

# E-government and gender equality in the Asia-Pacific

## - Framework for a research study

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## 1. Introduction:

The critical role of e-government in the larger project of harnessing the information society opportunity for women's empowerment and gender equality, has been widely acknowledged (Hafkin 2002; Hafkin 2009; Huyer 2010; United Nations 2010; Hilbert 2011; UNPOG 2013). Digitally mediated interaction presents new possibilities to overcome the traditional barriers to women's participation in governance processes (Ju Choi and Zoo 2011). Hence e-government holds tremendous potential to strengthen targeted service delivery to women (Huyer 2010). However, as government increasingly moves towards becoming '*digital by default*', women are likely, because of their socio-cultural location, to be more alienated and excluded. This is especially true for women in developing country contexts where women lack the opportunities that men have (Schuppan 2009; ITU 2013), especially in accessing and using ICTs. E-government efforts therefore, may not automatically effect women's empowerment and gender equality. As many scholars and policy practitioners have pointed out, bringing gender into e-government needs to be a conscious endeavour in e-government efforts (Hijab and Zambrano 2008; United Nations 2010; Huyer 2010). An inclusive and equitable e-government initiative has to **think gender, by design**.

## 2. What is the meaning of e-government for women's empowerment?

According to Hijab and Zambrano (2008, pg. 13), there are five key areas in ICT-enabled governance and public administration in which gender equality has to be fostered: “(1) *the design of e-governance policies and strategies*; (2) *delivery of basic e-services*; (3) *e-participation of citizens, and more specifically, of marginalised groups, women and youth*; (4) *access to ICTs* and (5) *access to public information via ICTs*”. These ideas find resonance in the recommendations of the Committee of Experts on Public Administration to the United Nations Economic and Social Council in 2010, and in the research framework adopted by UNPOG in its 2013 study of gender equality and e-government in the Asia-Pacific region. According to the Committee of Experts on Public Administration, the critical elements in e-government policy and programming that can effectively harness the information society opportunity for women and girls, include: “(a) *attention to women's access to Information and Communication Technologies*; (b) *integrating gender concerns effectively in the design of ICT policies and e-governance strategies*; (c) *providing equal opportunity to men and women in accessing government information and public services*; and (d) *increasing the e-participation of women*” (United Nations 2010, pg. 6). Similarly, UNPOG's study, identifies four pillars of gender equality in e-government: “*women's access to ICTs, capacity development for women, online public service outreach for women and women's participation in online public processes*” (UNPOG 2013, pg. 4).

Policy and programmatic principles and preconditions suggested by experts and scholars to bring about gender equality and women's empowerment need to be seen as important ingredients – starting points of a process that cannot be captured in highly prescriptive design-implementation regimens. Indicators of women's empowerment span the crucial aspects of women's *access to and control over resources, well being, autonomy and agency – both individual and collective* (O'Neil,

Domingo and Valters 2014). In fact, while drawing such a women's empowerment and gender equality perspective, the specific measures of empowerment processes and outcomes will need to be grounded in culturally specific trajectories of change (BRIDGE 2007).

What this also implies is that the desired goal of transformative change that results in equality between women and men in society, must encapsulate a process (*the journey of empowerment*) where women themselves can envision and direct change. Any empowerment initiative therefore must aim to create the shift that scholars such as A. Sen (1999); G. Sen (1993); Kabeer (2001); Rowlands (1995); Nussbaum (2000); and Chen (1992) emphasise as the transformation (*the end goal of empowerment*) whereby women are able to define self interest and choice, and consider themselves as not only able, but entitled, to make choices (cited in Malhotra, Schuler and Boender 2002, pg. 6). Kabeer offers a useful definition of empowerment that serves as a guide post for development efforts: "*The expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them*" (Kabeer 2001, cited in Malhotra, Schuler and Boender 2002, pg. 6).

The purpose of this study is to recommend **how** e-government can effect gender equality in terms of the substance of 'empowerment', discussed above, that is, 'women's enhanced ability to make strategic life choices that they believe they are entitled to'. Such an impact can obtain in many areas – social, economic, political, institutional, or may be limited, to some. For example, according to Huyer (2010, pg. 44-60), e-government efforts can lead to substantive impacts for women's empowerment by: "*(a) enhancing women's access to government services and programmes, [especially in contexts where there are socio-cultural restrictions on women's mobility and public interaction]; (b) promoting political participation of women; (c) supporting women's livelihoods and employment opportunities, and (d) improving the ICT capacities of national gender machineries*". E-government impact on women's empowerment may also be evidenced in a shift in gender norms at the community or household level. Empowerment outcomes can be a direct consequence of the intention of an initiative (for example, an e-health service that reaches timely information can give pregnant women better access to health facilities) or an indirect fallout of the initiative's institutional design (for example, a one-stop-shop for women can give women greater control over economic resources, by facilitating direct access to entitlements like pension or social welfare support).

To explicate the steps and directions necessary for a gender transformative e-government blueprint, this study seeks to lay out the constituent nuts and bolts of the e-government ecosystem, elaborating an analytical framework to scrutinise e-government and its constituent elements from the standpoint of gender equality. Through case studies, (see section 6), such an analysis will provide the basis for discerning whether, and in what areas, impact on women's empowerment has taken place. The case studies will validate the framework, offering the empirical rigour to sharpen and refine it.

### 3. What exactly is the definition of e-government?

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At this juncture, it seems useful to take stock of what exactly is referred to, by the term 'e-

government' in this discussion – as otherwise it may become a floating signifier. For the scholars and policy practitioners whose work has been detailed in previous sections, e-government is certainly much more than the narrow idea of the use of the Internet and other ICTs by government agencies “for delivering government information and services to citizens” (United Nations 2005, cited in Jain Palvia and Sharma 2007, pg. 1). They subscribe to an extended idea of e-government – one that aligns with the idea of e-government as the use of a wide range of digital technologies by government agencies, to restructure social relationships – between government and citizens, government and businesses, and within the various arms/wings of government (World Bank 2009, cited in Ju Choi and Zoo 2011). In this vision, e-government comprises the *sum toto* of efforts by government agencies for “... (making) governments more accountable, transparent, effective and responsive to citizens’ demands;...based on a citizen-centred approach that tailors services to people’s needs rather than to the needs of the agency delivering them” (Huyer 2010, pg. 1). Here, e-government is viewed as comprising not only supply side issues such as the 'push' for e-services, but critical demand side-efforts for citizen uptake and engagement. It is such a vision that informs this research study.

Before proceeding to outline the framework for the study, we now discuss the key insights emerging from a review of existing literature at the intersections of e-government, women's empowerment and gender equality.

#### 4. Review of Literature on e-government, and its implications for women's empowerment and gender equality: Key insights

In the decade after the World Summit on the Information Society, considerable progress has been made on e-government, globally. The United Nations E-government Survey 2014 reveals that all countries have a web presence, and “almost all countries in Europe – and the majority of countries in the Americas and Asia provide online information on education, health, social welfare and labour” (United Nations 2014, cited in ITU 2014, pg. 19). Also, by 2012, over 70% of countries were providing one-stop-shop portals – a sharp increase from the mere 26% that offered such a provision in 2003 (ITU 2014, pg. 19). Though high levels of income are not an automatic guarantee of e-government development, income levels are closely related to ICT infrastructure and ICT literacy among citizens (United Nations 2014, pg. 4). This gives countries with high income a head-start over middle and low income countries in e-government efforts. This edge is especially pronounced in e-participation services (ITU 2014, pg. 21). Similarly, as far as the issue of the connectivity backbone of e-government efforts is concerned, lower middle and low income countries have a long way to go, when it comes to including women, older persons and other disadvantaged and vulnerable groups, in the reach of e-government (United Nations 2014, pg. 128-129). For instance, in 2014, the United Nations E-government Survey that covered the 193 member states of the UN, revealed that out of the 55 high income countries studied, over 46 offered downloadable forms (for services) specifically directed at vulnerable and marginalised groups; whereas only 1 out of the 36 low income countries studied, offered such services (United Nations 2014, pg. 130).

Against this back-drop, the evidence on e-government and women's empowerment is examined in the following sections, through a review of existing research on the constituent elements of the e-

government eco-system: service delivery, citizen uptake and participation, and underlying connectivity architecture.

## 4.1 Service Delivery

The world over, e-government design and implementation is largely gender-neutral. The Broadband Commission's Working Group on Gender and Broadband (2013) notes that in the majority of countries, national e-governance policies do not openly tackle gender, and so, the potential of e-government for designing and implementing services that can address women's needs and priorities, remains largely under-utilised. This is corroborated by existing data.

According to the United Nations E-government Survey 2014, the percentage of countries providing online services that are specifically directed towards women, is as follows: 23% in the Americas, 26% in Europe, 29% in Oceania, 28% in Asia and a mere 2% in Africa (United Nations 2014, pg. 138). The 'online services' referred to here, mainly include: availability of application forms pertaining to schemes/services for women on integrated web portals for transactional services, and the availability of information specifically targeted at women users, on the websites of ministries/government agencies. On allied strategies, such as the use of mobile phones for targeted information outreach to women and girls, and one-stop-shops that mediate women's access to online services in contexts with high levels of female illiteracy, the information that we have is limited to specific case studies or documentation by policy makers (Huyer 2010; United Nations 2014).

On the 'demand' side, global data on usage and uptake of e-services and m-services by women is lacking, as countries do not maintain gender-disaggregated statistics of citizen usage and uptake of e-government (Melhem and Tandon 2009; United Nations 2014). This makes it difficult for us to answer the question – *In the transition to ICT-enabled service delivery systems, what happens to women's uptake of public services?* – except by turning to the small-scale research studies that exist.

Most such research studies have attempted to approach this question from a gender digital divide perspective – looking at the correlation between gender as a user attribute, and the uptake of digitalised services, in specific contexts (Akman *et. al.* 2005). These studies have produced divergent results. As Papadomichelaki and Mentzas (2011, pg. 304) note in their review of prior literature on the use of Internet and e-government, “*some researchers (Losh, 2003; Huesing and Selhofer, 2002) identified the gap between genders (as) significant (in) affect(ing) propensity to use internet and e-government while other group(s) of researchers (Levy, 2002; Mellor et al., 2002a, 2002b) found that gender has no effect*”. The inconclusivity of these studies is not surprising, as they reflect a fundamental limitation of the gender digital divide framework: the tendency to essentialise gender (Cheung *et.al.* 2002 cited in Surgevil and Ozbiglin 2012). To put it differently, the gender digital divide framework treats 'gender' as an independent variable, failing to recognise that gender differences in the use and uptake of the Internet, ICTs and e-government services, are merely symptomatic of the underlying social divides - in education, income, employment status, etc, which disadvantage women in general. Therefore, tracing gender-based

outcomes in terms of propensity to use e-government requires identification of the specific demographic and social antecedents of women who are 'unreached'. It also calls for a study of how socio-cultural contexts present specific gender barriers that impinge upon women's use patterns. Studies using a social constructivist framework can therefore better illuminate 'gender' (Choudrie, Umeoji and Forson 2012).

