This research project, commissioned under WSUP’s Urban Sanitation Research Initiative, aims to assess the extent to which slum-dwellers can be expected to bear the financial costs of high-quality sanitation, and at the same time to generate information of specific value for sanitation planning in three cities in Bangladesh, Ghana and Kenya. The three cities are provisionally identified as Rangpur (Bangladesh), Ga West (Ghana) and Malindi (Kenya), but other well-justified proposals will be considered (one city per country). The primary question to be explored by this research is “how does low-income-consumer willingness-to-pay relate to full lifecycle costs and price-to-consumer of available high-quality sanitation options?” (see main text for a more detailed statement). The research should deliver parallel assessments of a) the full life-cycle financial costs of different existing or candidate sanitation improvement options in low-income areas in each city, as well as current or projected prices charged to low-income consumers, and b) detailed analysis of low-income people’s ability and willingness-to-pay in each city (considering the different sanitation improvement options), allowing c) identification of financing gaps that likely need to be covered by some form of subsidy or cross-subsidy. The work will aim to provide data and analysis directly useful in these three countries, notably i) as a basis for assessment at national and city level of scope and opportunities for private sector contribution, ii) as a basis for assessment at national and city level of public finance requirements and mechanisms, and iii) as partial data input into more comprehensive future city sanitation investment planning activities. In addition, the work should aim to generate internationally valuable learning through wide data collection and analysis under a common framework. The methodology required for this research will be complex and challenging to develop: we here outline an envisaged approach, based on our own non-expert understanding of this research domain, but we are open to other approaches that can respond effectively to the primary research question. This work will run parallel with, and/or feed into, other research under the Urban Sanitation Research Initiative, in areas including market development, public finance mechanisms and city sanitation investment planning. In at least one of the cities included in this contract, we expect in future to commission related research developing a sanitation investment planning methodology.

**Maximum budget under this Call**: GBP 360,000

**Bids due**: Before UK 1700 hours on Friday 1st December 2017
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 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),1 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 4, though is also relevant to the other areas, notably 1 and 3. 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

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1 Currently the EHSD is transitioning from the Ministry of Local Government and Rural Development (MLGRD) to the newly created Ministry of Sanitation & Water Resources (MSWR).
2.1 Sector influence aim

To support sanitation policy development in the three countries and in particular to provide a firm financial analysis basis that contributes to city sanitation investment decisions in the three selected cities and nationally, and that supports assessment of public finance requirements for pro-poor urban sanitation improvement. In addition, this study should generate useful international learning, including with reference to financing requirements for achieving the sanitation SDGs.

3 Work required under this contract

3.1 Background

As noted in the 2017 overview document for the Urban Sanitation Research Initiative (available for download from www.wsup.com/research), there is weak understanding of the life-cycle costs of different sanitation models and of elasticity in consumer demand; it is thus difficult to assess the space for market solutions, and the requirement for public finance. Trémolet (2012)2 argues for wider application of cost-benefit analysis in sanitation research and sanitation investment planning, suggesting that key areas of research should include improving estimates of benefits and comparing benefits with costs of sanitation in a broader range of countries and local contexts. In a review commissioned for this initiative, Daudéy (2017) reports that studies of sanitation costs have used inconsistent methodologies, and many such studies focus only on capital costs, or do not report data on desludging, transport and treatment. Daudey notes that comparative analysis of raw cost data across countries is in any case of limited value, owing to the numerous determinants of costs and their context-dependence; as a result, there is a need for sanitation cost databases at country and even city level (see also Hutton & Chase 2016). Duflo et al. (2012) identify willingness-to-pay (WTP) as one of four key areas for research, noting that it may be affected by disparities in how much the product or service is valued by end-users, and by the household member in charge of purchasing decisions: in some situations, women may value a product or service more than men, but not take the purchasing decision. Relating to the relationship between costs, WTP and public finance, Trémolet (2012) suggests that to design better actions, we must improve our knowledge of what needs to be financed.

WSUP's own implementation experience is that, in most contexts, effective pro-poor urban sanitation solutions will require a mix of market finance (essentially equivalent to what poor householders pay from their own pockets, either directly or through their rent) and subsidy finance (from donors; or more sustainably from taxation-derived government funds, or from direct “rich-to-poor” cross-subsidy within tariff systems): without some form of subsidy, it seems unlikely that the market alone can deliver effective citywide sanitation. However, there is weak understanding (in specific contexts and internationally) about the size of the financing gap, and consequently weak understanding both of the opportunity for market solutions and the magnitude of the requirement for subsidy finance. A study which applies a consistent methodology and analysis in three different locations can contribute to better understanding of these issues.

