

## COMPETITION BRIEF

Open Single-Stage  
International Architectural Design  
Project Competition  
for the:  
“Knowledge and Innovation Center”  
Tripoli, Lebanon



Competition managed by:  
The Lebanese Federation of Engineers and Architects

On behalf of the client:  
Tripoli Special Economic Zone  
The Republic of Lebanon

Endorsed by:  
The Union of International Architects  
Supported by:  
The Union of Mediterranean Architects

**Final v 10.32**  
**13 February 2019**

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Fact Sheet:

<b>Country:</b>	Lebanon
<b>Client:</b>	Tripoli Special Economic Zone (TSEZ) The Republic of Lebanon
<b>Client Category:</b>	Government Organization
<b>Competition Management:</b>	Lebanese Federation of Engineers and Architects
<b>Competition Endorsed by</b>	Union of International Architects (UIA)
<b>Competition Supported by</b>	Union of Mediterranean Architects (UMAR)
<b>Project Name:</b>	Knowledge and Innovation Center (KIC)
<b>Type of Project:</b>	Business & Technology Park / Incubator / Accelerator
<b>Site Location:</b>	KIC site is located on a parcel (75,000 sqm) within the campus of Rachid Karami International Fairground (total 1,000,000 sqm), in Tripoli, Lebanon <u>Note: Only the KIC site (75,000 sqm) is part of this competition.</u>
<b>Original Site Planer:</b>	Oscar Niemeyer
<b>KIC Land Area:</b>	75,000 sqm
<b>Competition Characteristics</b>	International Competition
<b>Field of Specialty</b>	Architectural Design
<b>Competition Type</b>	Project Competition
<b>Competition Stages</b>	Single-stage
<b>Procedure Type</b>	Open Procedure
<b>Competition Outcome:</b>	Urban and Architecture Design Concept
<b>Competition Announcement</b>	Mon 18 February 2019
<b>Registration Deadline</b>	Mon 18 March 2019
<b>Deadlines Questions</b>	Mon 15 April 2019
<b>Deadline for Answers</b>	Thu 18 April 2019
<b>Final Submission Deadline</b>	Mon 17 June 2019
<b>Jury Deliberation</b>	Thu – Fri 27-28 June 2019
<b>Announcement of Winners</b>	Fri 28 June 2019
<b>Awards Ceremony</b>	Fri 5 July 2019
<b>Exhibition</b>	Fri – Sun 5 – 7 July 2019

## Purpose Statement:



The purpose of this “Competition Brief” is to be the main document related to the international architectural design project competition. This competition is open to international and local Architecture and Urban Design firms to participate in providing Urban and Architectural concept for the “**Knowledge and Innovation Center**”, a business service and technology park in the city of Tripoli, Lebanon. The location of this project is exceptional, as it is located within the campus of Rachid Karami International Fair, a campus designed by Oscar Niemeyer in the 1960s.

This document is issued by the Tripoli Special Economic Zone (The Client) and the Lebanese Federation of Engineers and Architects (The Competition Manager). It is intended to be the main source of information for competitors participating in the competition.

The competition will be conducted according to UNESCO regulations and the best practice recommendation of the UIA “Competition Guide”.

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## 1. BACKGROUND AND INTRODUCTION

This document contains the information and instructions needed to participate in the architectural design project competition to provide an Urban and Architecture Design concept for the “**Knowledge and Innovation Center**” in Tripoli, Lebanon.



### 1.1. Background

The Tripoli Special Economic Zone (TSEZ)-the owner of the Knowledge and Innovation Center (KIC)-is the first authority of its kind in Lebanon entrusted with developing a multi-use economic zones, complete with all the required infrastructure and utilities. The TSEZ Law No. 18 was passed by the Lebanese Parliament in 2008. The creation of the TSEZ will attempt to overcome the barriers that have historically stymied foreign direct investment and that have prevented many local private sector businesses from expanding their operations in Lebanon. To this end, TSEZ enjoys a multitude of advantages and offers a series of legal, administrative and fiscal incentives.

TSEZ Authority is now planning to establish the “**Knowledge and Innovation Center**”, at the Rachid Karami International Fair in Tripoli—the subject of this competition.

## 1.2. What is the “Knowledge and Innovation Center”?



The “**Knowledge and Innovation Center**” (**KIC**), a business and technology park, is a planned development project that will accommodate and foster the growth of entrepreneurial activities, start-ups and SMEs in the city of Tripoli. It also aims at creating job opportunities for the youth by providing a dynamic environment for growth and creativity. KIC aspires to generate a wide array of affiliations with local universities, incubators, accelerators as well as private and public organizations.

As such, KIC would become an inclusive ***platform for collaboration*** bringing together innovative ideas, diverse population, dynamic interaction, progressive services, high-end infrastructure, modern life-style amenities, wide-ranging funding sources and enhanced governance.

Thus, KIC is envisaged to attract a variety of enterprises including ICT tenants, research facilities, training academies, creative industries and value-added services. These enterprises will benefit from the fast internet connection provided by the I-ME-WE main cable linking Europe to the Middle East and West India with a branch landing in Tripoli.



The KIC project will be developed in partnership with the private sector and rented out as office space (flex-desk, serviced-offices or core & shell) to local and regional service companies, which will also benefit from the TSEZ's incentives, streamlined procedures and supporting business environment.

Additionally, KIC will host incubators/ accelerators as well as fund managers to support entrepreneurs and start-ups. A training academy will be part of KIC to assist young graduates in acquiring timely on-demand skills needed on the market, through fast-track training programs.

KIC will be developed on a parcel of land within the campus of Rachid Karami International Fairground-a larger piece of land originally designed by Oscar Niemeyer. TSEZ administration has decided to conduct an international architecture competition to solicit the most suitable design for the KIC site.

## 2. COMPETITION REGULATIONS

### 2.1. Competition Objectives



This competition is extremely attractive to architects who are interested to work on a site of high architectural and developmental value. It involves the preservation of modern heritage buildings as well as the design of new structures within a modern heritage campus, currently listed on the UNESCO World Heritage Tentative List. While designing the new buildings for the KIC parcel, utmost care should be placed on the relationship between the new buildings and existing buildings designed by Oscar Niemeyer. It is a site of extreme value with an extraordinary history of modern heritage in a City with valuable Mamlouk, Crusader, Ottoman, and French Mandate legacy.

The competition objective is to provide an urban and architectural concept for the “Knowledge and Innovation Center” including:

- i. **Master Plan** for approximately 60,000 sqm of Built Up Area (BUA), including:
  - a. Phase-1: BUA of approx. 30,000 sqm
  - b. Phase-2: BUA of approx. 30,000 sqm
- ii. **Architectural design** for Phase-1 only (for approx. 30,000 sqm)

Note: Phase-2 should be studied as part of the Master Plan only.



