



Minutes of Meeting
ISA/M.05/WD.01
23rd – 27th September, 2019
Conakry, Guinea

(Confidential)

Minutes of Meeting for Expert Level Visit to Guinea by International Solar Alliance Secretariat held from 23rd – 27th September, 2019.

Venue: Conakry, Guinea

Minutes of the meetings

Expert Level Visit by International Solar Alliance Secretariat

September 23rd, 2019 to September 28th, 2019

A. Background

The International Solar Alliance (hereinafter referred to as “ISA”) is a treaty based inter-governmental organization which was launched on 30 November 2015, in Paris, France, with Headquarters in India (UN Registration No. 54949). ISA is established to collectively address key common challenges to the scaling up of solar energy in its Member Countries. Guinea is one of the founding members of ISA.

ISA has been framing various Programmes in order to implement various solar application in the Member Countries. All the Programmes of ISA are member driven. Currently there are 5 ISA programme viz. 1) Scaling Solar Applications for Agricultural use 2) Affordable Finance at Scale 3) Scaling Solar Mini Grids 4) Scaling Rooftop Solar and 5) Scaling Solar E-mobility and Storage.

Team under ISA Secretariat visited Guinea from 23rd September 2019 to 28th September 2019. The team consisted of members from ISA and PwC (details provided in Annexure I).

The objectives of the Mission were:

1. To create awareness of ISA Programme and its activities among all the important Ministries/ Departments and other stakeholders in Guinea as identified by Mr Karim Camara, the Alternate National Focal Point (ANFP) of ISA in Guinea.
2. To discuss and understand the policies, regulation and present status of energy sector and the possibilities of taking up/scaling up of solar rooftop, solar pumps and mini-grid projects in Guinea.
3. To discuss and understand financing needs for taking up these projects.
4. To assess training & capacity building requirement of officials & agencies in Guinea on various Solar Applications.
5. To discuss regarding iSTAR center.

Apart from the above main objectives, the ISA mission wanted to understand and gather information on the existing energy scenario of Guinea including renewable energy activities, agriculture/ irrigation infrastructure and various policies/ regulations in the country, which will help ISA to assist Guinea in developing country programme to scale up solar applications.

NFP had prepared the schedule of the meetings with concerned Ministers, officials and dignitaries of various ministries of the Government of Guinea. Date wise meeting details are as following:

B. Date of the meeting – 23rd September 2019

Agenda – Debriefing the Hon’ble Minister of Foreign Affairs Cooperation, Africa Integration and Guinea Citizen Aboard on the objectives of the visit

Venue – **Ministry of Foreign Affairs, Conakry**

The ISA team visited the office of Ministry of Foreign Affairs, Conakry. As the minister of Foreign Affairs was out of country, the ISA team met the Secretary General (SG) of Foreign Affairs along with official from the Ministry, Mr. Mohamed Dabo, Special Advisor to the Minister. The team briefed the SG about the ISA. During discussion SG wanted to know what ISA can do for capacity building in the country.

The ISA Expert Team Lead gave a brief introduction about ISA activities and objectives. It was also explained to the Secretary General that the initial ISA Framework Agreement was amended and that the approval of Guinea for the revised version of the Framework Agreement is awaited through diplomatic channel.

The ISA Team reminded to Ms. The key role the Ministry of Foreign Affairs, as an interface, needs to play for a better coordination between ISA and the different ministries of Guinea for solar project’s coordination.

She appreciated that ISA is already closely interacting with the Diplomatic Missions of the member countries since they are their first respective country representative in the ISA host country headquarter. She reassured about the engagement of the Ministry of Foreign Affairs.

H.E. Ms. Also requested ISA to consider sending experts on the ground in Guinea to train people. ISA team informed about the Mid-career professional Program and Management training program. ISA team also explored the possibilities for sending a team of experts in their country for capacity building. Discussions were also held on how Guinea can effectively leverage the ISA platform to fulfill its requirements.

