating to out-of-stock situations and the duration of a licence.

The tools of I.P law allow their holders to control the use that third parties are likely to make of them. With the development of e-commerce, they contribute to commercial success while enhancing the value of intangible assets. The use of a selective or exclusive distribution network appears to be the solution for controlling I.P rights and their enhancement *via* selected co-contractors. However, this commercial structure leads to a risk of market compartmentalisation effect. The Court of Justice moderates this position with regard to the provisions of Articles 101 and 102 of the TFEU: I.P rights are a lawful tool for derogation from the requirements of E.U. competition law, the only limit being the abusive exploitation by its holder (ECJ, 1968, C-24/67).

However, the question of design protection for spare parts, or parts of a complex product, has always been a controversial issue in the E.U Member States. In the absence of an agreement, a *standstill* position was adopted in the framework of Article 14 of Directive No. 98/71 of 1998 on

the legal protection of designs and models. Member States keep applying their national laws. They can only modify them in the sense of a liberalisation of the market concerned and must respect the exception of Article 110 §1 of the Regulation n°6/2002 on Community designs and models which organises the mechanism of this repair clause.

In a prospective way, the event of a conflict between the rules of I.P law and those relating to environmental protection could allow the sustainability to be part of the actual construction of this E.U. ecological public order (Belaïdi, 2008, p. 461). Public order could be used as a tool to prevail some intangible social values like right to life or right to health in any potential conflicts between contradictory interests. Targeting a social imperative of protection in the material sense, environmental value exists in substance in the form of scattered rules escaping the free-market logic (Fritz, 2002, p. 430). Ecological public order refers to the insufficient consideration of the links existing within ecosystems and insists on the right of human and non-human populations to live in harmony within the sustainable limits set by the biosphere. This notion encourages the protection of life through a common base of essential social values and raising awareness of ecological risks (Belaïdi, 2010, p. 350). Thus, the former is being superseded by the latter, taken as a component of environmental public order.

CONCLUSIONS

1. The “*sustainability by design*” approach offers multiple vectors for reconciling the circulation of goods and products with the guarantee of the technological sovereignty of the Member States. Through standardisation, it promotes preventive tools and innovating design methodologies that are committed to reducing the environmental impact of new goods and products. Freely inspired by the European personal data law, sustainability draws the outline of a new framework by being applied from the design stage and throughout the life cycle of goods and products.
2. Sustainability will impact the circulation of goods and products. Upstream, it can justify the application of the precautionary principle. Downstream, sustainability could take advantage of the praetorian trend towards the globalisation of justifications, relating both to public health and to the imperative need to protect the environment, to become an imperative reason of general interest justifying barriers to free trade.
3. Sustainability is also echoed as a way of incapacitating the components of goods and products. Encouraging the implementation of a new principle of reparability, sustainability would become a means of combating planned obsolescence by promoting autonomous renewal.
4. As a component of an ecological European public order, sustainability may defeat classical property rights held by third party States and offer to the European States Members a means to displace/diminish their technological independence by favouring their own industries as it has been made possible by the GDPR. In addition to promoting greater transparency from the economic actors concerning their practices and the composition of the goods put into circulation, the prevalence of environmental law encourages the development of secondary markets which support Europe in times of crisis and defuse technological dependence.

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