

CUTS Submission to Ministry of Electronics and Information Technology on Strategy for National Open Digital Ecosystems

Background

The 'Ministry of Electronics and Information Technology' (MeitY) had released a 'Consultation White Paper' (the paper) on the 'Strategy for National Open Digital Ecosystems' (NODE). Consumer Unity & Trust Society (CUTS) is pleased to submit its response on the questions posed in the paper.

Response to questions posed in the paper

Question 1. Please comment on the guiding principles defined in Section 4 and indicate whether there are any principles you would add/amend/drop. Please provide reasons for the same.

Prior to responding to the question and diving deep into the key principles, we would like to make following general comments about the principles:

- These principles should not be an afterthought or deemed necessary merely from compliance perspective, but should be incorporated during design and development of 'GovTech' platforms. At the same time, the principles must not remain mere aspirational but should be implemented in letter and spirit.
- While developing and implementing these principles, it will be useful to learn from mistakes and unintended consequences of platforms previously built.
- A top down approach for implementation and enforcing the platforms on users for the purpose of achieving scale will be futile and counterproductive. Citizens, users, and other stakeholders should be involved from the beginning in development of such platforms. In addition to generating awareness and building their capacity, their concerns about product design, user friendliness must be taken into account and the users must be able to customise the platforms as per their needs and convenience for use without any external support.
- There is a need to avoid centralisation, which can lead to concentration of powers and lack
 of accountability and promote decentralisation, for enabling innovation, competition,
 partnership and user-friendliness.
- There is a need to realise that technology is not a panacea for all problems, while it can aid in identification and implementation of optimal solutions. Thus, strategies for addressing challenges must be devised by sector/issue specific experts (such as health experts) who could involve technology experts but the process must not be led by the latter. In other words, technology experts will need to work closely with experts across sectors for design and implementation of solutions.

Coming back to the guiding principles, although they are broadly exhaustive, however, the scope of such principles needs to be further deepened. Given below are the principles requiring more clarity.

Guiding principle 1 – be open and interoperable: As the paper has also rightly acknowledged, various global developments have taken place, or are taking place within the realm of open digital ecosystems. There is therefore a need to make provisions for international business to government (B2G), and government to government (G2G) collaborations. However, such collaborations (including domestic collaboration/participation) must be on Fair Reasonable and Non-Discriminatory (FRAND) monetary and non-monetary terms. Mutual respect to Intellectual Property Rights (IPRs) must be ensured, while also upholding the principles of competition law and policy. Inspiration may be taken from appropriate elements of telecom standard setting processes. Studies¹ have highlighted the adverse impact of proprietary/monopolistic telecom standards, which hamper interoperability and restricts follow-on innovation. A participative approach must be adopted to ensure inclusive participation of all stakeholders in the proposed digital ecosystems. In other words, there is a need to reach out to all relevant stakeholders rather than expecting them to approach the government, which may be difficult for them owing to capacity, resource or other constraints. In addition, the principle mentions access to open APIs, specifications and standards to enable innovation by ecosystem players. It is absolutely essential that these standards and specifications are developed through a transparent, consultative and inclusive process. Moreover, non-discriminatory access to APIs needs to be ensured. Concerns have been raised in the past with platforms like UPIs which acted like 'walled garden' in its initial days resulting in disproportionate benefits to select players and weakening of competition. Lessons from such experiences must be learnt and the playing field must be levelled from the beginning to enable entrepreneurs leverage the potential of digital platforms.²

Guiding principle 3 – be scalable: While the paper has rightly emphasised on the need for scalability, it will be essential to ensure that this is not achieved at the cost of user convenience. In other words, the platforms will need to remain nimble and user friendly and should be easy to use. While the paper provides example of GSTN, significant concerns were raised regarding its design and difficulty of use, particularly by MSMEs, who had to approach expert intermediaries (like CAs etc) to file returns, resulting in significant enhancement in cost of using such platforms. Moreover, scaling will also require cooperation between different state and local governments. Consequently, creating enabling mechanisms for them to periodically engage, discuss challenges and way forward could aid in achieving scalability.³