## 2.2. Instructions to Competitors

### **Launching:**

The competition will be announced on the TSEZ official website, the UIA site as well as the Order of Engineers and Architects in Beirut and Tripoli sites on **18 February 2019**.

### **Eligibility:**

Architecture and Urban Design firms, who are permitted to practice in their respective countries, are eligible to participate in the competition, pending the following two conditions:

- The firms are registered in countries which have a standing diplomatic relationship with the Lebanese Republic. The list of countries with standing diplomatic relation with the Republic of Lebanon can be found at: [https://en.wikipedia.org/wiki/Foreign\\_relations\\_of\\_Lebanon#Bilateral\\_relations](https://en.wikipedia.org/wiki/Foreign_relations_of_Lebanon#Bilateral_relations)
- The firm registers via website (Procedures explained below.)

### **Registration:**

Architecture and Urban Design firms who are interested in participating in the competition should register via website, no later than **Monday 18 March 2019**. Interested firms will have to send the following:

1. Name of individual or firm\*
2. Country of office headquarters\*
3. Copy of license or registration in his/her country, or proof of practice in the candidate's country\*
4. Postal address
5. E-mail address\*

Fields marked with \* are mandatory.

You can register at the following web address:

<https://www.tsez.gov.lb/kic/competition>

Firms who will register will become "Interested Competitors" and will be entitled to participate in the competition. Interested Competitors will receive a notification by mail with a password to access all documents posted on the website. (Please check list of available documents below)

**Competition Official Website:**

A web site has been dedicated to this competition. The site could be accessed at:

<https://www.tsez.gov.lb/kic/competition>

The web site includes the following sections:

- Registration
- Useful Material and Documentation
- Q & A section
- Updates
- Jury Report (will be posted at the end of the competition)
- Prizes and mentions announcements (will be posted at the end of the competition)
- Virtual Exhibition: All competitors' entries (projects) will be posted on the TSEZ website and on the UIA website at the end of the competition and after the prizes have been awarded.

Interested Competitors will be able to access the competition web site's public as well as private sections. Procedures and deadlines will be posted there, as well as any updates regarding dates and procedures.

**List of Available Documents:**

The private section of the website will include documentations such as:

- a) Competition Brief
- b) Topographical survey
- c) Geo-Technical report
- d) Fly-over movie by drone (showing the site)
- e) Drawings of existing buildings
- f) Photographs of existing buildings

**Question and Answers (Q&A):**

The website will also have a Q&A section. Interested Competitors can send their inquiries and questions no later than **Monday 15 April 2019**.

The organizers will make every attempt to answer questions and provide information to the best of their abilities. However, it remains the responsibility of

the competitors to conduct their full research and detailed site assessment and review requirements of similar techno park projects.

All Q&As will be published on the competition website and will be made accessible to all competitors no later than **Thursday 18 April 2019.**

**Final Submission:**

The competitor's scope of work, program and list of deliverables are explained in later sections. Final submission will take place no later than **Monday 17 June 2019.**

A Competitor is allowed to enter only one project in the competition. Variants are not permitted.

During final submission, each competitor will choose his/her own alphanumerical code containing 2 letters and 3 digits (i.e. DN 345) which will be posted on all submitted deliverables. With the submission of deliverables, the competitor will submit his identification sheet in a sealed envelope carrying the alphanumerical code on the front. The envelope will remain sealed until the ranking has been determined, prizes awarded and jury report has been signed by jury members.

The alphanumerical code is used to protect the competitors' identity and to ensure that the process of evaluation is anonymous and non-biased.

**All submissions and communications must be in English.**

### 2.3. Timetable and Main Deadlines

The following table shows the competition's timetable and main deadlines.

MILESTONE	DATE
Competition Announcement	Mon 18 February 2019
Registration Deadline	Mon 18 March 2019
Deadlines Questions	Mon 15 April 2019
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Exhibition	Fri – Sun 5 – 7 July 2019

### 2.4. Organizing Committee

An organization committee has been appointed to manage the competition, including:

- Michel Barmaki, Order of Engineers and Architects, Beirut, former UIA Secretary General
- Dr. Antoine Charbel, Order of Engineers and Architects, Beirut
- Joe Abi Kassam, Order of Engineers and Architects, Tripoli
- Chawki Fatfat, Order of Engineers and Architects, Tripoli, Lebanon
- Wassim Naghi, UMAR Chair
- Dr. Hassan Dennaoui, Tripoli Special Economic Zone
- Maged A. Fattal, Client's Technical Advisor

A technical committee constituted by the organizing committee will examine the entries and prepare a report for the jury which will be presented before the beginning of the evaluation process. The technical committee examines if:

- Entries have been submitted within the submission deadline
- Entries are complete
- Program and specific regulations are respected
- Anonymity is respected

## 2.5. International Jury

An international Jury will evaluate the proposed design. The jury will include world renowned members representing international organizations such as the UNESCO, UIA, Docomomo International, UMAR, Deans of Architecture Schools in prestigious international universities, Order of Engineers and Architects in Beirut and Tripoli. All jury members are highly qualified professionals who will be committed to ensure a professional and fair evaluation of the submitted creative work. The jury will include the following members:

### **Official Jurors (in-Country):**

- a. H.E. Raya Al Hassan, Minister of Interior. Former Chairperson TSEZ, Lebanon
- b. Jad Tabet, Head, Lebanese Federation of Engineers and Architects, Beirut (Official representative)
- c. Bassam Ziadeh, Head, Order of Engineers and Architect, Tripoli (Official representative)

### **International Jurors:**

- d. UIA representative (TBA)
- e. Antonio Raffaele Rivero, Former Vice President- Region 1 of UIA (UMAR Representative) (Italy)

- f. Francesco Bandarin, Former Director of World Heritage Centre and Former Assistant Director General for Culture at UNESCO (Italy)
- g. Ana Tostoes, Chair, Head, Docomomo International (Portugal)
- h. Fares Dahdah, Director of the Humanities Research Center at Rice University, member of Fundação Oscar Niemeyer Board (USA)
- i. Dr. Suha Ozkan, Former Secretary General of the Aga Khan Award for Architecture (Turkey)

**Alternate Jurors:**

- j. Alternate Juror: Dr. Amale Andraos, Dean, Columbia Graduate School of Architecture, USA, and advisor to the Chairperson
- k. UIA designate alternate international juror

Jury's internal deliberations remain confidential. However, Jury decisions will be documented. Evaluation processes and the rationale for jury decisions will be available to all competitors and the public in the final jury report.

