

Urban Sanitation Research Initiative

RESEARCH CALL

Identification of indicator criteria for definition of high-quality shared sanitation in urban contexts

26th January 2018

This research project, commissioned under WSUP's Urban Sanitation Research Initiative, aims to identify key criteria determining whether a shared toilet in an urban context can be considered of high quality. This research will be centrally based on extensive survey of shared toilets and their users across cities in Bangladesh, Ghana and Kenya. This research has its roots in the current official judgement of the WHO/UNICEF Joint Monitoring Programme that shared toilets are to be considered at best a "limited" solution and cannot be included within the higher category "basic". But as outlined in a 2017 editorial in the *Journal of Water, Sanitation and Hygiene for Development* (reference in main text of this Call), shared toilets are the only possible solution (short of rehousing) for the millions of slum-dwellers who live in dwellings which are too small for a private toilet; as a result, there is a risk that the JMP's exclusion of shared toilets from the "basic" category may perversely incentivise donor agencies and governments not to allocate resource to slum sanitation. However, many shared toilets are indeed of unacceptable quality, and at the same time there is uncertainty about criteria which can be used to distinguish between shared toilets of unacceptable quality and of acceptable/high quality: so even though it is widely accepted that high-quality shared toilets are an appropriate solution in some slum contexts, there is uncertainty about how "high-quality" should be defined. These issues are relevant internationally (to JMP judgements, to donor agency policies, etc), but also very relevant nationally within Bangladesh, Ghana and Kenya: in all three countries, shared sanitation is widespread, and there is strong national interest in better understanding when and how to promote and support shared sanitation solutions. Against this backdrop, this research will aim to identify and explore key determinants of high-quality shared sanitation, on the basis of extensive survey of shared toilets and their users across cities in Bangladesh, Ghana and Kenya, alongside qualitative studies. We would expect this research to deliver both rich qualitative exploration and large-sample quantitative analysis. We would expect research that delivers both **a)** detailed empirical assessment of the drivers and determinants of user experience, and **b)** analysis to identify criteria that can provide the basis for implementing and policy setters to define minimum standards for high-quality sanitation, as a basis for high-level progress monitoring, for funding decisions, and for programme design/implementation.

Maximum budget under this Call: GBP 300,000

Bids due: Before UK 1700 hours on Monday 26th February 2018

1 About Water & Sanitation for the Urban Poor (WSUP)

Water & Sanitation for the Urban Poor (WSUP) is a not-for-profit company that helps transform cities to benefit the millions who lack access to water and sanitation. We were created in 2005 as a response to the unprecedented urban explosion that has left cities unable to provide basic services, such as access to a toilet or drinking water, to low-income communities. We are based in the UK with offices in six countries in sub-Saharan Africa and Asia. Since inception we have helped over 10 million people access better water and sanitation services.

WSUP has grown rapidly to a £10-12m organisation and has plans for greater expansion over the next few years. The organisation is now at a pivotal stage in its growth. In the business plan period 2016-2020, WSUP's ambition is to raise £65 million (an annual turnover of up to £18-20 million in FY2019-20), but more importantly to be recognised as a key player in the water and sanitation section sector globally. It presently operates six well-developed, respected country programmes in Africa and Asia to strengthen public and private sector service providers to improve the delivery of affordable services to low-income consumers. WSUP has recently expanded its portfolio of operations to include the building and strengthening of private sector provision in urban water and sanitation services and the sale of consulting services on all aspects of low income urban WASH (Water, Sanitation and Hygiene) to disseminate learning and increase impact. All of these operations are supported by research, communications, funding and finance and resources teams. For more information about WSUP's vision and approach, see www.wsup.com

2 About the Urban Sanitation Research Initiative

This research is being commissioned under the WSUP-led **Urban Sanitation Research Initiative** (www.wsup.com/research). The Urban Sanitation Research Initiative is a 2016–2020 programme currently focused in Bangladesh, Ghana and Kenya. The primary aim of this initiative is to deliver research that builds national evidence bases around pro-poor urban sanitation, and that drives policy change and wider sector change in the three focus countries. The initiative is managed by Water & Sanitation for the Urban Poor (WSUP) and core-funded by UK aid from the UK government.

Within this wider initiative, the **Urban Sanitation Research Initiative Bangladesh** is managed by WSUP in strategic partnership with the Centre for Water Supply and Waste Management (ITN – BUET) and the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). The **Urban Sanitation Research Initiative Ghana** is managed by WSUP in strategic partnership with the Environmental Health and Sanitation Directorate (EHSD) of the Ministry of Sanitation and Water Resources, the Institute of Local Government Studies (ILGS), and the Kwame Nkrumah University of Science and Technology (KNUST). The **Urban Sanitation Research Initiative Kenya** is managed by WSUP in strategic partnership with the Water Services Regulatory Board (WASREB) and the Ministry of Health (Division of Environmental Health).

The Urban Sanitation Research Initiative focuses on five broad areas: **1)** sanitation businesses and market development; **2)** institutional frameworks and capacity; **3)** sanitation models, user behaviour, and user experience; **4)** public finance and sanitation planning; and **5)** regulation and smart enforcement. This Call is in Area 3, though is also relevant to the other areas. For more information about the vision and aims of the Urban Sanitation Research Initiative, and for information about other Calls, see www.wsup.com/research

2.1 Sector influence aim

All research under the Urban Sanitation Research Initiative is designed to drive real sector change in focus countries and internationally. The primary sector influence aims of the present research are to generate evidence that can support judgements on minimum criteria for high-quality shared sanitation, internationally and in the three countries, and to provide evidence-based support to the development of relevant international and national policy documents that (in their turn) influence the investments of stakeholders including national governments and development funders. We note also that we expect the findings of this research to inform WSUP's own policies and practices as regards shared sanitation.

3 Work required under this contract

3.1 Background

Shared sanitation facilities include:¹ **(a)** *shared household toilets* (toilet in one household also used by other households); **(b)** *compound toilets* (toilets used only by the people living in a particular compound); **(c)** *community toilets* (non-household toilets used by a restricted group of households); and **(d)** *public toilets* (open to anybody). [This research will probably cover a-c, with public toilets treated as out of scope because they are widely judged to be unacceptable: however, this is not a final determination, and we can consider approaches which in some way include “public” toilets in the analysis.]

3.1.1 JMP treatment of shared sanitation

Under the current WHO/UNICEF Joint Monitoring Programme (JMP) definition, shared sanitation is considered to be at best “limited”; but the JMP core indicator for assessing countries’ progress towards SDG Target 6.2 is proportion of population with “basic sanitation”, the category *above* “limited sanitation”. As outlined in the recent editorial by Evans et al. (2017),¹ there is broad consensus that this exclusion of shared sanitation from the core indicator is potentially problematic: many slum-dwellers necessarily depend on shared sanitation (because they live in tiny dwellings which are too small for a private toilet), and exclusion of shared sanitation from the “basic” category may create a perverse incentive for donors and governments to direct funds at rural areas or less-poor urban areas, not at slums.

