

5 October 2017

Personal Data Protection Commission
450 Alexandra Road
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Singapore 119963

Dear Sirs

**PUBLIC CONSULTATION FOR APPROACHES TO MANAGING
PERSONAL DATA IN THE DIGITAL ECONOMY**

The principal issue considered in this academic response is whether the proposed enhanced framework for the collection, use and disclosure of personal data, in relation to the Internet-of-Things (IOT) (together “IOT processing”), is within the meaning of the Personal Data Protection Act 2012 (PDPA).

Specifically, this response considers the proposals to:

- I. Substitute Notification of Purpose for consent, subject to the condition subsequent that a data subject is not adversely impacted (together the “Notification of Purpose Rule”); and
- II. Substitute Legal or Business Purpose for notification of purpose and consent (informed consent), if the public interest test is satisfied (together the “Legal or Business Purpose Rule”).

This response further recommends Proportionality, a principled balancing test, to apply to the Legal or Business Purpose Rule.

I hope the PDPC will find my views useful.

Respectfully submitted,

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[Redacted]

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1. INTRODUCTION

IOT significantly advances an IOT data processor's technical abilities to process personal data, against a data subject's right to protect it. Informed consent, the most important right a data subject possesses against an unlawful IOT processing, is significantly impacted. Because of aesthetic or cost considerations, IOT devices invariably lack an effective user interface. As a consequence, informed consent is factually impossible under IOT.

IOT is a global technological phenomenon. And it redefines how consumers interact with businesses. IOT devices interlink to form a machine-to-machine business eco-system. These devices now enhanced with sensory functions and communication capabilities, are transform into networked devices. They exchange data seamlessly with one another, some within physical proximity of the data subject, while others inconspicuously across the larger internet cloud. The data subject is often unaware of this latent 24/7 data network, whose topology is known only to its architects, the IOT data processors.

Data protection concerns are accentuated for IOT is crucial to Big Data. In an information economy, organisations in pursuit of profits, have an insatiable need to process personal data as essential inputs to business analytics. Business analytics is key to predicting consumer behaviors and an IOT data processor is financially rewarded for getting that right. Against this backdrop, data protection regulators must consider advancing their data protection laws.

2. THE PROPOSAL TO SUBSTITUTE NOTIFICATION OF PURPOSE FOR CONSENT, SUBJECT TO THE CONDITION SUBSEQUENT THAT A DATA SUBJECT IS NOT ADVERSELY IMPACTED (NOTIFICATION OF PURPOSE RULE), IS WITHIN THE MEANING OF THE PDPA

The proposal to substitute Notification of Purpose for consent in instances where it is impractical for an IOT data processor to obtain consent from his data subject, subject to a condition subsequent that his data subject is not adversely impacted, is valid within the meaning of the PDPA.¹ First, the PDPA extensively invokes the use of conditions as exceptions to the general rule that an IOT data processor shall not process personal data without his data subject's consent. Second, as consent is a heavily qualified privilege under the PDPA, notification of purpose may validly replace consent. And finally, the rule is fair and just to the

¹ PDPC, "Public Consultation for Approaches to Managing Personal Data in the Digital Economy", 27 July 2017.

IOT data processor and his data subject. The data subject is not made worse off as a result of the IOT processing; and the IOT data processor is not prejudiced for he must take the burden if he seeks to take the benefit of circumventing the consent requirement.

A. THE USE OF CONDITIONS SUBSEQUENT IS CONSISTENT WITH THE PDPA'S PRIOR USE OF CONDITIONS TO QUALIFY THE PRIVILEGE OF AN IOT DATA PROCESSOR

In determining if the Notification of Purpose Rule is within the meaning of the PDPA, it is helpful to look to the PDPA for guidance. The PDPA extensively invokes the use of conditions² as exceptions to the general rule that an IOT data processor shall not process personal data without consent.³ These exceptions, numbering eighteen in total, are articulated in the Second, Third and Fourth Schedules, and they strictly qualify an IOT data processor's privilege⁴ to process personal data without consent. By way of a condition precedent, an IOT data processor may lawfully process personal data without consent for any purpose that is "*clearly in the interest of the individual*".⁵ This act is permissible if consent "*could not be obtained in a timely way or the individual would not reasonably be expected to withhold consent*".⁶ Here the condition precedent stands as a prerequisite for the grant of that privilege. The IOT data processor bears the burden of proof. As a consequence, he cannot rely on that exception if that condition precedent is false; and he is in possible breach of the PDPA if he commences to process personal data.

