PO 7123 Volume 2 – Terms of Reference - ENERGY SECURITY AND RESOURCE EFFICIENCY PROGRAMME: REAL TIME LEARNING PROCESS

1. About DFID

1.1 The Department for International Development (DFID) mission is to help eradicate poverty in the world's poorest countries and this is underpinned by our set of values:

- Ambition and determination to eliminate poverty
- Ability to work effectively with others
- Desire to listen, learn and be creative
- Diversity and the need to balance work and private life
- Professionalism and knowledge

1.2 DFID wishes to work with Service Providers (SP) who embrace the above, and also demonstrate Corporate Social Responsibility (CSR) by taking account of economic, social and environmental factors. These practices, whether operated locally, regionally or internationally, should also comply with International Labour Organisation (ILO) core standards on labour and social matters.

2. Introduction

2.1. The International Climate Fund (ICF) is a £2.9bn fund which is managed jointly by the Department for International Development (DFID), the Department of Energy and Climate Change (DECC), the Department for Environment, Food and Rural Affairs (Defra) and the Foreign and Commonwealth Office (FCO). Through the ICF, the UK will provide a total of £20m over four years (from 2015-2019) to build resilience in Somaliland through the Energy Security and Resource Efficiency programme (ESRES). The programme is aimed at helping Somaliland diversify its energy mix with the introduction of a renewable component in the form of 'Green mini-grids'[1]. It aims to build resilience to resource shocks (fuel imports) and enhance the sustainable use of resources. ESRES will support innovative renewable energy and energy efficient technologies, governance approaches and business models to provide improved access to electricity – and, by extension, to essential services dependent on electricity – to local communities in Somaliland.

2.2. The programme will be implemented in two Phases. Phase 1 aims to establish 3-5 mini-hybrid grids and establish a Renewable Energy (RE) fund to support private and public projects as well as provide technical assistance (TA) to the Government of Somaliland (GoSL), Ministry of Energy and Minerals (MEM). Phase 2 will involve expansion and management of the renewable energy fund. Phase 1 will include a pilot phase (30 months) followed by an expansion stage (Phase 2). (BC annexed).

2.3. The program is currently under tender with an implementing partner scheduled to be appointed in June 2015. DFID seeks supplier services (SP) to undertake a Real time learning process (RTL) for the ESRES and to co-ordinate with the implementing partner to inform real time programme implementation. This ToR focuses on undertaking a Real Time Learning process for Phase 1 (2015-2017). The RTL will provide recommendations on whether the programme should continue beyond the pilot phase.

---

[1] Green Mini-grids are village or district level electrical distribution networks serving multiple consumers, powered by either fully renewable or diesel-hybrid generation, and either unconnected to the main grid or interconnected in such a way that autonomous operation is possible

3. Objective and Scope

ESRES is an entirely new programme for Somaliland, trying to do something that has not been done before in a Fragile and Conflict Affected State (FCAS). It aims to introduce 3-5 mini-hybrid grid pilots across multiple sites in Hargeisa, and potentially beyond and improve capacity in the Ministry of Energy and Minerals to develop a regulatory framework by December 2017. It will also establish a renewable energy fund in the final year of the pilot phase with the aim that Independent Power Providers (IPPs) in Somaliland will show interest in the pilots and in taking up this technology in future. The six key objectives of the ESRES Real time learning process are:

3.1 To assess whether ESRES hybrid mini-grid pilots can provide access to affordable green energy for communities in Somaliland;

3.2 To examine capacity building in the Somaliland Ministry of Energy and Minerals (MEM) designed to lead to the development of a regulatory framework for the provision of electricity;

3.3 To explore likely adoption of hybrid mini-grids by Independent Power Providers (IPPs) in Somaliland;

3.4 To generate and use real time learning to update the ESRES theory of change and improve programme implementation during phase 1;

3.5 To use evidence to produce recommendations for the design and implementation of ESRES Phase 2 To gather and disseminate robust evidence on the feasibility and challenges of hybrid mini-grids in Somaliland highlighting, where appropriate, lessons of wider applicability in other FCAS;

3.6 To undertake DFID annual reviews of the ESRES programme and Project Completion Reports if required.

3.7 While most ICF programmes report against a common set of ICF Key Performance Indicators, given the nature of the ESRES programme it is considered unreasonable to expect high levels of results against the KPIs.