In any case, in order to effectively understand how e-services impact gender equality, we need to go beyond the limited mapping of 'supply side' 'targetting' of women, and 'demand side' uptake by women. The implications of digitalisation on women's inclusion in public service delivery systems; and the pathways to women's empowerment that digitalised services open up are also significant.

However, existing literature on the impacts of e-services and the transformations they have catalysed for women's citizenship, is scanty (Arduini and Zanfei 2011; Lips 2006; Lofstedt 2007), especially in developing countries (Alshawi and Alalwany 2010). In spite of the paucity of such studies, we now outline the key insights from the limited scholarship in this area.

#### 4.1.1 Implications of digitalisation on women's inclusion in public service delivery systems

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The few research studies in this area focus on key elements in the design of digitalised service delivery systems that determine women's inclusion.

##### 4.1.1.1 Strategic intermediation of e-government services at the last mile

Existing research clearly reveals that strategic intermediation of e-government services plays a critical role in guaranteeing their accessibility to poor and disadvantaged groups, such as rural women. Kuriyan and Ray (2007) and Bailur and Maseiro (2012) have observed how providing ICT access to marginalised rural women and other socially vulnerable groups (through initiatives such as ICT-enabled single window service delivery points) does not automatically ensure their accessibility to digitalised service delivery systems.

Kuriyan and Ray's study (2007) on the inclusionary potential of two such e-service delivery initiatives in India, implemented through a public-private partnership model explored a state initiated partnership model involving village level entrepreneurs, to set up a franchise network of rural telecentres/service delivery kiosks. The entrepreneurs provided the initial investment, and the government provided them training and support in implementation. Both initiatives were promoted as 'social enterprise' models, with the potential to enable the inclusion of poor and disadvantaged groups in public service delivery, whilst simultaneously furthering ICT-enabled business opportunities in rural areas. One state government put in place affirmative action directives to promote the uptake of franchises by women entrepreneurs and the other put women's self help groups in charge of the kiosks. The study concluded that where the government enters into contractual obligations with large private sector companies, the latter wield more power in the arrangement and often escape accountability, leading to a situation where the



government abdicates its core responsibilities to citizens. In contrast, the kiosk model for e-service delivery was seen as promoting a new form of public private partnership that ensured that the balance of power remained in favour of the government, while promoting small enterprise. The study also found that despite their purported pro-poor intentions, and the active involvement of state governments, the one-stop-shop service delivery kiosks set up under these initiatives mainly served the middle-class, and not the most vulnerable groups at the community level. The main reason for this, was identified as the state governments' tendencies to over-emphasise the financial sustainability of the kiosks, over their social goals (Kuriyan and Ray 2007).

New architectures of intermediation that emerge out of multi-stakeholder partnerships in e-service delivery efforts may bring into state systems new commercial imperatives. These may be in conflict with older norms governing state accountability – such as citizens' expectation of the state being the “*provider of goods and services of last resort*” (Rosenau 1999, cited in Kuriyan and Ray 2007, pg. 10).

Bailur and Maseiro (2012) have explored a different facet of such new, digitally-enabled service delivery systems – the importance of human intermediation at the last mile, for social inclusion. Their research emphasises the need to understand the critical role of human intermediaries, at last mile points such as service delivery kiosks or community multimedia telecentres, in opening up “*spaces of human development*”, by playing the role of mediators and translators between multiple community networks (Bailur and Maseiro 2012, pg. 37). Other scholars have affirmed the need to pay close attention to the specifics of how practices of intermediation can create a knowledge exchange framework at the community level, through: “*facilitation (providing opportunities to others), configuration (creation of a social space that facilitates appropriation) and brokering (between individuals and institutions)*” (Stewart and Hyysalo 2008, cited in Ramirez, Parthasarathy and Gordon 2014, pg. 2). These studies belie and “*counter the idea that information and its technologies can unproblematically replace the nuanced relations between people*” (Brown and Duguid 2002, cited in Ramirez, Parthasarathy and Gordon 2014, pg 1). Instead, they affirm the critical function of intermediaries in creating 'moments of truth' where users of telecentres and e-service delivery systems at the last mile – especially those disadvantaged by age, poverty, literacy, gender, disability, or caste – “*realize the potential of ICTs and develop the capacity and confidence to explore technology independently*” (Ramirez, Parthasarathy and Gordon 2014, pg 2).

#### 4.1.1.2 Managing the tension between procedural accountability and inclusion

Accountability mechanisms ensure that core democratic values are furthered in the everyday functioning of governance systems such as service delivery (Smith, Noorman and Martin 2008). However, such mechanisms – especially those that focus on procedural accountability, may not always further the inclusion agenda.

Procedural accountability in digitalised public service delivery systems depends upon reducing the role of human discretion, to check the abuse of such powers towards nepotistic ends (Smith, Noorman and Martin 2008). However, completely curtailing individual discretion may also be undesirable, as this may result in “*extreme forms of rule -obsession, proceduralism, rigidity, and an unproductive shirking of responsibility in the public sector*” (*ibid*, pg. 15).

A case study from the US is illustrative of how inclusion related outcomes in e-government may get short-shrifted. In Boston, a technical glitch on a federal government website resulted in an application for funding for an inner city education programme being filed 46 minutes late. Though the programme was an award-winning one, the Department of Education officials refused to consider the application saying that it had been submitted late. There was a hue-and-cry that this technical glitch was being conveniently used to sabotage the programme, as it did not have political support. The Department's response, in the end, was an appeal to procedures, "*The Department does not have the discretion to waive the deadline...nor the flexibility to alter Grants.gov requirements*" (Abel 2007, cited in Smith, Noorman and Martin 2008, pg. 11). This is a clear instantiation of the repercussions arising out of the failure to balance the efficiencies of automation with the need for flexibility, in the transition to digitalised governance systems.

Extrapolating the findings from the above case study, one can imagine the exclusions that can result from an overemphasis on rigid, automated procedures, especially in contexts where connectivity architecture is underdeveloped, and access to digital technologies and capacities among marginalised groups, including women, is still limited, if not sub-optimal.

#### 4.1.1.3 Identification and authentication in digital service delivery systems

Digital technologies open up new opportunities for effective targeting of services, especially as they enable the creation of a singular personal identification and authentication system to track individuals accessing government services (Lips 2006). Such a system bundles together core identity information – like biometrics and personal history – pertaining to an individual with a unique, electronically generated identifier (usually a number). It also facilitates the creation of a mechanism that enables data traces associated with a specific identifier, across multiple databases held by different agencies, to be assembled together (Lips 2006; Chattapadhyay 2014).

Without adequate checks and balances, such systems can lead to excesses of state power against citizens at the margins, especially as they broaden the capacity of the state to undertake 'welfare surveillance'. Welfare surveillance refers to "*the practices of surveillance operating in the operation, delivery and provision of occupational, fiscal and social welfare*" (Henman and Marston 2008, pg. 4). While surveillance of the poor is an age-old practice in welfare states, digital systems have led to an unprecedented strengthening of the state's power to "*assert norms and monitor behavior*" (*ibid*, pg. 14) of poor and vulnerable groups, leading to the creation of a new, "*digital poorhouse*" (Gilliam 1992, cited in Henman and Marston 2008, pg. 14). In other words, such systems re-inforce the relations of power and authority that structure public service delivery and social welfare systems. This enhanced capacity for citizen surveillance also enables states to control citizens' mobility across systems and networks (Nayar 2012) – thus vesting them with the power to "*digitally redline*" certain sections of the population from accessing a range of opportunities (Perri 2001, cited in Henman and Marston 2008, pg 14) and persecuting them for deviating from mainstream socio-cultural norms. The latter possibility has been of grave concern to feminists – considering the historical collusion of the state with patriarchal power.

Clearly, the need for legal frameworks and rules that protect citizens' data security, freedom from surveillance, and right to privacy, for furthering the inclusion agenda and building citizens' trust (Chan *et.al.* 2010) in such digitalised service delivery systems, cannot be over-emphasised.



However, preliminary research by UNDESA has revealed that among the 193 UN member states, only 79 countries have addressed data protection and security concerns through specific legislation, such as Data Protection Acts; and 90 countries have no such legislation (United Nations 2014, pg. 169).

#### 4.1.2 Pathways to women's empowerment that digitalised services open up

Digitalised services can open up new pathways to women's empowerment, by facilitating women's access to the “*increased information, knowledge and income generating outputs that ICTs can promote*” (Huyer 2010, pg. 43). However, a detailed scan of existing case studies on e-government (such as the United Nations E-government Surveys and the UNDESA Compendium of Innovative E-government Practices) reveals that there is a dearth of initiatives that explicitly focus on these goals. Also, the few e-governmental initiatives that are specifically directed at women, imagine them as passive recipients/consumers/users of services rather than as actors capable of self-directing change and shaping their own political agendas (Martinez and Reilly 2002; cited in Huyer and Sikoska 2003). Initiatives that address the needs of women in crisis (such as the Thuthuzela Rape Crisis Centres set up by the National Prosecuting Authority of South Africa, or the Women and Child Protection Units of the Government of Philippines), or provide health and information services to rural women (especially common in South Asia and Africa), are vital. But empowering outcomes because of e-government can go a longer distance where women engage with the design of the service – enabling its scope to be defined dynamically.

As far as services/platforms that leverage ICTs for enhancing women's livelihoods (whether it be supporting traditional livelihoods in agriculture, strengthening women-run enterprises, or equipping women to set up IT enterprises) and enhancing women's political participation are concerned, international development organisations and their partnerships with local civil society organisations seem to lead the way. Some well-known initiatives include: the IDRC small grants programme on 'Gender, Agriculture and Rural Development in the Information Society'(2002-10) that supported mobile-based price information networks and ICT-enabled rights education for women farmers in Africa; and the iKNOW Politics initiative spearheaded by UNDP and UNWomen that has attempted to build a multi-lingual, online knowledge network for women in politics to share experiences, resources, advice, and collaborate on issues of interest.