Guiding principle 4 - ensure security and privacy: While the paper has provided for ensuring privacy and data protection, it needs to be pointed out that India currently lacks dedicated personal and non-personal data protection laws. The tabled personal data protection bill 2019 suffers from many lacunas. ⁴ Also, it is to be noted, that a committee chaired by Kris Gopalakrishnan, is currently deliberating on framing governance norms for non-personal data.⁵ In light of the massive volumes of data expected to be processed by the proposed NODES, it will be essential to wait for these legislations to be finalised before proceeding further, in order to ensure compliance with such legislations and upholding the fundamental right to privacy. Moreover, some of the practices

¹ CUTS report tilted: Standards Development and the 5G Opportunity, available at: https://cutsccier.org/pdf/Report-Design in India to Maximize 5G Opportunities.pdf and ITU reports on standards: https://www.itu.int/en/ITU-T/focusgroups/dfs/Pages/deliverables.aspx

² CUTS, Level the Playing Field to Leverage the Potential of Digital Payments, 2018 https://cutsccier.org/pdf/Research Report-Competition assessment of payments infra in India.pdf. Also, Ramanathan, Sahay, India's fintech disruption sequel, 2020, Ken, https://the-ken.com/story/sahay-indias-fintech-disruption-

³ Pande et al, Experience with GST holds valuable lessons for One Nation One Ration Card, May 2020, Indian Express, https://indianexpress.com/article/opinion/columns/a-portable-welfare-6428712/

⁴ CUTS Submission to the Joint Committee on The Personal Data Protection Bill, 2019, available at: https://cutsccier.org/pdf/submission-pdpb-2019.pdf

⁵ Indian govt forms committee to recommend governance norms for non-personal data, Infosys' Gopalakrishnan to head it, available at: https://www.medianama.com/2019/09/223-meity-non-personal-data-committee/, dated 16.09.2019

followed in other countries might be inspiring but will need to be customised for use by Indian demography. It must be ensured that users are able to enforce their right to privacy and security without much hassle and the mechanisms do not lead to discrimination between informed and uninformed users. For instance, privacy labels could be one of the mechanisms through which control could be provided to users. Moreover, while the principle mentions the utility of end to end (E2E) encryption, attempts to weaken such protocols which may reduce utility for users need to be resisted.

<u>Guiding principle 5 – Adopt an agile, data-driven development method</u>: The principle correctly mentions the need to gradually enhance understanding of user behaviour. In this pursuit, it would be relevant to take assistance of user facing organisations working with consumers on different issues, including technology, digital payments, privacy and data protection.⁸

Guiding principle 6 – define accountable institution(s): It would certainly be wise to setup an accountable organisation for NODEs. However, it is imperative that such organisation works closely with sectoral (example: Telecom Regulatory Authority of India in the telecom sector, or the Reserve Bank of India in the banking sector etc.), as well as market regulators (such as the Competition Commission of India, and the proposed Data Protection Authority). Relevant provisions to ensure a hand in glove working relationship with such regulators must be mentioned in the envisaged national strategy on NODEs. Also, in order to establish an independent and well-balanced institution, CUTS work on the draft regulatory reform bill may be referred. While such institution can be responsible for setting standards and rules of engagement, it must be ensured that there is no conflict of interest between the institution and accountable/regulated entities. Moreover, the function of such institution must be restricted to enforcing rules and it should not get into service delivery. Concerns with the design of the National Payments Corporation of India must be taken into account while designing accountable institution. 10

<u>Guiding principle 7 – establish rules of engagement:</u> While it is important to establish rules of engagement, it must be ensured that the process adopted for establishment of such rules is transparent, inclusive and consultative. It should consider costs and benefits of different regulatory alternatives and adopt those which are likely to achieve regulatory objectives in a manner that costs to stakeholders are substantially outweighed by the benefits. The Regulatory Impact Assessment framework, as implemented in different jurisdictions, could act as an inspiration in this regard. Moreover, while the paper mentions Payment and Settlement System (PSS) Act 2007, the best principles for designing of rules in draft PSS Act 2018 should be considered. ¹²