3.8 Examination of the RTL key review questions may lead to questions or recommendations around ESRES governance and management arrangements, and if these arise they would clearly be important to capture.

4. Recipient

4.1 The ESRES Phase 1 implementing partner, the GoSL and the IPPs in Somaliland are the main recipients as ultimately the RTL work is about improving the efficiency of the ESRES pilot. DFID Somalia, DFID Climate and Environment Department and The ICF Board will be secondary recipients of the Real time learning process. GoSL Policy and management stakeholders will have a particularly strong interest in the findings and would play a key role in taking any agreed recommendations forward, including: the Minister of Planning, Minister for Energy and Minerals, Minister of Environment

4.2 Equally, the RTL process will provide lesson learning of interest widely, and the report will be made publicly available in order to ensure that future renewable energy projects in FCAS by the UK or by others can benefit from the lessons learnt through ESRES. .

4.3 The ultimate beneficiaries are the programme beneficiaries in partner countries, whose lives will be improved through improved access to electricity.

5. Evaluation Criteria that will be addressed via the RTL process
5.1 The more detailed questions of interest for the real time learning process are identified below, with the OECD-DAC evaluation criteria as the guiding framework (this will be separate from the evaluation criteria used to assess tender submissions. For each criterion there is an overarching question and then example sub-questions which will help address the broader question. While the broad questions are not expected to change significantly, the evaluators will have some ability to influence the sub-questions – and we also anticipate the implementing partner may raise issues to explore too that will help improve their operations. It is envisaged that the study reference group (see section 11) will take decisions on any proposed changes to the evaluation questions:

The broad analytical framework for the RTL is outlined below. Within this structure, the key RTL questions (in bold, numbered 1 to 4) and sub-questions indicate the expected coverage of the RTL.

 As detailed below, the RTL process should involve a wide range of stakeholders and this may lead to modifying or adding some sub-questions, and if so changes should be agreed with the DFID Somalia Management Team during Phase 1 of the programme. .

DAC evaluation criteria	Questions
Relevance	***Is ESRES an appropriate response to meeting the energy needs of poor Somalilanders in a sustainable way?*** Eg: - Is ESRES aligned to Somaliland's strategic priorities? - Does the programme fit with what others are doing? - Is the selection of pilots appropriate? Are poor communities likely to benefit? - Do the pilots demonstrate a sufficient understanding of the political economy /security context in which they operating? - Is the capacity building work targeted appropriately? - Is there appropriate engagement with IPPs? - Has the price of electricity reduced in areas where the pilots are located?
Effectiveness	***Are the expected results likely to be delivered based on an assessment of whether the theory of change is being realised in the early stages?*** - E.g. - Does the programme attract appropriate technical personnel? - Does the programme have appropriate governance and financial arrangements? - What are the challenges (institutional, political, technical, financial, etc) facing the mini grid pilots? - How receptive is the Ministry of Energy and Minerals to the capacity building work? - To what extent do Independent Power Providers show interest in the pilots? - Are the key underlying assumptions in the theory of change holding true? - How flexible and dynamic is the programme in responding to