The condition subsequent that a data subject "*is not adversely impacted*" is a logical extension of the PDPA's use of conditions to qualify an IOT data processor's privilege to process personal data without consent. To an IOT data processor, the condition subsequent is no different from a condition precedent. Both conditions effect similar legal consequences, albeit by a different legal construct. A condition precedent, upon its satisfaction, grants the IOT data processor the privilege to process personal data. A condition subsequent grants that same privilege but withdraws it upon occurrence of a set of operative facts, the condition subsequent. For him, the difference is purely in the schematics. The difference rests merely in the choice of the point of reference from which his privilege to process personal data is granted or withdrawn. An IOT data processor cannot process personal data if he is unable to show that the IOT processing is "*clearly in the interest of the data subject*", a condition precedent. Here, a condition subsequent achieves the same result, by withdrawing that privilege if the data subject is "*adversely impacted*". Finally, the IOT data processor in seeking to rely on the condition subsequent exception bears the same burden of

² *The Personal Data Protection Act* (Act 26, 2012 Rev. Ed. Sing). s.17(1),(2), (3)

³ *Supra* Note 2 s.13

⁴ I have used the term "privilege" as a condition granted by Parliament in place of a "right", which typically refers to an inherent and irrevocable constitutional right.

⁵ *Supra* Note 2, Second Schedule, 1 (a), Third Schedule 1 (a), Fourth Schedule 1(a).

⁶ *Supra* Note 5

proof. In summary, the use of a condition subsequent is consistent with the PDPA's prior use of conditions to qualify the rights of a IOT data processor.

B. AS CONSENT IS NOT AN ABSOLUTE RIGHT UNDER THE PDPA, NOTIFICATION OF PURPOSE MAY VALIDLY REPLACE CONSENT

As a starting point, consent is best understood in the maxim "*he who consents to an act is not wronged by it*". Consent is a data subject's most important privilege in his arsenal for an IOT data processor cannot lawfully process personal data without consent.⁷ Consent, once obtained, absolves the IOT data processor from liability.

But consent is not an absolute privilege under the PDPA. It is possible to vary or even remove it in its entirety. A careful reader of the PDPA will discover that consent is heavily qualified and narrowly construed⁸. Consent is curtailed⁹ to the point of being redundant if it falls within any of the eighteen exceptions articulated in Schedules Two, Three and Four. Accordingly, notification of purpose may validly take the place of consent.

By way of a comparison, such a proposal may fall out of the ambit of the European Union's General Data Protection Regime (GDPR). Under the GDPR, consent ranks as the first of six permitted exceptions to general rule that any processing of personal data is unlawful¹⁰. The GDPR invokes an expansive reading of consent: that *consent "is freely given, specific, informed and unambiguous"*.¹¹ Consent is also one of the three ways which an IOT data processor could lawfully process personal data.¹¹ Further, an IOT data processor must provide a positive opt-in method¹²; and must allow a data subject to withdraw his consent.¹³

C. THE NOTIFICATION OF PURPOSE RULE IS FAIR AND JUST

The Notification of Purpose Rule is fair and just to IOT data processor and his data subject. Here, the principle of fairness is applied to ensure that the data subject is not made worse off by the IOT processing in two key ways:

⁷ *Supra* Note 3

⁸ Ong Ah Chuan v. PP (1979-1980) SLR(R) 710. The "rights" in the PDPA are not fundamental rights and are therefore not read generously.