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2 Trémolet S (2012) Sanitation markets: Using economics to improve the delivery of services along the sanitation value chain.
Duflo E, Galiani E et al. (2012) Improving access to urban services for the poor: open issues and a framework for a future research agenda.
(all can be accessed by googling)
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 question to be explored by this research is “how does low-income-consumer willingness-to-pay relate to full lifecycle costs and price-to-consumer of available high-quality sanitation options?” The primary research aim of this study is to explore in depth, in three locations, the relationship between low-income-consumer WTP and sanitation solution cost, in order to draw location-specific and generalisable conclusions about the viability of commonly proposed solutions, and to assess financing gaps that would need to be filled by some combination of i) cost reduction (= benefit reduction?); ii) demand (WTP) enhancement (what is the ceiling to this?); iii) revenue generation from faecal waste, blackwater or urine; or iv) subsidy.3 Underlying broader questions are “can low-income urban citizens afford the sanitation solutions on offer to them?”, “can high-quality poor-inclusive urban sanitation systems be delivered without subsidy?”, and if not “how much subsidy is required?”. Questions around where any such subsidy might come from, or exactly how it might be targeted, are likely outside the reasonable scope of the present research contract.

We do not expect this research to generate comprehensive costing of candidate city-wide sanitation improvement options, as this would not be feasible within the available budget. Rather, the research should focus on the more specific research question defined, likely focusing on a small but representative subset of low-income locations in each city, and likely looking at a small but representative subset of candidate sanitation options (existing or projected) in each location. This will certainly raise conceptual and methodological challenges that will need to be tackled at the proposal stage and subsequently, including i) challenges around how to delimit the scope of costing, in a way that generates sufficient understanding of lifecycle cost components without extending into full-scale city-level costing of sanitation improvement scenarios (see Section 3.2.8b below), and ii) challenges around deciding whether to assess existing sanitation options or projected sanitation options (see Section 3.2.3 below). The research will also almost certainly require structured consideration of landlords, tenants and owner-occupiers, and of transfer of costs from landlords to tenants; within this Call, the term “householders” should be understood in a broad sense to include landlords where it is the landlord's WTP that is relevant (see Section 3.2.5 below).

As noted in the summary paragraph at the start of this Call, WSUP expects in future to commission related research developing a sanitation investment planning methodology in one of the cities included in this research. This will involve more comprehensive costing of city-wide sanitation improvement scenarios than can be achieved in the present study, which is more focused in scope. [We certainly understand that focusing on low-income communities only, as in the present research, is not a sufficient basis for city-wide sanitation planning; however, it can provide partial information useful for city-level planning.]

In Sections 3.2.2-3.2.7, we outline our anticipated approach to this work. However, we are open to considering different approaches that respond to the primary research question as worded above; any such alternative approach would need to be strongly justified, and should extend across the 3 countries. Indeed, we are open to proposals which argue for some wording modification of the primary research question, if bidders consider that an alternative phrasing would better meet the spirit of this Call; in that case, we would certainly advise bidders to contact us previously to confirm that the question aligns with our understanding of the spirit of the Call.

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3 We stress that we are here referring to subsidy in a broad sense, potentially including direct subsidy to householders, but also any other type of subsidy support that reduces price to householder: for example, public investment in faecal sludge management infrastructure or services may reduce the pit/tank-emptying prices charged to householders, by reducing the costs that the market has to bear.
3.2.2 Selection of cities

This Call covers parallel research in three cities. The three cities have been initially identified as Rangpur in Bangladesh, Ga West in Ghana, and Malindi in Kenya. We are willing to consider proposals for other cities (one city in each of the three focus countries), if bidders provide strong justification, likely including positive institutional setting for citywide sanitation planning, and strong prospects for major investment for sanitation. In order to tie this work to ongoing and future WSUP work and capacity support, we will prefer cities in which WSUP already has a presence. We note, for bidders’ information, that we have identified Rangpur because it is a relatively small city with strong municipal interest in urban sanitation improvement; by contrast, Dhaka is probably too large for a focused study of this type, and the institutional and financial barriers to effective sanitation planning are daunting. Similar reasoning lies behind our identification of Ga West and Malindi. In all three cities, WSUP has good relationships with municipal authorities and other actors, and we are confident that this research would be well supported, and would have good prospect of feeding into practice. If bidders do propose alternative locations, we request (in addition to strong justification) indication of whether the proposal is absolute (“we are only interested in doing this research in the new locations we propose”) or flexible (“we prefer the new locations, but would also be happy to do this work in the locations initially proposed by WSUP”).