	changes in context? - Which pilots are working best/ worst and why? - What does pilot monitoring data show in terms of delivery of affordable electricity to communities? How is the gender sensitivity? Can findings be verified by visiting communities? What are people doing with the electricity?
Efficiency	***To what extent does ESRES represent Value for Money (VfM) and are appropriate systems in place to secure and assess this?*** Eg - To what extent do the actions and processes taken by the implementing partner in designing and implemented Phase 1, represent best practices to maximise VfM through promoting Economy, Efficiency and Effectiveness? This is to be done through assessing the actions and processes reported by the partner through the VfM Actions Template. - How do the VfM indicators reported by the implementing partner compare with those from other similar projects elsewhere? - What is the updated cost-benefit analysis for ESRES from updating the assumptions in the Business Case with the evidence from Phase 1, and the proposed plan for Phase 2? - How do administrative costs for ESRES compare to similar programmes implemented by other parts of DFID/other donors? What lessons can be learnt to reduce administrative costs for management of the programme? - What mechanisms should be put in place to enable bench-marking of VfM measures for Phase 2? - To what extent are there any particular vulnerabilities to fraud and corruption in ESRES? How could the ESRES programme management and monitoring approach to safeguard against fraud and corruption?
Sustainability	*What evidence is there to suggest that this programme can create transformational change?* Eg. - Are policies changing to allow gains to be continued? - To what extent has the ESRES programme incentivised IPPs to introduce a renewable energy component in their current operations. - Are individuals/ communities happy with the way ESRES has worked?/ Are other communities requesting hybrid mini-grids? - To what extent can the ESRES programme be replicated in other regions of Somalia and beyond (to other FCAS).

Impact	Ultimately the intention is that lives will be improved through access to affordable electricity and as a catalyst to economic development. , however it is beyond the scope of this study to attempt to measure impact of the programme in a robust way.

The evaluation should also explore effects on cross cutting issues such as gender, poverty, human rights, HIV/AIDS, environment, anti-corruption and capacity building. The issues of programme coverage, coherence, and coordination should be considered to the extent possible and relevant.

6. Approach
6.1 In line with the objectives, as part of the answers to the key questions the RTL should provide regular updates on:
- An assessment of progress so far;
- An assessment of the current programme design and decision-making processes;
- Realistic recommendations to improve the relevance, performance, and monitoring & evaluation of the overall portfolio;
- Considerations for any future FCAS intervention with ICF funding;
- Forward looking considerations for potential improvements in implementation, coordination notably to inform the ESRES expansion stage).

Outlook:
6.1 The RTL will need to take an iterative approach to achieve the objectives to learn and to inform next steps. The RTL also serves accountability purposes, and will be subject to scrutiny both by internal staff and management and by public constituencies. The MTE approach and products will need to remain sensitive to possible tensions in efforts to meet both accountability and lesson learning requirements, but it should be emphasised that the lesson learning focus is greatest with this study.

Stakeholders
6.2 Stakeholders include intended beneficiaries and others whose lives may be affected by the ESRES programme e.g climate change and development professionals, private sector enterprises, and civil society, including think-tanks. Bids should propose stakeholder engagement approaches to ascertain stakeholder views and which stimulate a genuine lesson-learning attitude from all parties and are conducive to the recommendations being followed up and acted upon.

Risk
6.3 There are a number of risks that could undermine the success of this study, ranging from a failure to design/ implement a high quality piece of work and set up workable arrangements with the implementing partner, to worsening of the security situation. Bidders should set out what they see as the key risks to successful delivery of the study and how they would propose to mitigate these.

Methodology
6.4 Bidders should propose a clear and rigorous methodology for providing reliable answers to the evaluation questions. The RTL is likely to require a mix of methods - both quantitative and qualitative.

Quantitative data collection is anticipated within communities where the pilot hybrid mini grids are located – surveys should gather information on electricity provision (to whom), reliability, cost/ affordability and (to a limited extent) what people are doing with it. Views on the use of mini-hybrid grids would also be useful. It is not anticipated that communities who don't receive a pilot will be targeted in an experimental design, although it may be useful to gather some benchmarking data on the cost and reliability of electricity in areas with other sources of provision and areas with no provision to see how a proposal for a mini hybrid grid might be received. Qualitative data may

also be sought in communities where issues are identified which require more in depth exploration and perhaps in the early days before electricity is being provided to gauge how it is likely to be received.

Qualitative approaches will be essential to contribute evidence to address most questions. This will include seeking views of the implementing partner, Government, other IPPs and wider stakeholders.

