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Department of Infrastructure and Energy

GEOTHERMAL RISK MITIGATION FACILITY FOR EASTERN AFRICA (GRMF)

GRMF HEAT – Developer Manual

(Third Edition)

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Content

1 BACKGROUND

Geothermal energy in East Africa has the potential to contribute substantially to the energy supply mix. Since 2012 the regional programme, Geothermal Risk Mitigation Facility (GRMF) hosted by the African Union Commission (AUC), has funded geothermal power generation projects in East Africa. The AUC together with the German Federal Ministry for Economic Cooperation and the European Union (EU) Africa Infrastructure Trust Fund through KfW Entwicklungsbank (KfW) established the GRMF for Eastern Africa (the Facility), in order to mitigate the high risk of exploration and reservoir confirmation drilling.

Until now, the GRMF has only focused on power generation projects, strongly relating to the advantages of a clear and secure business model and the need for power in East Africa. The economic impact of power generation projects is certainly positive, bringing in all advantages of this alternative energy form: being a domestic, base load power generation technology with minimum of ecological impact and land use. These economic advantages develop their impact on a macroeconomic level as part of the power supply of each country, but do not enable nearby communities to develop business on a local level or substitute fossil fuels for heat requiring processes.

For the macroeconomic level, the direct use of geothermal resources as a constant, reliable source of heat is also very relevant. Direct use of heat from geothermal resources can be used in multiple processes. It strengthens energy independence and supports the development of a varied sustainable energy sector. Moreover, the use of geothermal heat contributes to greenhouse gas emission reduction since it is a CO_2-free, sustainable and domestic alternative to wood burning or the use of fossil fuels.

Despite a great potential, geothermal resources in the region are largely unexploited primarily due to the high cost and the associated risk of discovering and proving the resource. Geothermal resources within East African countries are in general poorly defined with the exception of Kenya. Furthermore, the framework conditions (e.g. regulations together with financial and institutional arrangements) required to encourage geothermal development are insufficiently supportive.

The GRMF HEAT is a grant programme designed to cost share exploration work of public and private investors acting as geothermal project developers (applicants/eligible entities). The programme provides first step grants for feasibility studies as well as siting of wells to assist developers to secure financing for subsequent exploration wells. Furthermore, grants for infrastructure costs are funded.

In contradiction to the GRMF POWER grant programme, the HEAT programme requires the preparation of a feasibility study as an obligatory part of the surface study.

In order to limit the risk to the GRMF, the grants will be awarded based on the quality of the proposed project's geological and technical data as well as its work programme, feasibility, financial viability and environmental/social sustainability. Next to these, other evaluation criteria relate to the capacity and the experience of the applicants and their partners, as well as the overall coherence of the application.

2 OBJECTIVE OF THE FACILITY

The objective of the Facility is to encourage public and private investors as well as public and private partnerships to develop geothermal prospects for direct use in Eastern Africa by providing grants for surface studies to determine the optimal location of exploration wells at the most promising geothermal prospects including the preparation of a feasibility study.

3 FINANCIAL SUPPORT

The upper limits for financial support of the approved eligible costs at the time of proposal submission (as stated in the eligible activities), fixed in the form of a grant contract to winning Applicants for Surface Studies, are as follows:

- Infrastructure grants: up to 20% of approved eligible costs for infrastructure required for eligible surface studies (e.g. access roads, water supply).
- Surface study grants: up to 80% of approved eligible costs (excluding infrastructure costs).

The disbursements will be based on actual costs up to the limits stated above upon reaching of agreed milestones.

It is to be noted that collaborations between the Facility and other bilateral and multilateral facilities (e.g. NEPAD-IPPF, ARGeo and Development Banks) are strongly encouraged.

4 PURPOSE OF THE DEVELOPER MANUAL

The Developer Manual (the Manual) has two purposes:

- To provide information about the Facility so that developers can decide whether or not to apply to the Facility.
- To assist developers in their understanding of the Facility's main processes (Figure 1). Of particular interest to developers (and hence the main focus of the Manual) are the following processes: pre-qualification phase; application phase; evaluation; grant contract and grant provision.

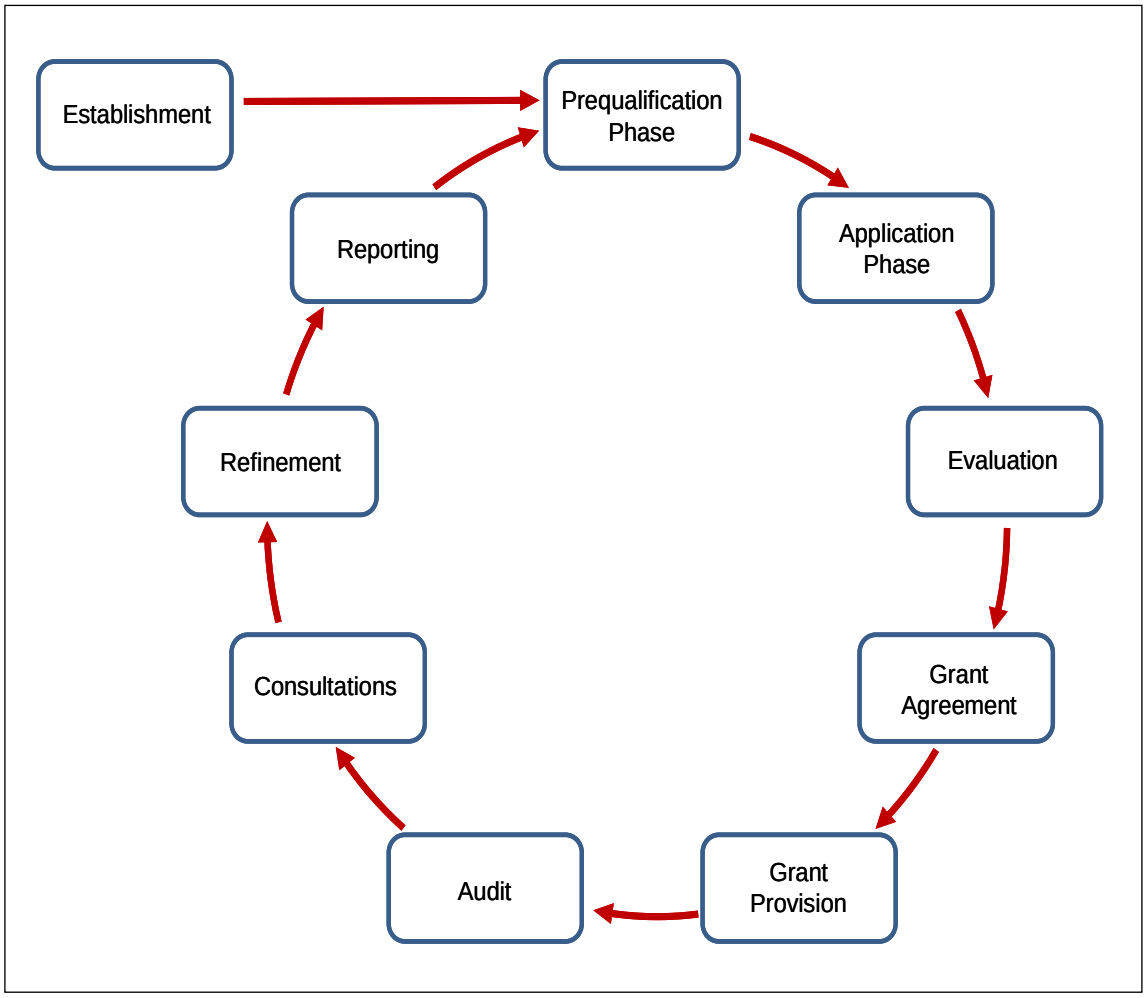

Figure 1: Overview of the main processes of the GRMF Facility.

5 FACILITY EXTENT

The size of the Facility is approx. USD 10 million comprising of contributions by the German Ministry for Economic Cooperation (BMZ) and the EU-Africa Infrastructure Trust Fund (EU-ITF). The Facility is open to contributions from other donors.

6 PARTIES OF THE FACILITY

The establishment and the implementation of the Facility involve several parties, shown in Figure 2.

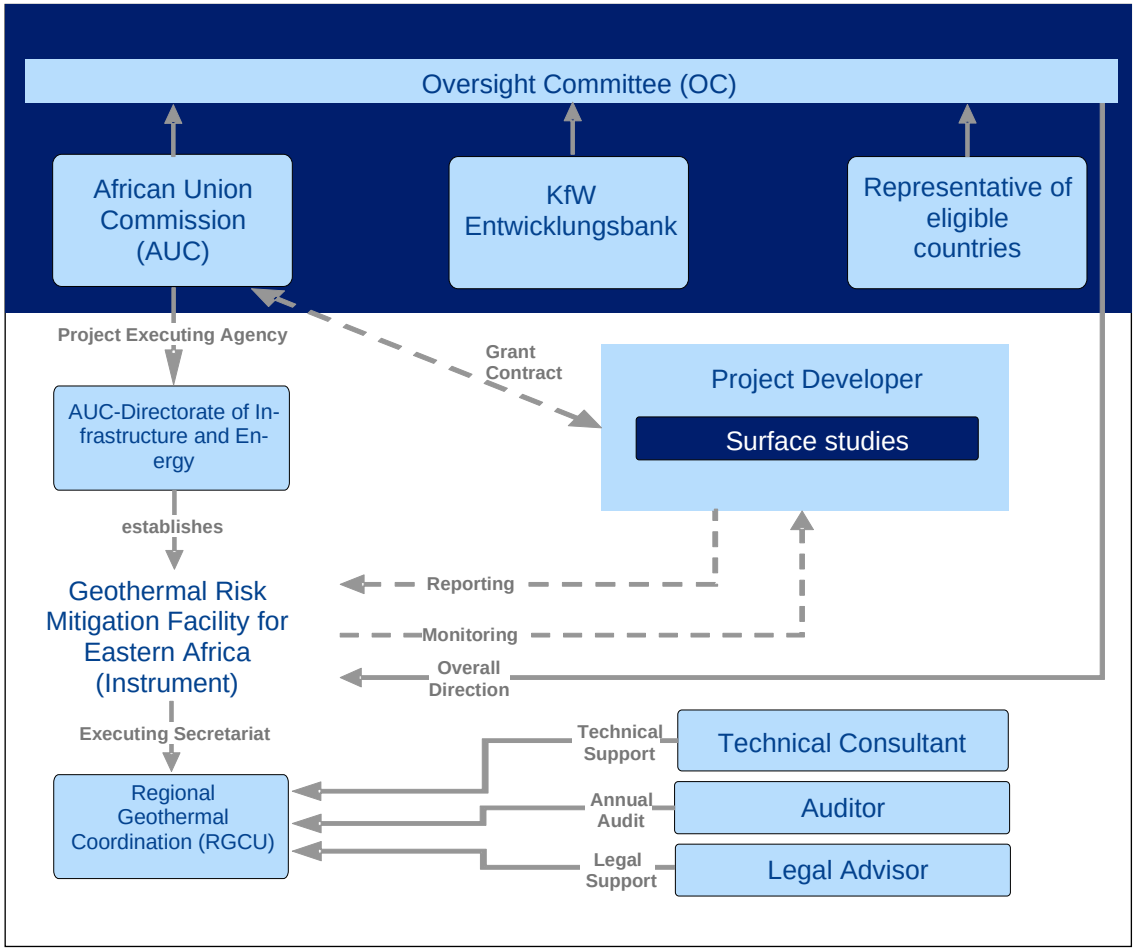

Figure 2: Overview of parties involved in the Facility.