Agenda – Debriefing the Hon’ble Minister of Energy on the objectives of the visit and discuss policy level initiatives for increasing penetration of solar energy in the country

Venue – **Ministry of Energy, Guinea**

The ISA team visited the Ministry of Energy and had a detailed meeting with Hon’ble Minister of Energy, Dr. Cheick Taliby SYLLA, the Secretary General, Mr. Sekou Sanfina Diakite and National Director, Mr. Mamby DOUMBOUYA. The ISA team informed about the program viz. Solar Agricultural Pumps, Solar Rooftops, Solar Mini Grids and E-mobility and discussed the following to the Hon’ble Minister:

- a) It was informed to the Ministry that demand aggregation for solar rooftop, solar pumps have been done to achieve economies of scale as well as to get more suppliers interest, which will bring down the cost of equipment.
- b) Hon’ble minister was of the view that ISA supports is required in technology transfer for solar pumps.
- c) Hon’ble Minister have informed ISA that Guinea is surrounded by 6 country borders, which can be a manufacturing hub for import-export of solar equipment. The country has a huge potential for solar energy but it lacks in technology. Hon’ble minister wants ISA to facilitate

Guinea in setting up manufacturing of solar equipment in the country. The country has access to land, raw material, skilled manpower, other resources to have a manufacturing base for solar panels. The Minister also reminded that energy transition and energy development in Africa is based on solar and that being able to manufacture solar modules and equipment only will enable one country to become competitive.

- d) In the near future, battery storage will play a prominent role in the energy sector as the share of renewable energy in the total energy mix would increase significantly, the country would like to take a lead to initiate the process of manufacturing of storage batteries with the help of ISA.
- e) Out of 1000 MW of total demand Guinea has provided the total demand of 1 MW in 9 sites to ISA for installation of solar rooftop projects.
- f) The minister have said that the country has 1 hydroelectric project and the another 450 MW hydro electric project at Souapiti Dam is under construction. Once the project is commissioned, the country would be able to meet its base load demand.
- g) The Minister informed about the irrigation potential in Guinea with more than six million of arable land that could create revolution if they become able to manufacture solar panels and solar pumps locally for agricultural use
- h) The Minister informed that Guinea has a very good Investment Code and the right policies to attract investors. He invited ISA Experts to read the existing policies and law in this regard. The main concerns of the Energy Minister were to build in house competences, to promote employment generation and to become autonomous.

ISA Suggestions:-

- a) ISA team suggested that a well defined roadmap for development of Solar Energy based projects is required in the country with clear milestones and targets in the short, medium and long term.
- b) Most of the technologies are owned by the private companies. The private companies invest in a country when they see a competitive advantage over other countries, such as natural resources, manpower, electricity tariff, logistics, transportation.
- c) Also to attract private investments, a country should have a manufacturing policy in place. The policy should have financial incentives, subsidies and other benefits for industries.
- d) New schemes in RE Policy by each concerned ministry. Eg. Adoption of solar pumps by agriculture/irrigation/hydraulic ministry, solarisation of schools by Education Ministry, solarization of hospitals by Health Ministry etc.
- e) With regard of financing, there is a line of credit of \$ 2.5 Billion available from ExIm Bank out of which, they have earmarked some funds for pre- feasibility studies. Also line of credit of \$ 1.5 Billion is available from AFD.
- f) ISA would like to assist Guinea in setting up solar manufacturing utilities. For this, ISA would further put this in general assembly to include solar manufacturing as a separate program apart from the existig programs of ISA.
- g) Solar Rooftop is a viable solution for electrification. There are frequent power cuts and projects should be developed for specific industries such as solar rooftops for hospitals. Storage systems should be included in the schemes for better utilisation.

- h) Government buildings in Guinea have fluorescent lights all across. Being a power deficit state, if these lights can be replaced with LED lights which will reduce their electricity consumption by 3 times and also last for longer period of time. If this can be incorporated in energy policy or govt would give any incentive for replacement of existing lamps with LED lamps can meet short term requirement of power. This can provide energy saving for the country.

Additional comments made by Hon'ble Energy Minister are:

1. Hon'ble Minister have proposed to invite various developers, manufacturers and investors in the General Assembly meeting which is going to be held in October'2019. There should be a B-to-B sessions with different stakeholders to identify their business interest in such African countries.

The ISA Team assured to take the Minister concerns and remarks forward and to consider including the manufacturing aspect in the future ISA activities and programmes. This will take up as a separate vertical, Subject to approval from assembly

Issue of ratification of amended agreement was conveyed to Hon'ble Minister, which should have been approved by now, but it is pending since Assembly could not take place.