Both quantitative and qualitative methods should be planned and applied rigorously by people with appropriate training and skills. Bids should propose approaches for any sampling required and use of case studies (if required). It is expected that at least 6 visits to Somaliland may be required over the duration of the programme, The proposed methodology should ensure that there is triangulation of evidence so as to provide real time assessments that are credible as well as informative and produce recommendations that are grounded in evidence.

6.5 The study will also need to draw on IP monitoring data and information on programme costs. It is expected to include a desk review of ESRES documents, and other appropriate literature.

6.6 The RTL will also need to consider existing evidence from non-ICF programmes (whether UK or others), particularly to be able to effectively benchmark results and value for money expectations and processes – this could include large non-ICF programmes but will necessarily need to cover theme, sub-themes and specific projects. Bids may offer preliminary views on potential non-ICF candidates (relevant to a FCAS context).

6.7 There may be a tension between aiming to provide full answers and full coverage and keeping the RTL focused, costs down and outputs to the prescribed schedule. Bids should note that the evaluation should remain focused on yielding timely information which is most useful at this stage.

7. Deliverables

A key aim of this exercise is to feedback lessons emerging from the pilot phase to inform delivery and the evaluation team will need to work with the implementing partner to determine the most effective way in which to do this.

The supplier will need to provide the following key outputs:
Inception Phase (3 months)
- An Inception report (within first three months of programme commencing)
- Implementation Phase (27 months)
- Quarterly Update reports for the duration of Phase 1 (format to be agreed with DFID following inception report – this may just be a summary of activities undertaken and reference to any other outputs where emerging findings are detailed - or there may be a thematic focus across different returns)
- Undertake DFID annual reviews and Project Completion Reports working with the DFID Climate Change/Infrastructure adviser and ESRES Senior Responsible Owner
- Summaries of Emerging Findings – these could be short reports, perhaps 2 a year, focused on particular areas of learning
- Draft Final Report (approximately 1 month before the end of Phase 1,exact timing to be agreed with DFID to allow sufficient opportunity for feedback to SP on form and content of final report.)
- Final Report to be submitted before completion of contract(no later than 1 month following conclusion on Phase 1)

The evaluation team will also present their findings DFID Somalia audiences and DFID Climate and Environment department at mid and end points.

7.1 The inception report should be no longer than 30 pages excluding annexes. Considering you will be including some of these components within your technical submission, the inception report will include final versions of: the proposed real time learning design a detailed explanation, exploration and justification for the methodological issues, including approaches for any project selection, an RTL framework (mapping the proposed RTL design, methods and analytical plan against the evaluation questions), scope of findings to be available in the interim report, a communications plan, as well as challenges and risks and KPIs for the Implementation Phase. The inception report should essentially bring together the proposal made in the bid, the discussions held during inception meetings with the ESRES management team, and information from any other stakeholder consultation and initial scoping of documents. This should be provided within three months of starting the RTL. The SP should work with the implementing partner to update the theory of change if need be during this phase.

7.2 The Quarterly Updates and Emerging findings reports may be merged into one product or kept separate. It is important that the team should present real time analysis and findings, and it will also be important to update on the RTL activities/ process even when there are no immediate deliverables. .

7.3 The final report should be no longer than 60 pages excluding annexes and include: an executive summary, description of the methodology, a full analysis of findings tailored to the RTL questions, reference to any evidence gaps that should be addressed and a set of actionable recommendations. Recommendations should be timely, realistic, and based on evidence presented earlier in the report. The report should include clear recommendations for the expansion stage – or reasons why the programme should be discontinued and costs of doing this. Annexes should include: terms of reference, list of stakeholders consulted and interviewed at different stages of the evaluation, list of documents reviewed, any analyses and supporting evidence (including analyses and data on other donors' interventions used for benchmarking) that is considered to be too detailed for the core section.