The jury will convene on **Thursday and Friday 27 -28 June 2019.** Following the jury deliberation, the winners will be announced on **Friday 28 June.**



## 2.6. Awards

An award ceremony will take place on **Friday 5 July 2019**. Prizes will be awarded to the top three ranking designs; who will receive, respectively:

- 1st Prize: \$ 60,000 (The Winner)
- 2nd Prize: \$ 30,000
- 3rd Prize: \$ 15,000

Additionally, honorable mentions could be conferred on works of exceptional merits in a specific area of innovation or creativity. The jury has the right to decide on the number of projects to be distinguished. However, more or less, three mentions could be designated, if the jury sees fit.

The results will be published on the official website as well as the UIA site. The Jury report will also be available for downloading through a link provided to competitors.

Note: Prize money will be disbursed no later than 60 days from the Award ceremony. Prizes are in US Dollars.

## 2.7. Exhibition

As mentioned above, an exhibition will take place at the end of Jury deliberation.

The exhibition will take place on site at Rachid Karami International Fairground on **Friday to Sunday 5 – 7 July**. All submitted projects will be on display along with the name of their authors. Following the exhibition, the Competitors will be allowed three days to pick up their submitted material if they wish to do so. After three days all material related to the entries will be destroyed at the end of the exhibition.

All projects will be posted on the competition official website and UIA website for 30 days.

## 2.8. Author's and Client Rights

The design materials (such as plans, models and digital material) of the 1st, 2nd and 3rd prizes shall become the property of the Client. The Client may use the design of the first prize only if its author is involved in the further collaboration as stipulated in chapter 2.8. No design, whether or not awarded a prize, may be used wholly or in part by the client without a written agreement by its author. The author of any design retains the copyright and the author's rights of his/her work; no alterations may be made without his/her formal consent. The winning design can only be used once. All participants must guarantee that their submitted

entries do not violate intellectual property rights of any third parties and that they are the authors of the submitted design. They are obliged to protect the client from any claims that may arise in this regard.

Based on securing all the necessary preparatory steps, the Client reserves the right to select the start dates for launching the subsequent tendering process, for signing all service and work contracts, for issuing the Notice to Proceed (NTP) to initiate the design studies, for awarding the work contracts, for handing over the site, for launching the actual construction works, etc.

### 2.9. Publication rights

The Client and the International Union of Architects (UIA) have the right to publish, communicate to the public or distribute in paper copies, in electronic or digital format, or on the internet (including social networks as a downloadable or non-downloadable file), the submitted projects or copies of the submitted projects for the purpose of communicating or informing about the competition without the authors' consent. The names of the authors will always be mentioned. Following a mutually assumed agreement, the client and each competitor share the right to publicize competition entries, provided that the authors and the client are mentioned. Competition participants are not allowed to publish their submitted project (press, books, internet, any other media, etc.) until the competition results are officially announced. Prior publication will be grounds for disqualification.

## 2.10. Contract and Scope of Services Awarded to the First Prize Winner

According to Lebanese laws, design services for public projects such as the KIC project, should be awarded through competitive tendering. Thus, the tendering process will be as follows:

This competition will yield a competition winner who will become the Concept Architect.

In addition, upon securing the necessary fund and approvals, the Client intends to launch a tendering process for “Additional design and engineering services for KIC Phase-1”, to award a contract for the Engineer/Architect of Record. The tendering will solicit proposals for the preparation of the technical design, execution drawings, and tender documents for KIC Phase-1. This tendering will be a competitive bid based on the Quality and Cost Based Selection (QCBS).

The evaluation will combine Quality assessment (called a technical score, usually 75% of the total grade) and a Cost assessment (called financial score, usually representing 25% of the total grade). The evaluation of the technical proposal will be based on:

- a) History of the firm and its portfolio of relevant projects (40% of the technical score)
- b) CVs of the proposed team (40% of the technical score)
- c) Proposed methodology and work schedule (20% of the technical score)

The front-runner of this tendering will be awarded a contract and will become the Engineer/Architect-of-Record. This firm should be locally registered in Lebanon, according to the country laws and to the regulations of the Order of Engineers and Architects (OEA) and should be authorized to sign the necessary building and occupation permits.

The Concept Architect and the Engineer/Architect-of-Record must enter into a joint venture.

During the Concept Development phase, the two entities will agree on a cooperation formula for the development of the concept; and the Concept Architect takes the lead.

During Design Development and subsequent phases, the Engineer/Architect-of-Record will take the lead. He/she will prepare the execution drawings, tender documents, priced BOQ; as well as coordinates with public authorities and public utilities, assists the client in reviewing contractors’ bids, supervise the works, and finally oversees the handover of works and the issuing of the occupation permit. During this process, the Concept Architect remains responsible for monitoring the project development to ensure that the integrity of the design concept is



respected (i.e. including such tasks as supervising design changes, choosing finishing materials, etc.).

The Joint Venture's scope will be to prepare the following:

- a. Master Plan development
- b. Concept Development for phase-1 (to develop the concept submitted to the competition)
- c. Design Development: Architectural (phase-1)
- d. Design Development: Technical (phase-1)
- e. Design Development: Site infrastructure, traffic and landscape
- f. Execution Drawings: Architectural (phase-1)
- g. Execution Drawings: Technical (phase-1)
- h. Execution Drawing: Site infrastructure, traffic and landscape (phase-1)
- i. Preparation of Tender Documents (phase-1)
- j. Support Client in the tendering process of contractors
- k. Preparation and signing of all permits, carry the responsibility of the design liability and carry the necessary liability insurance
- l. Supervision of Works

To ensure balanced partnership, a split of tasks should be clearly defined at contract signing. The final split of tasks will be negotiated by the two partners on the basis of the following proposal scheme and is subject to final approval by the Client.

Task	Concept Architect	Engineer/ Architect-of-record
Master Plan development	E	–
Preliminary Design for phase-1 (to develop the concept submitted to the competition)	E	–
Design Development: Architectural (phase-1)	E	A
Design Development: Technical (phase-1)	A	E
Design Development: Site infrastructure, traffic and landscape (phase-1)	O	E
Execution Drawing: Architectural (phase-1)	E	A
Execution Drawings: Technical (phase-1)	O	E
Execution Drawing: Site infrastructure, traffic and landscape (phase-1)	O	E
Preparation of Tender Documents (phase-1)	–	E
Support Client in the tendering process of contractors	–	E

Preparation and signing of all permits, carry the responsibility of the design liability and carry the necessary liability insurance	–	E
Supervision of Works	O/A	E

E: Execute  
A: Assist  
O: Oversee

**Professional Fees:**

As per the OEA rules and regulations, the Joint Venture’s total fees for the tasks described above, are limited to 6% of the construction cost.

The Concept Architect’s fees are between 2% and 2.5% of the construction cost.