Routes to women's empowerment may also open up when e-governmental initiatives, not explicitly focussed on women's needs and priorities, still manage to upturn given social norms that create disruptions in existing gender orders. For instance, in 2008, the state government of Andhra Pradesh (India) launched a web-based Management Information System with a local language interface (entitled RAGAS) to facilitate registration of workers, and the processing of work records and muster rolls, to enable regular and correct wage payments directly into the bank accounts of workers, under the Indian government's wage employment programme. RAGAS is not merely a web based monitoring tool for government officials, but also the data backbone for the participatory social audits, institutionalised under the scheme. A gender lens did not explicitly guide the design of RAGAS, but on implementation, it was found that the MIS-enabled direct payment of wages to bank accounts had made a dent in the age-old discriminatory practice of

paying unequal wages for women and men for the same work, in violation of constitutional guarantees (UNDESA 2012, pg. 64). Similarly, in Colombia, the Ministry of Agriculture and Rural Development in partnership with the United Nations Food and Agricultural Organization has launched a technology-based information and communication platform for the agricultural and agri-business sector, that contains a digital library on standards, food security and sustainable practices for small farmers; and also provides mobile-phone based information updates on domestic and international market prices and the weather. Since women constitute a major percentage of those employed in the agricultural sector, it is expected that this initiative, by opening up contextually meaningful possibilities of ICT use, will enhance women's uptake of ICTs (UNDESA 2013, pg. 83). In Saudi Arabia, the monetary agency's platform for centralising and streamlining electronic bill presentment and payment in the country – SADAD – has opened up employment opportunities to women (UNDESA 2009, pg. 71).

## 4.2 Citizen participation and engagement

The United Nations E-government Survey's concept of 'e-participation' serves as a useful peg for placing our analysis of women's participation in, and engagement with, governance systems, structures and processes in relation to e-government. According to the United Nations E-government Survey 2014 (pg. 197), e-participation may be defined as consisting of the following dimensions:

- 1) e-information that enables participation (and uptake of services) by providing citizens with public information, and access to information upon demand;
- 2) e-consultation by engaging people in deeper contributions to, and deliberation on public policies and services; and
- 3) e-decision making by empowering people through co-design of policy options and co-production of service components and delivery modalities.

In the 2014 E-government Survey, only 8 countries scored above 66.6% in all 3 facets of e-participation – and of these 8 countries, all except one (Colombia) are high income countries (United Nations 2014, pg. 66). E-decision making tools are used by very few countries, and that too, mainly in the area of finance (United Nations 2014, pg. 71). More number of countries engage in e-consultation and e-information provisioning, but there is still a lot of ground to be covered. As of 2014, 95 countries among the UN member states conduct some form of e-consultation, while over 150 share archive information on various sectors of governance – health, education, finance, social welfare etc. (United Nations 2014, pg. 68). However, only very few countries (a mere 46) have set up dedicated platforms for data sharing (open government data portals), and 85% of these countries are high income and upper middle income countries (United Nations 2014, pg. 166).

As in the case of digitalised services, to understand the implications of e-participation for women's empowerment and gender equality, we have to move beyond this supply-side mapping, and examine the specific impacts of such initiatives on women's engagement with, and participation in, governance. As literature in this specific area is almost non-existent, we have to extrapolate key insights from the general studies that are available, on the impacts of e-participation, upon

citizens.

### 4.2.1 E-information services

The potential of e-information services in enhancing citizen uptake of e-government is well-acknowledged among scholars of e-government (Westcott 2001; Arpit 2012). For instance, one-stop-shop web portals may enhance citizen uptake of digitalised services, by smoothening citizen-state interfaces in service delivery. As Westcott (2001, pg. 14) observes, *“the advantage of (a one-stop-shop portal) is that users can receive ‘one-stop service(s)’, and don’t need to know which government agencies are responsible. For a particular issue, users (are now able to) obtain procedures so that they know what to do under different circumstances”*. Similarly, as Arpit (2012) explains, e-information services can also enhance citizen engagement in governance processes, by opening up governance information that can be the basis of community audit of service delivery (such as citizen charters and information on work flow processes and location of authority), and of the governance system in its entirety (such as outcomes of government decisions and performance indicators of government departments).

However, it is important to keep in mind the following caveats with respect to the efficacy of e-information services in realising these outcomes.

#### 4.2.1.1 The importance of facilitation

To fully realise their promise, e-information services need to be supported by intermediation structures at the community level and digital literacy programmes for marginalised groups. As in the case of other ICT-enabled governance services, low levels of technological literacy and infrastructural barriers prevent many segments of the citizenry (such as women and other socially vulnerable groups) from accessing and benefiting from such e-information services (Bertot, Jaeger and Grimes 2010). Thus, e-information services may not succeed in circumventing socio-economic biases that structure political participation in democratic contexts. In fact, research reveals that e-information services may tend to reinforce existing biases (Thomas and Streib 2003; Reddick 2005). Therefore, to fully realise the promise of e-information services, it is important for governments to invest in a combination of offline and online strategies for awareness-generation, and strategic facilitation/mediation of e-information services that can enable women and other marginalised groups to benefit from e-information. ICT-enabled community kiosks/information centres (Islam 2008; van Deursen and van Dijk 2009; Gurusurthy and Chami 2014) and digital literacy among these sections of the citizenry (United Nations 2014) are vital steps in this regard. Further, research on public access centres, points to their contribution to encouraging civic interaction and engagement, offering the social infrastructure for converting information access into civic participation (Sey *et.al* 2013).

Existing studies argue how the idea of digital literacy cannot be limited to computer skills training. Instead, efforts to promote digital capabilities need to imagine digital literacy as an umbrella idea that involves a range of competencies: *“competencies in actively finding and using information in “pull mode” (information literacy)...abilit(ies) to deal with information formats “pushed” at the*

*user (media literacy)...and an understanding of sensible and correct behaviour in the digital environment, (including) issues of privacy and security (moral/social literacy)”* (Bawden 2008, pg. 30). In other words, they need to recognise that digital literacy is *“about ideas, not key strokes”* (Gilster 1997, cited in Bawden 2008, pg.18). Most importantly, digital literacy efforts need to recognise and connect to the multiple forms of literacies in the context they operate, including oral and folk forms of knowledge, avoiding universalist prescriptions (Dunn 2013).

#### 4.2.1.2 Openness not equal to Inclusion

Open Government Data initiatives are often valorised for their potential to enhance citizen engagement in governance processes (Gurstein 2011; United Nations 2014). Open Government Data is an umbrella term that refers to all initiatives that stem from the intention of making available *“local, national and regional data, (particularly publicly acquired data) in a form that allows for direct manipulation using software tools, as for example, for the purposes of cross tabulation, visualisation, mapping and so on”* (Gurstein 2011). However, it is important to understand that opening up access to governance information does not automatically enable effective use by citizens, especially those belonging to marginalised groups – as they lack access to the underlying ICT infrastructure, and also do not possess the requisite skills for 'making sense' of the information and data sets thus published (Gurstein 2011). In fact, such opening up of governance information often enables elite groups among the citizenry to further their interests, at the expense of the underprivileged (Benjamin, Bhuvaneshwari, Rajan, and Manjunatha 2007; Raman 2012; Spencer 2010 cited in Gurstein 2011). For example, Benjamin, Bhuvaneshwari, Rajan and Manjunatha in their 2007 study of an e-government initiative in Bangalore that focused on enhancing transparency in land records, found that the opening up of information about land titles had benefited land sharks, by helping them zero-in on property holders with defective titles and to bully the latter into parting with their lands! Similarly, experiential accounts from community members of Nova Scotia, Canada have clearly revealed that the concerted push to put land titles, deeds, maps etc. online mostly stems from the real estate community, and their surveyor and lawyer lobbies (Spencer 2010, cited in Gurstein 2011). Another more recent study in Mumbai, India found that provisions for the disclosure of spatial records had enabled elite groups to put pressure on governments to evict slum dwellers, in the name of law enforcement (Raman 2012). Clearly, if the potential of Open Government Data for enhancing the participation of marginalised groups in governance processes is to be fully realised, it is important for governments to invest in creating the conditions for the effective use of such initiatives. Facilitating access to technology and training individuals in developing the skills for data interpretation are a precondition if data is to bring meaning for women to negotiate their status.

It is not merely the demand-side factors that need attention when it comes to creating the conditions for effective use of open government data. Supply side decisions on the data architecture are critical determinants of their inclusiveness and accessibility (Davies 2010, cited in Gurstein 2011; Davies 2014). For example, technical data standards that mandate publishing in non-proprietary formats are crucial to ensure unrestricted use of such data sets by citizens – especially in terms of re-combining data sets (United Nations 2014). Similarly, choices pertaining to the features of data architectures (such as selectivity, coding for display, nature of tagging, language etc.) are extremely crucial in determining the transformatory potential of open data initiatives (Davies 2014). If these choices are based on closed-door processes that focus on the

lowest common denominator of what is to be shared, the end results will clearly not be inclusive or empowering (Davies 2014).

### 4.2.2 E-consultation

Across contexts, scholars and policy practitioners have recognised the importance of putting in place consultative mechanisms (using a combination of online and offline strategies) for enhancing citizen uptake of e-government services (United Nations 2014; Huyer 2010). E-government services can be inclusive only when they are contextually-relevant and meaningful to the group targeted by the service (World Bank 2004; Al-Rababah and Abu-Shanab 2010; Huyer 2010, pg. 30,36). This requires mechanisms that elicit the participation of the target group in the design of such services; and seeking citizen feedback (Huyer 2010; United Nations 2014).

The potential of e-consultation can be fully realised only in contexts with high levels of ICT diffusion and technological literacy, and thus, it is not surprising that Northern governments have emerged as leaders in this area (Coleman and Gotze 2001; Hayhtio and Keskin 2005; European Commission 2010). However, existing studies on the impacts of such processes in facilitating 'meaningful' civic engagement are inconclusive. Research on initiatives in Europe has in fact, found that *"citizens' policy recommendations emerging from e-consultative processes tend to be poorly recognised and are ambiguously integrated in decision-making. Feedback on what happens to civic inputs is seldom given..(Thus), a politically correct trend of procedurally including citizens in policy processes is proliferated in which citizens are invited to the policy-making table and are consulted, but the extent to which institutions 'learn' and take citizens' inputs seriously in the process is uncertain"* (Tomkova 2009, pg. 9).

### 4.2.3 Co-production of services: a promising horizon for women's empowerment

Empowering women to collaborate, in the design and delivery of public services is an exciting frontier for e-government. Informational services directed at women can encourage the local production of information in a manner that recognises women's pre-existing local knowledge (Huyer 2010), and maximises the multiple affordances the digital eco-system offers (including broadband Internet, mobile messaging, mobile-based IVR networking, mobile apps, community radio and so on) for effective outreach, and not be fixated with specific gadgets (Gurumurthy and Chami 2014). Also, women can be part of specific service components if new modalities in e-government are based on partnerships that bring women new strategic choices to expand their capabilities.

Often, governments have opted for top-down models through private-public partnerships that provide communities with valuable information, but may not really create local capacity. For example, in the area of addressing women's needs for health information, governments in Asia and Africa are mostly following models such as the Mobile Alliance for Maternal Action – a public-private partnership between aid agencies, governments from the South, and telecom providers – where country governments subsidise the providers in sending reproductive and maternal health

tips/informational messages centrally developed by experts, to women from marginalised groups across the areas covered by the programme (United Nations 2014). For longer term sustainability, design architectures need to focus on creating community-level enablements whereby grassroots women's organisations can play a role in co-production of services that lead to meaningful participation of women in governance. This approach can pave the way for the twin goals of decentralisation and good governance to be en-gendered, and also promote women's empowerment.