7.4 The draft final report will be subject to an external quality review, managed in accordance with standard DFID procedures for Quality Assurance. Evaluators will likely also have their own internal QA process and must detail this clearly within their offers

8. Duty of Care
Potential SP should be aware that Somalia and Somaliland presents a challenging operating environment.

DFID has recently launched the new 'Duty of Care to Suppliers' policy. This policy aims to clarify DFID's position in relation to Duty of Care (DoC) and how it will be addressed as part of our risk management and procurement processes. The policy has a particular focus on Suppliers who will be operating in dangerous environments. Further information on this policy and how it will be applied to DFID's procurement processes can be found at http://www.dfid.gov.uk/Work-with-us/Procurement/Duty-of-Care-to-Suppliers-Policy/.

8.1 The Supplier is responsible for the safety and well-being of their Personnel (as defined in Section 2 of the Contract) and Third Parties affected by their activities under this contract, including appropriate security arrangements. They will also be responsible for the provision of suitable security arrangements for their domestic and business property.

8.2 DFID will share available information with the Supplier on security status and developments in-country where appropriate. DFID will provide the following: [Programme to ensure the following will be available before including in the ToR]

- All Supplier Personnel will be offered a security briefing by the British Embassy/DFID on arrival. All such Personnel must register with their respective Embassies to ensure that they are included in emergency procedures.
- A copy of the DFID visitor notes (and a further copy each time these are updated), which the Supplier may use to brief their Personnel on arrival.

8.3 The Supplier is responsible for ensuring appropriate safety and security briefings for all of their Personnel working under this contract and ensuring that their Personnel register and receive briefing as outlined above. Travel advice is also available on the FCO website and the Supplier must ensure they (and their Personnel) are up to date with the latest position.

8.4 Tenderers must develop their PQQ Response and Tender (if Invited to Tender) on the basis of being fully responsible for Duty of Care in line with the details provided above and the initial risk assessment matrix prepared by DFID. They must confirm in their PQQ Response that:

- They fully accept responsibility for Security and Duty of Care.
- They understand the potential risks and have the knowledge and experience to develop an effective risk plan.
- They have the capability to manage their Duty of Care responsibilities throughout the life of the contract.

8.5 If you are unwilling or unable to accept responsibility for Security and Duty of Care as detailed above, your PQQ will be viewed as non-compliant and excluded from further evaluation.

Acceptance of responsibility must be supported with evidence of Duty of Care capability and DFID reserves the right to clarify any aspect of this evidence.

8.6 If at a subsequent stage it becomes apparent that the programme will operate in a region that had not previously been considered, then the programme team will conduct a risk assessment at that stage, share it with suppliers and satisfy themselves that the Supplier can manage the DoC.

8.7 If at any stage there are concerns that the Supplier cannot manage DoC for a region not previously considered then they may be precluded from operating in that region. The ability of the Supplier to manage DoC will be a pre-condition of the contract.

Proposals will also need to include identification of risk and mitigating actions and suitable and appropriate management procedures in proposals.

9. BREAKPOINTS
At the end of the 3 month Inception phase, there will be a contract break point to review Inception Outputs. Progress to the Implementation Phase will be subject to the satisfactory performance of the service provider, delivery of Inception outputs and the continuing needs of the Programme.
There will be a further break point half-way through the contract after the first annual review (June 2016) to allow an on-going assessment of the successful operation of the RTL work and progress against objectives. We can also use this opportunity to consider increasing / decreasing the scale of the contract requirements depending on the results achieved to date.

10. KEY PERFORMANCE INDICATORS FOR CONTRACT MANAGEMENT
DFID will agree Key Performance Indicators (KPIs) with the service provider and are likely to include: quality and delivery; management, financial; personnel; and innovation indicators. You should propose a suite of KPIs for the Implementation period as part of your bid. Which can then be reviewed and agreed with DFID for inclusion in the Inception report. KPIs in this context refer to things like, timely proactive communication with DFID e.g re delivery updates/issues/risks, or evidence of coordination and/or collaboration with relevant stakeholders. These are just 2 possible examples. KPIs are therefore in terms of aspects of delivery effectiveness as opposed

to measurable progress against logframe indicators or things that are to be reasonably expected anyway e.g delivering reports on time. You should note that these KPI's will be linked to a percentage of the fees payable under this contract. The percentage will be agreed by the end of the inception and is expected to be a minimum of 5%.