**2.11. Transparency Fairness and Non-Discrimination**

The organizers of this competition acknowledge the great value of the Rachid Karami site and its exceptional architectural heritage, designed by Oscar Niemeyer.

The organizers are committed, to conduct this competition and any future development with the utmost care to preserve this heritage. The organizers are strongly committed to current and future coordination with the UNESCO to preserve the site’s existing structures; and only allow its expansion in the most suitable manner.

The organizers are committed to the highest ethical standards, complete transparency and full adherence to the law. It is the intent of the organizers to treat in a fair manner all parties involved; including the competitors, the client and the participants in any future related studies.

The Client, the competition organizer and the jury members are committed to complete transparency. They will adhere to impartial treatment of all competitors and to non-discriminatory conduct throughout the process.

The competition will be conducted according to the UNESCO Standard Regulations for International Competitions in Architecture and Town Planning and the UIA best practice recommendations ( see: competition Guide for Design Competitions in Architecture and Related Fields) Competition <http://www.uia-architectes.org>

To ensure fairness, the entry will be anonymous, as stated above. Thus, the entries must be submitted by post or courier and the identification of the competitor will be placed in a sealed envelope carrying an alphanumeric code on its front. A person of confidence, who is not related to and does not get in contact with the jury will receive the entries, unpack the parcels and destroy the outer wrapping which might have the address of the competitor. Upon reception of the entries, the identification envelopes will be taken apart and kept by the professional advisor in a safe until the jury has awarded the prizes and signed its report. Then the jury president will open the identification envelopes and reveal the identity of the authors.

#### 2.12. Dispute Resolution

The jury members are the sole arbiters at all stages, up to the final prize giving. Jury's decisions are final and cannot be disputed. They must be accepted by the client and the competitors.

All efforts will be made to resolve disputes through the Lebanese Federation of Engineers and Architects. For that matter, the Lebanese Federation of Engineers and Architects will announce the name of the federation's representatives in any dispute resolution no later than the announcement of winners. The Concept Architect and the Engineer/Architect of Record will each appoint a representative for dispute resolution upon signing of their contract.

#### 2.13. Conflict of Interest Mitigation

(a) Anyone employed by the client or a jury member; (b) anyone closely related to the client, a jury member, the organizing committee or the professional adviser; and (c) anyone involved in the preparation of the competition - will not be eligible to compete or assist a competitor in this competition nor a participant in the engineering tendering process.

### 3. PROGRAM AND PROJECT DELIVERABLES



The “Knowledge and Innovation Center” aspires to become a dynamic **platform for collaboration** bringing together innovative ideas, diverse population, dynamic interaction, progressive services, high-end infrastructure, modern life-style amenities, wide-ranging funding sources and enhanced governance.

#### 3.1. Summary Scope of Work

This competition is to provide an urban and architectural concept for the “Knowledge and Innovation Center” including:

- i. **Master Plan** for approximately 60,000 sqm of Built Up Area (BUA), including:
  - a. Phase-1: BUA of approx. 30,000 sqm
  - b. Phase-2: BUA of approx. 30,000 sqm
- ii. **Architectural design** for the first phase of development (for approx. 30,000 sqm)

Notes: Phase-2 should be studied as part of the Master Plan. No further details for Phase-2 is needed for this competition.

Three existing buildings of total area of approx. 7,100 sqm, exist on site and need to be renovated to their original form. The designer should take these existing

spaces into account and use the available space to host some of the elements of the program.

Phase-1 total BUA of approx. 30,000 sqm includes: approx. 7,000 sqm of existing buildings + approx. 23,000 sqm of new buildings

### 3.2. KIC Site



KIC is envisioned to become a major knowledge and Innovation hub poised to attract innovators and young entrepreneurs that would thrive in an urban interactive campus-style location. The site of RKIF campus fits such description. The boundaries of RKIF campus is shown in red on the aerial photo above.

The KIC parcel allocated for the KIC project (75,000 sqm of land) is shown on the map below (The turquoise line delineating the KIC site limits). Additional site drawings are available in Appendix C. Additionally, a topographical survey and a fly-over movie of the site are available on the website.



The whole RKIF site, originally designed by Oscar Niemeyer, is a sensitive site. The KIC project would include the re-use of existing structures (Structures, within the KIC site, are shown on map above). The site proposed to host the KIC project includes three existing structures as shown below:

- Building # 1 is the former RKIF admin building. It is composed of two floors with a total built up area (BUA) of approx. 5,500 sqm
- Building #2 is a one-story structure with a total built up area (BUA) of approx.1,600 sqm
- Building # 3 is an arched-ceiling old fire engine garage, which could be converted into a different use

**Note:** The location of the 3 existing buildings is indicated on the above map

Documentations of these buildings are available on the web site.

KIC intends to renovate and occupy the three existing buildings described above (Total area = approx. 7,100 sqm) for the functions which will be directly operated by TSEZ (Public Administration, oversight and regulatory functions, common rooms, rental office space of flex-desks, etc.)

### 3.3. Proposed Program and Area Tabulation



Based on the survey conducted by InfoPro in 2017 and the consequent analysis by City Trends (KIC Framework, 2017), it has been shown that the size of demand for office space at KIC could reach approximately 22 - 28,000 sqm, (in addition to related services) in the coming five years.

Additionally, to fulfill the objective of KIC and be able to host the components described in the previous section, a space program has been devised.

#### **A. Phase-1 (BUA: approx. 30,000 sqm):**

Based on studying other examples of similar facilities in Lebanon and the region, and based on further discussion with industry leaders, the World Bank, InfoPro and the TSEZ authority representatives, it has been suggested that Phase-1 of KIC would include the following mix:

- Leasable offices (approx. 16,500 sqm, including circulation). These offices will be leased out, and include:
  - Working Flex/Smart Desk (Approx. 5,000 sqm) for entrepreneur and startups. These are shared offices.
  - Serviced small size offices (Approx. 7,500 sqm) for startups and SMEs. Small offices could range between 50 -200 sqm each, with shared support facilities.

- Open space larger offices (Approx. 4,000 sqm). It is assumed that at the initial phase, one or two anchor tenants would be attracted to open offices in the KIC.

Note: Common Interaction Spaces and Circulation should not exceed 15 % of BUA of Leasable offices.

- Admin offices (Approx. 1,000 sqm, including circulation), including offices for:
  - TSEZ
  - KIC staff offices ( staff 10: 1 director, 2 managers, 4 professionals, 3 technical support staff)
  - Incubator/accelerators offices (3 staff)
  - Training Services offices (3 staff)
  - Advisory Services offices (4 staff)
  - Fund offices (2 staff)
  - Archives

Note: Common Interaction Spaces and Circulation should not exceed 15% of BUA of Admin offices

- Support facilities (Approx. 2,000 sqm, including circulation), to be used for meetings, training and promotion activities, including:
  - Meetings rooms (4 meeting rooms, including: 1x 25 persons, 1x12 persons, 2x6 persons)
  - Lecture hall (100 persons)
  - Exhibition hall
  - Common Interaction Spaces and Circulation: Approx. 20 % of BUA of support facilities.