Guiding principle 8 – create transparent data governance: While the paper has rightly recognised the need to ensure that data policies are easily understood and readily available to all users, studies have shown that users (meant consumers here) do not read and/or understand data policies due to their length and legalese. Therefore, the strategy must encourage the use of technology for effective communication of the same to last mile users. This may be in the form of privacy labels, on the lines of nutrition labels, or energy labels. Additionally, any data governance policy framed

ccier.org/pdf/CUTS Submission to RBI on Innovation and Competition in Retail Payments.pdf

⁶ https://cuts-ccier.org/pdf/policy-brief-notice-and-consent-framework-of-the-PDPB.pdf

⁷ https://cuts-ccier.org/understanding-consumers-perspective-on-encryption/

⁸ CUTS has implemented large scale studies to understand users' perspectives on digital payments, privacy and data protection. See https://cuts-

ccier.org/pdf/Presentation for RBI Committee on Deepening Digital Payments.pdf and https://cuts-ccier.org/pdf/survey_analysis-dataprivacy.pdf

⁹ CUTS work on Regulatory Reform Bill, available at: https://cuts-ccier.org/regulatory-reform-bill/

¹⁰ For details, see https://cuts-

¹¹ https://cuts-ccier.org/regulatory-impact-assessment/

¹² https://dea.gov.in/sites/default/files/Payment%20and%20settlement.pdf

¹³ CUTS consumer perception survey on privacy and data protection, available at: https://cuts-ccier.org/cdpp/

by the government, should not be regressive or restrictive in nature (such as data localisation, adverse impacts of which have been well documented)¹⁴, and must follow principles of global data governance. Moreover, users should not be required to incur costs for enforcement of such data governance principles. The monitoring and enforcing authority should have expert and independent members and must not act as sinecure for retired bureaucrats and members of judiciary.

Guiding principle 10 – adopt a suitable financing model: It is of course imperative to explore suitable sustained financial models for the envisaged NODEs. However, the chosen financial model should not become an entry barrier, especially for startups or consumers. For instance, under the Government's 'Bulk Data Sharing Policy', the Government intended to monetise a database of vehicle registration certificates, citing benefits to the 'transport and automobile industry'. Without getting into the merits of such a policy, the reserved amount of INR 3 crores for commercial organisations to get access to such data would likely have become a barrier for start-ups to benefit, as they may not be able to afford such access. Accordingly, a Cost-Benefit Analysis (CBA) must be undertaken before implementing any financial model, in order to ensure that the costs imposed by it, do not outweigh its intended benefits. Rather than a one size fits all subscription model to raise finances, a tiered suite based subscription model could be explored. Widespread ownership and enlisting on capital markets could also aid in raising finances while ensuring adequate transparency and accountability. Models like People first PPPs could be explored for financing of NODEs. 17

Guiding principles 11 and 13 – ensure inclusiveness and drive end-user engagement: It is important to take suggestions and involve experienced and credible consumer groups at every stage of technology design/development to get a consumer perspective on the proposed NODE, as they would help in gauging and presenting the various challenges which may be faced by consumers in the uptake of such proposed digital technology. Cases studies¹⁸ and nationwide surveys may be conducted in this regard. Furthermore, it is important to involve Civil Society Organisations (CSOs) in raising awareness amongst end-users or business users through awareness generation and capacity building workshops¹⁹ with respect to proposed NODEs. Moreover, in addition to language support, audio, video and disable friendly tools will need to explored to ensure true inclusiveness. For driving end-user engagement, in addition to awareness and capacity building programmes, appropriate incentives will need to be designed to foster usage. Seamless integration in existing processes and helpfulness in solving problems faced by potential users could drive adoption. However, unsustainable incentives (like cashbacks etc) should be avoided.