11 .Existing information sources

11.1 The ESRES Programme Team will be provided with an ESRES master spread sheet, which includes the programme the programme timelines. It also covers the programme status, and both the current and projected spend. More information is included in the references section.

12.Abilities & Expertise To Deliver This Requirement

12.1 This contract will be issued for 30 months, commencing in September 2015 and ending in February 2018. In bidding for this work, evaluation teams should set out in some detail how they would plan to timetable evaluation activities to maximise learning and spread deliverables within the timeframe available.

12.2 The RTL Team should cover the following essential competencies and experiences between team-members:

Field Work

- Ability to undertake high quality quantitative and qualitative fieldwork in Somaliland and in Somalia.
- Strong experience in leading, designing and conducting a range of reviews and evaluations, including Real time, process, theory-based and impact evaluations, beneficiary monitoring, desk reviews, interviews and field work;

Programme Management
- Excellent skills in stakeholder management, negotiation, communication, report-writing and delivering quality products on time.
- Strong knowledge and experience of renewable energy issues and development programmes in FCAS, including energy access. In particular, expertise in ICF focus areas including resilience, transformational change, private finance, innovation;
- Strong knowledge and experience in economic assessments of low carbon, development programmes; Strong record in stimulating lesson-learning and use of evidence from reviews or other evaluative exercises;

Risk Management
- Demonstrated ability to take a strategic view across a multi-million programme of work in a highly politicised context;
- Demonstrated ability to mitigate risk.

13. Logistics and procedures

13.1 The Service Provider will be responsible for their logistical arrangements including Duty of Care, in-country transport (Kenya and Somalia), office space, translation and other logistical support.

13.2 The Service Provider should have a presence in Somaliland.

14. DFID Somalia Management arrangements

14.1 The ESRES Programme Manager and the programme office in DFID Somalia will be the main contact points and will oversee management of the RTL. The RTL supplier will work closely

with the Phase 1 implementing partner and will undertake DFID annual reviews and Project Completion reports as part of the annual programme cycle. A reference group will be established to advise on key elements of the RTL including final design of the study and study outputs. This group will include representatives with appropriate skills from DFID and Government and we might also invite academics or other interested parties to engage on this. Terms of Reference for the Group will be established. It is likely it would meet no more than once every six months. Representatives from the evaluation team may be invited to attend meetings of this group depending on the agenda and it may also make sense to include the implementing partner – decisions on these details can be taken during the inception phase.

References
Key ICF strategic documents
ICF implementation plan (on web)
Thematic paper and theory of change for Low Carbon Development theme (available on request)