The African Union Commission (AUC), represented by AUC's Directorate of Infrastructure and Energy (AUC-IED), is the Project Executing Agency for the GRMF. An Oversight Committee (OC), with members from the AUC, KfW and a representative from eligible countries as well as additional donors' representatives, ensures that the GRMF meets its overall objective and that the activities are consistent with its mandate. The Regional Geothermal Coordination (RGCU) was established by the AUC-IED and acts as GRMF's executing secretariat.

7 ELIGIBILITY

7.1 Eligible Entities

Public or private organisations as well as public private partnerships (eligible entities) are eligible to apply to the Facility.

7.2 Eligible Activities

Activities eligible for support from the Facility comprise the following:

- Surface studies to locate optimal sites for exploration wells at geothermal prospects, which have previously been studied to some extent. Eligible surface studies include shallow temperature gradient wells (see Annex 4), provided that they are drilled on non-permanent well pads, geophysical surveys (e.g. seismic, gravity and resistivity surveys) and supplementary geological, hydrogeological and/or geochemical surveys. In addition, a surface study programme may include infrastructure upgrades required for conducting surface studies (e.g. for providing access), if applicable. Surface studies shall include a feasibility study regarding the exploitation of the resource and the available market for direct use applications. Surface studies shall also include an integrated resource report interpreting and summarising the results of the surface studies in terms of a temperature gradient map of the resource area as well as a conceptual model of the resource and identification of high priority drill sites and targets at depth.
- For public entities, external costs for preparation of Expression of Interest (EoI) and full application (own cost are not eligible). Please be aware that these costs will only be covered in case of a successful application and signing of a grant contract.
- Infrastructure costs required for surface exploration (e.g. access roads, water supply) are covered by an infrastructure grant, which can be applied for in conjunction with the surface study.

The Facility will not support activities other than those described above. The Facility will therefore not provide grants for activities of a general nature, e.g. concession area reconnaissance, country wide reconnaissance, university research, general project development costs, legal costs, mitigation of political or legal risk or general eligible entity overheads.

It is allowed to provide multiple applications for eligible activities related to different sites by a single entity.

Since there may be multiple promising sites within a large concession, it is permissible to apply for more than one grant as long as evidence is provided that the projects applied for are independent from each other. It will however be important to give clear justification for all requests and to have adequate personnel identified to manage all projects. Separate applications for the different activities must be prepared and submitted accordingly.

Joint funding of a proposed project by public grants from other facilities is allowed, however it must be capped in that way that developers need to provide evidence that at least 20% of the eligible costs are covered by own means. Public entities are excluded from this rule.

Eligible entities not being prequalified will be informed accordingly.

7.3 Eligible Countries

Following is the list of the eligible countries for the direct use facility:

- Burundi
- Comoros
- Democratic Republic of Congo
- Djibouti
- Eritrea
- Ethiopia
- Kenya
- Rwanda
- Somalia
- Tanzania
- Uganda
- Zambia

The Facility will not support projects at sites in areas subject to conflicts, or where disputes about borders exist.

7.4 Eligible Costs

7.4.1 Eligible Costs for Infrastructure

Funds for infrastructure will only be granted on the condition that they are directly associated with an eligible surface study. Eligible costs for infrastructure comprise the following activities:

- If applicable: access roads and/or access road maintenance
- If applicable: water supply infrastructure to operate a single rig for temperature gradient drillings
- If applicable: transport and crew accommodation
- Eligible, reasonable and agreed contingencies

7.4.2 Eligible Costs for Surface Studies

Eligible costs comprise the following activities on the condition that they are directly associated with the surface studies:

- External consulting cost for preparation of Expression of Interest (EoI) and full application (for public entities only),
- Rental or provision of technical equipment (e.g. geophysical signal sources, geophysical sensors, recorders, receiver stations, GPS equipment, gravity equipment, magnetic equipment). By provision it is meant that equipment owned by the applicant can be funded at the rates usually charged for rental, the purchase of the equipment is not eligible cost,

- Material and specialist services - such as drilling and logging, for shallow temperature gradient well(s),
- Providers of specialist services (e.g. geological mapping, soil temperature and soil-gas release seismic, electromagnetics, resistivity, gravity, magnetic, microseismics, Li-DAR, chemical- and petrological sampling and analyses),
- Personnel, on-site accommodation and transport - including vehicle leasing or rental,
- Purchase of aerial photography, remote sensing data or equivalent,
- Consumables (e.g. fuel, chemicals used during sampling / measurements),
- Feasibility study regarding the exploitation of the resource and the available market for the direct use applications,
- Environmental/Social studies and assessments as per Applicable Standards (see Chapter 11 below) as part of the surface studies (scoping studies) including studies and activities as per the GRMF Human Rights Guidance as appropriate, establishment of stakeholder engagement plan and corresponding stakeholder engagement activities including the process of Free, Prior and Informed Consent (FPIC) as appropriate,
- Costs **to obtain** environmental/social permits and licences (for subsequent drilling),
- Environmental/Social studies/–impact assessments and –management plans (including specific plans such as Biodiversity Management Plans or Resettlement Action Plans/Livelihood Restoration Plans or Human Rights Impact Assessments if applicable) and reviews/updates of Stakeholder Engagement Plans and corresponding engagement activities including the process of Free, Prior and Informed Consent (FPIC) as appropriate as per Applicable Standards (see Chapter 11 below) including studies, assessments and activities as per GRMF Human Rights Guidance as appropriate in the course of the preparation of the subsequent drilling phase,
- Well Design and Drilling Programme (for subsequent drilling),
- Documentation and reports preparation costs (except for the Expenditure Verification Report (EVR)),
- Project management costs,
- Mandatory insurances to be taken out and maintained during the entire project period, including but not limited to the following items:
  - General liability including third party liability,
  - All risks (physical loss or damage),
  - Construction,
  - Fire,
  - All medical, cars and housing insurances for the personnel at site,
  - Workers compensation insurance,
  - Relevant insurance so the beneficiary can guarantee that there will not be any liability whatsoever for the contracting authority arising out of or in connection with the grant contract against the contracting authority,
- Eligible, reasonable and agreed contingencies.

7.4.3 Non-Eligible Costs

All costs which are not explicitly mentioned in Sections 7.4.1 to 7.4.2 will not be covered by the Facility. These non-eligible costs have to be covered by the developer, including but not limited to:

- All costs in excess of the amount stated in the grant contract,
- Concession (and other permit/licence related) fees,
- Developer overheads (e.g. office costs, legal costs),
- Third party liability and claims, including claims by the drilling contractor and environmental damage or clean-up costs,
- Debts and provisions for losses or debts,
- Interest and project developer financial obligations owed,
- Financial fees,
- Items already financed by other parties (e.g. governments, donors),
- Purchases of land, buildings or vehicles,
- Currency exchange losses,
- Taxes, including VAT,
- For public entities: Own cost for preparing Expression of Interest and full application,
- For private entities: Own cost and external costs for preparing Expression of Interest and full application,
- Cost incurred during negotiations of the grant contract,
- Costs for participation at meetings and workshops,
- Training and capacity building,
- Costs incurred prior to grant award (such as costs for studies, concessions and concession related items such as rental payments etc.) except for "early contracting"[1],
- Costs resulting from tender procedures not following the GRMF procurement regulations,
- Costs for land acquisition and compensation/RAP/LRP implementation,
- Costs for the Expenditure Verification Report (EVR).

[1] Please refer to document "Conditions for Early Contracting" for specification.

8 WORKSHOPS

Before the start of each application round, a kick-off workshop will be held for potential applicants and other stakeholders (such as organisations, financiers, etc.) to the Facility. The objectives of the kick-off workshop is to promote the GRMF, to present the GRMF's intention , target, programme and its expectations, to clarify inquiries considering the Request for Expression of Interest and to safeguard the quality of Expressions of Interest and Applications. The introduction into the Applicable Standards (see Chapter 11 below) for environmental and social assessment and management is a part of the kick-off workshop.

Participation at the kick-off workshop for potential Applicants is not mandatory, however it is highly recommended that the Applicants familiarise themselves with the type and scope of services to be supplied. It is, however, understood that any cost incurred in this context has to be borne by the workshop participants and will not be reimbursed. The cost incurred will be at the workshop participants' own expense and risk.

After the evaluation of the Expressions of Interest is concluded with a short-list of applicants, a pre-bidding workshop will be organised and held for the above-mentioned short-listed developers. The aim is to ensure high-quality applications by clearly explaining the application, evaluation and procurement processes.

Participation at the pre-bidding workshop is mandatory for Applicants wishing to submit an application. It is, however, understood that any cost incurred in this context has to be borne by the Applicants and will not be reimbursed, but are at the Applicants' own expense and risk.

9 APPLICATION PROCEDURE

The Facility will provide grants to developers through a competitive, transparent and rigorous two-stage application and an evaluation processes divided in two stages:

- The first stage is an open pre-qualification process inviting potential Applicants to submit their Expressions of Interest (EoI) by a specified closing date. Based on the evaluation of these EoI, shortlisted developers will be invited to participate in the application stage.
- In the second stage, applications from shortlisted developers will be accepted by a specified closing date.

The following Figure 3 gives a general overview on the different stages, procedures and tools.

All news on the GRMF Facility as well as unrestricted documents for the application rounds will be published on the GRMF website:

www.grmf-eastafrica.org

A Web GIS for the GRMF Facility is also available on the website.

