

KU Leuven Centre for IT & IP Law (CiTiP) – imec

www.law.kuleuven.be/citip

Big is beautiful? Data pooling as a regulatory instrument

Charlotte DUCUING – November 2019, Tilburg

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

Data sharing obligations within the data flow paradigm

- The booming of data sharing obligations & regulatory focus on the ‘monopolist data holder’
 - See Lundqvist, 2018.
 - Open Data and PSI Directive as the standard; Electricity Directive; on-going institutional discussions on in-vehicle data, etc.
- ‘Market for (raw) data’ conceived of as a parallel market aside the original one
- Increased focus on private undertakings
- Regulatory focus on the market for (‘raw’) data (data transaction)

THESIS

The paper opposes the ‘data flow paradigm’, defined by:

- 1/ its objective: foster the “(free) flow of data” for the sake of the data economy
- 2/ Its regulatory focus on data(set) as a subject-matter

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

1/ Data as relational asset



- Analogy with rivers (Delacroix & Lawrence, 2019)
 - Data as relational asset \gg standalone, well-delineated asset existing in isolation.
 - “Data ecosystems” (Purtova, 2017) wrt personal data
 - Data as “reincarnations” of natural persons who constitute the “human livestock”
 - Economic distributive function of data.
- The focus on ‘raw’ data (transaction) neglects their “relational and distributive nature” (see Cohen, 2017)

2/ The technological infra to 'make the data speak'

Use value of data created *after* the data transaction, with relation to further processing

- Data >< commodity? (Isaac, 2018)

Big data as 'recombinant innovation' (Mattioli, 2017)

3/ Network effects: learning from data-driven markets

Data & algos positive feedback loop

- Positive impact on data value
- Reinforcement of dominant positions

Digisation of B&M industries → similar risk?

- Online platforms turn to B&M industry data
- New "conglomeratism" (Bourreau and De Streel, 2019)

4/ Data sharing obligations: A risk of 'platformisation'?

Purpose to ensure 'fair-level playing field' on the market for raw data... shortsighted?

Risk to confine regulated entities (data holders) in a role as 'raw data provider' in the data economy and to reinforce the dominance of data giants in downstream markets?