<u>Guiding principle 14 – be analytics driven and learn continuously:</u> While it is important to rely on data and artificial intelligence for decision making, it should be ensured that this does not result in undue discrimination and violation of ethical principles. This is critical, particularly in sensitive

¹⁴ CUTS studies on data localisation, available at: https://cuts-ccier.org/consumer-impact-assessment-oncross-border-data-flow/, and https://cuts-ccier.org/pdf/projectbrief-dtdl.pdf

¹⁵ Government clears policy to sell vehicle registration data, available at: https://www.hindustantimes.com/delhinews/govt-clears-policy-to-sell-vehicle-registration-data/story-n4aBtGpJgETNuN9vbAW3LL.html, dated 13.03.2019.

¹⁶ CUTS work on Regulatory Impact Assessment, available at: https://cuts-ccier.org/regulatory-impact-assessment/
¹⁷ https://circ.in/unctad/ and

https://www.unece.org/fileadmin/DAM/ceci/documents/2018/PPP/Forum/Documents/The 8 Guiding Principles for People-first PPPs in support of the UN SDGs-Part II.pdf

¹⁸ CUTS case study on OTT services in Rajasthan, available at: https://cuts-ccier.org/pdf/case-study-of-rajasthan.pdf

¹⁹ CUTS awareness generation and capacity building workshops on privacy and data protection, available at: https://cuts-ccier.org/consumer-awareness-workshop-on-data-protection-and-privacy-impact-of-personal-data-protection-bill-2018-2/, and https://cuts-ccier.org/consumer-awareness-workshop-on-data-protection-and-privacy-impact-of-personal-data-protection-bill-2018/

markets like labour which boast of huge diversity among job seekers. Design of policies and use of algorithms must be continuously reviewed, improved, and integrated with other solutions.²⁰

Guiding principle 15 – grievance redress: having a robust grievance redress mechanism for NODEs is imperative, considering rampant digital illiteracy and inexperience of Indian users in using/employing digital tools and technology in their daily or professional life. Having a single window for grievance redress for NODEs in a particular sector may be considered to be more efficient than having individual grievance redress contact points for NODEs within a particular sector, while at the back end the complaint may be forwarded to the relevant team, but the user must not be required to identify and approach relevant team. Support may be taken from consumer organisations in this regard, on the lines of the erstwhile Grahak Suvidha Kendras (elaborated in a subsequent question). Transparency and feedback in grievance redress would be the key and the user should be able to track status of her complaints at all times. The grievance redress mechanism should incorporate a mechanism for compensation to users in case of violation of rights. In addition, with increasing use of technology, the type and nature of fraudulent and phishing practices are likely to evolve. Thus, the NODEs will need to consider such developments and design an appropriate counter strategy.²¹

Question 3. What are the biggest challenges that may be faced in migrating from a 'GovTech' 1.0 or 2.0 approach to a NODE approach (e.g. inter-departmental systems integration, legacy systems modernization, poor usability, and poor data quality)? How might these be overcome?

Digitalisation of government departments, functions and processes would expectedly face multiple challenges. Overall, there is a need to address trust deficit for migrating to the NODE approach. A few such steps have been listed below.

- 1. Skill development: This is not only necessary for technology development and maintenance, but also for personnel at the last mile data collection and entry points. Such personnel are not only government officers, but also government outsourced officers. Many instances of errors in data collection and processing have been noted in various government operations. Popular examples include incorrect personal details in Aadhaar card, inaccurate digital land records etc. Such errors may have a long-lasting ripple effect poor data quality, leading to poor usability. Also, it is believed that despite modernising hardware at the last mile, government officials face various capacity constraints in using such hardware, and still rely upon manual modes of task completion. Training workshops conducted by the government and/or private players, with assistance from civil society organisations may help overcome such challenges. In order to overcome status quoist approaches, appropriate incentives may need to be designed for adopting change and disincentives for avoiding it. A bonus-malus approach may be helpful in this regard.
- <u>2. Improving quality of data</u>: Another possible issue which may crop up is of inadequate data, or poor quality of data. Such issues may need to be overcome, within the ambit of data minimisation, purpose limitation as mandated under the draft personal data protection bill.
- 3. Enhancing cyber-security: India has been prone to numerous cyber-attacks, and has witnessed many government websites being hacked. Significant investment in training and security infrastructure development may need to be undertaken parallel to the NODEs being developed.
- 4. <u>Infrastructure and connectivity</u> constraints will also need to addressed to increase reliance on digital systems.