### 4.3 Connectivity architecture

Accessible and affordable connectivity is a precondition for successful e-government efforts (Bwalya, Plessis and Rensleigh 2012; Nkohkwo and Islam 2013). Based on a scan of the literature in this area, key insights on creating a connectivity architecture that is gender-inclusive, are summarised below.

#### 4.3.1 Public access policies and programmes are important.

Research studies clearly reveal that public access is not merely an intermediate step to the “ultimate goal of private access” (Sey et al. 2013, pg 4). On the other hand, oftentimes, public access is a complement for private access, for those segments of the citizenry with limited digital capabilities, such as citizens from lower socio-economic strata and older persons – even in contexts with high levels of connectivity (Sey et al. 2013, pg 4; Bertot et.al. 2006; Gibson, Bertot and McClure 2009). In fact, a recent eight-country research study led by the University of Washington on the impact of public access to ICTs concluded that: *“the value of public access ICTs is not limited to countries with very low levels of digital connectivity. Public access is equally important in higher connectivity countries, supporting multiple modalities of access, and ensuring that marginalised groups can access the resources to join the information society. There is reason for both widespread and strategic support for public access availability in low and middle income countries”* (Sey et al. 2013, pg. 5). Needless to add, women ought to be a key constituency that such efforts focus on, considering that existing socio-structural divides between women and men have produced a global gender divide in terms of access to the connectivity architecture underpinning the information society (ITU 2014; Intel 2012; GSMA 2010). Public connectivity points also have the potential to become local hubs for new generation educational and entrepreneurial activity that build on the strength of local digital knowledge ecosystems (Ariyabandu 2009, pg 4).

Though there is evidence of their potential to enhance women's access to governance information and services, education, health, and even leisure activities, research reveals that public access points do not automatically open up opportunities for women's empowerment. This is because in many contexts, socio-cultural norms may restrict women's mobility and participation in the public sphere, and thus public access points, such as Internet cafes, end up as 'male bastions' that intimidate women (Intel 2012; Tafnout and Timjerdine 2009; sm Kee 2011). Therefore, the design of public access points needs to be consciously geared towards creating a space that welcomes women. It was found in one study that women tend to frequent libraries and community



telecentres more than cybercafes (Sey *et al.* 2013, pg. 10). The institutional design factors that make some public access points more gender-inclusive than others needs to be understood for framing appropriate policy directions. This is an urgent imperative, considering that gender concerns remain absent from ICT policies, in most countries (Broadband Commission 2013).

#### 4.3.2 Digital opportunity for women's empowerment is more than “mobiles for women”.

In developing country contexts, governmental strategies to build the connectivity infrastructure their citizenry, especially women and other marginalised groups, require, have mostly focused on tapping into the potential of mobile broadband. This has resulted in a situation where in the global South, mobile broadband has become a replacement rather than a complement to fixed broadband (ITU 2014). Though the investments required for mobile broadband are much lower than that of building fixed broadband infrastructure, it is important for country governments to fully consider the trade-offs involved in this exclusive pursuit of a mobile-based strategy for connectivity. As highlighted by the 2012 Report of the ITU on *'Measuring the Information Society'*, *“(mobile broadband) effectively restricts the type and quality of applications and services that users can access over the Internet. It is also important to note that while mobile-broadband technology helps to increase coverage and offer mobility, the mobile networks and services currently in place usually only allow limited data access, at lower speeds, which often makes mobile-broadband subscriptions unsuitable for intensive users, such as businesses and institutions. High-speed, reliable broadband access is particularly important for the delivery of vital public services, such as those related to education, health and government. The potential and benefit of mobile-broadband services is therefore constrained when mobile broadband is used to replace, rather than complement, fixed (wired)-broadband access”* (ITU 2012, pg. 8).

As has been discussed in the previous sections, e-government efficacy, especially to meet the goals of women's empowerment, is contingent upon sensitivity and sophistication in the design of service delivery. The connectivity architecture is an important ingredient in this mix, and serves both institutional and individual capacities. Thus, *“...(t)he mobile is but one part of the menu, with a wide-ranging complex of servers, apps, platforms, wired and wireless connectivity, human organisation and contextual priorities and much more, powering what we see as 'use'”* (Gurumurthy and Chami 2014, pg. 2). For the majority of the world's marginalised women, situated in developing country contexts, the ability to access the full range of opportunities in the emerging digital eco-system hence requires adequate attention in e-government initiatives to the connectivity architecture.

### 5. Research Framework – a gender analysis of e-government

The literature reviewed in the preceding section indicates how the concept of e-government is more than about the online provisioning of public services. The 'demand' side concerns of promoting citizen uptake of services (by educating citizens about access to services, creating intermediary structures that support effective uptake – especially by women and other marginalised groups, etc.) are central to e-government efficacy. Similarly, ensuring the availability

of the basic connectivity infrastructure is a precondition to 'roll out' e-government effectively.

The e-government institutional ecosystem, as discussed, consists of the following key components: online service delivery, citizen uptake and the connectivity architecture. Conceptual frameworks on e-government such as the UN E-government Development Index rank countries on the basis of their performance, in provisioning online services, investing in the human capacity to participate and building connectivity infrastructure. But the Index *per se* may not be an effective measure of whether efforts on these parameters have added up to promote the intended outcome of e-government (Kettani, Moulin and Chakiri 2014). A gender analysis of the e-government ecosystem therefore has to be much more than an empirical enquiry to pull out gender-disaggregated statistics on the components. Gender disaggregated statistics are useful in discerning some aspects of the macro picture on e-government. Questions such as – *How many women-only online services are available? Is women's participation in the online spaces of state-citizen interaction equal to that of men? Is there a gender budget in the National Broadband Plan? How many services target women beneficiaries through mobile phones?* – are no doubt, important. However, they may not be adequate to establish whether the e-government service in question addresses appropriately, the substance of women's rights as citizens.

Different outcome-based approaches to assess e-government have been suggested by scholars. Some have assumed state modernisation as the goal of e-government (Waema and Adera 2011, cited in Kettani, Moulin and Chakiri 2014), while others have equated the aim of e-government with realising 'public value' in service delivery (Heeks 2006, cited in Kettani, Moulin and Chakiri 2014). However, such approaches still fall short of capturing the *raison d'être* of e-government – the idea that e-government is a pathway to the goal of accountable governance. Kettani, Moulin and Chakiri (2014) suggest that e-government must be evaluated by the constituent characteristics of 'good governance'. The concept of 'good governance' however, has varying etymologies. On the one hand, it finds a home in the much-questioned Bretton Woods Institutions' efforts to restructure democratic institutions in developing countries, to make them more globalisation-friendly (Cornwall and Eade 2010). On the other, it also resonates with development actors, who are pushing for the restructuring of state-society relations in a manner that foregrounds inclusiveness and accountability (Mkandawire 2010; Cornwall and Eade 2010; UNDP 1997, cited in Kettani, Moulin and Chakiri 2014).

In relation to e-government, scholars have pointed out that most e-government experiments are informed by a flawed notion of 'good governance', in which the technical aspects of administrative simplification are decoupled from the associated political aspects of strengthening democracy by furthering transparency and accountability (Parthasarathy 2011; Madon 2009). In fact, Parthasarathy (2011) argues for the need to tie the concept of 'good governance' to the critical governance literature, in order to ensure that the concept is restored to its full integrity, effectively straddling the political and technical dimensions detailed above. Taken in this sense, good governance represents a wider idea of accountable institutions in a democracy. Gender equality is a core dimension of such 'good governance' – as gender constitutes a key axis of marginalisation of citizens from governance structures (Roy 2013).

**Therefore, the extent to which e-government efforts produce gender equality is best studied through a framework that examines the e-government institutional ecosystem and its key**

**components: online service delivery, citizen uptake and connectivity architecture, against the goal of good governance.** The United Nations Development Programme's framework identifies 'good governance' as comprising the following attributes: fostering citizens' capacities for participation, enforcement of the rule of law, transparency, responsiveness, equity, effectiveness and efficiency, accountability, successful mediation of competing interests, and a strategic vision for human development (UNDP 1997, cited in Kettani, Moulin and Chakiri 2014). Using this working definition, the proposed research seeks to interrogate if and how in the contexts under study, the design and implementation of e-government have enabled the realisation of women's empowerment and gender equality. Also, the proposed research will go beyond positivist approaches, adopting a social constructivist and historical perspective on the *why* of e-government (Heeks and Bailur 2006). Using institutional analysis to understand the processes of how an e-government system is developed, enforced and evolved (Kim, Kim and Lee 2009), it will unpack the norms, rules and practices that shape it<sup>1</sup>.

The overall questions that we seek to answer in the present study, through such institutional analysis, are as follows:

1. What new norms are introduced with the introduction of technology? How are emerging norms impacting women's empowerment and gender equality?
2. What are the new rules legitimising the structures and procedures of e-government? Do they have a legislative mechanism? How do they impact women's empowerment and gender equality?
3. What new everyday practices and cultures of interaction between state and citizen are evident with the introduction of technology? How do they impact women's empowerment and gender equality?

The specific elements of such institutional analysis – based on the attributes of good governance – are elaborated in the analytical matrix below (see Table 1). This framework (more suggestive than exhaustive, of how attributes of good governance translate into specific analytical pegs) brings together the key components of e-government - **online service delivery, citizen uptake and connectivity architecture**, with the 3 key dimensions of institutional analysis – norms, rules and practices.

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<sup>1</sup> In institutional theory, the following mechanisms are considered to be at the core of institutional systems: normative, regulatory/coercive, and cognitive/mimetic. Normative mechanisms refer to the norms underpinning the domain in which a particular institution operates. Regulatory mechanisms refer to rules and other mechanisms for legitimation of institutional functioning. Mimetics or cognitive mechanisms are the practices that shape institutional systems. Hence, an institutional study of e-governance has to focus on norms, rules and practices. For more details: Kim, Kim and Lee 2009.