The history of the JMP decision is as follows. In the previous Millennium Development Goals period (2000–2015), shared sanitation was excluded from the indicator for monitoring sanitation (‘use of improved sanitation facilities’), which generated some controversy. During development of the 2030 Agenda for Sustainable Development, setting out the 17 SDGs and 169 associated targets, the JMP convened expert Task Teams to advise on the formulation of targets and indicators for global monitoring of drinking water, sanitation and hygiene. The Sanitation Task Team recommended that the JMP should consider households using facilities shared by no more than five families and no more than 30 people (taken as a proxy for adequate management) as having access to ‘basic’ sanitation. Despite limited evidence on the impact of shared toilets, the Team believed there was a compelling case for encouraging countries to consider limited sharing “as a step in the progressive realisation of the human right to sanitation”. However, as noted, the JMP finally decided not to include shared facilities in the normative definition of ‘basic’ or ‘safely managed’ sanitation. The main stated reason was that, in large-scale national and global monitoring processes, it is extremely difficult to differentiate between shared facilities that are poorly designed and managed, and shared facilities that are hygienic, accessible and

¹ This section cites extensively from a recent editorial co-authored by us: Evans B, Hueso A, Johnston J, Norman G, Pérez E, Slaymaker T, Trémolet T (2017) “Limited services? The role of shared sanitation in the 2030 Agenda for Sustainable Development”, *Journal of Water Sanitation and Hygiene for Development* Sep 2017, 7 (3): 349-351.

safe. First, most censuses and national household surveys do not currently ask whether facilities are shared: in 2015, only 85 countries had information on the number of households sharing sanitation facilities. Second, there is little evidence on the relationship between the number of households sharing facilities and their hygiene, accessibility and safety, making it difficult to find an adequate proxy indicator. Given this lack of data and evidence, the JMP decided it would classify improved facilities which are shared with other households as a 'limited' sanitation service.

Subsequent to that decision, and perhaps partly as a result of the dialogue arising around the Evans et al. (2017) editorial, the 2017 JMP progress report now states that *"While universal use of private toilets accessible on premises remains the ultimate goal, high-quality shared sanitation facilities may be the best option in the short term in some low-income urban settings."* The current JMP message is thus somewhat conflicted: while recognising in the text of a key report that shared sanitation can be the most appropriate solution in some contexts, it remains excluded from the core indicator definition (perhaps in part reflecting the political/bureaucratic challenges that JMP specialists would face if they attempted to change indicator assignments at this stage). The JMP attempt to "square this circle" is perhaps best summarised by the following text from the Evans et al. (2017) editorial: *"The JMP reports on global indicators, enabling countries to compare progress over time. Core indicator 6.2.1, by measuring the population using safely managed sanitation services, sets a standard that all countries should aspire to, but does not require that countries get there immediately or focus solely on that service level. The SDG framework, in line with the principle of reducing inequalities and the progressive realisation of the human right to sanitation, recognises that intermediate steps will be needed along the way. Governments need to strike an appropriate balance between extending access to unserved populations and progressively improving service levels. They should therefore set ambitious but realistic targets, based on their own strategies and specific situations, and focusing on the most vulnerable. As a first step, this will likely mean prioritising service levels below 'safely managed', including shared sanitation in dense informal settlements."* Whether this successfully squares the circle is debatable: shared sanitation remains excluded from the core indicator, and progress as measured by the core indicator is arguably what donors and governments want to be seen to achieve.

Against this backdrop, Heijnen et al. (2014) state that research is necessary to determine the circumstances in which shared sanitation can offer a safe and acceptable alternative to individual household toilets.

3.1.2 Existing research around shared sanitation

As noted, shared sanitation facilities include: **(a)** *shared household toilets* (toilet in one household also used by other households); **(b)** *compound toilets* (toilets used only by the people living in a particular compound); **(c)** *community toilets* (non-household toilets used by a restricted group of households); and **(d)** *public toilets* (open to anybody). This is a simple typology to provide a terminology for this document, but certainly in practice shared toilets vary along multiple dimensions including user group size, user group restrictions, distance from dwelling, ownership, payment model (if any), and operation and maintenance arrangements; and this research might very possibly need to use a more complex typology considering dimensions of this type. The boundaries between the different categories of sharing are not clear-cut, and it may be helpful to consider them as positions along a continuum from "publicness" to "ownership".² Svensson et al.³ propose a ladder describing different levels of facility sharing: public/communal/investor ownership, neighbourhood shared ownership, co-tenant shared ownership,

² Norman G (2011). When are communal or public toilets an appropriate option? WSUP Topic Brief 2011, pp 1–18.

³ Svensson G, Wagner B (2015). The latrine ownership ladder: A conceptual framework for enhancing sanitation uptake in low-income peri-urban settings. *Manag Environ Qual An Int J.* 2015, 2(26):195–213.

and finally household ownership. The notion of “ownership” may be context-specific, and both the ownership of the land and of the facility need to be considered.⁴

Various studies have explored from different perspectives **a)** how sharing (as opposed to not sharing) impacts on user acceptability and wellbeing outcomes including health outcomes; **b)** what characteristics of shared toilets affect user acceptability and wellbeing outcomes; and more specifically **c)** how user acceptability and wellbeing outcomes are affected by the number of people sharing. Clearly we should expect complex variability here: multiple factors are likely to affect user acceptability and wellbeing outcomes, and we would expect any effects to be context-dependent, not neatly uniform across different locations. More specifically, there is no reason to suppose that there is a single “magic” number of users below which quality/acceptability is always “good” and above which quality/acceptability is always “poor”. Nonetheless, the primary aim of this research is to identify workable criteria for defining quality of shared toilets: in other words, we encourage researchers to look for ways of distilling simple criteria applicable to complex realities (of which more below).

A recent major systematic review of health impact studies comparing shared and individual sanitation⁵ found increased risk of adverse health outcomes associated with shared sanitation compared to individual household latrines. Specifically, a meta-analysis of 12 studies reporting on diarrhoea found increased odds of disease associated with reliance on shared sanitation (odds ratio 1.44, 95% CI 1.18–1.76). However, the authors point out that the evidence is limited, does not adequately address likely confounding, and does not identify potentially important distinctions among types of shared facilities; they note that “*as reliance on shared sanitation is increasing, further research is necessary to determine the circumstances, if any, under which shared sanitation can offer a safe, appropriate and acceptable alternative to individual household latrines*”. The confounding referred to by Heijnen et al. (2014) is important: it is reasonable to expect that people depending on shared sanitation will tend to be poorer than people with a private toilet, so we would expect their health to be worse anyway (i.e. shared sanitation may simply be a correlate of poor health, not a cause). Furthermore, analyses of this type put all shared sanitation into one category, without attempting to distinguish between low-quality and high-quality shared sanitation. Thus there is evidence indicating that shared sanitation users typically have poorer health than private sanitation users: but this is likely to be at least partially correlation not cause-effect, and there is no evidence to counter the common-sense prediction that (for people who necessarily depend on shared sanitation) improving shared sanitation quality is likely to have beneficial outcomes, possibly including beneficial health outcomes.

The ongoing MapSan health impact evaluation study in Mozambique⁶ may make an important contribution to this debate, since it is using rigorous large-sample approaches to assess health impacts of shared sanitation improvement, by comparing health metrics among users of high-quality shared sanitation and among users of traditional low-quality shared sanitation. Fieldwork is now completed, and preliminary findings are expected in summer 2018.