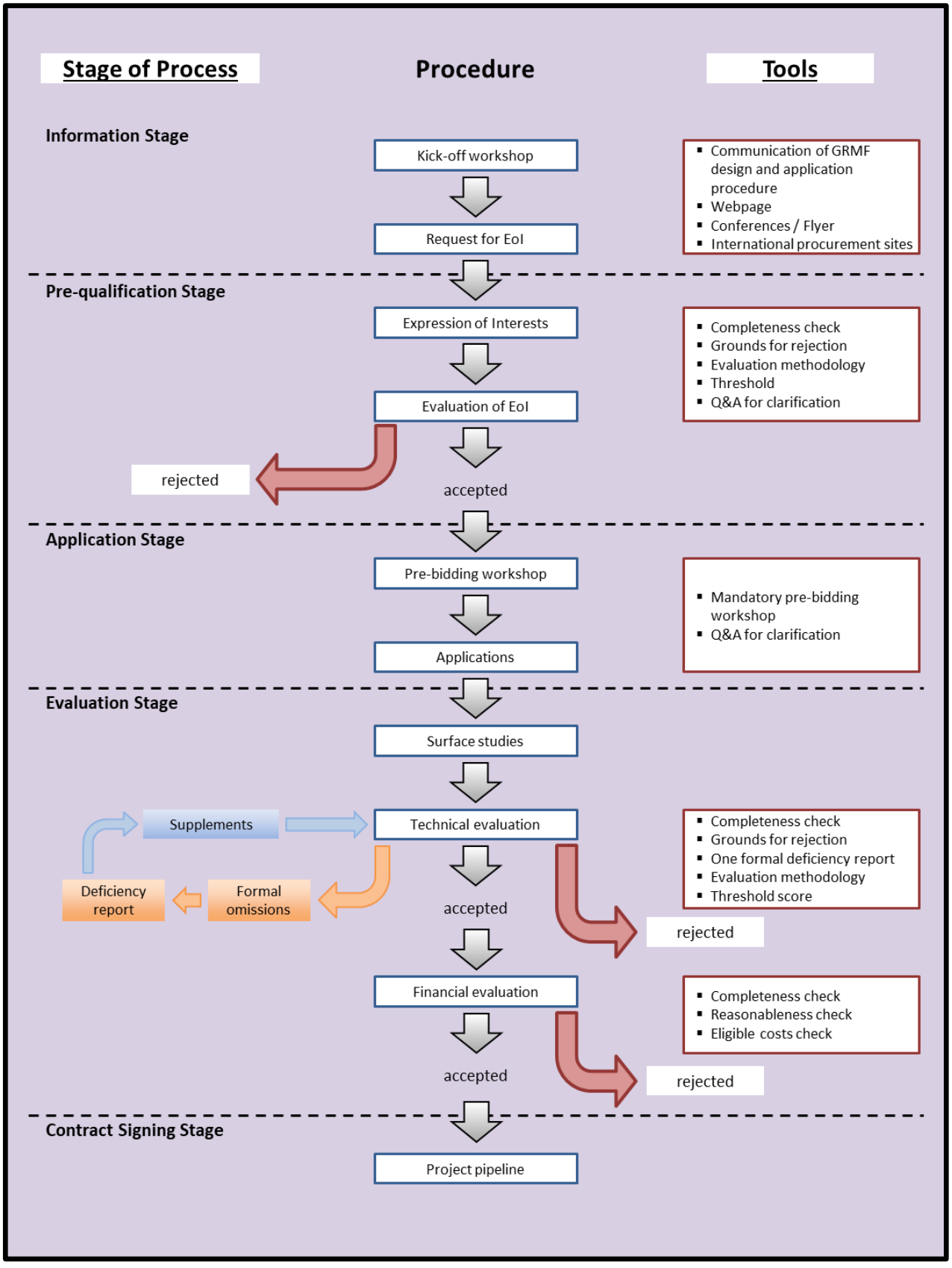

Figure 3: Overview on the stages, procedures and tools of the GRMF application procedure.

9.1 Pre-qualification Stage

EoI will be accepted by a specified closing date.

The pre-qualification process comprises the following activities:

- Potential Applicants of the Request for EoI will be informed by means of promotion activities (e.g. the kick-off workshop).
- Request for EoI will be posted on the Facility webpage.
- For inquiries for clarifications regarding the EoI, Applicants shall submit questions via e-mail to the following addresses: grmf@africa-union.org and grmf@roedl.com. The deadline for inquiries is 14 days before the closing date of the pre-qualification. Inquiries received after the deadline will not be considered. Inquiries will be collected and answers will be published, without eligible entity's or inquirer's details, on the GRMF webpage.
- The deadline for submission of pre-qualification documents may be extended by issuing an amendment or addendum. Also, the content of the Request for EoI might be changed by amendment.
- The Applicant shall send one electronic version of the completed pre-qualification document as well as one signed original hard copy of required declarations and cover letter as specified in the Request for EoI to the tender box within 8 weeks of the Request for EoI being posted on the Facility webpage (the precise date will be indicated in the Request for EoI). The arrival date and time of the document is relevant for consideration of the EoI. EoI received after the deadline or not in the required manner will not be evaluated but will be returned unopened to the Applicant.
- Only complete EoI which are in line with the required submission form will be considered for evaluation.
- Expressions of Interests will be evaluated according to a predefined methodology that will be specified in the Request for EoI.
- Applicants will be provided with the feedback presumably within 12 weeks after the submission deadline for EoI.
- Shortlisted Applicants will be invited to participate in the mandatory pre-bidding workshop and in the application stage.

9.2 Application Stage

The application stage comprises the following activities:

- Access to the Request for Applications and all relevant documents will be provided to Applicants shortlisted during pre-qualification along with the invitation to participate in the mandatory pre-bidding workshop. Applicants will access these documents within the restricted area of the homepage of the Facility, for which an access password will be provided within the feedback letter. Only Applicants who register and thereafter participate in the pre-bidding workshop will be eligible to submit an application.
- For inquiries for clarifications regarding the application, Applicants shall submit an e-mail to the following addresses: grmf@africa-union.org and grmf@roedl.com. The deadline for inquiries is 14 days before the closing date of the applications. Inquiries

received after the deadline will not be considered. Inquiries will be collected and answers will be provided to all applicants without specifying eligible entity's or inquirer's details.

- The deadline for the submission of application documents may be extended by issuing an amendment. Also, the content of the Request for Application might be changed by amendment.
- Applicants shall send one softcopy (PDF searchable file in a CD, DVD or USB memory stick) of the completed application as well as one signed original hard copy of required declarations and cover letter as specified in the Request for Application to the tender box within 8 to 10 weeks after the pre-bidding workshop (the precise date will be indicated in the Request for Application). The arrival date, time and location of the document are relevant for consideration of the application. Applications received after the deadline, not in the required manner or location, will be returned unopened to the Applicant.
- Applications will be evaluated using the predefined methodology described in Section 10.

9.3 Content of Applications

This Section describes the information to be included in the applications and reflects the Evaluation Methodology described in Annex 1. More details on the content of applications and its submission form will be given in the document "Request for Application". The following information has to be submitted:

- A declaration that developers will accept and adhere to the procurement standards set forth in the Developer Procurement Guidelines.
- A declaration that the applicant is not in a situation which will lead to a direct rejection as described in Section 9.4.
- Certificate of incorporation as evidence that the applicant exists as a legal entity. In the case of joint ventures, all partners need to submit certificates of incorporation, which need to be complemented by the joint venture agreement.
- Information on the Geothermal Resource.
- Surface Study Plan.
- Environmental and social permits.
- Environmental and Social Risk Screening Report and Stakeholder Engagement Plan (as per Applicable Standards, including GRMF Human Rights Guidance, see Chapter 11 below), including indication whether process of Free, Prior and Informed Consent with Indigenous Communities would be required.
- Infrastructure Plan (if applicable).
- Information on- and evidence of Projects' Concession Agreement and Permits.
- Information on concept strategy and resource market viability.
- Financing Plan and Statements on Financial Capabilities.
- Procurement Plan (indicating each component and method).
- Community Benefit.

- Applicant's Key Personnel/Staffing Plan.
- Applicant's References.
- Statements on Management and Organisational Capabilities.
- Plans for subsequent reservoir confirmation drilling.
- Anticipated Costs of the project broken down in sub-activities.
- Map indicating the site
- Information on early contracting activities.

Information on the Geothermal Resource

Available information on the geothermal prospect in question is of major importance. A summary of field's features and characteristics as well as a conceptual model and a resource capacity evaluation is to be provided.

Good evidence of a geothermal resource should be given. Any information describing or predicting the sub-surface conditions of the prospect will be considered. For example, an analysis of geological conditions, geochemistry, surface or airborne geophysical surveys, a conceptual model, reference data from surrounding boreholes, (which allow conclusions on the prospect of the project for support by the Facility) including geophysical logs and/or an evaluation of the possible interaction with adjacent geothermal fields. The quantity and quality of measured data should be presented. References and major reports relating to the proposed project should be provided.

For the assessment of the application, the interpretation of the results of any previous works as described above, also the underlying geothermal raw data, may be requested for a raw data check. On a case-by-case decision, it may be requested to submit specific raw data for re-interpretation and analysis of the geothermal raw data in order to verify the conceptual model and the interpretation of the results provided by the applicant.

Surface Studies Plan

The applicant shall present a work plan for the surface studies. This will specify the overall concept, the activities to be carried out, the technical specifications to be followed, all underlying assumptions and the expected results.

The work plan must be in continuity with any previous measurements and studies. The plan shall describe well defined objectives, which are based on interpreted results of previous exploratory works. Choices between several investigation methods must be clearly justified.

The plan shall also include information on any proposed surface study contractors. It shall specify the interpretation plan of the expected results. The interpretation of the results shall be the basis for the **siting of any exploration wells**, which could possibly be supported by a drilling grant in the next application round if announced. Therefore, the interpretation plan is especially important.

Surface study plans shall include, but not be limited to the following:

- Survey justification, including topographical base map, percentage of area covered, measurement density/spacing and expected outcomes.

- Survey details including equipment, field techniques, data collection strategy, etc.
- Modelling and interpretation strategy.
- Details on any infrastructure requirements (such as access roads, water and power).
- If applicable: details on custom clearance requirements for any necessary equipment.

The plan shall include a schedule for the survey and specify milestones for completion of major activities. Regarding environmental and social documentation, an Environmental and Social Risk Screening Report and Stakeholder Engagement Plan (SEP) including activities related to process of Free, Prior and Informed Consent with Indigenous Communities as appropriate (as per Applicable Standards, including GRMF Human Rights Guidance, see Chapter 11 below) are required.

By the completion of surface studies, any E&S documentation as required by national legislation, as well an E&S Scoping Report and Updated SEP including documentation of activities in the context of Free, Prior and Informed Consent Process with Indigenous Communities as appropriate are required.

By the completion of surface studies, a feasibility study regarding the exploitation of the resource and the available market for the direct use applications needs to be prepared.

Milestones/Grant disbursement schedule will be included in the grant contract. Achievement of milestones will trigger any grant disbursements. Relevant disbursement schedules shall be communicated during the RfA phase.

Information on Project's Concession Agreement and Permits

Applicants should provide information on the status (i.e. in place or under negotiation) as well as timing of authorisation to carry out exploration activities (e.g. concession agreements, exploration and/or prospecting licences). A minimum requirement is that applicants have submitted their application for the concession before submitting their EoI, if required by national regulations.