Table 5.1 Analytical matrix to examine the e-government institutional ecosystem for shifts in gender relations

1.Norms:	Service delivery	Citizen uptake	Connectivity architecture
	1.1 Shift in the room for human mediation 1.2 New frameworks of mediation / new intermediaries 1.3 Shifts in the predictability of state-citizen interaction 1.4 New norms in inter-departmental and govt-citizen-private sector arrangements 1.5 Convergence in service delivery	1.6 Shift in the norms of citizen use of /access to services, and citizen feedback	1.7 Assumption about ICT access and connectivity
<b>2. Rules/ Enforcement:</b>	2.1 Authority to process, authenticate and modify transactions. 2.2 Transparency mechanisms in e-service design and entitlements processing 2.3 Mechanisms for responsiveness to citizens' concerns in entitlements processing 2.4 Data security law/policy	2.5 Policies on Openness of the technical architecture 2.6 Rules / Laws on Right to Information and Proactive Disclosure of Public Information	2.7 Policies for universal and affordable access
<b>3. Practices</b>	3.1 New forms of intermediation 3.2 New forms of stakeholder arrangements 3.3 Practices for making tacit work flows explicit in virtualised service delivery. 3.4 Practices to promote equity considerations in service implementation	3.5 Offline mechanisms to strengthen online uptake (including digital literacy efforts)	3.6 Use of techno-platforms for wider and gender-inclusive reach (sms outreach)

The analytical matrix presented above can be used as a basis for examining how the e-government institutional system recasts gender relations. The matrix provides indicative entry points that allow an interrogation of the e-government institutional ecosystem, to trace changes in norms, rules and practices, and arrive at a nuanced understanding of why and how, institutional shifts that have effected women's inclusion in governance systems have taken place. While institutional transformation can enable movement towards gender equality, and is necessary to sustain women's empowerment over time, it is important not to conflate the analysis of such systemic shifts that impact institutional inclusion of women, with the end-goals/outcomes of empowerment (Malhotra, Schuler and Boender 2002, pg. 4-5).

As discussed in the opening section, the purpose of this study is to trace empirically *how* e-government results in *women's enhanced ability to make strategic life choices that they believe they are entitled to*. Even if end-goals/outcomes of women's empowerment may be best captured through initiative-specific indicators, empowerment indicators must be underpinned by a "recognition of the universal elements of gender subordination that underpin local gender systems" ( Malhotra, Schuler and Boender 2002,pg. 10). Thus, indicators that attempt to capture the outcomes of empowerment must be able to map the shifts in **gender power** across different domains of life (at the micro-level of the individual and her relationships within the household, the intermediate level of community and institutional structures, and the macro-level of the political and market system) as well as its different dimensions (economic, socio-cultural, public-political, legal, familial, psychological). Such inferences will allow us to locate if and whether women perceive greater ability to make life choices, as a consequence of the e-government ecosystem's institutional transmutations.

Table 2 demonstrates how existing frameworks on measuring empowerment outcomes (Rao and Kelleher 2002, cited in Batliwala and Pittman 2010; and Malhotra, Schuler and Boender 2002) can be adapted, to develop a new framework for measuring women's empowerment outcomes of e-government, that will be useful for this study. We have zeroed in on economic, socio-cultural and public-political outcomes at the individual, household and community/institutional level as this seems optimal, considering the scope of this study.

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Table 5.2 Framework to measure women's empowerment outcomes of e-government initiatives

Dimension of empowerment	Indicators	Probes (suggestive, not exhaustive)
<b>Economic</b>	<p><b>Household level:</b></p> <ul style="list-style-type: none"> <li>- Control over income</li> <li>- Relative contribution to family support</li> </ul> <p><b>Community and Institutional level:</b></p> <ul style="list-style-type: none"> <li>- Women's access to employment</li> <li>- Women's access to credit</li> <li>- Women's access to markets</li> </ul>	<ul style="list-style-type: none"> <li>- Has the initiative led to an increase in women's earnings? How has this changed their role in the economic decision-making of their household?</li> <li>- Has the initiative opened up new employment opportunities for women?</li> <li>- Has the initiative enhanced women's technical skills, and contributed to their employability?</li> <li>- Has the initiative enabled access to new livelihood opportunities for women?</li> <li>- Has the initiative contributed to the strengthening of women's enterprises?</li> </ul>
<b>Socio-cultural</b>	<p><b>Individual level:</b></p> <ul style="list-style-type: none"> <li>- Internalised values and beliefs that normalise gender discrimination</li> </ul> <p><b>Household level:</b></p> <ul style="list-style-type: none"> <li>- Women's mobility</li> <li>- Level of Intra-household discrimination against women and girls.</li> </ul> <p><b>Community and Institutional level:</b></p> <ul style="list-style-type: none"> <li>- Women's participation in extra-familial groups and social networks</li> <li>- Women's presence and participation in social spaces</li> </ul>	<ul style="list-style-type: none"> <li>- Has the initiative shifted women's self-perception?</li> <li>- How has the initiative impacted women's standing within the household and in the larger community?</li> </ul> <p>(Eg. Digital literacy initiatives may bring new sets of skills to women, that may enhance their self-esteem and their status in the eyes of other members of their households and communities.)</p>



<b>Public-political</b>	<b>Individual level:</b> - Knowledge of political system and means of access to it <b>Household level:</b> - Support for women's public-political engagement <b>Community/Institutional level:</b> - Women's involvement in local level mobilisation, campaigning and advocacy	- Has the initiative enhanced women's awareness about their rights as citizens and asserting these rights-claims? Has it shifted household level perceptions of women's public-political engagement? - Has the initiative enabled women to express their political opinion and participate in public discussions? - Has the initiative contributed to the development of a local level discourse on women's needs, priorities and issues?
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The subsequent section will elaborate the methodology to be used in the present study, also explaining how exactly the analytical frame can be deployed.

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## 6. Methodology for the Research Project

This research study seeks to undertake an institutional analysis of e-government systems, to study how the outcomes of e-government can contribute positively to women's empowerment and gender equality goals. It will be undertaken in 5 countries in the Asia-Pacific region. Based on a common framework, the study will generate country level insights, which then will be synthesised into a regional report. Key findings and conclusions on enabling the achievement of gender equality and women's empowerment through e-government is sought to be provided by drawing upon the country studies. Specific learnings on the constituent elements of 'good practices' in this area, will also be pulled together. This will then form the basis of a 'Toolkit' that can support policy-makers of country governments in the Asia-Pacific region, and officials of international development organisations engaged in the e-government discourse develop insights and build perspectives to design and implement e-government programmes that account for gender equality<sup>2</sup>.

Each country study will comprise of the following elements:

### 6.1 State of the art review: A gender analysis of the e-government institutional ecosystem in the country

**Feb 9<sup>th</sup> 2015**

All country researchers will undertake a 'state of the art' (SoA) review that provides a gender analysis of the e-government institutional ecosystem in their country context. The state of the art analysis will cover the following aspects – the historical evolution of e-government in the country, the current status of e-government services, and existing legislative and policy frameworks on e-governance – bringing clear insights on:

- a. how the e-government landscape intersects with considerations for accountable and gender just governance and
- b. how it implicates gender equality concerns.

The purpose of the SoA review is to offer a broad brush stroke on the gender and e-government theme, building upon facts, to offer a nuanced analytical top-view. The section needs to end with a conclusion on points 'a' and 'b' outlined above.

A draft structure for the SoA review and an indicative list of sources of information is provided below:

<sup>2</sup> The country studies will be prepared by country-researchers who have been selected through an Open Call. IT for Change, will guide the preparation of the country case studies, and also be responsible for the Regional Report and the Toolkit.

Table 6.1 Structure for the SoA

Section	Questions the Section will address	Sources of Information, for triangulation of analysis
Historical evolution of the e-government ecosystem	<ul style="list-style-type: none"> <li>- What is the historical trajectory of the country's movement towards e-government?</li> <li>- What is the strategic vision guiding e-government?</li> <li>- What are the key priorities for women's empowerment and gender equality in the context under study? How are they being addressed by the vision for e-government?</li> <li>- Is there a separate e-government policy that addresses demand and supply side issues? Or is there only a piecemeal approach? (<i>meaning that e-government decision-making is largely left to state/provincial governments; or the individual preferences of governmental departments</i>)</li> <li>- Is the Department/Ministry handling women's rights and gender justice closely engaged in envisioning and designing the e-government eco-system?</li> <li>- Are there national / local efforts on digital literacy? How are they implemented? Are they adequate to the emerging needs for new literacies in the digital context? Do they go beyond enskilling women in technical literacy? How do they focus on women's capacities to deal with government, in the digital age?</li> </ul>	<ul style="list-style-type: none"> <li>- Key informant interviews with policy makers involved in the design of e-government systems and research scholars and civil society actors closely engaging with e-government.</li> <li>- Key informant interviews with activists and scholars who are invested in the women's rights agenda.</li> <li>- Evaluation studies / scholarly work of the country's e-government system.</li> <li>- Regional and Global reports that assess e-government systems at the country-level, such as the United Nations E-government Development Survey.</li> <li>- National level policy documents on e-governance and on specific sectoral e-services in (health, agriculture, etc).</li> <li>- National level policy documents on connectivity/ broadband/ telecom infrastructure</li> <li>- National policy documents on digital literacy.</li> <li>- National statistics on status of women, and country level reports and assessments, that highlight key priorities for women's empowerment and gender equality in the country.</li> </ul>
Status of e-government services	<ul style="list-style-type: none"> <li>- What kind of services are provided? (<i>cover flagship and mission mode services at national and sub-national levels such as in e-health, e-agriculture, integrated online portal for citizens to access certificates and apply for entitlements, online portals for citizen engagement, online grievance redressal mechanisms, one-stop-shops in remote and disadvantaged areas, etc.</i>)</li> <li>- Are there services directed at women?</li> </ul>	<ul style="list-style-type: none"> <li>- Key informant interviews with policy makers involved in the design of e-government systems and research scholars and civil society actors closely engaged with e-government</li> <li>- Key informant interviews with activists and scholars who are invested in the women's rights agenda.</li> <li>- Research studies on e-government services in the country</li> <li>- Global indices such as Web We Want Index</li> </ul>