⁹ *Supra* Note 1

¹⁰ EC, *Regulation (EU) 2016/679 of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*, [2016] O.J. L 119/1 Art. 6(1)(a) ¹¹ *Ibid* Art. 4(1).

¹¹ *Supra* Note 12 Art. 6(1)(b), 6(1)(f).

¹² *Supra* Note 12 Recital 32

¹³ *Supra* Note 12 Art. 7(3)

- I. Where feasible, the IOT data processor permits his data subject to optout; and
- II. If the personal data is processed, the IOT data processor avoids inflicting detriment onto his data subject.

The IOT data processor is also not prejudiced. He is burdened by a statutory duty of due diligence only if he seeks to take the benefit of circumventing the consent requirement. And he discharges that duty by conducting a mandatory risk and impact assessment and, if necessary, by instituting risk mitigation measures. Further the rule provides further assurances to the IOT data processor. Here the data subject is deemed to have consented to the IOT processing if he fails to opt-out if presented with a reasonable opportunity to do so.¹⁴

In summary, the proposal to substitute Notification of Purpose for consent, on condition that a data subject “*is not adversely impacted*” is consistent with the meaning of the PDPA. The Minister can implement the condition subsequent exception by amending Schedules Two, Three and Four; and publishing in the Gazette.¹⁵ The PDPC may also draft new regulations to effect the proposed amendments.¹⁶

3. THE PROPOSAL TO SUBSTITUTE LEGAL OR BUSINESS PURPOSE FOR INFORMED CONSENT, IF THE PUBLIC INTEREST TEST IS SATISFIED (LEGAL OR BUSINESS PURPOSE RULE), IS WITHIN THE MEANING OF THE PDPA

The proposal to substitute legal or business purpose for consent and notification of purpose (informed consent) in instances where it is not desirable or appropriate to obtain consent, subject to the public interest test, is valid within the meaning of the PDPA. By necessary implication, this is a proportionality test. And it promotes an analytical and transparent approach to the data protection adjudication. By asking the right questions, and in the correct sequential order, an IOT processing is now properly referenced against a permitted legal or business purpose.

A. A BALANCING TEST AVOIDS HARD RULES AND CONTINUES TO PRESCRIBE NON-ARBITRARY RULES EVEN WHERE RULES RUN OUT

By invoking a balancing test, the PDPA provides a pragmatic approach to reconciling the competing data protection interests of an IOT data processor and his data subject¹⁷. Section 3 of the PDPA states as follows: “*the purpose of this Act is to govern the collection, use and disclosure of personal data by organisations in a manner that recognizes both the right of individuals to protect their personal data and the need of organisations to collect, use or disclose*

¹⁴ PDPA, s.15

¹⁵ *Supra* Note 2 s.64(1),(2)

¹⁶ *Supra* Note 2 s.65(1)

¹⁷ PDPA, s 3

personal data for purposes that a reasonable person would consider appropriate in the circumstances.” Here, the privilege of a data subject to protect his personal data - the statutory privileges, obligations and prohibitions accorded to him by Parliament, are balanced against an IOT data processor’s need to process personal data for purposes considered appropriate by a reasonable person. Having identified the relevant competing interests, the adjudicator assigns the appropriate weights to these interests to reach a final decision. An IOT data processor is not in breach of the PDPA if his interests trump those of his data subject.

A balancing test is suited for adjudicating on data protection issues in relation to IOT. IOT, in particular, will pose significant challenges to traditional rulebased data protection laws. IOT is driven by technological innovation, as a consequence, IOT applications and devices will evolve at exponential rates¹⁸. Rule-based data protection laws are generally static and may redress those reasonably foreseeable data protection concerns at the time of its drafting. As a consequence, rule-based laws may fail to keep pace. And where rules run out¹⁹, an adjudicator risks discretionary rule-making.

In contrast, a balancing test provides a “living” approach to regulating data in an IOT age. This test is frequently applied in constitutional law. Here rigid rules are abandoned in favor of a nuanced approach to discover the final rule. Such tests avoids hard rules and continues to prescribe non-arbitrary rules even where rules run out.