Remark: If no national regulations exist within the applicants country, this needs to be clearly stated within the legal opinion, which is to be submitted prior to grant contract signing.

A geo-referenced map showing the area of the authorisation shall be included (if in place) or needs to be provided before signing of the grant contract (if under negotiation).

If the authorisation is in place, a copy needs to be provided as evidence. A letter from the authority granting the authorisation is also requested, stating that all conditions and timelines of the authorisation have been met.

If no authorisation is in place yet, applicants need to provide a Letter of Support from the government of the target country of their project and a confirmation that the relevant application has been submitted.

Applicants shall also provide details on any required environmental, drilling and social permits, water rights and the permission to access the land at the geothermal prospect, as well as on any other relevant authorisations. Applicants shall provide evidence of all respective permits or specifications on the plans and timelines to get them.

Applications need to include evidence that the required environmental and social permits and approvals as per national legislation have been obtained or are in the process of being obtained.

Applications have to contain the required documentation as per Chapter 11.

If environmental and social permits are not required, applicants must provide evidence that they were notified so by the relevant authority.

Information on concept strategy and resource market viability

Applicants should provide a plan for successfully and convincingly bringing the potential reservoir at the concession area into sustainable heat production. Such a plan shall include but not be limited to:

- A concept strategy and description of the direct use applications
- A description of the anticipated energy content of the reservoir and energy requirement of the direct use applications
- A description of the anticipated construction cost of the direct use applications
- Pipeline infrastructure description and cost
- Information on heat prices according to off-taker agreement/anticipated sales prices
- Comparative analysis (LCOH) with other available energy options in the country
- Information on potential customers

The applicant should also provide information about any signed or ongoing discussions related to off-take agreements.

Financing Plan and Statements on Financial Capabilities

The Applicant needs to present a plan for financing the remaining portion of the surface study budget as well as for the activities not eligible for funding by the Facility. The Financing plan has to include the implementation costs for all Environmental and Social Management Plans including costs for land acquisition, compensation and livelihood restoration (RAP/LRP implementation).

The financing plan shall include detailed information on all financing sources and streams in place including any other public funding schemes.

Joint funding by GRMF and other public bilateral and multilateral funding schemes or facilities (e.g. NEPAD-IPPF, ARGeo, Development Banks) is allowed. Applicants need to clearly specify which other public funding schemes are applied for, which amounts are applied for and whether or not the asked funds have already been granted. For public entities, a government support letter must be submitted showing that the applicants' own contribution will be covered. Private applicants or Private Public Partnerships (PPP) need to provide evidence that the applicants' own contribution is borne by the applicant and that the money is readily disbursable.

The applicant also needs to provide documented proof that the eligible entity is financially capable of conducting surface studies and that it has the resources to cover any eventual cost increases.

The required information consists of the following: statements on the capital capacity of the eligible entity, audited annual financial statements of the last three accounting years and a declaration of non-objection from the tax authorities.

Procurement Plan

The procurement plan needs to show the anticipated services to be contracted, including information on the estimated contract value and scheduled procurement method. The procurement plan needs to be updated through complete project implementation.

Community Benefit

Details on benefits for communities, resulting from a stable and local heat source have to be described.

Applicant's Key Personnel

The applicant (including private sector partners and engaged consultants) needs to demonstrate exploration experience and expertise by providing CVs for the applicant's key personnel designated to work on the proposed project. Experience and expertise should be specifically related to geothermal surface studies, preferably in the region.

CVs of all lead personnel (team lead/key experts) shall be provided.

If appropriate, the same person can fill in several positions. This should then be described in detail and clearly shown in the application.

A staffing plan (clear structure with own personnel, consultants, contractors) should be provided. An organisational chart for the project should also be provided to clearly indicate roles and responsibilities of all key staff for which the CVs have been provided.

A Memorandum of Understanding or equivalent between the Applicant and any designated consultants, service companies or contractors shall be included.

CVs shall be up to date, include date and signature and follow the given format in the Request for Application.

Any assignment of consultants, services companies or contracts has to follow the procurement regulations and regarding any assignment prior signing of a grant contract specific attention should be spent on the "Conditions for Early Contracting".

Applicant's References

The applicant (including private sector partners and engaged consultants) needs to demonstrate exploration experience and expertise by providing relevant references. Experience and expertise should be specifically related to surface studies and will be demonstrated by project references.

References should at least contain information on the project's name, year of execution, client and location of the project, the scope of work, the applicants' role within the project, the project budget and the budget of the work delivered by the applicant. Only project references from the last 15 years shall be included.

Any assignment of consultants, services companies or contracts has to be included in the procurement plan and follow the GRMF procurement guidelines. Under the scenario that any of these assignments are formalised prior signing of a grant contract, the "Conditions for Early Contracting" apply.

Statements on Management and Organisational Capabilities

The Applicant needs to provide documented proof that the eligible entity is organisationally capable of conducting surface studies and that it has the management capabilities to mitigate any eventual difficulties. Capacity demonstration shall cover all environmental and social management requirements to prepare and implement activities funded by GRMF.

The required information consists of the following: information on the eligible entity, its legal entity and its core business, including a group organisational chart.

Applicants shall provide evidence that they exist as legal entities and, as part of their application, shall submit a declaration confirming that they are not in any situation which would lead to rejection as specified in Section 9.4.

Each applicant will have to submit information satisfactory to the AUC of the ownership structure fulfilling AUC's "Know-Your-Customer" (KYC) and anti-money laundering requirements.

To allow for a KYC assessment, the following information need to be submitted:

1. Name of shareholder entity (e.g. copy of company's registry)
2. Beneficiary of shareholders (entities respectively person behind with a share or voting rights of > 25%)
3. List of acting persons in the management
4. Place of registry of company
5. Full names, birthday and nationality for natural persons

Plans for subsequent reservoir confirmation drilling

The applicant needs to provide information on plans for subsequent reservoir confirmation drilling and testing if the surface studies provide good evidence for a promising geothermal resource. Details should be given on plans for obtaining expertise (e.g. identified team and partners), finance (i.e. identified (e.g. pre-committed) funds to cover the applicant's portion of the financing and equipment (availability of rig) for subsequent reservoir confirmation drilling at the prospect.

Anticipated Costs

Applications shall include a cost estimate including a detailed breakdown of anticipated costs for surface studies which are eligible for support by the Facility as defined in Sections 7.4.1 to7.4.2. In order to judge the overall project costs, applicants also need to state any non-eligible costs which need to be borne by the applicant (e.g. taxes, import duties, overheads).

Applicants shall also clearly state the total grant (only including eligible costs) and percentage of overall eligible costs which they request from the Facility.

Applications shall demonstrate that anticipated costs are reasonable and adequate and that they represent value for money, i.e. that costs and quality of all goods and services are at a minimum consistent with market norms and country standards and preferably represent a discount compared to market norms and country standards. Applications should include documentations such as quotations or estimates from different suppliers of services and goods as well as costs of previous projects in the region and internationally or any other justification of costs that substantiate the cost estimate. The reasonableness of the cost will be estimated.

9.4 Grounds for Rejection

If applicants are in one or more of the following situations, this will lead to rejection of the application:

- They are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations.
- They have been convicted of an offence concerning professional conduct.
- They have been guilty of grave professional misconduct proven by any means which the contracting authority can justify.
- They have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed.
- They have been the subject of a judgment for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the country’s financial interests.
- They are faced with a conflict of interest.
- They or their subcontractors are subject to UN, EU or AU sanctions.
- They propose project sites in areas subject to conflicts, or where disputes about borders exist.
- They do not declare that they will follow the Developer Procurement Guidelines.

- They do not demonstrate that they will comply with relevant local and national environmental and social legislation as well as with the Applicable International Standards as explained in 11.
- They do not exist as legal entity.

Furthermore, the following criteria will lead to rejection:

- Expression of Interest/Application refers to a non-eligible activity or country.
- Incompleteness of the submission form of EoI or application (incompleteness relates to filling all required fields of the template and providing all information in the required standards; also, if any fields are ticked as Not Applicable these must be supported by additional remarks).
- No extensive geological and geochemical studies have yet been undertaken for the proposed project site.
- The necessary concessions/licences/permits are not issued or not in process of being approved (meaning not yet submitted to responsible authorities).
- The full application is found to be non-responsive in respect to the information and request for further clarification provided in the EoI feedback letter.
- The two declarations and the cover letter are not submitted according to the provided format and/or are not signed and/or stamped.
- The Application/EoI is not submitted by the submission deadline to the required location in the requested format (1 searchable electronic version and original hard copy documents regarding declarations and cover letter).
- False statements in the Expression of Interest or in the application will also lead to rejection.

10 EVALUATION

A general overview on the evaluation procedure for applications is given in **Figure 4** below.