A recent cross-sectional study⁷ explored differences between households relying on shared sanitation versus individual toilets (in terms of demographics, sanitation facilities, and faecal exposure) in slums in Orissa. Households relying on shared sanitation were poorer and less educated than those with individual toilets (supporting the possibility of confounding in the meta-analysis referenced above).

⁴ Mazeau A, Reed B (2010). Assessing people’s views of infrastructure: methodologies to study urban shared sanitation. World Wide Workshop for Young Environmental Scientists, May 2010, Arcueil, France.

⁵ Heijnen M, Cumming O, Peletz R, Chan GK-S, Brown J, Baker K, et al. (2014) Shared sanitation versus individual household latrines: a systematic review of health outcomes. PLoS ONE 9(4): e93300.

⁶ Brown J, Cumming O, Bartram J, et al. (2015) A controlled, before-and-after trial of an urban sanitation intervention to reduce enteric infections in children: research protocol for the Maputo Sanitation (MapSan) study, Mozambique. BMJ Open 2015, 5: e008215.

⁷ Heijnen M, Routray P, Torondel B, Clasen T. (2015) Shared sanitation versus individual household latrines in urban slums: a cross-sectional study in Orissa, India. The American Journal of Tropical Medicine and Hygiene. 2015, 93(2):263-268. doi:10.4269/ajtmh.14-0812.

Individuals in sharing households were more likely to practice open defecation. Shared facilities were less likely to be functional, less clean, and more likely to have faeces and flies.

The type of sharing and ownership is likely to have implications for how facilities are used and managed; and equally, how facilities are used and managed is likely to impact on their quality/acceptability, with a clear risk of vicious circle effects.^{8,9,10} Shared toilets are commonly used by tenants (as opposed to owner-occupiers), and tenants may be unwilling to contribute to the maintenance of shared facilities; these issues are likely to be compounded when there is high population movement and tenant turnover.^{11,12} A study in slums in Uganda found that reported cleaning intention was lower among tenants than owner-occupiers, and that reported cleaning intention declined with number of sharing households.¹² Predictably, users with a good relationship with other toilet-sharing households were more likely to commit to cleaning the shared toilet than those who viewed their relationship with other users as bad. In another report of the same study, half of the toilets clean enough to use were shared among relatives, followed by direct neighbour users and well-known neighbours.¹³ Dirty and smelly toilets, long waiting times and lack of access at night may discourage the use of shared facilities and contribute to open defecation.¹⁴ In a consultation with urban residents in Ghana,¹⁵ some users admitted to preferring open defecation to using shared toilets that they considered to be dirty and smelly. These issues can of course be addressed at least in part by approaches including improved maintenance of facilities, and design and management approaches to increase sense of ownership.⁸

Security, privacy and convenience of shared facilities (and of the path to the facility) are key determinants of use and acceptability. Various studies in Ghana^{14,15,16} highlight the importance of privacy and security in ensuring use of shared sanitation facilities, particularly for women and children. A study of access, choice-to-use and cleaning of shared facilities in Kampala, Uganda, showed that location, distance and pathway to the facility (including slope), the time it was visited and privacy were more likely to inhibit access to and choice-to-use for women than men.¹⁷ Factors including poor or no lighting inside and around the facility, lack of a roof or lockable door, or long distance from the dwelling not only prevent some people from using the facility, but may increase the risk of women and girls facing sexual violence.^{5,7,15,17,18,19,20,21,22}

⁸ Schouten MAC, Mathenge RW (2010). Communal sanitation alternatives for slums : A case study of Kibera, Kenya. *Phys Chem Earth*. 2010, 5(13–14): 815–22.

⁹ Rodgers AF, Ajono LA, Gyapong JO, Hagan M, Emerson PM (2007). Characteristics of latrine promotion participants and non-participants; inspection of latrines and perceptions of household latrines in Northern Ghana. *Trop Med Int Heal*. 2007, 12(6): 772–82.

¹⁰ Chunga RM, Ensink JHJ, Jenkins MW, Brown J (2016). Adopt or adapt: Sanitation technology choices in urbanizing Malawi. *PLoS One*. 2016, 11(8): 1–16.

¹¹ Katukiza AY, Ronteltap M, Oleja A, Niwagaba CB, Kansime F, Lens PNL (2010). Selection of sustainable sanitation technologies for urban slums - A case of Bwaise III in Kampala, Uganda. *Sci Total Environ*. 2010, 409(1):52–62.

¹² Tumwebaze IK, Mosler H-J (2014). Shared toilet users' collective cleaning and determinant factors in Kampala slums, Uganda. *BMC Public Health*. 2014, 14: 1260.

¹³ Tumwebaze IK (2013). Prevalence and determinants of the cleanliness of shared toilets in Kampala slums, Uganda. *J Public Health*. 2013, 22(1): 33–9.

¹⁴ Günther I, Horst A, Lüthi C, Mosler H-J, Niwagaba BC, Tumwebaze KI (2011) Where do Kampala's poor "go"? *Res Evid Policy*. 2011.

¹⁵ Mazeau A, Scott R, Tuffeur B (2012). Sanitation – a neglected essential service in the unregulated urban expansion of Ashaiman, Ghana. *Sustain Futur Archit Urban Glob South*. 2012, 37–44.

¹⁶ Simiyu S (2016). Investigating quality of shared sanitation facilities in informal settlements of Kisumu, Kenya. 39th WEDC Int Conf. 2016.

¹⁷ Kwirengira J, Atekyereza P, Niwagaba C, Günther I (2014) Gender variations in access, choice to use and cleaning of shared latrines; experiences from Kampala Slums, Uganda. *BMC Public Health*. 2014, 14(1): 1180.

¹⁸ Corburn J, Hildebrand C (2015). Slum Sanitation and the Social Determinants of Women's Health in Nairobi, Kenya. *J Environ Public Health*. 2015:1–6.

¹⁹ Kwirengira J, Atekyereza P, Niwagaba C, Günther I (2014) Descending the sanitation ladder in urban Uganda: evidence from Kampala Slums. *BMC Public Health*. 2014,14(1): 624.

²⁰ Practical Action (2010) Breaking Barriers in Water and Sanitation Service Delivery to Informal Settlements: Case of Mukuru Informal Settlement. 2010.

²¹ Hussain R, Mangla B (2014) Toilet as an asset: necessity versus luxury. *Dev Ctry Stud*. 2014, 4(9):106–14.

²² Satterthwaite D, Mitlin D, Bartlett S (2015) Key sanitation issues: commitments, coverage, choice, context, co-production, costs, capital, city-wide coverage. *Environ Urban briefs*. 2015, 31(4):1–6.