3.2.3 Selection of sanitation options for analysis

In line with the primary research question (“how does low-income-consumer willingness-to-pay relate to full lifecycle costs and price-to-consumer of available high-quality sanitation options?”), we would initially anticipate that this research will identify perhaps 3 sanitation improvement options in each city, and carry out an in-depth analysis of full lifecycle cost, price-to-consumer and WTP for each, with data collection focused in a defined representative subset of low-income communities within the city. Each of these three data-and-modelling areas (lifecycle cost, price-to-consumer and WTP) are discussed in more detail below: this section considers the definition of “available sanitation improvement options”. First, we anticipate that a sanitation improvement option will be defined at the end-user level (rather than the city-wide level): for example, the options available might [depending on context, of course] be a) construction of shared sanitation facility with septic-tank-emptying service, or b) rental of container toilet with emptying service, or c) connection to sewerage system.4 Second, a sanitation improvement option might be a currently available option, or a currently available option with some projected future modification, or a projected new option; clearly, a focus on current options will enable more rigorously empirical data collection; conversely, a focus on projected options may be more meaningful if current options are not of sufficient quality in terms of user experience and public health; researchers will have to deal with this issue in some defined and systematic way that is consistent between the 3 cities.5 Third, the options may or may not include options currently supported by WSUP (and certainly, if WSUP-supported options are included in the analysis, we will not in any way push the researchers towards findings favourable for WSUP’s promotion of those options; see Section 5). In general, we would encourage researchers to select for analysis sanitation improvement options which a) enable detailed empirical assessment of cost, price and WTP data; b) are high-quality options in terms of user experience and public health (see Section 3.2.8.b); and c) together create a comparison set that is useful to local decision-makers thinking about the way forward. A possible (not required) approach would be to select closely parallel sanitation options in each city, favouring cross-country comparison. The WSUP team and relevant partners of the Urban

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4 These are just examples of sanitation options that might be looked at; this is not in any sense our particular preference. It is absolutely possible that researchers may choose not to identify the sanitation options at bidding stage, but identify them subsequently. With regard to sewerage, see also Section 3.2.8.d.

5 Hybrid approaches may be possible: for example, researchers might choose to analyse 3 existing options, and then apply projected change scenarios to some aspect/s of that option (e.g. the nature of the infrastructure or service, the management model, and/or the financing arrangement).
Sanitation Research Initiative will be happy to provide close support to identification of sanitation options for inclusion in the study, if the researchers judge this useful.

### 3.2.4 Lifecycle cost estimation

Within the restricted subset of sanitation improvement options selected for analysis, the study should deliver a detailed and comprehensive assessment of the lifecycle financial costs (to all stakeholders including householders) of different candidate sanitation solutions. Bidders will be expected to indicate a defined conceptual framework and approach for lifecycle cost analysis, and will be expected to apply a consistent methodology across the 3 countries of study. We expect empirical cost estimation to focus primarily on upstream components of the sanitation chain, with more approximative approaches used for downstream components (i.e. we would consider detailed empirical assessment of the costs of a major treatment facility to be almost certainly outside scope); bidders will therefore need to outline a reasonable approach for dealing with this. Cost estimates can of course be affected by multiple factors including assumed time horizon, projected cost reductions resulting from scale-up, assumptions about future input costs (e.g. fuel costs), etc. The methodology may need to incorporate confidence levels for different cost components, and possibly apply some sort of analysis of sensitivity of outcome values to error in input values. Independently of the technical methodology for costing, we anticipate that this component of the work will likely require an initial analysis, including stakeholder consultation, to identify the “decision menu” of solutions that will need to be included in the study (see Section 3.2.3 above); this may require some sort of modular approach (to give a simplified example: Treatment Option A might be linked to Toilet Option X, or Toilet Option Y, or to a defined mix of X and Y). Cost analysis may require consideration of the city’s topographical map and demographic data, for example in order to estimate distance-related costs (e.g. sludge trucking costs). Cost estimation should be based on detailed analysis of component financial costs borne by different stakeholders, using strongly empirical methods as far as possible (for example, detailed analysis of the costs of previous interventions).