- See Lundqvist, 2018

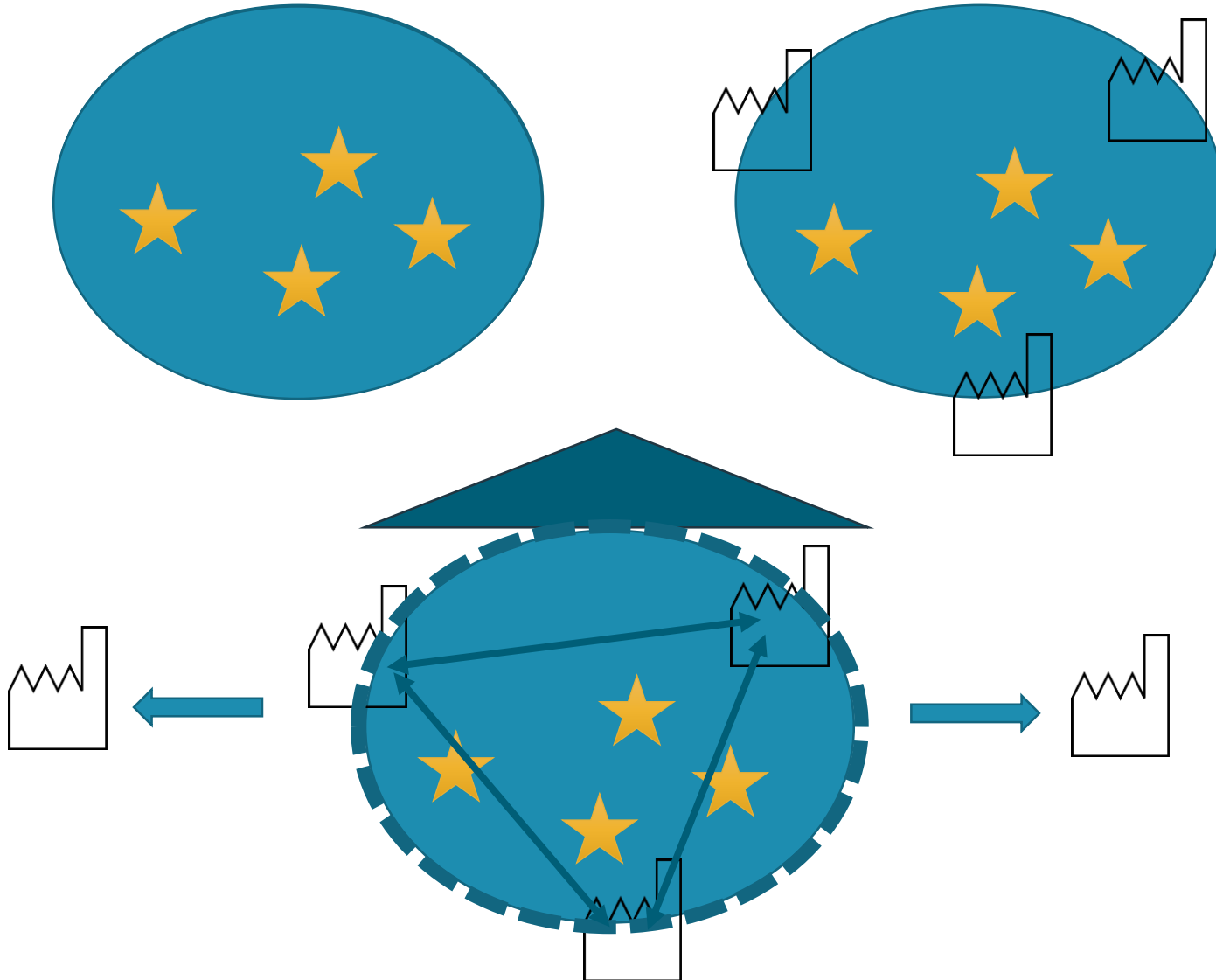
THESIS & INTERMEDIARY CONCLUSION

- Data sharing legal regime viewing ('raw') data (transactions) as the regulatory target seems to bear the idea that:
 - 1/ there should be well-operating such markets, and that
 - 2/ they alone would deliver the grand policy expectations ('AI', 'data-driven innovations')
- 2 limitations:
 - 1/ Absence / lack of consideration for what happens *after* the (raw) data transaction
 - 2/ Imprecise (shortsighted?) character of the policy objectives

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

Data pool or data pooling



“Industrial data platforms” (EC, 2018)
“big data collaborations” (Van Den Broek and
Van Veenstra, 2018)
“trusted data spaces” (AI HLEG)

Data trusts?

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

Drawing conclusions: the merits of data pooling?

1/ Moving focus: from data to data aggregation; from rights on data to data governance

Shifting focus from data(set) to conditions in which data pooling takes place to address the power asymmetry.

Recognition of the relational nature of data → context-specific.

Parties and/or (different forms of) governance of the data pooling arrangement as a means to bring trust to actors sharing data.



Collaborative empowerment & trustworthy environment to incentive data holders to share?

2/ The pro-competitive effects of data pooling: innovation disrupting data giants

Data pooling to benefit network effects of big data (“big data is about being big”).

DP to save (transaction) costs and, where intermediary in the value chain, to act as OSS.

⇔ Overcoming the fragmentation of data (sources).

- Analogy with patent pools (and collective licensing) to some extent
- E.g. vehicle data?

Means for B&M industry players to ‘come in through the front door’ of the data economy (see also Lundqvist, 2018)?

3/ Data pooling as a necessity to achieve certain objectives

E.g. 1/ safety of autonomous vehicles
⇔ cross-brand AI training → pooling?

E.g. 2/ Electricity data management.
Electricity data (management) as new infrastructure. Use of data necessary for different parties with different objectives.

Electricity Directive (2019):