	<p><i>(could include e-health, m-learning, online spaces for women to file police complaints etc)</i></p> <ul style="list-style-type: none"> <li>- What is the uptake of these services?</li> </ul> <p>What is known about women's uptake of these services? <i>(In cases where women's uptake is low, please identify potential reasons such as literacy barriers, prevailing gender norms etc.)</i></p> <ul style="list-style-type: none"> <li>- Is the underlying connectivity architecture adequate for active use of e-services?</li> <li>- What are current developments in building and provisioning connectivity infrastructure? <i>(policies for subsidising connectivity to remote and disadvantaged populations; programmes for building public access infrastructure and promoting digital literacy)</i></li> <li>- Are these steps gender-responsive? <i>(public access strategies directed at enhancing women's uptake; mobile-based info-outreach initiatives directed at women; e-spaces that are exclusively for women to raise grievances/concerns)</i></li> </ul>	<p>and Affordability Index to support the assessment of the status of connectivity architecture in the country.</p> <ul style="list-style-type: none"> <li>- National and state/ provincial level data on citizen uptake and connectivity</li> </ul>
<p><b>Review of legislations that implicate e-governance</b></p>	<ul style="list-style-type: none"> <li>- Legislative frameworks governing the connectivity infrastructure <i>(Is the Right to Internet access guaranteed in law?)</i></li> <li>- Legal and policy frameworks regulating the delivery of digitally-enabled services <i>(Are there legal / policy frameworks on the following issues?</i> <ol style="list-style-type: none"> <li>a. <i>Openness of the technical architecture underlying e-services</i></li> <li>b. <i>Citizen charters guaranteeing responsiveness and accountability of e-government services, and specifying redressal mechanisms.</i></li> <li>c. <i>Data security and privacy</i></li> <li>d. <i>Citizen's right to 'know e-government' – through proactive disclosure on aspects such as work flow allocation, location of authority, and terms of service; and the regular update of governance related information in the public domain</i></li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>- Key informant interviews with research scholars and civil society actors closely engaging with the debates at the intersections of e-government and citizen rights.</li> <li>- Key informant interviews with activists and scholars who are invested in the women's rights agenda.</li> <li>- National ICT policy documents and National Broadband Plan.</li> <li>- Open Standards policy</li> <li>- Citizen charters/ Guarantee of online services law</li> <li>- Data security and privacy laws and policies</li> <li>- Right to information laws and Open Data policies</li> <li>- Laws/policy frameworks governing public-private partnerships in service delivery.</li> </ul>

	<p>e. <i>In cases where government agencies have adopted a public-private partnership model for e-service delivery, do policy documents require specific Service Level agreements and Data protection agreements)</i></p>	
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It is suggested that the state of the art review is largely informed by desk research and that the key informant interviews are limited to 3-4. Though it may not be possible to find extensive information on all the aspects mentioned in the table above, it is important that all aspects be covered to the extent possible, to ensure that the review provides a sound basis for inter-country comparison of the 'regional' e-government institutional ecosystem. The state of the art analysis must be about 10 to 15 pages in length (single line spacing, Liberation Serif, font size 12). The final country report will tie in insights from the SoA review.

## 6.2 Case studies on e-government and gender equality

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In order to build a forward looking perspective that can inform country level policies in the Asia Pacific region, the proposed study will combine existing knowledge and scholarship on gender and e-government, with an empirical approach that allows deeper insight into trends across varied regional contexts. It is therefore proposed that country-level researchers will carry out 2 case studies. The purpose of the case study will be to closely study current e-government initiatives – tease out the gender impacts of the same, and infer principles and strategies that can help country level policy processes to become gender responsive.

The following criteria must be kept in mind, while identifying the case studies:

- Two case studies will be selected per country. Both case studies will be about an initiative in which any tier of government plays a primary role (national, state/provincial or local). Initiatives that have been designed and implemented through partnerships are also admissible, so long as a government agency is the initiator of the same.
- Preferably, the case studies should focus on initiatives that have been fairly successful in realising the outcomes of accountable governance and women's empowerment rather than reconstructing the story of a failure.
- It will be desirable if the two case studies speak to different aspects of e-government and gender equality.

The following steps will guide the development of the case studies. The case studies across the 5 country contexts will be carried out in parallel, with ongoing review by the regional research consultant.

### Step 1. Online workshop with country and regional consultants

**Jan 27<sup>th</sup> 2015**

A half day workshop – for about 3 hours – will be held by the regional consultant to orient country consultants to the framework. The purpose of the workshop will be to develop a shared understanding on the process of the research and the substantive aspects of the research design and framework.

## **Step 2. Selection of Case Studies**

**Feb 3<sup>rd</sup> 2015 – Note to Regional Consultant with possible options**

**Feb 4<sup>th</sup> to Feb 10<sup>th</sup> 2015 – Discussion and Finalisation**

Based on the criteria detailed above, the country researchers across the 5 contexts will each identify 2 case studies. Each country researcher will submit write-ups to the regional research consultant, about the 2 case studies selected, explaining how they are suitable exemplars for a gender analysis of the institutional eco-system of e-government, by elaborating which conceptual pegs in Table 5.1 and Table 5.2 they will help explore. Here the consultant will incorporate existing literature and scholarly analysis, media reports, and government / public information (from govt website, independent evaluations etc) on the case. The regional research consultant, along with UNESCAP, will read the notes submitted by the 5 country-researchers, and will review them for analytical clarity and relevance to the overall research framework – on the basis of which approval will be provided.

## **Step 3. Development of the detailed methodology for each case study**

**Feb 12<sup>th</sup> 2015 – Submission of draft plan**

**Feb 16<sup>th</sup> to 18<sup>th</sup> 2015 – Discussion and Approval of Plan**

Once the case studies are approved, the country consultant will provide a detailed methodology for both case studies. This will be reviewed by the regional consultant, before finalisation. The following steps will be adopted for the finalisation of the methodology.

1. For each of the case studies, the country consultant will identify the sub-set of the conceptual pegs provided in Table 5.1 that it will cover, and then use Table 6.2 (provided below) in the empirical exploration of the case. For each case, the findings with respect to the initiative or e-service under study, will need to be analysed in relation to the macro picture, as relevant. Table 6.2 contains the key areas of inquiry, and corresponding probes and possible research methods, for developing the case study.
2. The country consultant will also identify the conceptual pegs in Table 5.2 on women's empowerment outcomes, that the study will touch upon.
3. Literature and policy documents to be studied for elaborating the case study will draw from the work done in the State of the Art review. Further, the country researcher will:
  - identify the key stakeholders in the initiative under study
  - list the aspects to be covered through field research with specific stakeholders



- finalise the specific research methods for the field research, including detailed field research instruments that break down the probes into specific interview/focus group questions,
- outline a plan for triangulating field research findings

This methodological plan will be submitted to the regional consultant and UNESCAP for an evaluation of its robustness on the basis of the accepted principles of case study research. The field research for the country case studies will commence only after the methodology is approved by the regional research consultant.

Table 6.2 Detailed probes for an institutional analysis of e-government to map its outcomes w.r.t women's empowerment and gender equality