- Data Center: approx. 1,600 sqm

- Housing: approx. 3,200 - 3,500 sqm including; approx. 40 units divided between:

- Type-1: studios (35-40 sqm each)
- Type-2: two-bed room apartments (75-90 sqm each)

The mix between Type-1 and Type-2, should include:

- Approx. 40 % of the number of total units, would be designated as Type-1
- Approx. 60 % of the number of total units, would be designated as Type-2



The final number of units for each type is left to the designer.

- Retail and F&B: approx. 1,000 sqm, including: a cafeteria and convenience retail outlets such as document processing, bookstore, mini convenience store, small bank branch, etc.)
- Underground Parking: Min 250 cars (Two levels of undergrounds under each building and/or under the open spaces)
- Outdoor Covered Parking: 250-300 cars. This Parking can be used by visitors and during public functions (exhibitions, lectures, events, etc.)
- Outdoor landscaped areas
- Utility building: Approx. 350 - 400 sqm

Notes:

For each component, designers are allowed a flexibility of +/- 10% adjustment of the above proposed BUA.

Three existing buildings of total area of approx. 7,000 sqm, exist on site and need to be renovated.

Phase-1 total BUA includes approx. 7,000 of existing buildings + approx. 23,000 sqm of new buildings = approx. 30,000 sqm

The following table summarizes the program requirement for Phase-1

Phase-1 Program		Sqm
<b>Leasable Offices</b>		<b>16,500</b>
Flex Offices (including 15% circulation)	5,000	
Services Offices (including 15% circulation)	7,500	
Open Space offices (including 15% circulation)	4,000	
<b>Admin Offices</b>		<b>1,000</b>
<b>Support Facilities (including 20 % circulation)</b>		<b>2,000</b>
<b>Data Center</b>		<b>1,600</b>
<b>Housing (including 15% circulation)</b>		<b>3,220</b>
Studios (16 units)	640	
2 Bd-Rm (24 units)	2,160	
<b>Retail, F&amp;B</b>		<b>1,000</b>
<b>Utility Building</b>		<b>400</b>
<b>Underground Parking</b>		<b>4,500</b>
<b>Total BUA Phase-1</b>		<b>30,720</b>

**Estimated cost of construction for phase-1:**

The size of Phase-1 is approximately 30,000 square meter of class B office space and support functions. The targeted price per square meter, ranges between \$ 750 – 850 per sqm (based on design, choice of material, etc.)

The construction cost of the project phase-1 would be approximately 27 million US dollars including external works and landscaping. The competitors are encouraged to provide concepts within the above estimated cost parameters. This is a project competition and not an idea competition. Thus, the objective of the competition is to yield a moderately priced projects which would be feasible to construct and operate. Proposed concepts which display tendency of becoming expensive to construct and maintain, might be disqualified.

**B. Phase-2 (BUA: approx. 30,000 sqm, including circulation):**

Phase-2 should include approximately 30,000 sqm, split into:

- 70% of phase-2 BUA which would be dedicated for office spaces as follows:
  - Working Flex/Smart Desk (20 % of the office BUA)
  - Serviced small size offices (55-60% of the office BUA )
  - Open space larger offices: to be built on demand (20-25 % of the office BUA)
  
- 30% of phase-2 BUA would be dedicated for other spaces as follows:
  - Support facilities (administration offices, meeting rooms, etc.)
  - Call Centers
  - Test Labs
  - Retail
  - Underground parking

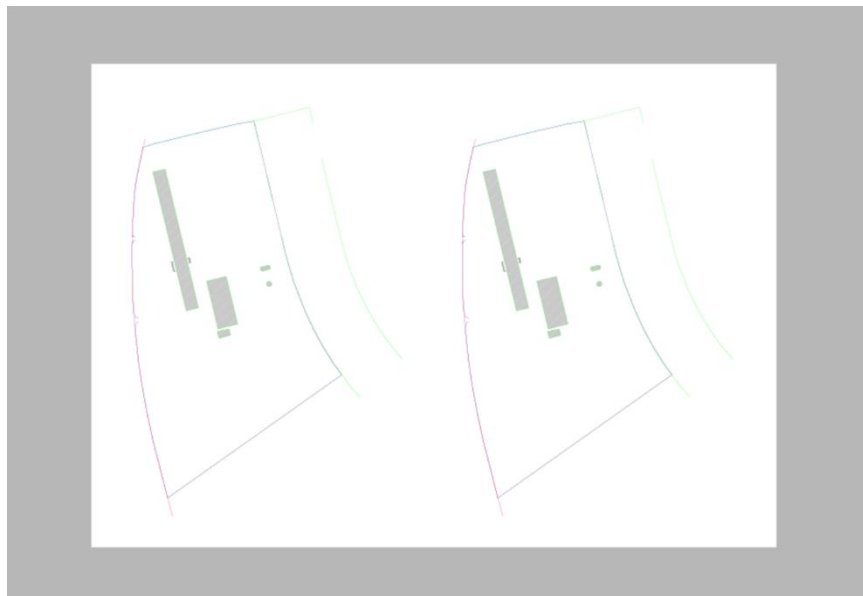
Phase-2 Program		Sqm
<b>Leasable Offices</b>		<b>21,000</b>
Flex Offices (including 15% circulation)	5,000	
Services Offices (including 15% circulation)	7,500	
Open Space offices (including 15% circulation)	4,000	
<b>Other Spaces</b>		<b>9,000</b>
Support Facilities (including 15 % circulation)	1,000	
Call Center	2,000	
Test Labs	1,500	
Retail, F&B	500	
Underground Parking	4,000	
<b>Total BUA Phase-2</b>		<b>30,000</b>

Note: Phase-2 should only be studied as part of the Master Plan.