This brief and non-exhaustive review of the literature highlights that the factors affecting user acceptability and wellbeing impacts of a shared toilet are very complex, and implies that we cannot reasonably expect *number of users of a shared facility* to be a clear-cut proxy indicator of “shared sanitation quality” (itself clearly a complex multidimensional concept). Nonetheless, we can certainly expect some relationship between number of users and shared sanitation quality, and (as discussed in more detail in Section 3.2.1.c below), it is possible that number of users may be a sufficiently good proxy to serve as a useful topline indicator. Several previous studies have looked at the relationship between number of users and shared sanitation quality. A major study of 1500 toilets in the slums of Kampala by Günther et al.²³ detected a strong correlation between the number of users and the cleanliness of a toilet. A smaller study in the same setting¹³ found that toilets shared by 2 households were “three times cleaner” than those shared among five or more households. Drawing on empirical findings and/or expert judgement, various authors have offered cut-off thresholds for acceptability: for example, Appiah et al.²⁴ suggest 10 people per toilet as the threshold for acceptability in Ghana; Kabange et al.²⁵ likewise in the Ghanaian context, argue that shared sanitation can be considered acceptable when sharing is limited to 2 or 3 households per facility “under good operation and maintenance”; the City of Cape Town in South Africa set up context-specific quality criteria for sanitation services^{26,27} including a threshold of 5 families per toilet within their definition of “basic sanitation services”; Günther et al.²⁵ suggest that toilet facilities shared by no more than 4 households (or 20 people) can be considered acceptable in Ugandan urban contexts. Günther et al.’s study is of particular interest, in that they use a clearly rigorous approach to reach this conclusion: specifically, using the data for 1500 toilets, they plot sanitation quality against number of users, and observe a clear drop-off in quality beyond 20 people. [So one question we would anticipate that this research could readily answer is whether Günther et al.’s suggested cut-off of 20 people is valid in Bangladesh, Ghana and Kenya: but as discussed further in Section 3.2.1.c below, we do not wish to pre-suppose that number-of-users is the most useful topline indicator, and we encourage bidding researchers to think more broadly about possible topline indicators. Indeed, one reviewer of this call indicated their view that number-of-users is not likely to be a useful indicator, that it has already proved a “cul-de-sac”.]

3.2 Aims, design and approach

3.2.1 Over-arching aim and approach

As noted in the summary paragraph at the start of this Call, the primary aim of this research is **to identify criteria determining when a shared toilet can be considered of high quality in terms of user acceptability, impact on wellbeing and other potentially relevant aspects of quality**. This research should be centrally based on extensive survey of shared toilets and their users across cities in Bangladesh, Ghana and Kenya. This might usefully categorise toilets (e.g. shared household, compound, communal), allowing comparative analysis by category. We would expect research that delivers both **a)** detailed empirical assessment of the drivers and determinants of shared sanitation quality,²⁸ and **b)** analysis to identify criteria that can provide the basis for implementing, policy-setting and funding agencies to define minimum standards for high-quality shared sanitation. Such analysis may foreseeably require application of appropriate multivariate statistical approaches (for example, dimensional reduction techniques like PCA or factor analysis, cluster analysis, discriminant analysis

²³ Günther I (2012) When is shared sanitation improved sanitation? - The correlation between number of users and toilet hygiene. *Public Choice*. 2012, 2729.

²⁴ Appiah EO, Oduro-Kwarteng S (2011) Improving access to basic sanitation in Ghana. lessons from a water and sanitation project in Ghana. In: 3rd Ghana Water Forum, Accra, Ghana, 2011 Water and Sanitation Services Delivery in a Rapidly Changing Urban Environment. 2011, p. 23–30.

²⁵ Kabange RS, Nkansah A (2015) Shared sanitation facilities: a reality or mirage? *Am Sci Res J Eng Technol Sci*. 2015, 14(1): 172–7.

²⁶ City of Cape Town (2008) City of Cape Town Water And Sanitation Service Standard Preliminary Draft 2. *Water Serv Rep*. 2008:16.

²⁷ Mels A, Castellano D, Braadbaart O, Veenstra S, Dijkstra I, Meulman B, et al. (2009) Sanitation services for the informal settlements of Cape Town, South Africa. *Desalination*. 2009, 248(1–3): 330–7.

²⁸ But see question-and-response Point 5 below.

and/or sensitivity-specificity analysis) to support conclusions on criteria. In line with these aims, we would expect this research to deliver both rich qualitative exploration and large-sample quantitative analysis. We would also expect the research to include detailed systematic review of the relevant literature as an early deliverable and necessary element for grounded analysis. [Systematic here used in the sense of comprehensive review with defined search strategy; we do not mean to suggest any form of meta-analysis.]

We will further clarify these aims using a question-and-response format, as follows:

1) Should this study aim to generate a simple criterion potentially applicable in a future JMP definition of shared sanitation for inclusion within the “basic” or “safely managed” category?

This study is commissioned by the Urban Sanitation Research Initiative, not by the JMP, and we expect **a)** that JMP would probably wish to base consideration of any future change in their treatment of shared sanitation on wider data than the findings of this study alone; and **b)** that the JMP may in any case not wish to change category definitions to favour shared sanitation, for possible reasons including lack of confidence that it would be the right decision in terms of scientific validity and/or impact on policy, concern about methodological difficulties, or simply the administrative/political barriers to changing SDG core indicators at this stage. That said, this study should certainly consider whether it is possible to identify a simple criterion (e.g. a number-of-users criterion, or other type of criterion) potentially applicable in a future JMP definition of shared sanitation for inclusion within the “basic” or “safely managed” category, and we certainly encourage researchers to consult relevant JMP specialists to get their views and explore ways in which this research could be of value to them (during research design, not at the proposal stage).

2) Are you only interested in simple criteria? No, we envisage that this research would aim to identify criteria at three levels of increasing complexity (and thus of increasing predictive power). First, we are interested in a possible top-level simple criterion (possibly a number-of-users criterion, possibly some other criterion) that could be of potential value at the JMP global monitoring level and similar levels [see also Point 5 below]. Such a criterion would need to be readily measurable in large-scale routine surveys. Second, we are interested in a more complex but still manageable criterion set (say 5-10 readily measurable criteria) that can form the basis for definition of “minimum standards” for shared sanitation in urban contexts, to be applied by governments, development funders and implementing agencies like WSUP. Third, we would ideally like this research to provide a basis for structured narrative guidance on how to design and implement urban shared sanitation interventions. [For how this relates to required contract deliverables, see Section 3.4 below.]

3) Should this study aim to identify a cut-off number of users per toilet? As noted, number-of-users is one possible topline criterion, and we would certainly expect this research to obtain a data-set which allows the usefulness of this type of criterion to be assessed. But we strongly encourage researchers to consider other possible topline criteria.²⁹ This research may certainly conclude that it is simply not possible to identify a cut-off number that distinguishes in a meaningful way between “high-quality” and “low-quality” urban shared sanitation, because (as discussed) the determinants of “quality” are potentially too complex and multidimensional to be usefully proxied by a single indicator, and/or because quality is a smooth continuum with no evident jump from unacceptable to acceptable.³⁰ However, researchers should understand that such a criterion (number-of-users or some alternative simple topline criterion), though undoubtedly imperfect, would be very useful in the real world, and identification of such a criterion should be core to this research. This should ideally be approached in a quantitative way: for example, if you could demonstrate that a given criterion in a given context offers

²⁹ We are certainly open to the possibility that the topline criterion might combine say 2 or 3 criteria: the important thing is that it should be workable in large-scale survey, and we are not definitely wedded to a single-item criterion.

³⁰ Though here we note that a threshold can still have policy value even when applied to a smooth curve, as in the case of restrictions on blood alcohol levels for vehicle drivers.

(say) 70% sensitivity and 90% specificity in discrimination between toilets classed as “high-quality” or “low-quality” on a defined metric of quality, then this provides a reasoned basis for policy judgements about whether that criterion is of value.