²⁰ https://cuts-ccier.org/pdf/dp-artificial-intelligence-implications-for-consumers.pdf

²¹ Such as, https://www.itu.int/en/ITU-

T/extcoop/figisymposium/Documents/ITU SIT WG Unlicensed%20Digital%20Investment%20Schemes f.pdf

In addition, there a need to change mindset that the migration is for the benefit of stakeholders and not an additional compliance item. For this to happen, all stakeholders will need to be engaged from the conceptual phase of the NODEs, so that their concerns could be addressed and appropriate incentives could be designed.

Question 4. In your opinion, should all delivery platforms be 'open source' or are 'open APIs' and 'open standards', sufficient? Please elaborate with examples.

All delivery platforms must be open source as that would lead to design and development of high quality, inclusive and trust worthy platforms. Making APIs and standards open may not be sufficient and quite often is a belated but insufficient reform to alter the philosophy of platforms built without considering all relevant points of views.

Question 5. Do NODEs across sectors require common governance frameworks and regulatory/ advisory institutions to uphold these? Or is it sufficient for each node to have an individual governance construct? If a common framework is required, please elaborate the relevant themes/ topics e.g. financing, procurement, data sharing.

While different NODEs can have individual governance structures, all must comply with a minimal set of principles relating to transparency, consultation, inclusivity, and accountability. Useful models to refer to could be the Indian Financial Code²² and Regulatory Reform Bill²³ which dealt with governance frameworks of financial and infrastructure sectors, respectively.

Question 7. What are some potential risks that open digital ecosystems can leave citizens vulnerable to, for example, risks related to data privacy, exclusion, having agency over the use of their data etc.? What types of overarching guidelines and/or regulatory frameworks are required to help mitigate them?

Consumers interests need paramount attention while designing and developing open digital ecosystems. They may be subject to various risks, such as the ones listed below. These need to be mitigated in order to build consumer trust on digital ecosystems, which is vital for its success.

- 1. Data privacy and protection: As mentioned previously, India lacks a dedicated privacy and personal data protection framework. The same must be finalised and implemented in spirit, after addressing its various lacunas.
- 2. Access, awareness and capacity constraints to avoid exclusion: Considering the large population of the country which is still devoid of internet access, it is imperative for the government and private service providers to lay the required internet infrastructure, in order to increase its penetration. In areas where internet access is available, but low rates of uptake are observed, awareness and capacity building workshops may be conducted with help from established consumer organisations, which will help in enhancing the uptake of digital tools and technologies at the last mile. These workshops may also be educative in nature, with respect to how to navigate the internet safely. Such steps will enable inclusive participation by all sections of the society.
- 3. Surveillance of vulnerable sections of the society: Adequate steps need to be taken to ensure that the proposed NODEs do not become means of enabling state sponsored surveillance, or targeted exclusion of vulnerable sections of society.

²² https://www.prsindia.org/uploads/media/draft/Draft-%20Indian%20Financial%20Code,%202015.pdf

²³ https://cuts-ccier.org/regulatory-reform-bill/

To summarise, in order to address risks, NODEs will need to inclusive principles like transparency, consultation, inclusivity, non-discrimination in its design, by involving and listening to experts in these areas and developing open ecosystems in partnership with such stakeholder groups.

Question 9. Are you aware of any end-user adoption and engagement models that platforms have successfully adopted e.g. feedback loops, crowdsourcing use cases, offline awareness and on-boarding campaigns?