Agenda – Debriefing the Hon'ble Ambassador of India to Guinea on the objectives of the visit

Venue – **Office of Ambassador of India, Conakry, Guinea**

The team of ISA has briefed to the Ambassador Mr. T.C. Barupal about the ISA program for scaling up projects related to solar applications in sub-African region. Guinea is one of the founding members of ISA. The mission is aware about the ratification of the Amended Framework Agreement of ISA which is sent to all the member countries. The office of the Ambassador would follow up with the Guinean side so that the Agreement could be signed before the deadline i.e. 31 October, 2019. The Ambassador is also aware of the two solar projects submitted by Guinea under Exim Bank LoC through Government of India

The Ambassador looks forward to the help ISA and Guinea to promote sustainable development of the country. The Embassy would provide the possible support in this regard.

C. Date of the meeting – 24th September 2019

Agenda – Workshop was organized by officials from Guinea to enable the ISA Experts to interact with all stakeholders about the ISA programmes and the prevailing energy situation in Guinea.

Venue – Sharaton Grand Hotel, Conakry, Guinea

The workshop was co-chaired by the Secretary General, Mr. Sekou Sanfina Diakite of the Energy Ministry and the ISA Team Lead, Mr Popli.

The Secretary General of the Energy Ministry gave the welcome remarks which was followed by a statement made by the ISA Team Lead.

In his welcome remarks, the Secretary General reminded that few years back, many nations did not know about the diverse utility of solar. Therefore, he encourages ISA to assist Guinea in making good use of solar in efficient manner at affordable cost.

The Secretary General mentioned the Government action plan under the PIDA programme but also the national electrification plan under which there are many ongoing initiatives. The Government is

willing to develop mini grids installation but is not well informed about the viable cost. Therefore, they count on ISA support to first get relevant information but also to access to funding mechanisms.

After the welcome addresses, a general presentation about ISA was given to explain the context of the creation and the main objectives of the Alliance.

Following this, all participants took a group photograph. After what, the workshop officially started with interactive in-depth discussions.

ISA presented its different programmes, solar pumping programme, scaling solar rooftop, scaling solar mini grid and the STAR-C capacity building programme.

The different department and institutions present at the workshop expressed interest in the programmes which they were not aware of.

The representative of the Ministry for Fisheries expressed their need of solar applications for drinking water supply, and also for food preservation. It was requested to have a bilateral meeting between the ISA Team and the above mentioned Ministry.

The representative of the Food and Agriculture Organization of the United Nations mentioned that FAO is supporting farmers and developing boreholes which are not always well operated. He expressed interest about the pumps that ISA is proposing.

The representative of the Ministry of Industry requested ISA technical and financial assistance to promote investment in solar sector for the industries. They are also developing multitask platforms in rural area.

It was informed that Guinea has a law about electricity regulation, but the policy is under process of improvement and the Government is willing to include the possibility for private operator to inject the surplus of energy to the grid. The tariffs are not yet defined.

The representative of the rural electrification agency informed about the existing projects related to mini grids, some are hybrid projects PV + Diesel or PV + Hydro. They are also developing standalone off grid applications. Studies are available.

The Government fixed a target of electrifying 85% of the country by 2035.

D. Date of the meeting – 25th September 2019

Agenda – To get information about the current status of energy sector in the country.

Venue – **Ministry of Energy, Guinea**

A meeting was held with the National Director for Energy at the Energy Ministry and ISA Experts submitted a number of questions which have been answered partially.

1. It was informed that Hydro energy contributes 65% of the total installed capacity followed by thermal i.e. 33% and remaining 2% is from solar.
2. The power system is being operated on three different voltage levels; High Voltage – 225 kV, 110 kV and 60 kV; Medium voltage – 15 kV, 20 kV and 30 kV; Low Voltage – 4 kV
3. The country has a 5 years plan to develop several projects in the short term and on the other hand to implement a National Master Plan for Infrastructure Development in the medium and long terms. The studies for the Master Plan have been finalized in 2018 and concerns the period starting from 2018 to 2035.

4. The Master Plan defines the different energy sources to develop, some sites projects have been identified for solar plant and thermal and the Master Plan is also accompanied by an Investment Programme.
5. The Director informed about the rate setting process and it was informed that the electricity tariffs are fixed by the government (Energy Ministry and Finance Ministry) after consultation with the Agency Electricité de Guinée EDG (Electricity of Guinea).