4) *If not number-of-users, then what?* We don’t know. One reviewer of this Call suggested that “location and ownership” are more important predictors of quality than number-of-users; this is very possibly true, but it is not straightforward to see how this might be translated to a simple topline indicator. Categorisation of toilets (e.g. shared household, compound, communal) in data collection and analysis might provide one sort of pathway to this. Another reviewer stressed the importance of sustainability concerns, expressing the view that shared toilets may sustain quality over time less effectively than household toilets. Again, though, it is not straightforward to consider how this might be addressed through a simple topline indicator. We encourage researchers, both at the bidding stage and in subsequent research design, to consider other possible indicators in a wide-ranging way.

5) *Should this study focus more strongly on understanding shared sanitation quality and its determinants, or on identifying criteria for discriminating between “high-quality” and “low-quality” shared sanitation?* As discussed above, defining the “quality” of a shared toilet is not black-and-white. Quality is undoubtedly multidimensional, not a single “thing”: it could be defined in terms of user perceptions (“user acceptability” and/or self-reported wellbeing) and/or in terms of some “objective” external judgement relating to health benefits or some other type of potentially measurable characteristic or benefit (e.g. toilet cleanliness, benefit in terms of women’s security, etc.). Effective understanding of these issues is likely to require careful consideration of who exactly uses the toilet, and when: do all putative users (including women and girls, and the poorest members of the nominal user group) have 24/7 access? It could potentially incorporate some assessment of sustainability over time (which is likely to be affected by diverse factors including financial viability of arrangements for covering recurrent costs, whether by the householder or government or both).³¹ User acceptability is itself likely to be multidimensional: for example, a user may be satisfied with the cleanliness of a toilet, but unsatisfied with the distance from her home; and she may attach more importance to one of these dimensions than to the other. Furthermore, this project is insufficiently resourced to be able to rigorously evaluate disease-prevention value of different toilets included in the sample, and researchers will need to make reasoned judgements based on the literature and on possible proxy metrics of health impact (e.g. observations of toilet cleanliness). Notwithstanding this complexity, we suggest that the nature of this research means that it will be necessary for the researchers to identify some sort of single metric of quality, which can then provide a basis for exploration of determinants and drivers of quality, and for identification of readily determined proxy measures of that quality. This single metric might be some sort of composite (a checklist of required features, or some arithmetic composite of different continuous or categorical variables), or it might be a single proxy (e.g. an assessment of toilet cleanliness on a structured rating scale). We note that different levels of “proxification” might be necessary: for example, a complex set of metrics of quality; a single metric (composite or proxy) that the researchers then use to define high-quality versus low-quality within their dataset; and finally an ultimate proxy (e.g. number of users) that can be used by others as a topline design criterion or survey indicator. Researchers will have to develop a reasoned approach to this, in outline at bidding stage and in greater detail if you win. So understanding and defining quality will be critical to this project: but we encourage researchers to view this element of the research not as an end in itself, but as feeding into the primary aim, which is to identify workable criteria as outlined in Point 2 above. A study which focuses too heavily on exploring the nature and drivers of “quality” risks losing sight of, or under-resourcing, the primary aim.

6) *Is this health impact evaluation research?* No, almost certainly not: it will almost certainly be impossible to rigorously assess health impacts of shared sanitation within the budget and timeframe of

³¹ Certainly we would expect that it might be useful to include questions about age of toilet and management arrangements in questionnaires and other data collection.

this work. Nonetheless, we would certainly encourage researchers to develop a definition/metric of quality which incorporates some sort of reasoned assessment of the hygienic (disease-prevention) quality of the different toilets included in the sample. Conversely, we are also open to proposals which focus solely on user acceptability (i.e. user judgements about the quality of their toilet), or even some specific aspect of user acceptability (e.g. women's judgements on quality in terms of perceived security and dignity). In making this decision at the bidding stage, we encourage researchers to think about what would be most useful to the government and development sector policy-makers who will read the eventual findings of this research (probably just the Executive Summary!) and who will consider whether it affects their judgements on the acceptability of shared sanitation in urban contexts, and whether the criteria proposed by this research are useful in practice.

7) What if we're unable to identify a simple criterion? It is certainly possible that the eventual findings of this research will suggest that there is no simple criterion of urban shared sanitation quality that could be adopted by JMP and others. That would be disappointing from the policy change perspective (because there are clear ethical reasons to support high-quality shared sanitation, and in order for this to happen it's important to have some simple way of deciding what high-quality shared sanitation looks like). So we encourage researchers to strive towards this end; but we certainly accept the possibility that eventual findings may indicate that there is no simple criterion which offers sufficient discriminant power. One possible outcome is that this research is able to identify a simple criterion that works in specific country locations, but that the cut-off values vary between countries (i.e. there is no internationally valid cut-off). Another possible outcome is that there is no single criterion, but (say) a 3-criterion set could do the trick. Again, we encourage researchers to consider applicable quantitative analyses such as discriminant analysis and sensitivity/specificity analysis. And again, we draw attention to the policy value of cut-offs even when applied to a smooth curve, as in the example of legal limits on blood alcohol levels in vehicle drivers.

8) What is WSUP's existing view on what constitutes high-quality shared sanitation? WSUP has an existing view, incorporated into current guidance for WSUP programme managers as 9 criteria (below). We stress that this is indicative and aspirational at present: not all shared toilets supported by WSUP meet all of these criteria. We also stress that this criterion set is expert-opinion-based, not strongly evidence-based; we certainly don't present this as a "gold standard", and indeed from the internal perspective this research will be useful to WSUP in generating more evidence-based criteria (which might be similar to these existing criteria, or substantially different). Nonetheless, these criteria can potentially be useful to researchers in their initial thinking about possible topline indicators and a "minimum standards" criterion set.

- The toilet is used by maximum 3 households per seat
- The toilet is used by maximum 20 people per seat
- The toilet is located no more than 20 m from the most-distant dwelling
- The toilet is located in a safe location (e.g. within locked compound)
- The toilet is readily accessible to all users 24/7
- The toilet is maintained to good levels of cleanliness
- The septic tank will be emptied when full
- In locations with electricity supply: the toilet has working electric light
- In locations with piped water: running water is available for handwashing

The above question-and-response section is our endeavour to explain in more detail the aims and complexities of this research: we hope this is useful, but we stress that we are open to reasoned proposals which disagree with aspects of our analysis. Clearly, though, we're looking for proposals which respond to the spirit of this call. As noted at the end of this document, we are happy to respond to clarification queries at the bidding stage.

We also note that we would expect the precise framing and methodology of this study to be fluid over the first 6 months (or thereabouts) of this study: we expect bidders to present a considered methodological approach at proposal stage, but we would entirely expect this to evolve over the early stages of the research.

3.2.2 Proposed methodology

Here we outline the broad methodology we would envisage for this work. However, we stress that this is for guidance only, and we are happy to accept proposals which **a)** follow our proposed methodology closely, **b)** follow our proposed methodology but with significant modifications, or **c)** propose a different methodology. In the latter case, we stress that we require work that responds to the spirit of this call, and that extends in parallel across the three countries (Bangladesh, Ghana and Kenya), because we consider that parallel data collection and analysis across the three countries will provide a strong basis for research which can claim to be internationally valid, and because these are the three specific countries in which we are committed to supporting the urban sanitation knowledge base.