ESRES Operational documents
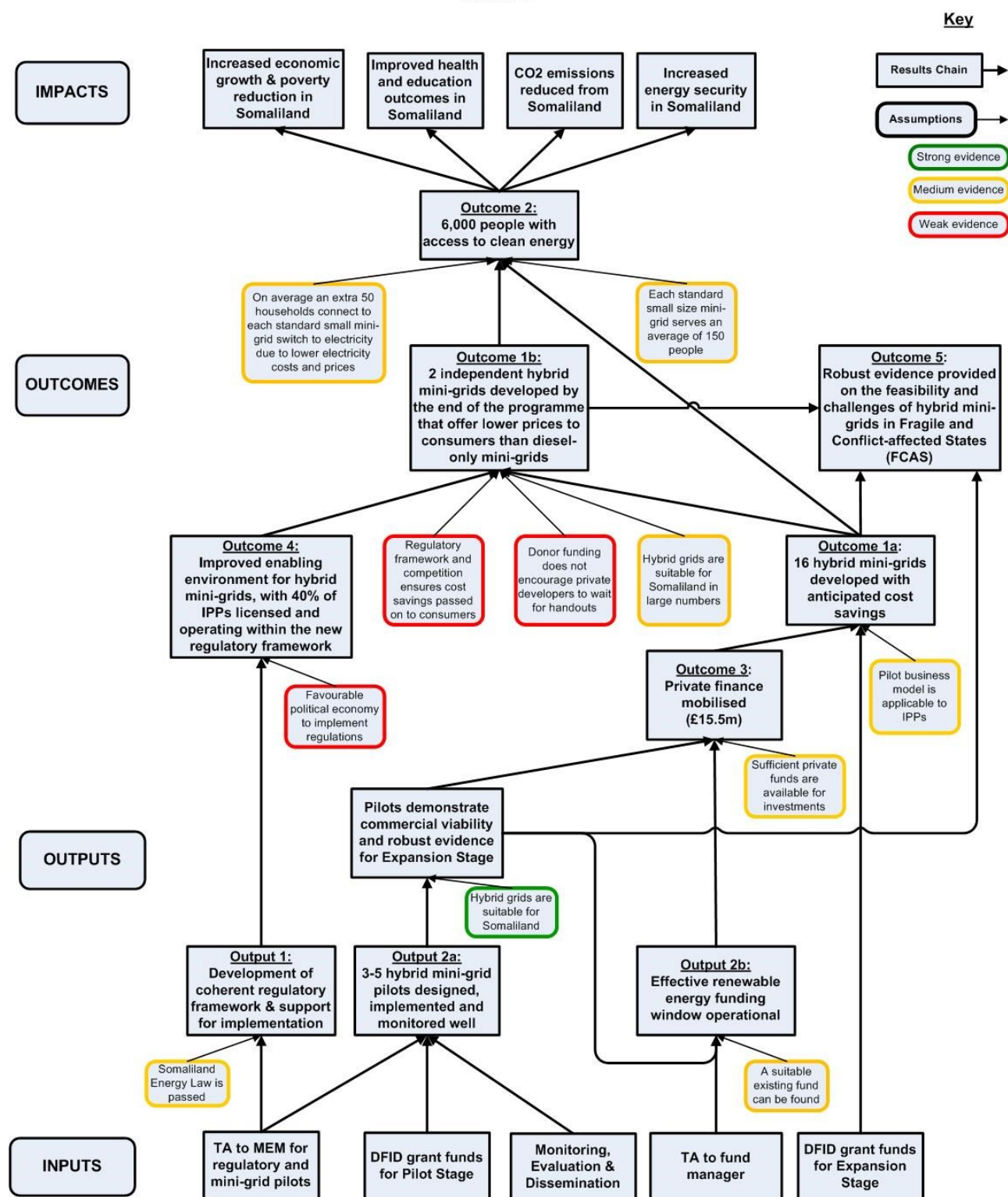ESRES Concept note (available on request)
ESRES Business Case

Review and evaluation standards
DFID Evaluation Policy (on web)

Theory of Change
Energy Security & Resource Efficiency in Somaliland (ESRES)
Version 3

1. TA to MEM on the regulatory framework leads to Output 1 – the development of a coherent regulatory framework and support for its implementation. As the regulatory framework is

implemented it leads to Outcome 4 of an improved regulatory framework for hybrid mini-grids, with 40% of IPPs licensed and operating within the new regulatory framework by the end of the project.

2. TA support relating to the mini-grid pilot, DFID grant funds for the Pilot Stage, and Monitoring, Evaluation and Dissemination (with an Independent Evaluation of the Pilot Stage) lead to Output 2a of 3-5 hybrid mini-grid pilots designed, implemented and evaluated well. This leads to the pilots demonstrating commercial viability and providing robust evidence to allow DFID to approve the Expansion Stage.

3. TA to the fund manager and evidence from the pilots, leads to Output 2b of an effective renewable energy funding window being operational. Together with the pilots demonstrating commercial viability to the private sector, this leads to Outcome 3 of £15.5m in private finance being mobilised. This private finance together with DFID grant funds for the Expansion Stage, enables 13-16 hybrid mini-grids to be developed that generate the expected cost savings.