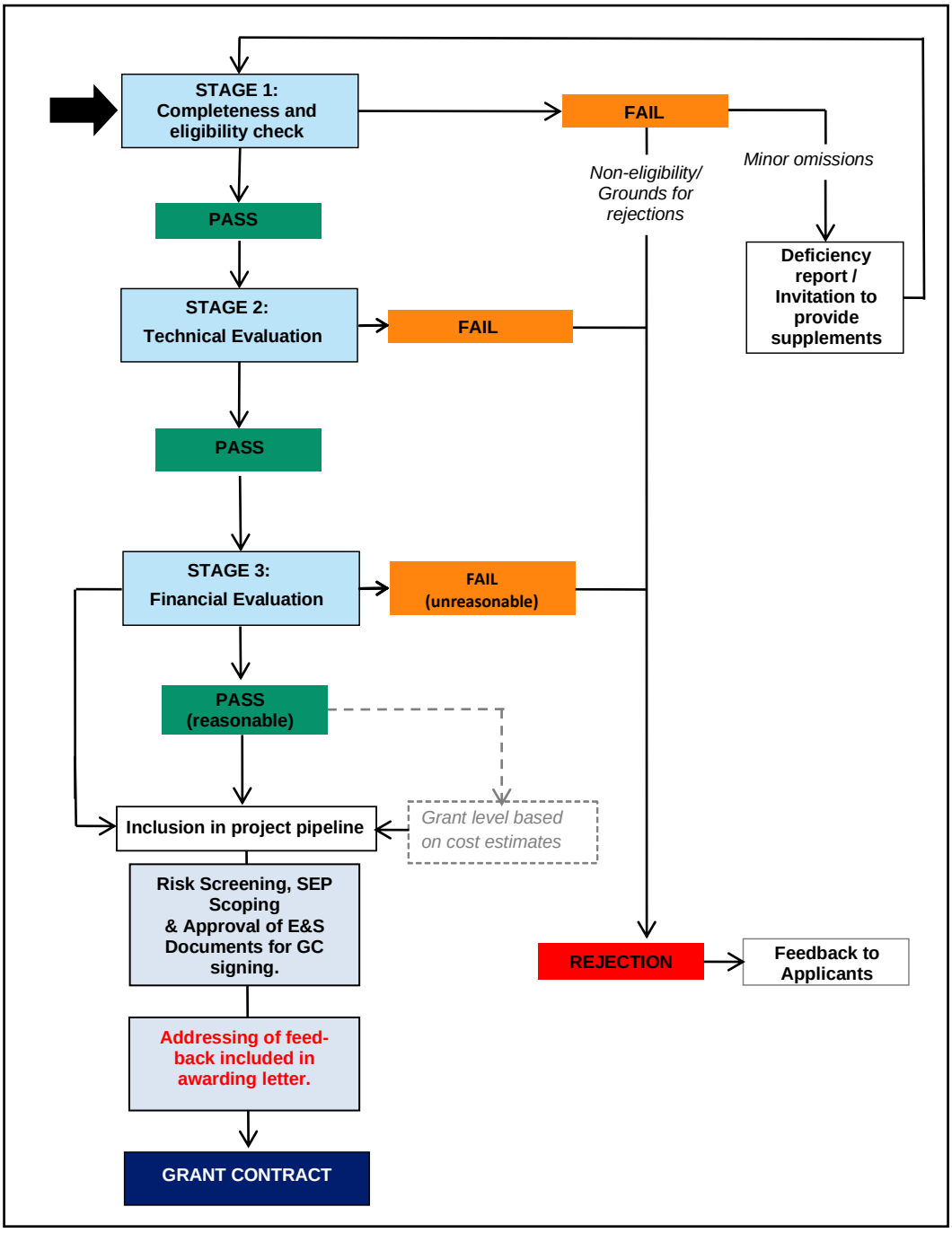

Figure 4: Overview of the evaluation procedure.

The applications will be evaluated as described below:

(a) Checking for application completeness as described in Section 9.3.

(b) Checking of application against the grounds for rejection stated in Section 9.4.

(c) Check of applications against eligibility as described in Sections 7.1 and 7.2.

(d) In case of minor, formal omissions, a deficiency report (only one per application and per application round) will be prepared and provided to the respective applicant. Applicants will have the possibility to correct the formal omissions and can send their supplements within one week of providing of the deficiency report, unless otherwise directed by the AUC. Supplements may only be given with regard to completeness, not with regard to content affecting the evaluation. Supplements shall be sent as one soft copy (as PDF searchable file) via e-mail.

(e) Written feedback for applications that do not meet the requirements of 10(a), 10(b) and 10(c), and if applicable: do still not meet them after providing the supplements specified in the deficiency report, will be provided to the relevant applicants. For the sake of clarity, such applications will not further be considered for the respective application round.

(f) If an application is received for surface studies at a geothermal prospect that has already applied to the Facility twice for the same site and by the same applicant in the previous two years but has not been invited to negotiate the grant contract in either year, then the application will not be further considered for the same site. The relevant applicants will be informed thereof.

(g) Applications that meet the requirements of 10(a), 10(b), 10(c) and, if applicable, 10(d) will be evaluated based on the pre-defined evaluation criteria listed in Annex 1. Most criteria have a threshold limit that needs to be reached. The criteria are also weighted based on importance for development of a successful geothermal project. Information on the weighting will be given in the Request for Application.

(h) The application receives a score for each criterion. The overall score is summed-up and adjusted with the criteria's weights.

(i) There is an overall threshold that requires the application to score 70% or more of the maximum achievable score.

(j) During the financial evaluation, the cost estimates from the applicants will be checked for completeness and eligibility. Subsequently, the adequateness and reasonability of the cost estimates based on the justifications given will be determined. All contingencies stated will also be checked for eligibility and reasonableness. Any adjustments necessary as the basis for the grant level offered in the contract negotiation phase will be proposed. For the sake of clarity, if the cost estimates or contingencies are found to be higher than the actual estimate of the evaluation experts, the grant level will be adjusted to match the estimated costs of the GRMF experts.

(k) If the budget is unreasonably estimated, the financial evaluation will fail and the application will be rejected.

(l) All applications that pass the technical and financial evaluation will be included in a project pipeline and subject to availability of funds offered a grant contract as soon as all project information as requested by the Facility is submitted.

(m) Applicants will be provided with feedback on the evaluation, presumably within 16 weeks from the submission deadline for applications.

11 ENVIRONMENTAL AND SOCIAL SAFEGUARD REQUIREMENTS

11.1 The Developer's Responsibilities

(1) Host Country Legislation and Applicable International Standards

It is the Developer's responsibility to carry out its operations at all times in compliance with all applicable national environmental, occupational health & safety, public health and safety, labour and social laws and regulations. International Law including conventions and treaties adopted by the host country and applicable to the project will be respected.

In addition, compliance with the requirements of KfW's Sustainability Guideline[2] (including Exclusion List as per Annex 2) and therewith International Environmental and Social Safeguards is required:

- IFC Environmental and Social Performance Standards (PS)[3] including
  - PS1: Social and Environmental Assessment and Management Systems 1
  - PS2: Labour and Working Conditions
  - PS3: Pollution Prevention and Abatement
  - PS4: Community Health, Safety and Security
  - PS5: Land Acquisition and Involuntary Resettlement
  - PS6: Biodiversity Conservation and Sustainable Natural Resource Management
  - PS7: Indigenous Peoples
  - PS8: Cultural Heritage
- ILO Core Labour Standards
- World Bank Group's Environmental and Health (EHS) and Safety Guidelines[4] including:
  - General EHS Guidelines
  - EHS Guidelines for Onshore Oil and Gas Development (for the management of naturally occurring radioactive materials (NORM)
  - World Bank Group's EHS Guidelines for Toll Roads (regarding abnormal load transports)
- For the resettlement aspects, the UN Basic Principles and Guidelines on Development-based Evictions and Displacement, namely sections 42, 49, 52, 54 and 60, have to be complied with (in addition to national legislation and IFC PS 5).
- Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT, FAO 2012)[5].

Guidance shall be obtained from

[2] KfW's Sustainability Guideline
[3] IFC Environmental and Social Performance Standards (PS)
[4] World Bank Group Environmental, Health, and Safety Guidelines
[5] Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT, FAO 2012)

- GRMF Human Rights Guidance including guidance for the process of Free, Prior and Informed Consent[6]
- For workers' accommodations, projects should adhere to international standards for worker housing such as "Workers' Accommodation: Processes and Standards: A Guidance Note by IFC and the EBRD"[7]
- "Geothermal Exploration Best Practices: A Guide to Resource Data Collection, Analysis, and Presentation for Geothermal Projects" (IFC 2013)[8] and "Best Practices Guide for Geothermal Exploration" (2014 by IGA in cooperation with IFC)[9]
- Addressing Gender Based Violence and Harassment; Good Practice Note for the Private Sector (IFC 2019)[10]
- Addressing Grievances from Project Affected Communities (ICF, 2009)[11]

The Exclusion List as per KfW Sustainability Guideline (2021) and IFC Exclusion List (2007)[12] will be respected and adhered to.

Host Country Legislation and the International Applicable Standards are together referred to as the **Applicable Standards**. According to the Applicable Standards the following main topics are under the Developer's responsibility.

(2) Environmental and Social Risk Management

The assessment of environmental and social as well as of human rights risks and impacts, including their significance and materiality, as well as the development of adequate management plans and programmes are key tools for achieving sound environmental and social performance for undertakings funded by GRMF. To assess these risks and impacts and design management plans and programmes a comprehensive Environmental and Social Impact Assessment (ESIA) including a human rights impact assessment as appropriate needs to be conducted (see further information below). The central tool to address and manage the specific risks and impacts of geothermal projects is an appropriate environmental and social management system (ESMS) to be established by the Developer, in line with relevant legislation of the host country and compliant with the *Applicable Standards*.

(3) Stakeholder Engagement

The Developer is required to prepare and implement a continuous process of Stakeholder Engagement, to be built into project planning in a way that enables a meaningful information exchange with all identified stakeholder groups at the very outset of the project and at subsequent key decision-making points in its life cycle. Stakeholder engagement activities need to satisfy host country legal requirements, guidelines and formats and have to be compliant with the Applicable Standards. Adequate budgetary resources should be foreseen and dedicated to this activity.

[6] GRMF Human Rights Guidance including guidance for the process of Free, Prior and Informed Consent
[7] Processes and Standards: A Guidance Note by IFC and the EBRD
[8] A Guide to Resource Data Collection, Analysis, and Presentation for Geothermal Projects
[9] Best Practices Guide for Geothermal Exploration
[10] Addressing Gender-Based Violence and Harassment: Emerging Good Practice for the Private Sector
[11] Addressing Grievances from Project Affected Communities
[12] IFC Exclusion List (2007)

As a key element of Stakeholder Engagement, the timely disclosure of relevant project information enables stakeholders to understand the project's risks, impacts and opportunities. The Developer will disclose Information to stakeholders in the local language(s) and in a manner that is timely, accessible and culturally appropriate. Any vulnerable or minority groups will be meaningfully taken into account in order to secure their equitable representation and for due consideration of their rights, views and interests.

Stakeholder Engagement comprises consultation of communities who are, or are likely to be, affected by adverse impacts from a project. The Developer will undertake a process of meaningful consultation in a manner that provides the affected parties with opportunities to identify and express their views on project risks, impacts, and mitigation measures.

The overall frequency and degree of engagement and consultations will depend on the nature and magnitude of risks and current and potential adverse environmental or social impacts arising from the project.

The Developer's responsiveness and the meaningful on-going engagement and consultations with impacted individuals, communities and other relevant stakeholders are key for a meaningful process of Stakeholder Engagement.

Annex 3: Stakeholder Engagement provides additional information on Stakeholder Engagement.

(4) Indigenous People, Free Prior and Informed Consent (FPIC)

It is the Developer's responsibility to assess at the very outset of the project if indigenous communities are present in the wider concession area. Careful probing of on-site communities' qualification will be undertaken, in order to establish if IFC Performance Standard (PS) 7 (Indigenous Peoples) ought to be triggered.

In case IFC PS 7 is triggered, the principle of free, prior and informed consent (FPIC) has to be applied by the Developer. In line with IFC PS 7, FPIC refers to the process whereby an affected community of indigenous people arrives at a decision in accordance with their legal provisions, cultural traditions and practices.

The FPIC process should produce a clear endorsement or rejection of the proposed project and a statement of accompanying mitigating measures and/or benefit-sharing agreements. As such, it is the main instrument ensuring to the Developer and the GRMF that at the project level, the indigenous peoples' priorities for economic, social and cultural development and environmental protection are promoted, informed by their traditional cultures, knowledge and practices, and the implementation of their inherent right to self-determination.