Proposed methodology components are as follows:

- 1) Systematic review of the relevant literature (probably running in parallel with Component 2, clearly focused in structure and content on the aims of this research, and generating a publishable deliverable)
- 2) Detailed design phase (based in part on consultation with relevant stakeholders including WSUP, JMP specialists, other people with specialist understanding of this area in academia and the development sector, relevant people from policy-making institutions in the three countries); this phase will include definitive identification of the study locations, which might be in one city or various cities in each country [as regards city selection, see Section 3.2.3 below; as regards importance of stakeholder consultation for policy influence in country, see Section 3.2.4 below]
- 3) Qualitative fieldwork (small-sample questionnaires, focus groups) to ground understanding and definition of shared sanitation quality, and to guide design of the questionnaire for the subsequent phase; if useful, qualitative work might also extend into Component 4, running alongside the large-scale survey
- 4) Structured survey of large samples of shared toilets in the selected study locations; we envisage that this would include structured questionnaire survey of users (these identified in a reasoned way) and also structured inspection of toilets; we envisage that toilet selection for this phase would focus primarily on inclusion of the most appropriate mix of shared toilets for criterion development, and so not necessarily aiming to be representative of urban shared toilets in that country (for example, the sample might be partially weighted more towards better toilets, or stratified by number of users or toilet category, on the view that this can provide more useful information for criterion development than a simple random sample from the total universe; however it is certainly possible that sampling design might also be able to generate a useful assessment of current shared sanitation quality in that country, over and above the primary aims of the research, and this would clearly be useful)
- 5) Data analysis as required to meet the aims of this research (as discussed above, we would expect this to be a significant element requiring appropriate statistical approaches for identification of discriminant criteria, and evidently this will need to be given careful attention at the design stage, not left until after data collection)

3.2.3 Selection of study locations

This Call covers parallel research in three countries, in urban locations only (i.e. this research should not extend to rural). We leave it to bidding researchers to propose approach within each country: one possibility would be to carry out field research in one city per country only, though certainly better

representativity could be achieved by carrying out field research across (say) three urban locations in each country.

3.2.4 Maximising in-country policy influence

This work aims to achieve policy influence at both the global level and within each of the three countries. With regard to in-country policy influence, we hope that this research will help demonstrate to policy-makers that shared sanitation, notwithstanding its current exclusion from the JMP definition of “basic sanitation” (and thus from the core indicator for SDG Target 6.2), is essentially the only solution for people who live in tiny dwellings with no space for a private household toilet; but at the same time it is important that this research should help clarify that this is not *carte blanche* justification for reliance on low-quality shared toilets in slum communities, but rather that shared sanitation needs to meet certain minimum criteria in order to be an acceptable solution.³² Identification of minimum criteria by this study will potentially provide a basis for policy and investment decisions by key stakeholders potentially including national governments, city governments, regulators and development actors including development banks, INGOs and NGOs. We do not here attempt to analyse the current policy situation as regards shared sanitation in each country: suffice it to say that, in order to achieve policy influence in country, this work will likely need to include **a)** analysis of policy context in the inception report and/or literature review at start of this research; **b)** consultation with relevant local stakeholders in the detailed design phase of this research; and **c)** attention to generation of country-specific project deliverables summarising findings and recommendations in each country.

3.3 Core requirements for work under the Urban Sanitation Research Initiative

The following are core requirements for all work carried out under the Urban Sanitation Research Initiative:

- 1) **Research must fully meet relevant research ethics requirements:** All research must be carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and with best practice in the country or countries in which research is carried out.
- 2) **Research design should pay careful attention to gender equality/equity considerations:** Bidders should explicitly ensure that their proposed design, analysis and research-into-policy work is taking full account of gender equality and equity.
- 3) **Research-into-policy should be considered a core element:** Research-into-policy should be considered a core element at all levels and stages of research design; not an after-thought once the “real research” has been completed.

For more detailed explanation, see the Core Requirements Form attached as Appendix A, which must be completed by all bidders and submitted with the bid (see Section 9).

3.4 Deliverables

Under the present Call, we require the following routine deliverables: **a)** a brief inception report (5-10 pages) soon after contract signature; **b)** a detailed methodology outline [*this might be included with the*

³²By indicating ways in which we hope that this work will influence policy, we are not in any way suggesting that the design or findings of this study should be modified in any way to present shared sanitation in a favourable light: researchers have full academic freedom to report findings that are unfavourable to shared sanitation, or which indicate that there are no simple criteria for distinguishing between low- and high-quality shared sanitation. However, we would expect design of this research and its deliverables to be grounded in an understanding **a)** that exclusion of shared sanitation from policy criteria risks impacting negatively on some slum-dwellers (by creating a “let them eat cake” situation), and conversely **b)** that lack of criteria for high-quality shared sanitation, or non-application of those criteria, risks perpetuating a situation in which low-quality shared sanitation continues to be accepted or supported by governments and development funders because it’s an easy/cheap option.

inception report, or might require more time]; **c**) brief monthly email updates on progress; **d**) short (3-5 page) six-monthly Word reports on progress/achievement/challenges (so probably three such reports under the present contract); and **e**) a final short summary report to WSUP demonstrating contractual compliance. Over and above these routine deliverables, generation of at least 1 (preferably 2 or 3) articles in a high-impact open-access peer-reviewed journal is a requirement under this contract. Other deliverables should be proposed by the researcher in the bid, in view of proposed methodology and approach, and with attention to policy impact. For example, bidders may choose to additionally offer print deliverables and other deliverables designed for technical dissemination and for policy influence within each specific context, and we would expect the three types of deliverable (journal article, local technical report, local policy influence deliverable) to be very different in content, interpretation and style. The WSUP team is happy to consider close involvement in policy influence deliverables (e.g. we write short publications based on your technical reports to us), if the researchers judge that helpful. Bidders may also choose to offer powerpoints, workshop presentations, or blog posts or videos for the Urban Sanitation Research Initiative website. Our preference is for phased deliverables, with some findings available reasonably early: this is likely to enhance the potential of this work for policy impact (by contrast with a study which releases no findings until the end of the contract).

We again note our interest (Section 3.2.1, question-and-answer 2) in developing criteria/guidance at three levels: 1) simple top-level criterion; 2) more complex but still manageable criterion set that can form the basis for definition of “minimum standards” for shared sanitation in urban contexts, to be applied by governments, development funders and implementing agencies like WSUP; and 3) structured narrative guidance on how to design and implement urban shared sanitation interventions. Your deliverables plan should take this into account. In the case of (3), we need this research to generate the content, but we are happy to do the text translation ourselves (WSUP), i.e. we create a guidance document or documents drawing on the technical publications arising from the research. [And we note that a useful document of this type is currently under preparation by the World Bank, such that one possibility would be to feed the findings of this research into a future version of the World Bank document.]

All deliverables (including draft-stage reports) should be written and laid out to publication-ready standard, with strong attention to clarity of structure, quality of wording, and professional layout; reports of poor quality will not be accepted.