4. Outcome 4 of a good enabling environment together with Outcome 1a of 13-16 mini-grids developed that generate cost savings, should then lead to Outcome 1b of 2 independent hybrid mini-grids developed during the period of the ESRES funding programme that reduce prices to consumers. (A further 20 independent hybrid mini-grids are then expected to be developed over the subsequent five years) This then enables Outcome 2 that 6,000 people have access to clean energy by 2018 at the end of the ESRES programme.

5. Outcome 2 of cheaper and more widespread use of electricity then leads to various beneficial impacts in Somaliland, principally increased economic growth and poverty reduction (through businesses), improved health outcomes (through service providers and households), reduced CO_2 emissions, and increased energy security.

6. Outcome 5 of robust evidence provided on the feasibility and challenges of hybrid mini-grids in Fragile and Conflict-affected States (FCAS), is contributed to from the Pilot Stage, Expansion Stage and the extent to which the project results in independent mini-grids being established without project support. Dissemination of evidence will be carried out by the Fund Manager.

Key Assumptions

7. Key assumptions underlying the theory of change are listed below.

- ***Somaliland Energy Law is passed (Medium evidence):*** the enactment of the Energy Law is a prerequisite for the secondary legislation, which, in turn, is needed to provide a solid basis for private electricity companies and to give legal security to firms to invest in technologies with high capital costs. Though the private sector is currently willing to provide electricity, it has only done so using technology which has a low capital cost for which the consequence of a stranded asset is low.
- ***Hybrid grids are suitable for Somaliland (Medium evidence***): analysis by the Consultants shows that hybrid mini-grids will provide lower cost electricity than diesel-only mini-grids. Diesel-only grids are currently universal in Somaliland. This evidence is given as medium because there is some uncertainty over whether the Government will achieve a consolidation of grids which will allow economies of scale and the introduction of lower cost technologies.
- ***A suitable existing fund can be found (Medium evidence):*** There are several alternative funds and the likelihood that none of them will exist or be suitable to host ESRES is intermediate.
- ***Favourable political economy to implement regulations (Weak evidence):*** There is some uncertainty over whether vested interests against reform of the sector will prevail.
- Sufficient private funds are available for investments (Medium evidence): Analysis by USAID (PEG) suggests that there is investor interest.
- ***Pilot business model is applicable to IPPs (Medium evidence):*** even if the pilots are well-designed, the renewable energy may be located within the health facilities and only indirectly

connected with with the IPP grids. Although the IPPs will be involved in the decision to invest in renewable energy, there is a risk that the IPPs will not accept this as demonstrating the benefits of renewable energy to IPP grids more generally.

- ***Regulatory framework and competition ensures cost savings passed on to consumers (Weak evidence):*** Mitigation measures are proposed through the regulatory framework that will be developed, but it remains uncertain.
- ***Donor funding does not encourage private developers to wait for handouts (Weak evidence):*** This is an inevitable risk of grant funded schemes. This can be mitigated to some degree by making it clear that the scheme is time and budget limited.
- ***A reasonable number of grids are suitable for hybrid technologies (Medium evidence):*** Small-scale mini-grids will not always be the best solution for Somaliland and in the future a larger grid will and should be created, but hybrid mini-grids represent the best solution for many parts of the region over the coming 10-20 years.
- ***On average 50 new connections to each standard small electricity grid are encouraged due to lower prices (Weak evidence):*** The impact of renewable energy on electricity costs and prices and the consequential impact on ability to pay for electricity in FCAS environments are unknown. The estimates are based on DFID Consultant's judgement.
- ***Each standard small mini-grid serves an average of at least 150 customers (Medium evidence):*** Existing mini-grids tend to be relatively large in Somaliland. However, in the light of Government policy to seek to consolidate mini-grids, the target is less related to the number of mini-grids that are supported and more related to the number of users affected, subject to other target outcomes (rural grids rather than existing urban ones, etc).
- ***Relative security and stable environment (Medium evidence):*** Analysis by the consultants and FCO suggest that Somaliland remains relatively stable with a medium probability of insecurity. This evidence is given as medium as previously (in 2013), HMG staff and implementing partners were not able to operate in Somaliland over a period of months due to threat reporting and potential insecurity.