### 3.4. Deliverables and Submission Requirement

The submission of the design competition shall be concluded by **10 June 2019** and includes the following:

- **Master Plan for the entire Project** (60,000 sqm of BUA); (submission: 2 x A1 sheets. Landscape orientation. 1 copy):
  - Master Plan: 1/1000 including building massing, parking, landscape, etc.
  - Circulation Plan: 1/1000 including:
    - Pedestrian and vehicular circulation around the site, including improved connectivity to the city
    - Access / Egress (pedestrian and vehicular)
    - Roads and pedestrian circulation within the site
    - Interactive spaces
  - 2 General Sections: 1/1000
  - 3D bird –eye view
  - Phasing Plan. It is possible to show the phasing on the main master plan, on the circulation plan or separate small schematic plan, including:
    - Phase-1
    - Phase-2 (with stage 1, stage 2, stage 3)



The above is an example of A1 sheet showing the master plan and circulation plan at 1/1000

- **Concept design for phase-1** (Approx. 30,000 sqm of BUA including the 3 renovated existing buildings); (submission: 2 x A1 sheets. Landscape Orientation. 1 copy):
  - Plans 1/250 for all buildings
  - 2 Sections 1/250 per building
  - Facades 1/250 for all buildings (indicate material)
  - 2 Perspectives
- **Concept Note:** Text explaining the concept and the rationale behind the concept (A4 format No more than 200 words)
- **Area tabulation** (A4, Table format), with leasable vs. non-leasable space
- **CD/DVD** including all above deliverables
- **Separate Sealed Envelope** with alphanumerical code (i.e. AF 345). The identification of the competitor will be placed inside the sealed envelope carrying the alphanumerical code on its front.

Please do not forget to include your alphanumerical number on all sheets.

All submissions and communications must be in English. All submissions are mandatory.

Final submissions to be submitted in hard copy format as well as an electronic format (CD/DVD), delivered to:

**Order of Engineers and Architects in Tripoli**  
**Dam and Farez**  
**P.O. Box 446**  
**Tel: +961 6 413110**  
**Tripoli, Lebanon**

All Competitors must ensure that their submitted entries do not violate intellectual property rights and that they are the authors of the submitted design.

All entries must be submitted and evaluated anonymously. Authors shall remain anonymous until the evaluation process has been completed and the jury has ranked the entries, awarded the prizes and signed the jury report.

A competition entry shall be excluded from the evaluation process if its author violates the presumption of anonymity. All documents are to be submitted anonymously. Names, logotypes, symbols or other identifying marks may not appear in any form.

Any entry, which arrives after the deadlines for submissions, will be excluded from the evaluation. The Jury maintains the right to disqualify any entry that does not conform to the mandatory requirements or regulations of the competition.

### 3.5. Evaluation Criteria: General Planning Directives



**a. Relationship with the Oscar Niemeyer Master Plan**

The most important challenge is to design a project within the campus designed by Oscar Niemeyer. While the competition management welcomes all creative ideas, a special care should be placed on the relationship between the new KIC urban plan and the existing Niemeyer's master plan for RKIF campus. Any design that would not integrate with Niemeyer's concept may compromise the integrity of the site and thus compromise its future nomination for inscription on UNESCO World Heritage List.

**b. KIC identity**

KIC should be known through its identity. The project should be projecting its core values as an inclusive platform for collaboration based on innovative

ideas, diverse population, dynamic interactions, progressive services, high-end infrastructure, modern life-style amenities, enhanced governance and wide ranging support for youth. As much as possible, these attributes are important to be reflected in the design of this project.

**c. Built UP Area (BUA):**

The BUA is 60,000 sqm in addition to roads, open parking, infrastructure, landscaping, outdoor common areas, open-air artwork, etc.

**d. Project Phasing:**

The project will be phased into:

• **Phase-1** includes:

- Renovation and re-use of the two existing buildings of total BUA of approximately 7,100 sqm
- Design of new buildings of approximately 23,000 sqm of BUA
- Roads, infrastructure, access/egress, parking, landscaping, utilities, etc.

Thus, the total BUA in Phase-1 is approximately 30,000 sqm (7,100 sqm of renovation + 23,000 sqm of new construction). Phase-1 of the project should be a stand-alone functional project; completed with office spaces and common spaces.

- **Phase-2** is a future expansion phase. It might include the design of the rest of the KIC in phases (approx. 30,000 sqm of BUA). This can be developed in 2 or 3 stages. It is important to show the various stages of project growth in Phase-2.

**e. Flexible Phasing:**

Precise quantitative indicators for future growth are not clear yet. The designers/competitors will have to make some assumptions and advise the Client through his/he proposed design. Flexibility is key in the development of this futuristic project.

The KIC project has devised an initial phasing strategy. However, the Client intends to construct Phase-2 into stages. Thus, it is up to the designer to show a logical further sub-phasing of Phase-2.

*Challenge: The Government of Lebanon is entering into a fairly new territory; namely the development of Business and Techno parks, which carries a multitude of uncertain business and economic parameters. While a preliminary phasing strategy is described above (Phase-1 and 2), the final phasing depends on actual growth of this new business endeavor. In order to mitigate the*



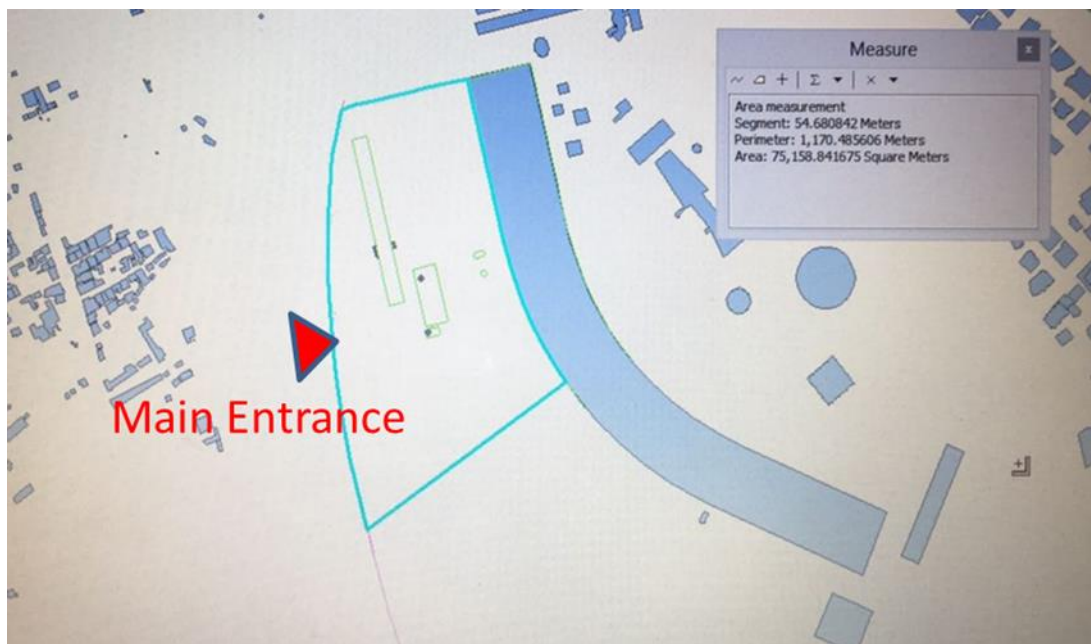
*uncertainty surrounding the exact future construction phasing, the success of any design will depend on the ability to display a flexible phasing strategy.*

**f. Multi-scenario scaling up:**

Subsequent sub-phases should be able to accommodate additional offices (leasable spaces) as well as additional common spaces (not necessarily a replica of the common spaces in the previous phases).