If the researcher judges it necessary, WSUP will respect embargo on reporting findings to be published in a peer-reviewed journal. However, the Urban Sanitation Research Initiative is a policy influence programme, and WSUP will expect to be able to make public headline findings (typically understood to mean any content that is included in the Abstract, though with re-wording, and potentially including basic methodology detail and headline findings not included in the Abstract but required for reasonable understanding of the study’s central findings) before journal publication. We expect a mutually constructive approach on this: WSUP recognising that the researcher may not be able to make detailed findings public before journal publication, the researcher understanding that WSUP must have the option to immediately disseminate headline findings to key audiences. One approach which bidders may find useful is to commit to delivery of a 1-3 page summary report on findings for free use by WSUP and partners: this approach will ensure that the researcher maintains control over precisely what elements are made public and precisely which should be considered embargoed until journal publication (though this does not rule out the possibility of WSUP requesting additional information be made public if the summary omits detail necessary for headline understanding).

3.5 Schedule

This project is expected to be completed within at most 18 months of contract signature; bidders are free to propose a shorter timeframe if they consider they can complete the work to high standard more quickly.

Date	Milestone/deliverable
26 th January 2018	Bid release
26 th February 2018	Bid submission deadline (Monday 26 th February before UK 1700 hours)
10 th March 2018	Contract signature and start
10 th April 2018	Inception report (with full methodological detail, or indication of when full methodological report will be produced)
Main implementation phase	<i>[print and other dissemination deliverables, and schedule thereof, to be proposed by bidder; see guidance above; note our preference for phased deliverables, as opposed to everything-at-the-end]</i>
1 st July 2019 (18 months after start)	Final deliverables received. <u>Note 1:</u> The deliverables schedule proposed by the bidder should specify draft report submission dates as well as final report submission dates, with draft reports submitted to WSUP for review at least 4 weeks prior to the final submission date; final reports will be expected to respond adequately to review/improvement comments from WSUP and other reviewers identified by WSUP. <u>Note 2:</u> Where a deliverable is an article for submission to a peer-reviewed journal, this should be submitted to WSUP and partners in draft and final form, like other types of deliverable. ³³

This is an 18-month project with no possibility of costed or no-cost extension, and research design will need to take this into account.

4 Team profile

We are happy to consider any proposed team structure (i.e. any combination of universities, research institutes, research consultancies or individual consultants, with any geographic distribution) that provides the required skills and capacity: however, in all cases this must be a single team (we are not able to consider separate bids for work in individual countries), and we require a single prime through which all contacts, contract negotiation and invoicing should be managed. The prime should be able to achieve strong presence in each country (whether through existing own-staff, or through subprimes or subcontracting or other arrangement). The research lead [probably but not necessarily employed by the prime] should have **a)** strong understanding of urban sanitation in general and shared sanitation issues in particular, **b)** strong understanding of large-scale survey design, of the smaller-scale qualitative social science approaches likely required to ground large-scale survey design, and of the multivariate statistical techniques likely required for effective delivery of this research, and **c)** demonstrable capacity to manage a significant multi-country research project. It may not be necessary for the research lead to be expert in all of these areas (for example, statistical expertise may come from another team member), but strong concept understanding across all areas will be essential. As noted, qualitative social science skills are likely to be important: this is quantitative research in terms of final outcome, but it will require a nuanced understanding of the psychological and social complexities of assessing how “acceptable” a toilet is. We are happy to respond to queries about team structure during the bid preparation period.

³³ We do not require research papers to be submitted to the named journal/s by the specified deliverable date; but we will non-contractually expect publication, and will favour bidders who have a significant academic publication record and own-incentives for prompt journal publication. We (WSUP, and the partners of the Urban Sanitation Research Initiative in each country) expect to have full opportunity, with sufficient time allocation, to review and respond to research papers in journal article format; WSUP reserves the right to withhold corresponding payment until we are satisfied with the quality of each paper, which may require no modifications, minor modifications, or major modifications. Our focus will be on methodological/intellectual quality and readability; if there is any disagreement about interpretation of findings and questions of judgement, we will request that our views be given sensible consideration, but in the final analysis respect the researchers' academic independence.

5 Intellectual property and academic independence

This is an academic research contract, and as such the researchers will retain full intellectual property rights for this research, subject to the deliverables requirements indicated above, but with full rights granted to WSUP immediately and in perpetuity to reproduce and use the findings of the research as WSUP deems fit, including in WSUP publications drawing on the research findings, and including by partners of the Urban Sanitation Research Initiative. In any use by WSUP or partners of findings arising from this research, the researchers will be duly credited. For full details of intellectual property rights, bidders should review WSUP's standard Research Agreement, available on request. [See also comments above under Section 3.4, in regard to publication of headline findings by WSUP and partners before journal publication.]

In the event that this work looks at shared toilets supported by WSUP, WSUP guarantees absolute academic independence to the researcher, with the researcher free to publish any judgement that they see fit. Nonetheless, WSUP and the partners of the Urban Sanitation Research Initiative require opportunity to review, before submission, all publications arising from this research, and (notwithstanding that we will in the final analysis fully respect academic independence), we expect that our views be given sensible consideration.

6 Reporting and liaison

The Task Manager for this work will be Guy Norman (WSUP Director of Research & Evaluation). Close liaison will also be expected with WSUP's Research & Policy Leads in each country (Farzana Begum, Bangladesh; Azzika Tanko, Ghana; Josphine Maina, Kenya), and with the Urban Sanitation Research team in London (Research Officer Rosie Renouf, Research & Evaluation Manager Sam Drabble).

7 Contract terms

A standard WSUP Research Agreement format will be used, subject to the Researcher's agreement with the terms. Where the bidder is a consortium, a contract (Research Agreement) will be signed with a single prime; we cannot consider multiple contracts under a single Call. This means that we are not able to consider individual bids for the individual countries included in this research.

8 Payments

8.1 Payment schedule

Payment will be 20% on contract signature, 50% on acceptance by WSUP of substantive midterm deliverables [*to be negotiated with selected bidder*], and 30% on acceptance by WSUP of final version of final deliverable. All payments will require prior invoicing.

8.2 Budget

Up to GBP 300,000, inclusive of VAT (sales tax) or other taxes; this amount will be expected to cover all costs including travel costs, and the full costs (including venue and participant travel costs as required) of any workshops or similar meetings; bidding organisations' indirect costs; any sub-contracting of staff; and the full costs (travel and time) of any visits to WSUP's offices (if judged

necessary and included in the proposal). Over and above this budget, WSUP will additionally consider bearing a cost of up to GBP 1,500 per article for journal publication, if the selected journal/s for publication of this research require payment for open-access; this will be subject to specific negotiation with the selected bidder (likely including a time-limit of article acceptance for publication within 6 months of the termination of this contract); our preference is for open-access journals which don't require payment, but this is not a strong preference if the most appropriate journal/s require payment.

9 Bidding procedure

Bid format is designed to make bidding relatively easy, with a focus on the proposed methodology. Bids should be submitted to erl@wsup.com before UK 1700 hours (5 pm) of Thursday 1st March 2018. We stress the importance of adhering strictly to the instructions below, including word counts; we do not expect anything else (e.g. standard blurbs) over and above the requirements indicated.