A case study of e-clinics in Rajasthan had revealed unique end-user adoption and engagement models, which have facilitated feedback loops and on-boarding campaigns for the uptake of digital technology driven services in rural areas.²⁴

- 1. Handholding for last mile and inexperienced users, with self-reliance for infrastructural requirements: The e-clinics established in rural areas employed a technician in each e-clinic who would assist patients in availing healthcare services through digital technology. Female nurses were also employed for comforting female patients while using audio-visual modes for healthcare needs. Self-reliance was also a key enabler of the success of e-clinics, i.e. electricity and internet connection were provided for in-house.
- <u>2. Raising awareness and on-boarding</u>: Offline awareness campaigns through loudspeaker vans, word of mouth and in-person during village meetings were regularly conducted to propel the uptake of e-clinics.
- 3. Surveys and in-person interviews for feedback: Surveys of patients through in-person interviews were conducted by service providers as well as other stakeholders to collect feedback on the eclinic service.

A cocktail of such efforts has resulted in enhancing the uptake of e-clinic services in last mile rural areas, having a population which was previously underserved for its healthcare needs. Similar initiatives may need to be planned for the success of the envisaged NODEs. Understanding the interaction between technology and society and designing appropriate strategies to drive user adoption would be crucial.²⁵

Question 10. Are you aware of any innovative grievance redressal mechanisms/models that go beyond customer support helplines to augment accountability to citizens? If yes, please describe along with examples.

Apart from traditional grievance redress mechanisms such as e-mails, helpline numbers etc., the following modes may also be considered:

- <u>1. Grahak Sahayta Kendra</u>: In order to provide for an alternate recourse, consumer assistance centres might be set up on the lines of CUTS Grahak Sahayta Kendra, ²⁶ which are specifically focused on consultation and conciliation on consumer complaints.
- 2. Use of social media: The use of social media has become popular amongst consumers, for lodging their grievances with service providers. Platforms such as Twitter have actively been used,

²⁴ CUTS case study of e-clinics in Rajasthan, available at: https://cuts-ccier.org/pdf/e-clinic-services-in-rajasthan-india-a-case-study.pdf

²⁵ CUTS is working at the intersection of technology and society, and has published papers on this theme. Details available at https://cuts-ccier.org/policy-briefs-consumer-protection/

²⁶ CUTS Grahak Sahayta Kendra, details available at: https://cuts-cart.org/consumer-care-centre-grahak-sahayta-kendra/

especially for resolving grievances pertaining to visas, traffic complaints and those pertaining to private services.

3. App based grievance redress: Not only private service providers, but even the government has started providing mobile apps grievance redress mechanisms to users.

A mix of technology and human centered (phygital) approach for pre-empting concerns, providing effective recourse will be the key.²⁷

Question 14. How would you like to engage further (e.g. individual consultations, workshops, etc.) as we build the strategy for NODE?

As a consumer organisation, CUTS is keen to engage with MeitY on a continuous basis, through not only individual consultations²⁸, but also in conducting various case studies²⁹ and bringing out a user perspective on related issues³⁰. Workshops to achieve diverse objectives (as mentioned previously) may also be conducted by CUTS.³¹ In particular, CUTS can aid in bringing the NODE discussion to tier-II and similar locations wherein the next half billion of internet users reside and will be the key users of services offered by NODEs.

About CUTS

In its 35 years of existence, CUTS has come a long way from being a grassroots consumer-centric organisation based in Jaipur to opening overseas Resource Centres in Vietnam, Africa, Switzerland, and most recently in the United States of America. It continues to remain an independent, non-partisan and non-profit economic policy research and advocacy group, while working on various programme areas, such as Trade, Economics & Environment; Consumer Action, Research & Training; Human Development; and Competition, Investment & Economic Regulation. It has been working towards enhancing the regulatory environment through evidence-backed policy and governance-related interventions across various sectors and national boundaries. For further details regarding CUTS, please visit: http://cutsinternational.org/pdf/About-CUTS-2018.pdf. Select CUTS' evidence-based research initiatives within the realm of digital economy have been given below.