### 3.2.5 Price-to-consumer estimation

For each candidate sanitation solution included in the costing analysis, it will be necessary to assess price-to-consumer. As noted, the relevant consumer may be an owner-occupier, a landlord, a tenant, or some combination of these. We are of course interested in what consumers are currently paying or being asked to pay; but certainly, analysis of projected sanitation options, and estimations of financing gap (regardless of whether current or projected sanitation options are being considered), will require simple assumptions or more complex modelling of different pricing scenarios. Within analysis of financing gaps, price-to-consumer may in fact be viewed as a parameter which the researchers can vary within defined bounds: once the full lifecycle cost of a given sanitation option is known, there may of course be multiple ways of allocating that cost to different stakeholders (including low-income people themselves through direct payment or rent; their landlords; non-poor tariff payers providing cross-subsidy; domestic, commercial and industrial taxpayers paying into government budgets at city or national level; government from commercial revenues; and donors); and these allocations may vary over time. Diverse other complications may also need to be taken into account here, for example modality of payment: as is well known, people may find it easier to pay 10 cents a day (amounting to $3 per month) than (say) $2 as a single monthly payment.

### 3.2.6 WTP estimation

The study should deliver a detailed empirical assessment of consumer willingness to pay for the different sanitation solutions. Again, WTP estimation is not straightforward, and bidders will need to indicate a defined conceptual framework and approach, which will need to tie in to lifecycle cost estimation and price-to-consumer estimation/modelling, and this framework and approach should be
applied in a consistent way across the 3 countries of study. Again, the relevant consumer may be an owner-occupier, a landlord, a tenant, or some combination of these. The WTP analysis may involve assessment of factors currently and potentially affecting WTP, and may certainly involve parallel assessment of plausible ability to pay; researchers may consider that assessment of ability to pay (as distinct from willingness to pay) is necessary to respond meaningfully to the primary research question. The methodology may need to estimate confidence levels for WTP assessments.

3.2.7 Analysis and modelling

We will strongly favour work that is based on extensive and rigorous empirical data collection. But we envisage that this work will inevitably require modelling work to incorporate assumptions in a structured manner, to project over time, to allow structured analysis of the effects of varying assumptions, and (importantly) to bring together the cost, price and WTP estimations into a coherent analysis that responds to the primary research question. Analysis may require cash flow modelling (and related types of modelling) of components of candidate systems. Modelling may also be required to assess impacts of different transfers of costs between stakeholder groups (e.g. rent increases by landlords, subsidy from government).

3.2.8 Additional clarifications

a) Is this a city sanitation planning exercise? No, this work is more focused in scope, aiming to respond to the primary research question defined above. City-level assessment of costs and WTP would require wider data collection and wider definition of city-level sanitation improvement scenarios, which would be beyond the budget and scope of the present project. Nonetheless, this work should certainly be designed to feed useful information into future city sanitation investment decision-making in the three selected cities. It is likely that, over the course of this project, WSUP will support further research around sanitation investment planning, alongside support for sanitation investment planning activities and associated capacity development, in at least one of these cities. We note in particular likely associated research around development of a planning methodology/tool which takes better account of pathogen flow pathways in urban sanitation investment planning. This present research will provide a substantive body of cost and WTP data to feed into this wider future analysis.

b) How should “high-quality sanitation” be defined? We consider this to be a centrally important question. Clearly, low-income consumers can be offered a cheap and affordable product or service which may give only the perception of better sanitation, or which may represent a real but only small improvement in the quality of their sanitation. However, this research should take as axiomatic that the aim is not to identify and cost solutions that the poor (or their landlords) are willing to pay for; but rather to identify solutions that are of high quality, and then assess WTP (and thus identify any financing gap). We do not pre-specify how high-quality sanitation should be defined, beyond noting a) that sanitation quality relates to both disease reduction but also multiple other aspects of well-being (including feelings of dignity, and the safety of women and girls to use the toilet at night), and b) that we favour a pragmatic context-specific approach, which may take account of WHO-UNICEF JMP categorisations, but which should not be uncritically bound by them (for example, people who live in tiny dwellings may simply have no space for a private toilet; for example, a septic tank might formally be considered as “basic”, but in fact be a significant source of pathogen release to the immediate local environment). We note also that the restricted scope of this research means that we would expect definition of sanitation quality to focus primarily on user experience and faecal contamination