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
<b>Normative Shifts - What new norms are introduced with the introduction of technology? How are emerging norms impacting women's empowerment and gender equality?</b>			
1.1 Shift in the room for human mediation	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- In the initiative/e-service under study, is arbitrariness in decision-making reduced? What is gained?</li> <li>- Is the room for human discretion reduced at the local level? What therefore is lost?</li> <li>- Is there a tension between equity and efficiency, when things become automated/ digitised or when human mediation is eliminated/ minimised?</li> </ul>	<p>Techno-systems come with the assumption that virtualisation can do away with negative human interference in the citizen-govt interaction process. This can bring government closer to women. However, e-government projects may eliminate precious human discretion that may be needed for considerations of equity and gender justice.</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; observation of last mile points; interviews with officials supervising last mile points; review of Business Process Re-engineering (BPR) reports or equivalent programmatic documents.</p>
1.2 New frameworks of mediation / new intermediaries	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What are the premises of inter-mediation of service delivery in the e-service delivery system?</li> <li>- What protections exist for women's rights with the virtualisation of service delivery? How is accountability visualised and built into the present system?</li> </ul>	<p>The implicit assumption in the transition to online service delivery is that it will enable citizens at the last mile to side-step exploitative local brokers and patron-client systems. New forms of mediation that such e-service delivery systems put in place, such as one-stop-shops for service delivery at the last mile, may empower women and marginalised groups in their interactions with state structures. But digitisation may also create new norms and structures that exploit the unfamiliarity of women and other marginalised groups to techno-processes.</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with officials involved in partnership management; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points; interviews with officials supervising last mile points; review of Business Process Re-engineering (BPR) reports or equivalent programmatic documents.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
1.3 Shifts in the predictability of state-citizen interaction	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>– How is the e-service addressing the issue of building women's trust?</li> <li>– How is the issue of ensuring the predictability of the new digital system being viewed? Is it seen only as a supply side issue – that is about assuring technical robustness of the new platforms/portals supporting digital service delivery? Or is it seen as a larger normative concern about trust, emerging from the changing role of the state in public service delivery?</li> </ul>	<p>E-service delivery brings about a shift in the culture of public service delivery, through a renewed focus on efficiency and effective targeting. New norms on quality of public service delivery, focused on enhancing the predictability of government systems may get framed. These can enhance the trust that women and other marginalised groups have in state systems. Sometimes, the new norms may shift the locus of responsibility for claiming services entirely onto the citizen, and fail to put in appropriate support mechanisms for citizens to seek redressal for the problems/issues they encounter.</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points; interviews with officials supervising last mile points; review of Business Process Re-engineering (BPR) reports or equivalent programmatic documents.</p>
1.4 New norms in inter-departmental and govt-citizen-private sector arrangements	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>– What the norms that underpin the contracts between government agencies and their private/civil society partners, in the e-service/initiative under study?</li> </ul> <p>For macro-analysis:</p> <ul style="list-style-type: none"> <li>– In the development of e-service delivery systems, what are the new inter-governmental and inter-stakeholder partnerships that are emerging?</li> <li>– What are the ensuing normative shifts with respect to guaranteeing women's rights in public service delivery?</li> </ul>	<p>In some contexts, techno-design may lead to a shift in the entire paradigm of government – a transition to networked forms of governance with multi-stakeholder partnerships. This is because in the transition from older legacy systems, governments usually involve private actors, as they perceive a need for 'IT-related expertise'; and rely on civil society organisations to use their 'civic power' to convince communities at the grassroots to use the new modes of claiming their entitlements (such as one-stop-shops). This new way of doing things creates new norms and leads to new cultures, which can favour positive gender outcomes of governance. But sometimes, the multi-stakeholder partnership model brings commercial norms into governance systems. This might lead to a loss of citizen rights of women.</p>	<p>For the initiative/e-service under study: Interviews with private sector/ civil society implementation partners; interviews with officials involved in partnership management; review of Service Level Agreements, Memorandum of Understanding or equivalent programmatic documents.</p> <p>For macro-analysis: Policy documents on e-service delivery.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
1.5 Convergence in service delivery	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- How does the e-service delivery framework address the question of making last mile convergence effective and efficient, for marginalised women?</li> </ul>	<p>For marginalised women, the silos of governance at the last mile oftentimes pose a barrier to accessing their entitlements, leaving them running from pillar to post. Institutionalising convergent service delivery through e-service delivery has been seen as an important step to ensure the inclusion of women and marginalised groups in public service delivery.</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>Interviews with officials involved in the design;</li> <li>interviews with intermediaries at last mile points;</li> <li>interviews with officials supervising last mile points;</li> <li>review of Government Orders and circulars on work flows.</li> </ul>
1.6 Shift in the norms of citizen use of /access to services, and citizen feedback	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- How does the initiative address the question of promoting women's online participation and protecting their rights in digital spaces?</li> <li>- How is the issue of contextual design addressed in this initiative?</li> <li>- What are the principles of inclusiveness that underlie the initiative? Can women share feedback on the platform and interact with authorities?</li> </ul> <p>For macro-analysis:</p> <ul style="list-style-type: none"> <li>- How do existing policy frameworks in the context under study look at the question of using the digital opportunity for women's participation?</li> </ul>	<p>In socio-cultural contexts where prevailing gender norms restrict women's mobility, online spaces for citizen interaction open up hitherto unavailable opportunities for women to dialogue with governance structures. However, these online spaces may also become normalised, and start mirroring offline social structures. Therefore, it becomes important to ensure that ICT-enabled platforms account for the specific needs that women have as users. Ensuring that the principles of inclusiveness inform their design at each step (such as maintaining local language content, non-textual content for non-literate women and so on) and women can share feedback with authorities, would be important.</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>Interviews with officials and partners from private sector/civil society involved in the design and maintenance of the portal/platform;</li> <li>interviews with authorities designated for feedback;</li> <li>content analysis of portal/platform being studied;</li> <li>interviews/focus groups with women beneficiaries;</li> <li>review of programmatic documents underlying the initiative/service under study.</li> </ul> <p>For macro-analysis: Policy documents on e-participation and citizen use/uptake of e-service delivery.</p>
1.7 Assumption about ICT access and connectivity	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What is the vision of connectivity? Is connectivity seen as a 'technical' issue? Is it seen as a gender-neutral issue?</li> </ul> <p>For macro-analysis:</p> <ul style="list-style-type: none"> <li>- What is the imagination of ICTs and the</li> </ul>	<p>The underlying assumptions about connectivity and access to ICT infrastructure are crucial to effective e-government design. These assumptions and the policy steps ensuing therefrom determine if and how women can access the Internet for public information and public services access. The</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>Interviews with officials involved in the design;</li> <li>interviews with intermediaries at last mile points;</li> <li>interviews/focus groups with women beneficiaries;</li> <li>observation of last mile points to assess field level connectivity;</li> <li>review of</li> </ul>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
	<p>Internet guiding mainstream policy in the context being studied? Are they seen as public goods?</p> <ul style="list-style-type: none"> <li>- How does this vision impact affordability, access and meaningful use?</li> <li>- Are existing ICT and broadband policy frameworks responsive to the need to address socio-cultural barriers that hinder women's access to the Internet and ICTs?</li> </ul>	<p>pathways of e-government, in contexts where public access is emphasised or where women intermediaries (infomediaries) facilitate connectivity, are different from those where connectivity provisioning is left to the market. Unless women are connected, they are unable to become e-citizens. In many cases, ICT and broadband policies may be gender-neutral. Considering prevailing cultural norms cause additional barriers for women's access to the new technologies (such as household control of mobile phones, highly masculinised cultures in cyber cafes and public access points), it becomes important to engender ICT and broadband policies.</p>	<p>initiative-specific connectivity plan.</p> <p>For macro-analysis: Review of policies on connectivity and universal access (including National Broadband Plans and national ICT policies); documents on programmes that seek to build public access infrastructure where such programmes exist; interviews with key officials in the telecommunications and IT departments.</p>
<b>Shifts in Rules/Enforcement - What are the new rules legitimising the structures and procedures of e-government? Do they have a legislative mechanism? How do they impact women's empowerment and gender equality?</b>			
<p>2.1 Authority to process, authenticate and modify transactions.</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- In the e-service under study, where is the authority to modify and authenticate transactions located?</li> <li>- What are the changes in the location of such authority, when compared to the pre-digital system?</li> <li>- How have such changes impacted the interface of women and marginalised groups with public service delivery?</li> <li>- Are the new locations of authority with respect to transactions, clearly visible to citizens?</li> </ul>	<p>Corruption in local governance systems may or may not be effectively tackled through e-government. New systems can be highly opaque and rigid, whereby authenticating officials could exercise arbitrariness in processing entitlements. For instance, it may not be clear to an illiterate woman how an error in the spelling of her name can be rectified.</p>	<p>For the initiative/e-service under study:</p> <p>Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points; interviews with officials supervising last mile points; review of Government Orders and circulars on work flows; review of Service Level Agreements, Memorandum of Understanding or equivalent programmatic documents.</p> <p>For macro-analysis: Policy documents on e-service delivery.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
2.2 Transparency mechanisms in e-service design and entitlements processing	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- Does the e-service provide clear information on work flow processes?</li> <li>- What laws /policies / rules govern transparency, in the initiative?</li> <li>- Are there mechanisms for public audit of the e-service platform architecture?</li> </ul>	<p>New forms of intermediation in digitised service delivery can lead to new anxieties for women. For instance, if work-flow descriptions are not upfront, or interpreted by an intermediary, follow-ups may become difficult. Similarly, provisions for real-time status updates on entitlement applications may help in ensuring that marginalised women are not disadvantaged through the invisibilisation of work flows that virtualisation creates. Also, software design is bound to create default rules that may compromise citizen interests. For example, women may need to provide specific documentation in the transition into digital systems just because the MIS requires that to be provided, even though such proof may not be mandatory in law.</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points; interviews with officials supervising last mile points; review of Government Orders and circulars on work flows.</p> <p>For macro-analysis: Legislative and policy documents on Right to Information and e-service delivery; citizen charters or equivalent legislation.</p>
2.3 Mechanisms for responsiveness to citizens' concerns in entitlements processing	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- Is there a grievance redressal policy for the e-service?</li> <li>- What are the guarantees in place to ensure that a minimum standard of service is guaranteed to citizens, under the e-service?</li> </ul> <p>For macro-analysis:</p> <ul style="list-style-type: none"> <li>- In the contexts where e-service delivery initiatives are undertaken as multi-stakeholder partnerships, what guarantees are put in place through MoU and other formal agreements?</li> </ul>	<p>Since most e-service delivery initiatives are implemented through multi-stakeholder partnerships that bring in a range of other actors - private sector companies providing technical consultancy, and private sector and civil society partners in implementation and management of e-service delivery initiatives - it becomes critical to put in place adequate safeguards to ensure minimum standards of service are maintained, and that women's citizen rights are protected. Service Level Agreements between governments and other partnering organisations in e-service delivery - for software support, maintenance of front-end and back-end technical infrastructure, and effective processing of applications at the delivery points on-</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries who may have had grievances; review of Service Level Agreements, Memorandum of Understanding or equivalent programmatic documents.</p> <p>For macro-analysis: Review of citizen charters or equivalent legislation; review of policy documents on e-service delivery.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
		ground- may be needed, to ensure that the transition from the legacy system to a new digitalised system does not disadvantage marginalised women. Systems for citizens to report back their grievances are important.	
2.4 Data security law/ policy	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What are the data-based tracking methods that are being used in the initiative/e-service under study?</li> <li>- Are private parties involved in the management of the data systems? What agreement exists between governments and private parties?</li> <li>- How are the data systems balancing the tension between effectiveness and individual citizens' rights to privacy?</li> <li>- How are the data systems impacting women in situations of high vulnerability (both positively and negatively)?</li> <li>- Do these data systems centralise power?</li> </ul> <p>For macro-analysis:</p> <ul style="list-style-type: none"> <li>- How do legal and policy frameworks ensure that data-based tracking in e-service delivery do not compromise privacy?</li> </ul>	<p>Digitalisation of services is often accompanied by the convergence of citizen data sets that are currently held by multiple governmental agencies – in order to build an integrated beneficiary data-base for enhancing efficiencies in service delivery. There is a tension between the government's imperative for better targeting and citizens' right to privacy. With respect to guaranteeing the rights of women, especially in situations of high vulnerability (single women, those belonging to women-headed households, women in sex work), this tension becomes amplified. On the one hand, marginalised women need a social security net that ensures effective targeting of benefits. On the other hand, they need to be protected from the danger of 'social profiling' by the state – which can place them in high risk situations. While the state needs data-sets about such women to grant them their entitlements, it also has to ensure that data security is ensured. Where private partners are involved in the implementation of service delivery and technical assistance in the management of data-bases, non-disclosure agreements to ensure data confidentiality becomes very important. Laws on data protection and privacy also provide</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; review of data protection agreements or equivalent programmatic documents.</p> <p>For macro-analysis: Interviews with civil society actors involved in national level debates on data security and privacy; review of legislation and policy documents on data security, data protection and privacy.</p>



Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
		<p>guarantees to women's rights, and become important, as data becomes a way of life and a double edged resource.</p>	
<p>2.5 Policies on Openness of the technical architecture</p>	<p>For the initiative/e-service under study:          – If the initiative has a private sector partner, brought in to manage the technical platforms, how is the issue of vendor lock-ins being addressed?          For macro-analysis:          – Is there a clear Open Standards policy directive for e-government?</p>	<p>Open Standards policies are important for ensuring that the technical architecture is open to all. Issues in interoperability and vendor lock-ins (to specific platforms, apps or services) could hinder participation by the poorest women who do not use high-end hardware or software.</p>	<p>For the initiative/e-service under study:          Interviews with officials and partners from private sector/civil society involved in the design and maintenance of the portal/platform.          For macro-analysis: Policy documents on e-participation, citizen use/uptake of e-service delivery and Open Standards.</p>
<p>2.6 Rules / Laws on Right to Information and Proactive Disclosure of Public Information</p>	<p>For the initiative/e-service under study:          – What possibilities for information outreach networking are being used? Does this include mobile phone-based strategies?          For macro-analysis:          – How are existing laws on citizens' right to information addressing the issue of proactive disclosure of information through online spaces?          – What is the existing policy framework on Open Government Data?</p>	<p>E-government initiatives can compromise accountability, if they do not address design and implementation issues around proactive disclosure. For women's groups and individual woman beneficiaries, having the names of officers handling various governance portfolios, knowing the mechanisms for grievance redressal etc. may be important when things don't work. It may also be important to explore additional public information outreach options – audio smses for instance, to reach groups with differential needs. Since Open Government Data is not a mere technical exercise, but a political act of determining the categories through which governance information is presented to the citizen, it can be used by citizens to further their rights.</p>	<p>For the initiative/e-service under study: Content analysis of portal/platform being studied, especially the platform being studied and the 'right to know' pages (or their equivalents).          For macro-analysis: Review of legislation and policy documents on citizens' Right to Information and Open Government Data.</p>
<p>2.7 Policies for universal and</p>	<p>For the initiative/e-service under study:          – In the initiative under study, how is</p>	<p>Policies for public access and taking connectivity infrastructure to remote and disadvantaged</p>	<p>For the initiative/e-service under study:          Interviews with officials involved in the design;</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
affordable access of ICTs	<p>connectivity addressed? Is there a connectivity plan (telecentre or infomediary etc) Is it gender-responsive?</p> <p>– If initiative is not providing connectivity, is connectivity being provided through market mechanisms?</p> <p>For macro-analysis:</p> <p>– How do existing policy frameworks address the question of taking connectivity to remote and disadvantaged populations? How is the question of public access infrastructure being taken up in policy frameworks? Is there a National Broadband Plan?</p>	<p>populations are important to build the underlying support infrastructure for e-service delivery. As market players may not be interested in initiatives where there is insufficient demand pull, policy frameworks for public access infrastructure may have to recognise the need for subsidising the development of connectivity infrastructure for marginalised populations – especially the broadband Internet. Mechanisms such as Universal Service Obligation Funds are seen as important levers in this regard. Mobile-based services are particularly useful to reach women, but they cannot assume that women have access to the Internet on their phones. ICT-enabled community information and knowledge centres have been widely studied for their positive gender outcomes.</p>	<p>interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points to assess field level connectivity; review of initiative-specific connectivity plan.</p> <p>For macro-analysis: Review of policies on connectivity and universal access (including National Broadband Plans and national ICT policies); documents on programmes that seek to build public access infrastructure where such programmes exist; interviews with key officials in the telecommunications and IT departments.</p>
<b>Shift in practices - What new everyday practices and cultures of interaction between state and citizen are evident with the introduction of technology? How do they impact women's empowerment and gender equality?</b>			
3.1 New forms of intermediation	<p>For the initiative/e-service under study:</p> <p>– How are existing patronage networks reacting to the new forms of intermediation in the initiative/e-service under study?</p> <p>– Do the new forms of intermediation empower women in accessing government? Or are they merely replacing traditional middle-men?</p>	<p>The digitisation of service delivery leads to the emergence of new forms of intermediation. Sometimes, new systems for convergent delivery, such as women-run community-centres or one-stop shops, can enhance women's access to government, and transform their interface with the e-systems for applications processing. Intermediaries can play a key role in enhancing marginalised women's knowledge of government: through effective facilitation of interactions, using their skills to re-cast the one-stop-shop into a social space that enables dialogue with local governance</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points; interviews with officials supervising last mile points.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
		<p>institutions so that decisions at the local level are made in the public interest, and not through networks of nepotism. Sometimes, intermediaries can also become new 'brokers' replacing traditional middle-men – consolidating the power that accrues to them because of marginalised women's unfamiliarity with digital processes, for private gain.</p>	
<p>3.2 New forms of stakeholder arrangements</p>	<p>For the initiative/e-service under study:  - What kinds of practices (including coordination arrangements) have been put in place, in the e-service delivery system to ensure accountability and responsiveness?  - Are there mechanisms for social audit of the e-service initiative?</p>	<p>There are new stakeholder arrangements that emerge in everyday governance. Private sector and civil society organisations may enter into partnerships to run front-end service delivery points – and new actors enter a space that was traditionally handled by governments alone: that of face-to-face interaction with citizens. Governance in an everyday sense, becomes a relationship between a 'service provider' and a 'client'. On the one hand, this leads to gains in efficiency. On the other hand, the citizen may be more distanced from the government when it comes to making rights-claims. Actors managing the front-end may become the new points for the citizen to raise grievances and make complaints, and the governmental actors who have to provide a resolution to these issues, become more removed. Helplines, online portals for filing grievances, options for emailing complaints, and forums for the community audit of service delivery, become important. The digital and offline mechanisms for audit of service delivery, and how each re-inforces the other in ensuring that the grievances and</p>	<p>For the initiative/e-service under study:  Interviews with officials involved in the design;  interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points;  interviews/focus groups with women beneficiaries; observation of last mile points;  interviews with officials supervising last mile points.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
		<p>complaints of marginalised groups are heard, may become extremely important for ensuring that the new digital system is effective and accountable.</p>	
<p>3.3 Practices for making tacit work flows explicit in virtualised service delivery.</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What kind of practices have been put in place to ensure that women and marginalised groups are made aware about the eligibility criteria for various entitlements provided by government?</li> <li>- Are information outreach practices inclusive? (cognisant of groups that are not textually literate, local language content etc.)</li> <li>- Is the status of their claims/ applications clear to citizens?</li> <li>- Do women receive timely updates on the status of their transactions? Are rejection of applications for service delivery communicated in a timely manner?</li> </ul>	<p>In the virtualisation of service delivery, it becomes extremely important to create practices for ensuring transparency in decision-making since virtualisation further invisibilises governmental workings, to marginalised groups. This involves intimating the citizens about rejection of applications (through mobile alerts and alerts built into the service delivery portal to ensure that the intermediary managing the front-end is appraised of the decision) and wide publishing of the eligibility criteria for welfare and social security schemes (not just on online spaces but also in newspapers, non-textual public information awareness campaigns, announcements at the citizen forums convened by local government, over radio etc.).</p>	<p>For the initiative/e-service under study:</p> <p>Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; interviews with officials supervising last mile points.</p>
<p>3.4 Practices to promote equity considerations in service implementation.</p>	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What has been the impact of the e-service delivery system on the time and other costs of marginalised women accessing the service?</li> <li>- What are the practices that have been put in place to build the gender-responsiveness of the e-service delivery system? (MIS for gender-disaggregated data on entitlement allocations, women-only time slots in one-stop-shops etc.) Have they led to the</li> </ul>	<p>For any e-service delivery system, equity considerations are paramount. Ensuring the presence of women intermediaries in single window service delivery points, having women-only time slots and MIS for tracking gender-disaggregated data about allocation of benefits may all be important. On the other hand, the e-service delivery system may also result in women incurring more costs – there may be additional charges to be paid to the intermediary organisation running the front-end service, as user fees; and</p>	<p>For the initiative/e-service under study:</p> <p>Interviews with officials involved in the design; interviews with private sector/ civil society implementation partners; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; interviews with officials supervising last mile points.</p>

Area of Enquiry	Probes (not exhaustive)	Assumptions	Sources (indicative, and including documents reviewed for the SoA review)
	intended outcome?	there may be instances of the new intermediaries overcharging customers.	
3.5 Offline mechanisms to strengthen online uptake (including digital literacy efforts)	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What are the offline mechanisms that exist in the context under study, for strengthening online uptake?</li> <li>- Are there government-civil society partnerships towards this?</li> <li>- Are these offline mechanisms responsive to the issues/concerns women raise?</li> <li>- What kind of digital literacy effort is associated with the e-service under study? What is its impact in building women's capacity to uptake/use e-services?</li> </ul>	<p>In most developing country contexts, the reality is that online services need to be tied to offline mechanisms for strengthening online uptake. The mere provisioning of services online may not enable women to effectively seize the opportunity to engage with state structures. They may need hand-holding and guidance in acquiring the skills to effectively participate in these digitally mediated spaces. To build the capacity of women and marginalised groups to actively take to e-government, states may rope in civil society organisations and community based organisations to work with women from socio-economically disadvantaged groups, to build contextually-relevant digital literacy models. Educating women about the e-services that are available, through offline trainings, can enable greater uptake.</p>	<p>For the initiative/e-service under study: Interviews with officials and partners from private sector/civil society involved in the design and implementation; interviews/focus groups with women beneficiaries; interviews with digital literacy instructors; review of programmatic documents underlying the initiative/service under study.</p>
3.6 Use of technology platforms for wider and gender-inclusive reach (sms outreach)	<p>For the initiative/e-service under study:</p> <ul style="list-style-type: none"> <li>- What possibilities of the digital ecosystem are being harnessed by the initiative?</li> </ul>	<p>The gender responsiveness of e-government may require a mixed approach comprising broadband, mobile Internet, phone-based networking, mobile apps, and even older technologies such as community media. Voice-SMS and IVR-based public information outreach targeting women have also been important, but household-level patriarchal controls over women's access to mobile phones also remains an issue in many contexts.</p>	<p>For the initiative/e-service under study: Interviews with officials involved in the design; interviews with intermediaries at last mile points; interviews/focus groups with women beneficiaries; observation of last mile points to assess field level connectivity; review of initiative-specific connectivity and outreach plan.</p>

#### **Step 4. Field research for the case studies in each country context**

**mid Feb to end Feb 2015**

#### **Step 5. Preparation of the Draft Case Study Reports**

**March 12<sup>th</sup> 2015 - Submission of draft report**

The draft case study report must analyse the findings with respect to each of the conceptual pegs in the analytical framework sought to be explored, and demonstrate the triangulation of key findings/insights. It must clearly spell out how the empirical findings connect to the macro picture and the literature reviewed. It must offer a detailed discussion on how the said initiative reflects considerations key to gender equality and good governance.

It will contain a main findings section that summarises in a table the insights for all areas of enquiry pursued in the case study. This will be important for the synthesis at the regional level.

It will also contain a concluding section that discusses the impact question – tracing the nature of empowerment of women that can be ascribed to the case studies analysed.

The suggested outline for the case study report will be developed in consultation with the country researchers, by the regional researcher. Each case study will be about 15 to 20 pages long.

#### **Step 6. Finalisation of the Draft Case Study Reports after feedback from the Regional Research Consultant**

**March 18<sup>th</sup> 2015 - Review and feedback**

**March 23<sup>rd</sup> 2015 - Final report submission**

## 6.3 Preparation of a Toolkit on e-government and gender equality

The research study will also feed into a Toolkit for e-government and gender equality. An outline of the Toolkit is provided below. The specifics of how it will be designed (such as 'how to' sections, FAQs, etc.) will be elaborated once the synthesis report for the regional research is ready. This structure is also tentative since the country case studies may throw light on newer facets/ omissions.

Table 6.3 Tentative Structure for Inputs into the Toolkit

Element of the E-government ecosystem	Good practice areas for the Toolkit
Service Delivery	<ul style="list-style-type: none"><li>a. Balancing the requirement for flexibility with the need to reduce arbitrary decision-making power at the citizen-end</li><li>b. Making intermediation frameworks in e-service delivery work for marginalised women.</li><li>c. Creating predictability and building trust in e-service delivery systems</li><li>d. Creating convergences between laws and policies for governance reform that help in promoting transparency, responsiveness and accountability and the e-service delivery system.</li><li>e. Creating data security frameworks</li><li>f. Institutionalising community convergence</li><li>g. Ensuring accountability of multi-stakeholder partnerships in e-service delivery initiatives.</li></ul>
Citizen uptake/ participation	<ul style="list-style-type: none"><li>a. Bringing accessibility and inclusiveness in the design of e-services</li><li>b. Ensuring openness of the technical architecture of e-services.</li><li>c. Using new and old ICT possibilities for public information outreach to women - how the Right to Information and Open Data policy frameworks can be used to promote this.</li><li>d. Digital Literacy models that build marginalised women's capacities to use e-service delivery and e-spaces for participation.</li></ul>



	e. Creating offline mechanisms for strengthening online uptake.
Connectivity architecture	a. Integrating gender in ICT and broadband policy frameworks b. Using public access provisioning effectively, to supplement market diffusion in building a universal and affordable connectivity architecture.

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