A mere-balancing test however is fraught with application vagaries. Its success rests strictly on an adjudicator’s ability perform the herculean tasks of:

- I. Balancing seemingly incommensurable interests; and
- II. Assigning the appropriate weights to these identified interests.

Incommensurables are characterised by an absence of a common denominator. Without a common denominator, any balancing attempt is reduced into a subjective speculative exercise. Such mere-balancing has been described as attempting to balance the length of lines against the weight of stones.²⁰ Further, few judicial cases provide guidance on the practical approaches to the mere-balancing test and these are often narrowly limited to the facts of the case.

IOT will demand a finer balancing of these incommensurables for IOT will push the boundaries of personal data processing. And as IOT technology advances, so will the issue complexities. This invariably may require case-by-case

¹⁸ Moore’s Law predicts that the processing power of computers doubles every eighteen months.

¹⁹ Hart, *“The Concept of Law”* 3d ed. (United Kingdom: Oxford University Press, 2012) at 128. Legal rules cannot provide for all situations and such gaps in the law occur when rules run out.

²⁰ *United States Supreme Court Bendix Autolite Corp. v. Midwesco Enterprise, Inc.*, 486 U.S. 888,897 (1988) at 2224. Justice Scalia: “On one side of the scale, the Court considers the benefit of the Ohio scheme to local interests... We have no way of knowing how often these ends are in fact achieved, and the Court thus says little about them except to call them “an important factor to consider.” Having evaluated the interests on both sides as roughly this, the Court then proceeds to judge which is more important. This process is ordinarily called “balancing”, but the scale analogy is not really appropriate, since the interests on both sides are incommensurate. It is more like judging whether a particular line is longer than a particular rock is heavy”.

judicial law making at every instance. Such a consideration may turn Singapore's statutory data protection regime into an example of the English judge-made common law, but without the benefit of centuries of judicial precedents to draw from.

Further, IOT presents practical difficulties in assigning the correct weights to the identified interests. As IOT is new, few case authorities on point are available to properly apply the weights of precedents. Further, the EU fundamental rightsbased decisions are not relevant as persuasive authority, for Singapore's PDPA is of an entirely different pedigree.

B. THE PDPA'S BALANCING TEST APPROACH TO DATA PROTECTION CONSIDERS THE RIGHT OF THE DATA SUBJECT TO PROTECT HIS PERSONAL DATA AGAINST THE REASONABLE EXPECTATIONS OF A DATA PROCESSOR TO PROCESS PERSONAL DATA

The PDPA attempts to untie this Gordian-Knot by injecting reasonableness into the balancing equation. Instead of attempting the difficult task of balancing incommensurables against each other, the adjudicator seeks to locate the proverbial middle ground by nominating reasonable expectations as that common denominator. An IOT data processor's reasonable expectations to process personal data is now matched against those of his data subject, thereby providing a way forward to balance the incommensurables articulated in Section 3 of the PDPA.

The reasonableness balancing test is executed as follows: Reasonableness is first assessed objectively, from the perspective of a reasonable IOT data processor; and next, against a threshold standard of whether that IOT processing was considered "*appropriate in the circumstances*".

This reasonableness balancing test however is deferential to the IOT data processor. This test simply means that an IOT processing is unlawful if an adjudicator concludes that it was so unreasonable that no reasonable IOT data processor would have done the same. IOT data processors have an insatiable need to process personal data as essential inputs to business analytics, and they are financially rewarded for correctly predicting consumer behaviors. Therefore, it is more probable than not, that a reasonable IOT data processor is characterised by a high threshold for IOT processing. As a consequence, this test may skew in favor of IOT data processors. Further, the PDPA adopts a low threshold standard of "*appropriate in the circumstances*". An IOT data processor can meet that threshold with relative ease, so long as his IOT processing was merely related to the purpose. It is unnecessary for him to prove that his IOT processing was either necessary to advance that legitimate interest; or if it was compelling because there was no less restrictive means available.