FPIC is expected to be established through good faith negotiation between the Developer and the participating indigenous communities and to be fully documented as a mutually accepted process between the parties, carrying evidence of agreement between them as the outcome of the negotiations and clearly outlining benefit- and risk-sharing provisions. Please see GRMF Human Rights Guidance[13] and GRMF guidance for FPIC[14].

[13] GRMF Human Rights Guidance
[14] GRMF guidance for FPIC

(5) Grievance Redress Mechanism (GRM)

The Developer shall establish, operate and document an accessible, transparent and culturally appropriate Grievance Redress Mechanism for the affected public as well as a separate GRM for project workforce, in line with the Applicable Standards.

Further information on the above described Developer's responsibilities is provided below including required assessments, management plans and essential considerations.

11.2 Surface Study Phase

All activities during the Surface Studies have to be undertaken in line with the relevant national legislation and requirements and compliant with the Applicable Standards.

(1) Environmental and Social Documentation for Application

The Developer will submit:

a) **Environmental and Social Risk Screening Report,** containing overall identification of environmental and social risks of the planned activities, key environmental and social information on the area to be studied and an initial scoping of environmental and social issues, including any human rights risks as per GRMF Human Rights Guidance. The Report has to include the Developer's work plan for the acquisition of environmental and social information and related activities during the surface study phase. The E&S Risk Screening Report is to include the environmental and social risk categorization of planned activities according to IFC standards.

b) **Stakeholder Engagement Plan (SEP),** describing the overall approach for stakeholder engagement and the stakeholder engagement activities to be undertaken during the Surface Study Phase, explaining how local communities in the survey area will be informed about the activities and consulted during the field work. The SEP will contain an initial grievance mechanism, to be further developed based on information from stakeholder engagement during the surface studies.

c) **Environmental & Social Documents/Permits**

d) **In case of Temperature Gradient Wells, for which temporary drilling pads are required**, additional documents have to be provided:

- All national permits required to be obtained and other relevant legal requirements to be adhered to.
- Appropriate Stakeholder Engagement has to be undertaken and to be documented as part of the Stakeholder Engagement Plan. In case Indigenous People's Land would be affected and IFC PS 7 triggered, the process of Free, Prior and Informed Consent has to be taken into account, implemented and documented as well. Regarding the compensation for any impacts from temporary land take for affected landowners and land users, fair and transparent negotiations should be undertaken in order to determine mutually agreed disturbance allowance/com-

pensation for temporary land take to be paid to the landowner/-user. Such agreement should be based on the provisions of national legislation and of IFC PS 5 and should be documented and signed by all parties.

Stakeholder engagement has to include actions to clarify whether IFC PS 7 is triggered by the Project and the SEP has to contain respective provisions to apply the process of Free, Prior Informed Consent in case this would be required.

The E&S Risk Screening Report with work plan and the SEP will be reviewed by GRMF and are subject to "No Objection".

The approved documentation will be part of the Grant Contract.

(2) Completion of Surface Studies: Scoping Report

During the surface study phase, based on the E&S Risk Screening Report, initial environmental and social baseline information will be obtained in preparation of the ESIA for the phases of Exploration Drilling/further project development respectively. The scoping exercise aims at identifying those potential impact areas that need further investigation in the ESIA phase. The result of these investigations, including the initial stakeholder engagement activities, is a Scoping Report, to be submitted by the Developer after the completion of the surface study phase. The Scoping Report will cover the physical, biological, socioeconomic and cultural environments within the proposed project area and identify the key issues including any human rights related issues relevant to the project to be considered in the full ESIA appropriate to the Exploration Drilling and if applicable in complementary ESIAs for further project developments (i.e. production drilling). The Scoping Report will provide confirmation of the project's Area of Influence (AoI)[15], the Terms of Reference for any additional baseline studies needed and for impact assessment and development of ESMPs and any other safeguard instruments as required in order to comply with the Applicable Standards.

Main contents of the **Scoping Report** are listed in Annex 2: Content of a Scoping Report.

The information obtained during the surface study phase will inform the further development/update of the **Updated SEP**, e.g. will provide input on the design of the engagement activities for the forthcoming ESIA phase. As part of the overall stakeholder engagement process, stakeholders should be able to provide input to the SEP and any other scoping document and receive feedback on how their comments and input have been incorporated and addressed. This process shall be made visible via an updated SEP comprising a transparent, accessible, culturally appropriate and free of cost grievance mechanism.

By completion of the surface study phase and as pre-requisite for final disbursement, the Developer will submit in line with the *Applicable Standards*:

a) Any E&S documentation as required by national legislation,
b) Scoping Report and
c) Updated SEP.
d) Land lease agreements.

[15] The AoI shall be defined consider the relevant physical, biological, and socioeconomic receptors potentially affected by the proposed Project

- In case of Temperature Gradient Wells, temporary drilling pads are required, therefore additional documents have to be provided upon completion: Upon completion of temporary drilling activities, all equipment, material and waste shall be removed from the drilling site and deposited appropriately. The Developer shall establish and implement a Restoration Plan.
- Following completion of site restoration, the handover of the land used temporarily back to the original owner/user shall be documented in the format of a Handover Protocol to be signed by both, the landowner/-user and the Developer.
- The TG well has to be properly sealed in accordance with best industry practice. This process has to be documented.

In case the land for the TG well is returned to the lessor a compensation payment in the amount of the purchase price must be made if one of the following actions is triggered during the preparation of the TG well:

- Surface levelling, earth works including removal of topsoil, soil compacting and gravel laying.
- Earthworks.

In case IFC PS 7 is triggered, the Developer will provide documented evidence for the application of FPIC and the respective decision made in this context (*see under Section 11.1 (4) above*).

The Scoping Report, the updated SEP and any additional documents related to temporary drilling activities will be subject to review and "No Objection" by GRMF.

Reporting during Surface Study Phase

During the surface study phase (from GC signing up to submission complete E&S Documentation as required), the Developer will submit monthly status reports, comprising information on stakeholder engagement activities and respective findings as well as on the progress of environmental and social field studies. A template for E&S Reporting will be attached to the grant contract.

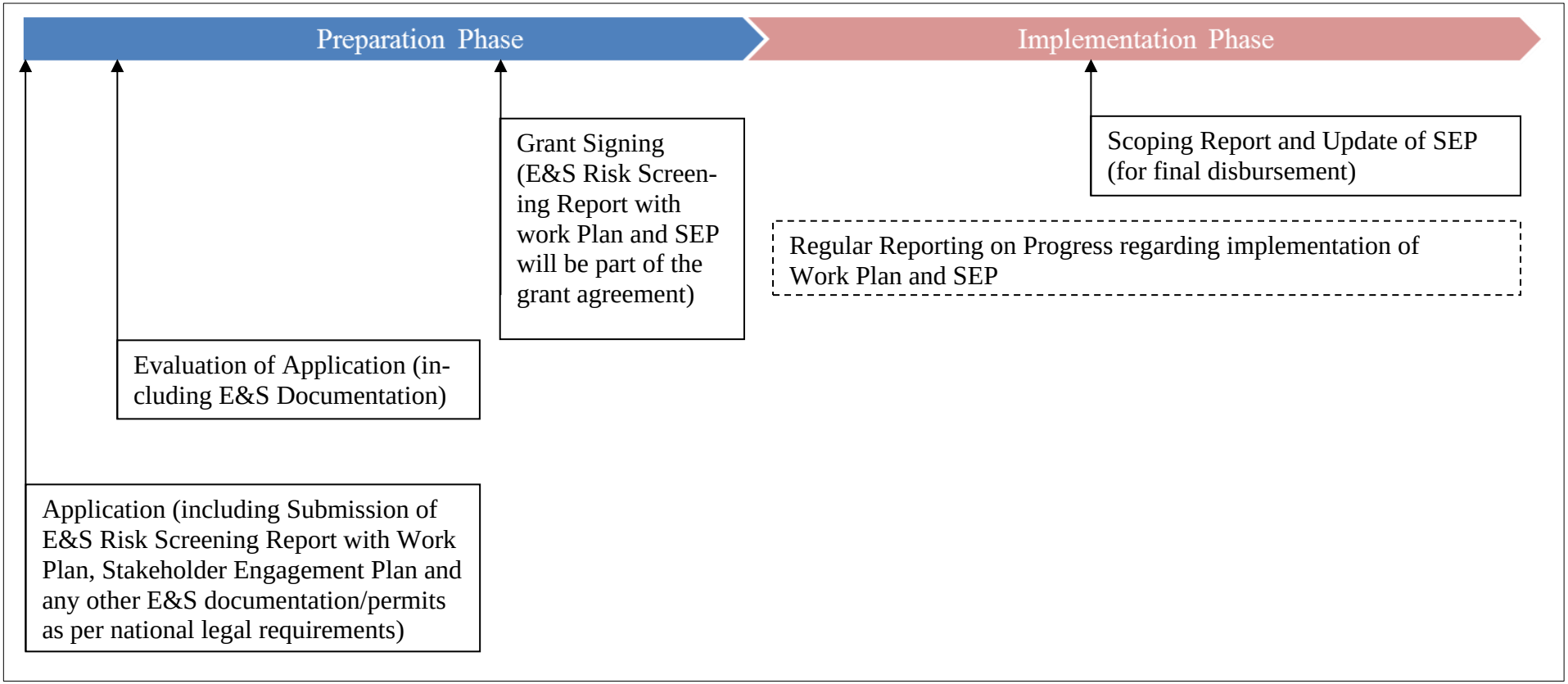

Figure 5: Requirements for environmental and social documentation/plans during the Surface Studies

12 PROJECT PIPELINE: PROCESS & REQUIRED DOCUMENTS

Projects passing the 70 points thresholds during the evaluation will be included in a project pipeline. Only these projects will be invited for grant contract signing subject to the condition that the following documents are submitted and approved:

a) All documents as requested with feedback letters announcing evaluation results of the full application.

b) Statement by the beneficiary's bank confirming the bank account into which the grant will be paid.

c) Signed letter by authorised representative of the beneficiary setting forth the name, title and authenticated specimen signature of each person authorised to sign payment requests.

d) Specimen signature for the person authorised to represent the Beneficiary in signing this Contract.

e) Specimen signatures for the persons authorised to represent the beneficiary during the implementation of the grant contract.

f) Legal opinion by a reputable third-party lawyer from the beneficiary's country of origin confirming that the beneficiary's legal status legitimates the beneficiary to enter into the grant contract and which persons are authorised to sign the grant contract on behalf of the beneficiary.

g) Legal opinion by a reputable third-party lawyer from the country (meaning the country where the project site is based) confirming that all documents provided by the beneficiary such as concessions, environmental/social permits, access rights are valid and in compliance with the law of the country as well as that all permits and licenses required by the law of the country to conduct the applied for surface study are obtained and valid.

h) Submission of all required monthly reports in case of early contracting.