9.1 Bid format

The bid document should contain only the following numbered sections:

- 1) **Name of lead bidding organisation**
- 2) **Name and email of primary contact**
- 3) **Brief summary of relevant experience of lead organisation and other participating organisations or key individuals, indicating and describing 3 recent most-relevant projects** (*max 750 words*)
- 4) **Statement of the justification for and aims of this research as expressed by the bidder.** We are interested primarily in academic/policy-influence justification, not ethical justification (*max 500 words*)
- 5) **Statement of the approach and methodology to be used.** This statement can include decisions left open pending more detailed analysis, but we encourage bidders to develop a strong methodology (including clear statement of the duration and likely scheduling of all work including in-country work). [See also Appendix A.] (*max 2500 words*)
- 6) **Statement of the available start-up date and anticipated final completion date.** See Deliverables section.
- 7) **Statement of anticipated day allocations of all participants in the research.** Include any sub-contracted participants, with participants named as far as is possible.
- 8) **Summary budget breakdown in tabular form.** Clearly indicate total budget (maximum GBP 300,000 inclusive of all taxes, all expenses and any subcontracted costs).
- 9) **Indication of first-choice named open-access journal/s for publication of this work.** Please indicate any requirement for payment for open-access.

You should also separately attach the following two documents:

A) Up to five CVs including **a) the overall lead researcher** (i.e. person who will take primary responsibility for design and management oversight of this research, and for research journal publication), **b) the lead researcher in each country**, and **c) the person with highest allocation of days.** [*This may in some cases be the same person.*]

B) A completed copy of the Core Requirements Form: see Appendix A.

In summary: your submitted bid should comprise 2 documents plus 1-5 CVs.

Please name your files as follows, where XXXXX is a single-word no-spaces summary bidder name (e.g. JENKINSON, CUNIKRI, URBANRT) of up to 10 letters:

XXXXX-bid
 XXXXX-core-requirements-form
 XXXXX-CV1 (etc)

9.2 Bid scoring criteria

Bids will be scored on the following criteria:

CRITERION	Points
a) Adherence to requirements for bid format and demonstration of clear writing/formatting skills	10
b) Quality and appropriateness of research team, as evidenced by Bid Sections 3, 7 and CVs	30
c) Strength of understanding of the research concept, and strength of methodology, as evidenced by Bid Sections 4 and 5	30
d) Demonstration that this research will effectively meet the core requirements, as evidenced by the Core Requirements Form (Appendix A)	20
e) Value for money within available budget	10
TOTAL	100

9.3 Pre-submission queries

We are very happy to respond to clarification queries of any sort prior to bid submission: please email erl@wsup.com. Where we consider that the response to a query should (for reasons of fairness) be shared with all bidders, we will do so by emailing all bidders who have already contacted us to express an interest in bidding: so if you want to be included in any such mail-out, please let us know promptly.

We thank Rob Dreibelbis, Eddy Perez, Andrés Hueso and Tom Slaymaker for verbal comments and review that were very helpful in development of this call.

Appendix A: Core Requirements Form

As indicated in Section 9.1, all bids should include a completed copy of this Core Requirements Form, which asks you to briefly clarify how your proposal will meet the three core requirements of research under the Urban Sanitation Research Initiative, as outlined in Section 3.4.

Requirement 1: Research must fully meet relevant research ethics requirements

All research must be carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and with best practice in the country or countries in which research is carried out. We note that some types of research (*for example, a study involving invasive treatments or biopsy sampling of human subjects*) will have extremely stringent research ethics requirements; other types of research (*for example, a desk study of institutional frameworks*) will have minimal research ethics requirements, beyond the need for due rigour, balance and consultation, and informed consent in any interviews; other types of research (*for example, a study involving household survey to collect information about slum communities*) will have research ethics requirements intermediate between these two extremes. We note also that researchers must take full responsibility, at the bidding and research implementation stages, for ensuring that relevant research ethics requirements are duly met, in letter and in spirit.

QUESTIONS YOU NEED TO ANSWER: How will you ensure that your research is carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and best practice in the country or countries in which research is carried out?

write here, maximum 150 words (please adhere strictly to this maximum word count)

Requirement 2: Research design should pay careful attention to gender equality/equity considerations

Bidders should explicitly ensure that their proposed design, analysis and research-into-policy work is taking full account of gender equality and equity. This is NOT a tick-box requirement for “including gender” in all research (indeed, bids may be scored down for “including gender” in tick-box ways which unhelpfully divert the research from its primary focus). Rather, our goal is to ensure that all bidders demonstrate that they have given serious thought to the possible implications of their research for women and girls, and include gender considerations in appropriate ways where this is important to exploration of the primary research question/s.

i) If this research in any way develops, or feeds into development of, a sanitation technology, sanitation service delivery model or sanitation policy, then this should be done in ways that ensure that that technology or model or policy fully meets the needs of women and girls; specific requirements of women and girls (including, but not restricted to, menstrual hygiene management and safety after dark) should be given due attention.

ii) If this research in any way assesses sanitation service quality, or recommends ways in which sanitation service quality should be assessed, then this should be done in ways that fully explore and disaggregate possible differences in sanitation service quality as experienced by women and girls and by men and boys; again, specific requirements of women and girls should be given due attention.

iii) If this research in any way uses or promotes some form of community consultation or expert consultation, then this should be done in ways that ensure that women’s voices are heard as loudly as men’s.

iv) More generally, researchers should interrogate their designs to consider gender implications in all respects and at all levels: for example, a WTP study might (or might not) find it relevant and useful to explore whether WTP differs between women and men; an organisational capacity study might (or might not) wish to explore whether women are represented in high-level decision-making. Again, we stress that we do not require tick-box “inclusion of gender” in all projects; rather, we require that bidders give serious thought to possible gender implications, and include gender-disaggregational elements or other gender-related considerations in their design and analysis where this is important to exploration of the primary research question/s.

QUESTIONS YOU NEED TO ANSWER: In what ways are gender considerations relevant to your proposed design, analysis and research-into-policy work? If you have included gender-disaggregational elements or other gender-related elements in your design, please briefly list these elements.

write here, maximum 150 words (please adhere strictly to this maximum word count)

Requirement 3: Research-into-policy should be considered a core element

Research-into-policy should be considered a core element at all levels and stages of research design; not an after-thought once the “real research” has been completed. Bidders should demonstrate that they have given serious thought to policy influence and policy translation of their findings: this may include [*among other possible elements*] **a)** appropriate consultation at the start-up phase, to ensure that key actors are “on board”, or at least that their needs and attitudes have been meaningfully taken into account; **b)** detailed analysis at the design stage of policy context and policy-influence aims and challenges, with consideration of relevant specific aspects such as “windows of opportunity”; **c)** detailed analysis of how in-country actors might need to be involved in the research and/or its subsequent dissemination, in order to maximise chances of policy influence outcomes; **d)** due consideration of dissemination of methods and findings throughout the project, not just at the end; and **e)** inclusion within the team of individuals with specific responsibility for editing to ensure high-quality text. Larger projects may choose to include individuals with specific responsibility for policy translation. We note that WSUP Research & Policy Leads in each of the research countries will expect to be closely involved in research-into-policy work, and you can depend on some support in this area: this can reasonably include WSUP responsibility for preparation of non-academic publication materials summarising key aspects of aims, methodology and eventual findings. [*Here we draw attention to Section 8.2, which states i) that any workshop events included within your bid must be fully funded from your budget, but ii) that WSUP will consider requests over and above budget to cover the costs of open-access academic publication.*]

QUESTION YOU NEED TO ANSWER: In what ways does this project ensure a pro-active research-into-policy focus?

write here, maximum 150 words (please adhere strictly to this maximum word count)

Please submit a completed copy of this form attached as a separate file to your bid.