This test is broad. And it will not permit the fine balancing of an IOT data processor's "need" for IOT processing against his data subject's right to protect it, articulated under Section 3 of the PDPA. As a consequence, it is effective as

against an egregious IOT data processor, but in all other situations, the data subject almost always stands to lose.

C. PROPORTIONALITY, A PRINCIPLED BALANCING TEST, PROVIDES A STRUCTURED AND TRANSPARENT FRAMEWORK TO GUIDE THE APPLICATION OF THE LEGAL OR BUSINESS PURPOSE RULE

It is possible to introduce proportionality, a principled balancing test, into the PDPA under the Legal or Business Purpose Rule. Swapping legal or business purposes for informed consent effectively changes the character of the reasonableness balancing test. Where a data subject's privileges once stood, an IOT data processor's legal or business purpose now stands in its place. Here the IOT data processor's reasonable expectations are now balanced against a permitted legitimate interest- the legal or business purpose. By necessary implication, this is a proportionality test. Here the IOT data processor's reasonable expectations to process IOT personal data is now reviewed, not against a set of data subject rights, but now as against a set of permissible purpose.

Proportionality consists of the following four steps:

- I. A legitimate purpose;
- II. A rational connection test;
- III. An assessment of whether the means to achieve the purpose was necessary; and
- IV. An assessment of whether the privilege contravened was proportionate to the purpose.

A proportionality test is more precise than a reasonableness balancing test. It provides an analytical and transparent framework to help guide the adjudicative process. By asking the right questions, and in the correct sequential order, it promotes critical thinking in the adjudicative process.

The proportionality test begins by asking whether the IOT processing was for the statutorily permitted legal or business purpose. Next, the rational connection test is easy to satisfy for it simply asks if the IOT processing was an appropriate means to achieve the intended legal or business purpose.²¹ This is the low threshold standard articulated in Section 3 of the PDPA, and an IOT data processor can lawfully process personal data for "*purposes that a reasonable person would consider appropriate in the circumstances*". Here, the adjudicator is not required to consider if the means to achieve the purpose was necessary or if it was compelling. The fact that a IOT processing was merely related to the legal or business purpose is sufficient. Finally, the assessment of whether the privileges contravened was proportionate to the purpose is a straight-forward balancing test. This enquiry ensures that any adverse impact on a data subject is

²¹ PDPA uses a lower rationally related threshold. As such, it is unnecessary to consider the necessity test under step 3

²³ Singapore, Parliament, Personal Data Protection Bill, No.89 (15 October 2012) (Assoc. Prof. Dr. Yaacob Ibrahim) ²⁴ Chee Siok Chin v. Minister for Home Affairs [2006] 1 SLR (R) 582 at 52.

not disproportionate to the benefits reaped from the IOT processing. And it is here that the proposed public interest rule is applied. Parliament enacted the PDPA to meet a wider policy objective to avoid heavy compliance costs on businesses, enhance Singapore as a trusted business hub, and facilitate crossborder data transfer.²³ Further, Singapore's legal jurisprudence demands a consideration of rights against a wider public interest. For if constitutional rights are not considered in vacuum but balanced against the common good for the community²⁴, what more is said of the PDPA's non-fundamental rights.

4. CONCLUSION

The proposals to (i) substitute Notification of Purpose for consent, subject to the condition subsequent that a data subject is not adversely impacted; and (ii) substitute Legal or Business Purpose for notification of purpose and consent, if the public interest test is satisfied; are within the meaning of the PDPA.

The PDPA's balancing approach to data protection is conceptually viable and it will allow the PDPA to evolve with IOT. Of particular concern is the low threshold standard where IOT processing is permitted for "*purposes that a reasonable person would consider appropriate in the circumstances*". An IOT data processor can meet that threshold with relative ease, so long as the IOT processing was merely related to the purpose. As a result, such a test is effective as against an egregious IOT data processor only.

IOT will significantly alter the balance against a data subject. A stronger data protection regime will require amending the threshold to that of "*purposes that a reasonable person would consider **necessary** in the circumstances*".

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