*Challenge: While it is easier to scale up the construction of the office spaces, it is more challenging to scale up the common spaces; while keeping the project coherent when all the phases of the project are completed. It is a balancing act to create enough common spaces for each phase and stage, while the common spaces maintain a coherent logic (concept) at the end of the development of the entire project.*

**g. Access/ Egress**



The KIC should have an independent access, separate from RKIF entrances. The location of the KIC main entrance is shown above. This entrance will serve as the prime vehicular and pedestrian access and egress to the site. A provision for an additional service entrance should be provided.

## h. Connectivity



While vehicular access will be maintained through the main entrance, it is important to maintain KIC pedestrian connectivity to the city, through the RKIF ground.

Sidewalks leading to the main entrance should be treated to become more pedestrian friendly and provide further linkages to the surrounding neighborhoods.

Pedestrian linkages between KIC's main entrance and other side of the highway facing the main entrance might be a plus.

## i. Open Space Design:

The design of the open spaces is as important as the design of the structures.

## j. Access to Public:

Some functions will be open to the public. As such, the facilities hosting public functions (such as exhibitions, lectures, events, etc.) should be easily accessible to the public.

### 3.6. Evaluation Criteria: Design Directives

The KIC should be an interactive, cooperative and dynamic platform. The capital investment going into developing the KIC should be cost effective and the operation should be sustainable (ecologically, functionally, economically, and socially). The design of the space should reflect these intrinsic qualities.

The project will also be judged on its functionality, the clarity of the organization of the program elements, the quality of the architectural concept, the quality of the proposed spaces, the quality of the aesthetical and architectural expression, the adequacy of the proposed materiality and construction, aspects of environmental and social sustainability, and coherence of the project.

Furthermore, special emphasis will also be placed on the following:



1. **Functional Flexibility:** In this fast changing operating climate, the design should be adaptable to allow flexibility in the use of space (functional and common areas); as well as projecting a feel of dynamism and creativity. There is minimum administrative staff required to manage this project (for further details, please check the program). At certain point in time, the administration would need to grow while the leasable space is growing. Furthermore, the flexible desks, serviced offices and core-and-shell offices will grow at different rates (currently unpredictable growth). Thus, the design should not be rigid. It should allow for some flexibility.

2. **Interactivity:** In order to encourage interaction and collaboration among various users, KIC will be a livable interactive space complete with urban amenities, public art and interactive open and enclosed spaces. This project is intended for young creative entrepreneurs. Interactive working spaces, gathering/working spaces, and common and open spaces are highly desirable to be integrated within the design.
  
3. **Leasable vs. Non-Leasable space:** Leasable space (or income generating) vs. Non-Leasable space (including circulation, common and administrative space) should be balanced. This project is intended to generate enough leasing income (generated from leasable Built-Up-Areas) to subsidize the operation and funding for start-ups. Thus, the non-leasable space should be kept to the minimum. It is important that circulation in addition to non-leasable spaces should not exceed 20% of the BUA. An example of program breakdown with Leasable and Non-Leasable is shown below.

Phase-1 Program	Sqm	Total Sqm	Leasable Space	Non Leasable Space	Notes
<b>Offices</b>		<b>16,500</b>	14,025	2,475*	*Circulation shown separately
Flex Offices	5,000				
Services Offices	7,500				
Open Space offices	4,000				
<b>Admin Offices</b>		<b>750</b>		750	
<b>Support Facilities</b>		<b>2,000</b>		2,000	
<b>Data Center</b>		<b>1,600</b>	1,600		
<b>Housing</b>		<b>3,220</b>	2,800	420*	*Circulation shown separately
Studios (16 units)	640				
2 Bd-Rm (24 units)	2,160				
<b>Retail, F&amp;B</b>		<b>1,000</b>	1,000		
<b>Utility Building</b>		<b>400</b>		400	
<b>Underground Parking</b>		<b>4,500</b>	4,500		
<b>Total BUA Phase-1</b>		<b>29,970</b>	<b>23,925</b>	<b>6,045</b>	
			80%	20%	

It is required that the competitors show that ratio with their submission.

4. **Feasible/ Cost-Effective:** Lebanon is a lower middle-income country with a high ratio of government debt to GDP. Since the KIC is a government funded project, cost effective construction is key to the success of any proposed design. This is an extremely important criteria. Cost estimate of fully finished grade B office space is between \$ 750-850 per sqm. Furthermore, the project is geared to be operated by a private operator.

*Challenge: It is a balancing act of designing a cost effective project while creating interesting spaces, adhering to the above directives and harmonizing with the adjacent Oscar Niemeyer's existing structures. The designer can check more accurate construction cost estimations for Lebanon in specialized widely available publications.*

5. **Relation to existing structures:** Again, one of the most important challenge is to design a project within the campus designed by Oscar Niemeyer. While the competition management welcomes all creative ideas, a special care should be placed on the relationship between the new KIC buildings and the existing Niemeyer's buildings. Any design that would not integrate with Niemeyer's concept may compromise the integrity of the site and thus, compromises its future nomination for inscription on UNESCO World Heritage List.  
There are many ways to imagine the relationship of newly designed and existing buildings. The designer will have the freedom to come up with interesting concepts while ensuring congruency with the original site composition.
6. **Outdoor/indoor spaces:** Lebanon enjoys a Mediterranean climate. Temperatures are moderate throughout the year (please check monthly average temperature and precipitation in Lebanon). Thus, it is not unusual to use outdoor spaces for eight to nine months a year, if the outdoor space are well designed or shaded.
7. **Art Work:** As a project for young progressive community, KIC would be a place to host outdoor and indoor art work. The design should accommodate places for such art work. The successful design of the project could also be an art work.

## APPENDICES

## Appendix A: Knowledge and Innovation Center (KIC) Business Framework

### A.1. Business Case & Conceptual Framework

TSEZ has performed a high level feasibility study for the project. A market assessment survey has been conducted by InfoPro, a Lebanese market research firm, to assess the demand for a technology park in the North of Lebanon. The survey tested the concept through a series of surveys of heads of service firms. The study also made an attempt to quantify the demand for space within such a technology park.

A follow up study by City Trends Consult, included face-to-face interviews with industry leaders, to assess the gaps within the ecosystems and determine ways to address it through the KIC's business framework. Focus groups and direct consultations with the World Bank, Ministry of Telecommunication and Ministry of Economy and Trade lead to the refinement of the technology park framework.



