



**COMMENTS OF THE
ACM EUROPE TECHNOLOGY POLICY COMMITTEE
ON A PROPOSAL FOR A REGULATION OF THE
EUROPEAN PARLIAMENT AND OF THE COUNCIL ON
HARMONISED RULES ON FAIR ACCESS TO AND USE OF DATA (DATA ACT)**

13 May 2022

The Association for Computing Machinery (ACM) is the world’s largest and longest established professional society of individuals involved in all aspects of computing. It annually bestows the ACM A.M. Turing Award, often popularly referred to as the “Nobel Prize of computing.” ACM’s Europe Technology Policy Committee (“Europe TPC”)¹ is charged with and committed to providing objective technical information to policy makers and the general public in the service of sound public policymaking. ACM and Europe TPC are non-profit, non-political, and non-lobbying organisations. Europe TPC is pleased to submit the following Comments² in response to the Commission’s above-captioned consultation on the “Data Act,” opened on 23 February 2022.³

Europe TPC supports the European Commission’s intent to ensure “fairness in the allocation of value from data among actors in the data economy and to foster access to and use of data.” To that end, we respectfully submit the following recommendations for potential changes to the proposed Data Act released on March 14, 2022, as follows:

Key Recommendations

1. The scope of the Data Act should be expanded to encompass metadata when it is needed to permit reasonable consumption and processing of underlying data by processing services. *(Articles 2, 3)*

¹ See, <https://europe.acm.org/europe-tpc>.

² The principal author of this document for Europe TPC was Alejandro Saucedo, Engineering Director at [Seldon Technologies](#) and Chief Scientist at the [Institute for Ethical AI & Machine Learning](#). Also contributing were Europe TPC Chair Chris Hankin, Fellow of the Institute for Security Science and Technology and Professor of Computing Science at [Imperial College](#), London; and Committee members Bran Knowles, Senior Lecturer at [Lancaster University](#); Natasa Milic-Frayling, CEO at [Inact Digital](#); Enrico Nardelli, Professor of Informatics at [Università di Roma Tor Vergata](#); and Gurkan Solmaz, Senior Researcher at [NEC Laboratories Europe](#). *(All affiliations listed for identification purposes only.)*

³ Proposal for a Regulation of the European Parliament and of the Council on Harmonised Rules on Fair Access to and Use of Data (Data Act), Brussels, 23.2.2022 COM(2022) 68 final; 2022/0047 (COD).

2. The Data Act must be formulated to define, address, and preclude or minimise foreseeable environmental impacts, including particularly those associated with smart contracts and distributed ledger-based technologies. (*Articles 11, 30*)
3. Requirements imposed by the Data Act on the acquisition and processing of data should be carefully assessed and drafted to assure that they do not unnecessarily add to the complexity and cost of those activities. (*Articles 5, 8, 11, 15, 23, 24, 26, 30*)

Detailed Comments

Article 2: Definitions

As noted in Recital 14, metadata that augments or extends underlying datasets are explicitly excluded from the Act. There are contexts, however, in which such metadata is required to ingest and/or make use of relevant datasets in meaningful ways. Europe TPC thus recommends amending Recital 14 to define and encompass relevant “metadata” under such conditions.

Article 3: Obligation to make data generated by the use of products or related services accessible

For the reasons described above, and to assure accessibility as intended, metadata also must be included in the definition of “data” for purposes of Article 3.

Article 4: Right of users to access and use data generated by the use of products or related services

Article 4 states that, “The data holder shall not require the user to provide any information beyond what is necessary to verify the quality as a user pursuant to paragraph 1.” Europe TPC emphatically endorses this proposal as critical to minimising data breaches accomplished by malicious parties through fraudulent data requests.

Article 5: Right to share data with third parties

The difficulty of and cost to data holders of making data available to third party data processing services will vary widely depending upon the means and speed with which a data holder is required to act. Data expected to be made available in real time, for example, will be much more costly to produce than data than data sourced offline or over an extended period of time. Costs also are likely to increase with the volume of data requested, number of data processing services seeking to concurrently access the data, and the number of times that the data is expected to be made accessible. The Data Act’s provisions should, wherever relevant, be written to reduce data infrastructure complexities and their associated elevated costs and burdens.

Article 8: Conditions under which data holders make data available to data recipients

For the reasons referenced in connection with Article 5, above, Europe TPC urges the Commission in the Data Act to encourage and enable the development of voluntary standards to provide industry and public sector participants in the data sharing ecosystem with formal and robust guidance as to how data suppliers can employ enumerated best practices to simplify the process of fulfilling of data requests.

Article 11: Technical protection measures and provisions on unauthorised use or disclosure of data
Europe TPC notes that Article 11 may be read to strongly encourage the use of “smart contracts.” To the extent that if adopted this provision of the Act will increase their adoption, the Committee is concerned, that this clause could significantly increase direct carbon emissions associated with the demand for data, thus potentially negating emissions savings potentially enabled by more efficient data sharing and working at cross purposes to other “green” European Union policies.

We specifically urge the Commission to actively discourage the use of proof-of-work-based distributed ledger (including blockchain-based) technologies because their exceedingly large energy consumption requirements necessarily will undermine the high level aims of the European Green Deal. Moreover, the requirements outlined for secure, robust, fit-for-purpose validation, etc. considerations should not be limited to smart contracts, distributed ledger-based technologies, nor any particular architecture or underlying technology implementation. They should apply to all cases regardless of the underlying system implementation.

Article 15: Exceptional need to use data

Europe TPC believes that a data holder, rather than the “public sector body or Union institution, agency or body” requesting data, is in the best position to determine whether there is an “exceptional need” for the data as defined by the proposed Act. Consistent with our recommendations with respect to other Articles, we urge the Commission to modify the Act to vest such determinations in the data holder under Article 15(c)(2) to minimise complexity and cost within the compliance infrastructure.

Article 23: Removing obstacles to effective switching between providers of data processing services

Europe TPC notes that restrictions on transferring data from one provider’s cloud infrastructure to another’s often are implicit and practical rather than “explicit” or “contractual” as suggested in Articles 23 & 24. Indeed, the simple technical difficulty of such inter-provider transfers is the primary obstacle to them occurring more frequently. To encourage interoperability of data across data-processing services, Europe TPC urges the Commission to support the development of industry-wide standards for data ingestion formats, data-protocols, and data-models for both the export and import of datasets. Absent such standards, exported datasets are likely to be provided in incompatible formats requiring potentially significant time and expense to resolve.

Article 24: Contractual terms concerning switching between providers of data processing services
Please see comments pertaining to Article 23.

Article 26: Technical aspects of switching

Europe TPC notes the proposed requirement in Article 26 that “providers of data processing services shall make open interfaces publicly available and free of charge.” Per our comments with respect to Article 5, determinations of cost under the Act should tally both traditional financial expense as well as the costs of energy expenditure required to produce a regulatorily required result.

Article 30: Essential requirements regarding smart contracts for data sharing

Europe TPC welcomes the Commission's use of regulatory policy to actively encourage the development and broader use of smart contracts but respectfully refers the Commission to the comments above pertaining to Article 11.