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6 As noted in the 2017 overview document for the Urban Sanitation Research Initiative (available for download from www.wsup.com/research), there is strong evidence that urban sanitation impacts on health, but limited understanding of how sanitation investment planning can take into account faecal pathogen pathways. An ongoing study commissioned by us (Willetts 2017) interviewed a number of sector experts, and finds wide consensus that health impacts are not currently considered effectively in sanitation investment planning, due to multiple factors including uncertainty around how to do so.

7 See Evans et l. 2017 “Limited services? The role of shared sanitation in the 2030 Agenda for Sustainable Development”
of the immediate residential environment, with wider contamination issues (related to e.g. wastewater treatment plant discharge quality, or agricultural use of faecal wastes) treated as less central. As noted, the WSUP team and relevant partners of the Urban Sanitation Research Initiative will be happy to provide close support to identification of sanitation options for inclusion in the study (involving judgements about what sanitation options can be considered “high-quality”), if the researchers consider this useful.

c) How should “low-income consumer” be defined? We do not offer any prior definition of “low-income”, and this is of course relative and context-dependent. In general, it is not difficult to pragmatically identify low-income communities in cities in sub-Saharan Africa and South Asia (though often detailed mapping and census data for these communities is unavailable). We are here interested in sanitation solutions for slum communities including the poorest people (say the poorest 10%) in those communities; and those solutions should fully meet the needs of women and girls (see Core Requirement 2, Appendix A). We certainly do not expect this research to extend into mapping or wealth assessment of low-income communities, or into detailed aspects of technology and management design to ensure that sanitation options meet the needs of women and girls, or of specific disadvantaged groups; nonetheless, in the selection of sanitation options to be included in the analysis, researchers should be cognisant of these issues, and certainly we would consider it likely that ability/willingness-to-pay analysis would disaggregate by household wealth.

d) Can this study consider sewerage? Where sewerage (whether connection to existing mains, or some sort of lower-cost variant such as decentralised/condominial sewerage) is a genuinely plausible solution for low-income communities, researchers are absolutely free to include this as one of the options studied. However, projecting the costs of sewerage extension creates particular challenges, since it can only be accurately done through a sewerage design exercise taking into account topography and corresponding possible network layouts. Bidders may consider this to be beyond what is feasible under the available budget, and we will certainly accept proposals which focus only on non-sewered components of the sanitation system.

e) Should this study consider non-financial costs and benefits? No, this is not a cost-benefit evaluation, and research should focus on financial costs, not wider economic costs and benefits. Nonetheless, if the bidder feels that, for any reason, it is not meaningful to approach this study without some minor or major consideration of economic cost-benefit aspects, then we are happy to receive reasoned proposals including aspects of cost-benefit analysis. At the outset, however, we are centrally interested in the relationship between WTP and price-to-consumer, and we will only consider inclusion of wider economic cost-benefit considerations if there is strong justification for this. We certainly envisage that the findings of this study will feed into future sanitation investment planning processes which will take account of wider economic cost-benefit.

f) Will the researchers be expected to present a detailed methodology in the bid? We are aware that the required methodology for this work is conceptually complex, and researchers will not be expected to develop the full methodology at the bidding stage. We would however expect to see a strong methodological framework including indication of how the detail of the framework will be subsequently developed, and demonstrating strong researcher understanding of the concepts, methodologies and methodological challenges of lifecycle cost estimation, WTP estimation and financial modelling. We would anticipate that this work will need a strong international lead with primary responsibility for methodology development. We would expect methodology to be developed reasonably soon after contract signature: this is not centrally a methodology development project, it’s

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8 Here we note that that non-sewered sanitation systems may similarly have map-dependent networked elements: for example, design of an effective FSM system may need consideration of tanker routes and the location of transfer/disposal/treatment facilities in relation to those routes.
a data collection and analysis project which will require a strong, sophisticated and well-documented methodological approach.