13 GRANT CONTRACT

The applicant will be offered a grant contract by the AUC. A draft will be provided to the applicant as soon as the requirements for grant contract signing are fulfilled. In case a notification of early contracting is submitted to the AUC, a draft grant contract will be made available to the applicant to ensure the compliance with all duties and liabilities covered in the grant contract.

- The grant contract will require the developer to take out and maintain during the entire contract period appropriate insurances and bonds, including but not limited to the following items:
  - General liability including third party liability.
  - All risks (physical loss or damage).
  - Construction.
  - Fire.
  - All medical, cars, and housing insurances for the personnel at site.
  - Workers compensation insurance.
  - The beneficiary guarantees that there will not be any liability whatsoever for the contracting authority arising out of or in connection with the grant contract against the contracting authority.
  - The beneficiary shall indemnify and hold harmless the Contracting Authority and Contracting Authorities´ affiliates and any of their officers, directors, shareholders, and/or employees from and against any and all losses, liabilities (whether present or future) damages and reasonable costs and expense arising out of or in connection with the Grant Agreement.
- All insurance policies have to be readily accessible in order for the RGCU to review upon request.
- Full record of all relevant authorisations as well as all applicable and required environmental and social permits is compulsory for signing the grant contract between the developer and the AUC.
- Approved Environmental & Social Risk Screening Report with work plan as well as SEP**.**
- If the applicant needs to select and appoint sub-contractors to carry out all or parts of the surface studies, then:
  - The procurement process for all goods and services must follow the Developer Procurement Guidelines and the “Conditions for Early Contracting”.
  - If any changes in contractors or key personnel occur between submission of the application and signature of the grant contract, the applicant has to inform the AUC in due time.
  - Applicants are required to keep a full written record of the awarding procedure for at least ten years, and to allow the AUC and auditors assigned by the AUC or the Oversight Committee at any time full access to any and all documents and records of the awarding procedure. Non-compliance with the procurement criteria shall lead to the termination of the grant contract.
  - As no import duties or any other taxes may be financed from the Facility account, such import duties, if part of the contract value, shall be stated separately in the

contracts for the goods and services and in the invoices. They will not be borne by the GRMF.

- It is to be noted that according to general GRMF rules, the time for commencement of services and sub-contracting shall be according to the agreed time schedule forming a part of the grant contract but no earlier than the effective date of the grant contract. However, the applicant is allowed to appoint sub-contractors after submission date of the EoI and to commence services after submission deadline of the full application but before signing of the GRMF grant contract but for this case of "Early Contracting" the following conditions shall apply[16]:
  - The Applicant has to comply with all duties and liabilities covered in the GRMF grant contract even before signing the grant contract (like following all procurement guidelines, monitoring and reporting requirements and all other guidelines relevant to the applicant, etc.) and will be excluded from funding if before or after signing of a GRMF grant contract it becomes clear that these haven't been followed in an appropriate way.
  - With the full application, a procurement plan (template provided) has to be submitted, which has to include all early contracted activities.
  - The applicant takes the full risk that:
    - he will not reach the threshold of 70 points in the application procedure and therefore will not be considered for a GRMF grant,
    - he will not be considered for a GRMF grant due to limited funding even in case of reaching the threshold of 70 points or more,
    - the GRMF grant contract covers only parts of the project that has been applied for,
    - or the GRMF grant contract will not be signed for any other reason.

[16] For a detailed description on "Early Contracting" please refer to the document "Conditions for Early Contracting".

- The grant contract will include but not be limited to the following:
  - Upper limits for all grants expressed in USD.
  - Exchange rate for agreed non-USD currencies will be determined on the basis of the UN Operational Rates of Exchange (https://treasury.un.org/operationalrates/OperationalRates.php) of the date specified in the Request for Application.
  - Milestones for grant disbursements.
  - Requirements for appropriate insurances and bonds.
  - Requirement that surface studies commence within 6 months of signing the grant contract and be completed (including an integrated resource report and feasibility study) within 15 months of signing the grant contract. On an exceptional basis, alternative timings can be negotiated.
  - Reporting requirements as stated in Sections 15 and in Chapter.
  - Requirement that the integrated resource report will be published on the Facility's regional geothermal database of prospects in the region. Confidential data that may cause competitive disadvantage to the developers may be kept confidential for a period of time as agreed upon with the AUC.
  - Requirement for developers to keep accurate and regular records and dedicated, auditable and transparent accounts for a period of ten years following signing of the grant contract.
  - The maximum grant will be stipulated in the grant contract. This will under no circumstances be exceeded. Prices quoted in the cost estimate as part of the application shall specify item costs and contingency separately. Eligible, reasonable and negotiated contingencies will be part of the grant contract amount. Variations in prices are eligible for GRMF funding up to the contingency level without prior notification of the AUC.
  - If the cost estimate is exceeded in regard to one or more cost categories of Tier 1, the developer may reallocate a cost saving from any other cost category of Tier 1 to the exceeded cost category to cover the overrun, but the reallocation may not exceed 15% of the cost estimate of the exceeded cost category.
  - The reallocation of approved costs is not permitted for the cost category "infrastructure" of Tier 1. Therefore, the developer may not use a cost saving from any other cost category of Tier 1 to cover an overrun of the infrastructure cost category and may not use a cost saving from the infrastructure cost category to cover an overrun of any other cost category of Tier 1.
  - The Beneficiary may within one cost category of Tier 1 reallocate costs between the cost categories of Tier 2 and Tier 3.

- On finalisation of the grant contract, the RGCU will dispatch three originals of the signed grant contract to the applicant. If the applicant does not deliver the counter-signed grant contract to the RGCU within 14 calendar days, the offer to enter into the grant contract will be cancelled.

14 GRANT PROVISION

- Payments will be disbursed against the presentation of a payment request.
- On achievement of milestones in the surface studies plan and according to the disbursement schedule included in the grant contract, the developer shall send the payment request and supporting information to the AUC address specified in the Request for Application (one original). Supporting information can be e.g. copies of receipts and/or invoices, reports on milestones reached or pictures of infrastructure established.
- Costs must be recorded in the developer's accounts or tax documents. They shall be accessible, identifiable and verifiable, and must be backed up by original supporting documents. Developers must keep accurate and regular records and dedicated, transparent, auditable and accessible accounts of project implementation for a period of ten years following grant provision by the Facility.
- Payment request and supporting information will be assessed. This will consist of a quality and consistency check, check for errors, costs not covered by grant and costs not substantiated.
- If the payment request is valid:
  - The AUC’s Finance department will authorise payment from the Facility Account as per the conditions in the grant contract.
- If the payment request is not valid:
  - The developer will be informed and will be asked for clarification of the payment request.
  - The developer shall in a timely manner correct and re-submit the payment request.
  - If the issue remains unresolved, dispute resolution will take place as per the conditions in the grant contract.
- If fraud (e.g. inflated costs, tasks not performed but invoiced) is detected, the payment request will be rejected for minor issues, dispute resolution will take place as per the conditions in the grant contract. In case of fraud, the grant contract will be cancelled.

15 MONITORING AND REPORTING

Developers need to submit several reports for review and assessment as specified below.

The developer shall inform the RGCU of surface study commencement, update the RGCU of progress in monthly status reports and inform the RGCU of surface study completion. A report template for the monthly status reports will be attached to the grant contract. The monthly status report will comprise information on stakeholder engagement activities and respective findings as well as on the progress of environmental and social field studies. A template for E&S Reporting will be attached to the grant contract. Furthermore, an updated procurement plan has to be submitted with each monthly report.

In addition, the developer may be requested to provide raw data files for the first set of surface measurements, which will be checked for quality and informational value. If quality and informational value are not satisfactory, the RGCU will inform the developer and provide feedback. The developer shall immediately start to resolve the issue. This procedure may be repeated a second time if the second measurement is not satisfactory either. If the third measurement is still not satisfactory, the grant contract will be cancelled. All costs accrued due to any non-satisfactory measurement resolution need to be borne by the developer.

Upon completion of the studies, all collected data, interpretations, lessons learnt, updates of project documentation as well as information on the total project costs shall be compiled in an integrated resource report as well as a financial report (including an expenditure verification report) and submitted to the RGCU. A blank report form of the integrated resource report and a guideline for the financial report will form part of the grant contract.

Upon completion of the studies a feasibility study of the resource and the available market for the direct use applications shall be prepared by the Developer. The aim of the feasibility study is to assess the technical, economic and market viability of the planned direct use applications. A blank report form of the feasibility study will form part of the grant contract. The feasibility study shall include but not be limited to:

- Market analysis
- Concept strategy
- Design premise
- Engineering works, including surface installations
- Cost/benefit analysis
- Financial analysis
- Risk assessment
- Social & Economic Benefit
- Assessment of regulatory framework regarding implementation of proposed project (e.g. licensing, concessions)
- Project Schedule

Raw data collected during the surface study funded by the Facility also needs to be provided. The raw data shall be annexed in clear tables or graphs for easy consultation (English language, International System of Units (SI)) and also be provided in digital format along with any special programmes necessary to view the raw data.

Failure in complying with the monitoring or reporting requirements will result in a request to rectify the issue. If the issue remains, dispute resolution will take place as per the conditions in the grant contract. If the dispute resolution remains, pertaining failure in complying will result in the cancellation of the grant contract.

Upon completion of the studies and as pre-requisite for final disbursement, the Developer will submit in line with the *Applicable Standards (see Chapter 11)* any E&S documentation as required by national legislation, a Scoping Report and the Updated SEP. The Scoping Report will cover the physical, biological, socioeconomic and cultural environments within the proposed project area and identify the key issues including any human rights issues relevant to the project to be considered in the full ESIA for Exploration Drilling and in complementary ESIAs for further project developments (i.e. production drilling and direct use applications).

An overview on GRMF reporting requirements for Surface studies can be found below.

Surface Studies:

- Notification of milestones (2 weeks in advance):
  - Commencement Date and
  - Completion Date.
- Monthly progress reports consisting of:
  - Narrative report
  - Environmental and social performance progress reports
  - Updated project execution schedule
  - Updated procurement plan
- Final report consisting of:
  - Narrative report being the integrated resource report
  - Financial report including an expenditure verification report
  - Feasibility study report
  - Final environmental and social performance report
  - E&S Scoping report
  - Updated Stakeholder Engagement Plan
  - Documentation evidencing the fulfilment of the FPIC-Requirements (if applicable)

16 INFORMATION AND COMMUNICATION

Information on the Facility will be disclosed and disseminated to the general public, including governments, civil society organisations and the private sector, unless there is a compelling reason not to do so. For this reason, a Facility website has been established:

www.grmf-eastafrica.org

All relevant information on the Facility (including the Developer Manual) will be published on this website.