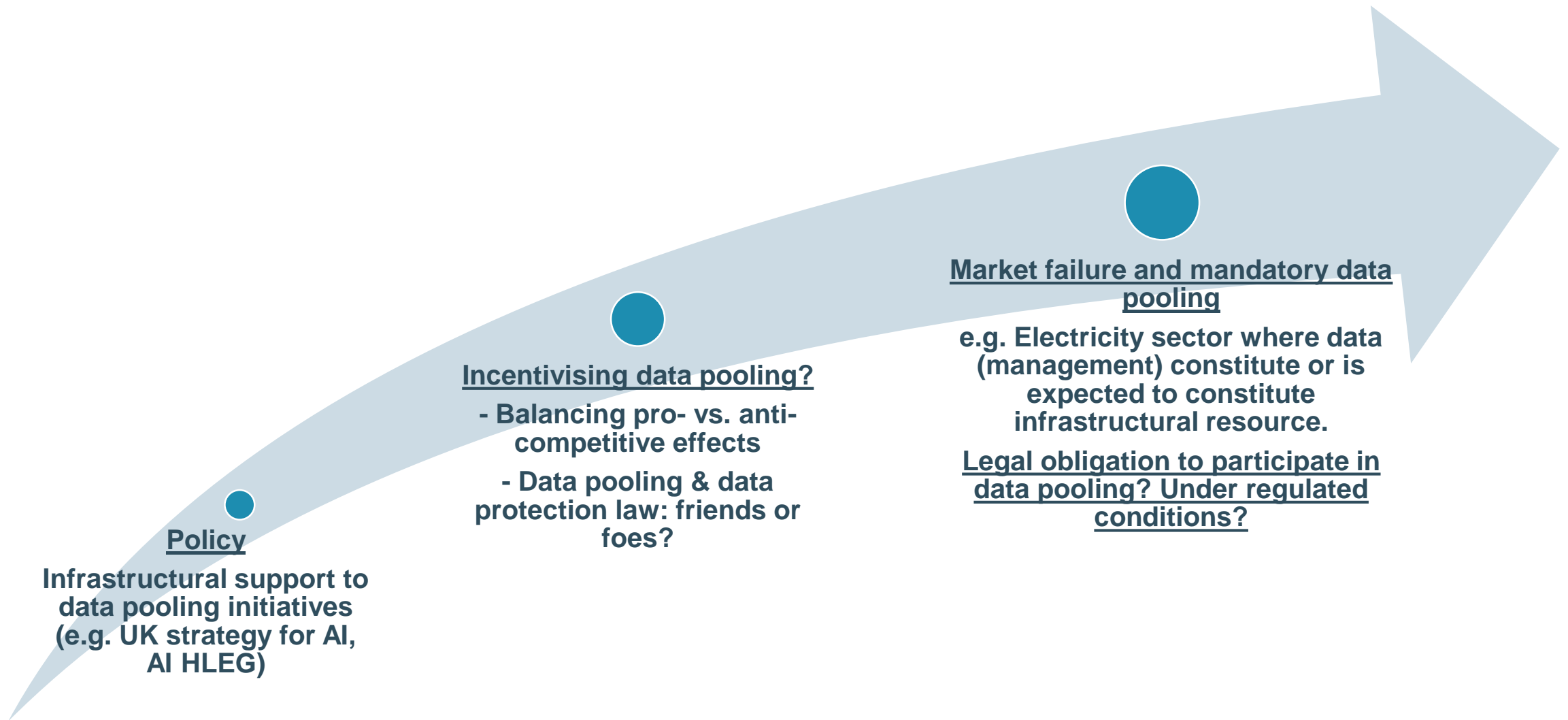
- data sharing obligations + light functional unbundling requirements (DSOs).
- Only halfway! Data management model remains with MS jurisdiction.

Necessary investigation of collaborative data governance of infrastructural data.

Table of content

1. Data sharing obligations within the data flow paradigm
2. Data as the regulatory subject-matter: the limitations of the data flow paradigm
3. Data pool, data trust,...: defining data pooling
4. The merits of data pooling
5. Leveraging data pooling as a regulatory instrument: a research agenda

Leveraging data pooling as a regulatory instrument: a research agenda



CONCLUSION

- The paper argues against a one-size-fits-all regulation of data.
- It pleads in favour of context-specific regulation of data governance, which invites to refine the regulatory objectives associated with the data economy.
 - Data flow paradigm seems to be stuck in a 'data control' vs. 'access to data' conundrum.
- (Perceived) lack of data sharing due to ensuing loss of control over one's data → lack of trust → chilling effect on the readiness to share.
- New pattern looks at data pooling mechanisms as a 'protective shell' to incentivise data sharing in trustworthy environment.
 - Avenues for the policy- and law-maker: place more emphasis on context-specific data governance.

Thank you for your attention!

Do you have any questions or comments?

KU Leuven Centre for IT & IP Law (CiTiP) - imec
Sint-Michielsstraat 6, box 3443
BE-3000 Leuven, Belgium

charlotte.ducuing@kuleuven.be
<http://www.law.kuleuven.be/citip>