g) Will other approaches be considered? As already noted, we are open to considering different approaches that respond to the primary research question as worded above; any such alternative approach would need to be strongly justified, and should extend across the 3 countries. An alternative approach might be a relatively minor modification of our proposed approach, or a substantially different approach. We are potentially open to research which focuses on analysis around a single sanitation option in each country rather than three (as suggested in Section 3.2.3); however, in likely competition with bids which look at three options, such an approach would need to be strongly justified. We are potentially open to proposals which argue for some wording modification of the primary research question, if bidders consider that an alternative phrasing would better meet the spirit of this Call; in that case, we would certainly advise bidders to contact us previously to confirm that the question aligns with our understanding of the spirit of the Call. In general, we encourage bidders to give careful thought to which aspects of this work should be a primary empirical/analysis focus, and which aspects will need to be based on existing data and pragmatic assumptions: such aspects might include the costs of treatment facilities, the definition of “low-income consumer”, and judgements about sanitation quality allowing identification of the “high quality” solutions to be included in the study.

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 potentially be included with the inception report, but we suspect that it will probably require more time]; c) brief monthly email updates on progress; and d) short (3-5 page) six-monthly Word reports on progress/achievement/challenges (so probably three such reports under the present contract). Over and above these routine deliverables, the major deliverables should be defined by the researcher in the bid, in view of proposed methodology and approach. Generation of at least 1 (preferably 2 or 3) articles in a high-impact peer-reviewed journal is a requirement under this contract. Bidders may also 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 these types of report (e.g. we write the 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).

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 full 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 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. We would anticipate that work would run in parallel in the three cities; however, this is not an absolute requirement.

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<thead>
<tr>
<th>Date</th>
<th>Milestone/deliverable</th>
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<tbody>
<tr>
<td>1st November 2017</td>
<td>Bid release</td>
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<tr>
<td>1st December 2017</td>
<td>Bid submission deadline (Friday 1st December at UK 1700 hours)</td>
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<tr>
<td>15th December 2017</td>
<td>Contract signature and start</td>
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<tr>
<td>15th January 2018</td>
<td>Inception report (full methodological detail not yet required)</td>
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<tr>
<td>15th March 2018</td>
<td>Full methodological detail developed and submitted</td>
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<tr>
<td>Main implementation phase</td>
<td>(print and other dissemination deliverables to be proposed by bidder; see guidance above; note our preference for phased deliverables, as opposed to everything-at-the-end)</td>
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<tr>
<td>1st June 2019  (18 months after start)</td>
<td>Final deliverables received. <em>[Note 1: 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. Note 2: 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 deliverables.]</em></td>
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*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."
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 expertise in cost analysis, WTP assessment and financial modelling in the urban sanitation context, and b) demonstrable capacity to manage a significant multi-country research project. Qualitative social science skills are also likely to be relevant: this is quantitative research, but will require a nuanced understanding of the social reality of low-income communities and the political reality of institutions. We are happy to respond to queries about team structure during the bid preparation period.

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 sanitation options 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 Managers for this work will be Sam Drabble (WSUP Research & Evaluation Manager) and 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).
### 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 360,000, 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 subcontracting 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).

### 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 Friday 1st December 2017. 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 Section 3.3 and 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 360,000 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.

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**In summary: your submitted bid should comprise 2 documents plus 1-3 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)

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### 9.2 *Bid scoring criteria*

Bids will be scored on the following criteria:

<table>
<thead>
<tr>
<th>CRITERION</th>
<th>Points</th>
</tr>
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<tbody>
<tr>
<td>a) Adherence to requirements for bid format and demonstration of clear writing/formatting skills</td>
<td>10</td>
</tr>
<tr>
<td>b) Quality and appropriateness of research team, as evidenced by Bid Sections 3, 7 and CVs</td>
<td>20</td>
</tr>
<tr>
<td>c) Strength of understanding of the research concept, and strength of methodology, as evidenced by Bid Sections 4 and 5</td>
<td>30</td>
</tr>
<tr>
<td>d) Demonstration that this research will effectively meet the core requirements, as evidenced by the Core Requirements Form (appendix A)</td>
<td>10</td>
</tr>
<tr>
<td>e) Rapid start-up and commitment to deadlines, as indicated by Bid Section 6</td>
<td>10</td>
</tr>
<tr>
<td>f) Cost</td>
<td>20</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
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.
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 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.