• Consumer Impact Assessment of Data Localisation. 32

²⁷ For details, see https://www.centerforfinancialinclusion.org/lessons-from-running-a-consumer-care-center-in-india and https://cuts-ccier.org/pdf/policy-brief-grievance-redress.pdf

²⁸ The senior management of CUTS, led by Pradeep Mehta, Secretary General has been a part of various consultative committees of the government. These include the Better Regulation Advisory Group (BRAP) set up by the Department for Promotion of Industry and Internal Trade (DPIIT),

²⁹ CUTS is empanelled with many various government agencies and has also undertaken many studies for them, such as Telecom Regulatory Authority of India, Competition Commission of India, NITI Aayog etc.

³⁰ CUTS has undertaken numerous evidence-based studies within the realm of digital economy, some of which have been listed subsequently.

³¹ All the above are subject to the availability of requisite resources.

³² Objective: Assessing the impact of restriction of cross-border data flows on consumers, among other stakeholders, on parameters, such as quality of service, innovation, data privacy, data security etc. Expected Outcome: presenting an evidence-based impact of data localisation, to the government and other stakeholders. https://cuts-ccier.org/consumer-impact-assessment-oncross-border-data-flow/

- Data Privacy and User Welfare in India.³³
- Digital Trade and Data Localisation.³⁴
- Consumer Broadband Labels for Greater Transparency & Informed Consumers³⁵
- Regional Inclusive Growth in Digital Economy³⁶
- Standards Development and the 5G Opportunity³⁷
- Documenting Use Cases & Impact of OTT Services: A Case Study of Rajasthan³⁸

We are keen to assist MeitY in its endeavour of proposing a strategy for developing NODE, and would be happy to remain involved at every stage of development. Please feel free to contact Sidharth Narayan (sid@cuts.org) in this regard.

^{33 &}lt;u>Objective</u>: Engage with consumers on a pan India level regarding data and privacy protection on both, online, as well as offline platforms, from the government and private players alike. <u>Expected Outcome</u>: Policy reforms empowering consumers for data privacy and protection. https://cuts-ccier.org/cdpp/

³⁴ Objective: Understand and analyse the importance of digital exports for India's GDP and economy, along with the possible impact of data localisation barriers on Indian exports of digital goods and services. Expected Outcome: build detailed and holistic understanding of the economic implications of existing and/or proposed data localisation barriers on India's digital exports, while producing evidence to study alternatives to data localisation measures which are prohibitory to free data flows, in order to help policy makers in India and around the world to take an informed and appropriates and on data localisation. https://cuts-ccier.org/pdf/projectbrief-dtdl.pdf

³⁵ Objective: Prevent consumers from misleading advertisement, unfair contractual terms, and practices of nondisclosures by sensitising consumer organisations and other stakeholders to increase their capacity/awareness on broadband services and need for nutrition label in order to bring about certain policy and practice changes. <u>Expected Outcome</u>: Change in attitude of consumers and consumer groups with regards to broadband services and the importance of QoS labels for broadband services. Adequate information and awareness about the consumer rights and obligations while availing broadband services. https://cuts-ccier.org/project-launch-meeting-consumer-broadband-labels-for-greater-transparency-informed-consumers/

³⁶ Objective: Highlight the need to strengthen digital economy in India, Vietnam and Philippines, along with identifying the bottlenecks and barriers to the growth of digital platforms in each country and recommend appropriate policy and practice reforms. Expected Outcome: Better understanding of impacts of digital economy on Inclusive Growth. https://cuts-ccier.org/diginomics-about-project/

³⁷ Objective: Examine various challenges vis-à-vis standardisation of crucial 5G technology, from the point of view of consumer and to compare different standardisation models and advocate for optimisation of the same. Expected Outcome: A framework for optimising 5G standardisation paradigms for enhanced competition, innovation and consumer welfare. http://cuts-ccier.org/pdf/Report-Design in India to Maximize 5G Opportunities.pdf

³⁸ Objective: Gauge the use cases and impact of OTT services in different geographic settings (Urban, Semi-Urban, and Rural) of consumers in Rajasthan. https://cuts-ccier.org/documenting-use-cases-impact-of-ott-services/