Agenda – Debriefing the General Secretary of Finance on the objectives of ISA and to discuss financial planning, incentives, investment policies for solar energy in the country.

Venue – **Ministry of Finance, Guinea**

The Hon'ble Minister of Energy made the following remarks, in response:

1. The Secretary General has a discussion with ISA Expert Team about the high cost of solar equipment in Guinea and requested the feedback of the experts to understand the prevailing situation.
2. She explained that Guinea has an optimal investment code but solar projects are not taking off. She encourages officials from the Energy Ministry to put in place a committee to make studies about the regulatory framework to understand if the policies are the bottlenecks.
3. She informed that they also have a Code for Public Contracts that includes a law on PPP with detailed roadmap for project preparation including de-risking mechanisms etc.
4. Regarding the fiscal measures, it was informed that solar equipment is not exempted from taxes.

The Secretary General expressed few expectations from ISA:

5. She encourages ISA to share best practices and to help Guinea to understand the reason why solar equipment and projects are so costly.
6. She requested ISA to explain the process and different steps for implementing a manufacturing plant as recommended by the Energy Minister.
7. The Secretary General also requested ISA to share the outcomes from the competitive bid process launched to help them better negotiate with their partners.

ISA Suggestions:

1. ISA team have suggested to setup a Interdepartmental task force to examine the current status, tax structure, policy and other issues which are restricting the growth and investment in solar energy.
2. ISA team have aggregated the demand of solar pumps and solar rooftop projects from their member countries. The benchmark cost would be decided based on competitive bidding process. The rates will be shared once they are available with us.
3. The line of credit from EXIM bank and AFD of \$ 2Billion and \$1.5 Billion respectively is also available for African countries in the form of concessional loan.

E. Date of the meeting – 26th September 2019

Agenda – Debriefing the association of industries about the objectives of ISA and to discuss the issues being faced by the industries in the country.

Venue – **Ministry of Energy, Guinea**

The ISA team have explained about the objectives of the mission, the programs which are being run viz. are scaling up solar rooftop, solar pumps, mini grid, e-mobility and storage. The team wanted to know about the key issues and bottlenecks which are being faced by the local industries in the country. The following points have emerged during the discussions:

1. The major key hurdles in the industry are lack of skillset required in technicians to perform the task, higher tax structure which includes custom duty, VAT, which increased the price of product, lack of financing, limited no. of players in the industry.
2. ISA team would provide the benchmark prices of solar pumps and solar rooftop projects as and when they will be available. The bid documents can also be shared for their reference. The team have suggested that the developers can arrange funds either through competitive bidding route or through feed in tariff. The rate of tariff would decide whether the project is bankable or not.
3. ISA can also assist in preparing of bid documents. It was further told that, the developers can approach EXIM bank directly for getting loan at commercial terms and conditions.
4. The higher tax structure by the government needs to be reviewed as early as possible to promote the private players in the country.

Agenda – To get the insight about the future planning for adding solar pumps.

Venue – **Ministry of Hydraulics, Guinea**

1. The dept. is planning to install 20,000 solar pumps for supply of drinking water in next 10 years. There would be at least 1 pump in each village for a population of around 1000 people.
2. ISA have asked them to provide information about the type of pumps, discharge head, location, hydrological map, etc to study further and to include such demand to get the benchmark rates through competitive bidding.
3. They want to take pilot projects by installing 1000 solar pumps for which they have to do feasibility assessment. EXIM bank has earmarked some funds out of the total corpus of \$2 Billion for pre-feasibility assessment which can be utilized for this purpose.

Done at Conakry, Republic of Guinea, on this 27th day of September, 2019 in two originals, each in English and French languages, both texts being equally authentic. In case of divergence in interpretation, however, the English text shall prevail.

Kuljit Singh Popli
Advisor, ISA

Karim Camara
National Focal Point of ISA Guinea

Place: Conakry, The Republic of Guinea

Date: 27th September, 2019

Annexure 1

Expert Team

S.No.	Name	Organisation	Designation
1.	Mr. K S Popli	ISA	Advisor
2.	Mr. P K Mahapatra	ISA	Advisor
3.	Ms. Aissatou D. Sonko	ISA	Consultant, International Relation
4.	Mr. Arpit Vaidya	PwC India on behalf of ISA	Consultant
5.	Mr. Abdoulaye Sow	Embassy of Guinea in India	Counsellor