After finalisation of the evaluation, information on the total number of projects potentially funded and the total amount of funds will be published on the Facility webpage. It is to be noted that the amount of grants awarded to a specific developer may be disclosed after grant signing.

As part of their application, applicants need to submit a project data sheet including information on the developer, the location, size and nature of the resource, type of surface studies to be undertaken and metadata on information sources. After signing of the grant contract, the project data sheet will be published on the Facility's regional geothermal database of prospects in the region.

17 CONFIDENTIALITY AND DATA PROTECTION

The AUC, BMZ, EU, KfW, and the Technical Consultants will keep confidential the details of any application and any information made available in connection with any further enquiries and/or discussions with the Project developer/Applicant. The details of any application will only be made available to the AUC's and the Technical Consultant's employees and professional advisers which are directly involved in the appraisal of such information.

The application process, the data system and its access will conform to the requirements of confidentiality.

If required and approved in writing by the AUC/KfW the data may also be transferred to internal audit services and/or relevant third parties directly involved in the GRMF.

Any party receiving information or data of any application will be obliged by the AUC/KfW to keep it confidential in accordance with the confidentiality policy of the GRMF.

18 ANNEXES

Annex 1: Evaluation Criteria – Surface Studies

The following table shows an overview of the evaluation criteria for surface studies. The criteria may still be subject to slight changes and will be stated more precisely in the Request for Application. The evaluation criteria 1, 2, 3, 4, 5, 6 and 7 are classified as main criteria. Applications which score in these main criteria in the lowest category will therefore not be considered further in the current application round but will be provided with feedback accordingly. The overall minimum score for all criteria is 70%.

	Evaluation Criteria	Status/ Criteria
1	Indication of the existence and nature of geothermal resource based on results from previous studies	Well documented, good evidence of the existence and nature of a geothermal resource
		Some evidence of the existence and nature of a geothermal resource
		Limited evidence of the existence and nature of a geothermal resource
2	Robustness of work programme and schedules for surface studies	Detailed, thoroughly presented and technically feasible as well as appropriate work programme and justification
		Feasible work programme but lacking some detail
		Incomplete or unfeasible work programme
3	Appropriate authorisation for exploration activities, environmental, access rights and any other relevant permits/licenses/rights in place or under negotiation	Majority of authorisations and permits/licenses/rights in place or not required; negotiations for missing authorisations/permits/licenses/rights underway
		Some authorisations/permits/licenses/rights in place or not required; negotiations for missing authorisation and permits/licenses/rights underway
		No/few authorisations/permits/licenses/rights in place; no/few negotiations for missing authorisations/underway: no details specified
4	Concept strategy and description of market strategy for the geothermal direct use applications	Robust and well thought out concept and market strategy
		Feasible concept and market strategy but lacking some detail
		Incomplete or unfeasible concept and market strategy
5	Plan for financing the developer's portion of the surface studies budget	Thoroughly presented, robust, feasible and adequate financing plan

	Evaluation Criteria	Status/ Criteria
		Fair financing plan, but lacking some detail
		No or limited financing plan
6	Geothermal exploration experience and expertise of the developer including private sector partners and engaged consultants as demonstrated in the key personnel CVs	Qualified working experience of key personnel in comparable geothermal projects ≥10 years including experience in East Africa
		Qualified working experience of key personnel in comparable geothermal projects ≥ 5 including experience in East Africa
		Key personnel inexperienced in comparable geothermal projects / no experience in East Africa
7	Geothermal exploration experience and expertise of the developer including private sector partners and engaged consultants as demonstrated in the project references	Good track record of successful geothermal exploration and development
		Some experience but some gaps and/or limited track record
		Unproven or inexperienced eligible entity
8	Financial, management and organisational capabilities	High financing, management and organisational capabilities in place to carry out programme
		Fair financial, management or organisational capabilities, but lacking some detail
		Low financial, management or organisational capabilities
9	Plans for obtaining expertise, finance and equipment for reservoir confirmation drilling	Robust and well thought out plans for subsequent reservoir confirmation drilling
		Fair plans for subsequent reservoir confirmation drilling but lacking some detail
		No or limited plans for subsequent reservoir confirmation drilling
10	Quality of the provided application	High quality
		Fair quality
		Poor quality

Annex 2: Content of a Scoping Report

Topics to be addressed in the **Scoping Report** will comprise, but may not be limited to:

- Overall contextual risk analysis and scoping of human rights risks for the planned project as per GRMF Human Rights Guidance
- Current land use in the area (including information on any existing structures that will need to be removed for the exploration drillings), including settlements and public infrastructure
- Local livelihoods, agriculture and grazing
- Presence of protected/endangered plants or animals
- Presence and/or proximity to wildlife migration corridors
- Proximity to important wildlife habitat areas including Special Protected Areas (SPAs) and statutorily designated or qualifying International or National sites for nature conservation
- Proximity to protected area or area of cultural significance
- Proximity to closest residence/neighbourhood, public health and safety
- Description of procedures for measuring and monitoring noise and potential impact on nearby residents and any controls that will be required on the equipment to minimize noise
- Water resources (surface water, ground water)
- Heath and disease vectors
- Occupational H&S
- Security implications
- Aesthetics and sense of place
- Traffic flows
- Waste
- Recreation and tourism
- Information regarding physical or economic displacement of population
- Information regarding potential impacts on indigenous people
- Information regarding how the land for the Project (exploration drilling and further development) will be acquired
- Any public meetings held with nearby residents and issues that arose.
- Information regarding planned expansion or presence of other geothermal facilities, existing or planned, in the Project area of influence.

Annex 3: Stakeholder Engagement

For the preparation of the Stakeholder Engagement Plan, guidance may be obtained from IFC's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets.

Exemplary Content of a Stakeholder Engagement Plan

(1) Introduction

- Project Description
- Public Consultation and Project Design, Construction and Operations
- Project Purpose and Objectives
- Total Project Cost and Associated Financiers and Lenders

(2) Public Consultation Regulations and Requirements

- National Regulations and Requirements
- International Standards and International Best Practice

(3) Previous Public Consultation and Disclosure Activities

- Summarize all public consultation and information disclosure activities to date. This should include the types of information disseminated, the locations and dates of meetings, descriptions of those individuals/groups involved.
- An overview of issues discussed, how they were responded to and how they were communicated back to the concerned publics.

(4) Stakeholders

- Provide an inventory of key stakeholder groups who will be informed and consulted about the project.
- Account for inter- and intra- social dynamics across all stakeholders, identifying under-represented and vulnerable groups.

(5) Stakeholder Engagement Plan

- Goals of the Plan
- Methods for Information Dissemination and Public Consultation
- Information Disclosure and Public Consultation
  - Issues Scoping
  - ESIA Review
  - Construction and Operations

(6) Schedule and Timetable

- Provide a schedule detailing when public consultation and information disclosure will occur, with which stakeholder groups, at what stages of the project's process/project cycle, and through what formats.

(7) Resources and Responsibilities

- Indicate budgets allocated to the realization of all activities foreseen in the plan.
- Indicate management and expert staff devoted to, and responsible for, the public consultation and disclosure programme.

(8) Grievance Mechanism

- Describe how the operation- affected people can bring their concerns to the project authority and how they will be considered and addressed.

(9) Monitoring and Reporting

- Identify where and when the results of public consultation and information disclosure will be reported. This should include at a minimum reporting on the results of consultations at the draft ESIA stage and annual monitoring reports.

Note: in case IFC PS 7 is triggered the SEP has to comprise the provisions for the process of Free, Prior and Informed Consent (FPIC) and any specific engagement provisions for indigenous groups as required. Please also see GRMF Human Rights Guidance and FPIC Guidance.

Annex 4: Glossary

This Glossary explains key terms used in the Manual, so to avoid ambiguity and help readers to understand the more technical or Facility specific terms.

Concession Agreement

A concession agreement is a license allowing the developer to conduct surveys or to drill a well in a specific area. In most countries, a concession agreement needs to be in place in order to implement a geothermal project.

Consortium

For the GRMF a "Consortium" is any kind of cooperation with the objective of a joint development of a geothermal project.

For this cooperation, there could be either:

a) A Special Purpose Vehicle (SPV) especially established for the particular project, with shareholders from participating partners
b) A Joint Venture agreement between cooperating parties

In case of a), the SPV will be the applicant and finally also the beneficiary. The declarations and the grant contract will have to be signed by the representative(s) of this corporation.

In case of b), the joint venture agreement has to be submitted to AUC with the application. The declarations and grant contract have to be signed by every cooperating party.

Geothermal Resource, Geothermal Prospect, Geothermal Reserve

A **geothermal resource** exists in such a form, quality and quantity that there are reasonable prospects for its eventual economic extraction. The location, quantity, temperature, geological characteristics and extent of a geothermal resource are known, estimated or interpreted from specific geological evidence and knowledge.

As geological evidence and knowledge increases, a **geothermal prospect** may become a geothermal resource but until that time, the prospects for its eventual economic extraction are uncertain.

The essential feature of a **geothermal reserve** as opposed to a geothermal resource, is that it takes commercial viability into account. 'Reserves' are defined as the part of the resource that is commercially extractable and 'Resources' as the as yet sub-commercial component.

Initiation/Completion of Field Work

Initiation of field work means the actual start of field work by geochemical sampling, structural mapping, laying-out and installation of geophysical sensors, etc. Completion of

field work means removal of all monitoring equipment or sensors from the exploration site.

Temperature Gradient Well

Temperature gradient (TG) well is a shallow, narrow well drilled below the ground water table for the sole purpose of measuring the temperature within 24 hours of drilling to be able to calculate the temperature gradient (°C/km) in the top part of the expected geothermal area and to construct a temperature gradient map of the resource area in an attempt to find an anomaly indicative of a deeper geothermal system.

Design, depth and number of temperature gradient wells shall be reasonable and solely for the purpose of measuring the temperature and to be able to calculate the temperature gradient (°C/km) in the top part of the expected geothermal. The design and depth of the TG wells can depend on the depth of the ground water, lithology, etc. For example, in low temperature areas (like the West – branch of the EAR) with low permeability and a shallow depth to groundwater table, TG wells can be as shallow as 30-60 m deep. Justifications of design should be given with reference to site characteristics.

Prior to drilling TG wells, the regional gradient must be known so anomalous areas can be delineated. In other words, the proposed TG survey should focus on finding anomalously hot areas.

This approach is ideal for fracture dominated but hidden geothermal systems. For a TG survey of this nature, the number of wells can vary greatly, from a few up to 15 wells.

For high temperature area (like the East – branch of the EAR), geothermal gradient wells can be applied in the surface study phase. The depth of the wells will depend on the permeability of the surface layers. Gradient drilling in high temperature areas can be much more complicated than in low temperature areas.

The suitability in regard to amount and depth of TG wells will be evaluated by looking at relevant justification on a case-by-case basis.