On May 3, 2018, the Council of the Ministers issued decree # 2897/2018, authorizing TSEZ to develop the Knowledge and Innovation Center. A land lease agreement with the Rachid Karami International Fairground was signed on August 7, 2018. An agreement with the Ministry of Telecommunication to extend a fiber optic cable to the KIC site has also been concluded. This would provide a significantly faster internet connection to the site.

This design competition for the KIC site is conducted as another milestone in the completion of the action plan to turn the KIC project into reality.

## A.2.KIC Objectives:



The KIC project aims at developing a technology hub on a parcel of land on the site of RKF in order to contribute to the development of the knowledge economy, as well as to the general economic renewal in Tripoli and the North. The aim is to help transform ideas into viable start-ups and to grow start-ups into functional businesses.



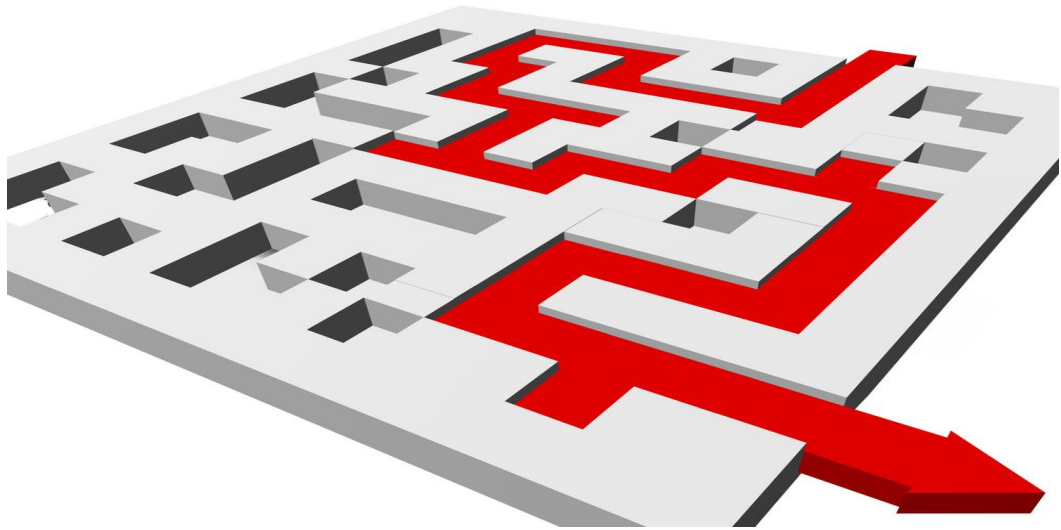
The KIC objectives are listed in the table below.

KIC Objectives/ Impact	KIC Activities
<b>Skill building, improved employment potential:</b>	<ul style="list-style-type: none"> <li>• Provide demand-driven rapid technical skills training (Coding, Business planning, Business writing, Communication)</li> <li>• Help forge university-industry partnerships (Internship, funding)</li> <li>• Bring together young grads – mentors – trainers</li> </ul>
<b>Increased productivity, encouraged industry innovation:</b> <ul style="list-style-type: none"> <li>▪ Increased Startups Formation, Collaboration and Growth</li> </ul>	<ul style="list-style-type: none"> <li>• Provide Incubation &amp; Mentoring</li> <li>• Offer Acceleration &amp; Counseling, scaling up</li> <li>• Help create industry clustering</li> <li>• Collaborate with R&amp;D Fund</li> <li>• Bring Seed and VC investment</li> </ul>
<ul style="list-style-type: none"> <li>▪ Improved Gov. support &amp; Incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Fiscal and administrative incentives</li> <li>• More flexible labor laws</li> <li>• Appropriate IP protection regime</li> <li>• Immigration and work-permit rules that are friendly to startups</li> <li>• Business friendly laws</li> <li>• e. Government support</li> </ul>
<ul style="list-style-type: none"> <li>▪ Improved Networking</li> </ul>	<ul style="list-style-type: none"> <li>• Help Startup/SME industry-bridging</li> <li>• Product-market matching</li> <li>• Forge local and regional agreements</li> <li>• Arrange for trade shows</li> </ul>
<b>Urban regeneration:</b>	<ul style="list-style-type: none"> <li>• Develop an urban environment for young grads, entrepreneurs and companies to collaborate and innovate</li> <li>• Support urban regeneration and growth in surrounding areas</li> <li>• Help Rebranding the city</li> <li>• Create SmartCity initiative</li> </ul>



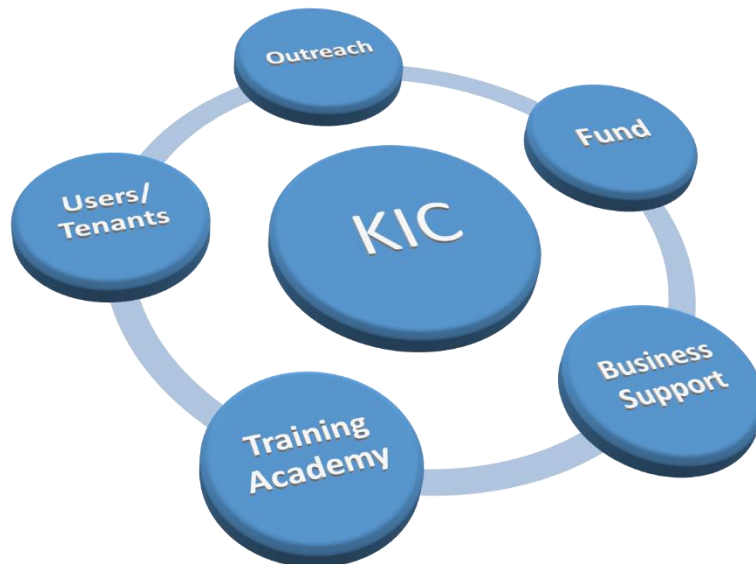
To achieve its aim, this project will be providing the following:

1. Developing in-demand skill building programs for young graduates in order to upgrade their skill-set, **to enhance their competitiveness and to improve their employability** at the market place.
2. Creating attractive environment for Entrepreneurs and SMEs in order to create a critical mass of 'knowledge and Specialized Service companies in Tripoli and **to increase the number of the promising startups** in the ecosystem pipeline.
3. Creating an environment of improved collaboration by bringing Incubators, accelerators and funds to provide support services to the entrepreneurs and startups in order **to improve the chances of startups' success and growth.**



4. Generating a series of upgraded regulations, **to improve government support** for Startups and SMEs.
5. Helping startups and SMEs with networking and marketing by linking them to local and regional demand points for their products and services in order **to improve trading of products and service produced at KIC**.
6. Helping urban regeneration and thus, contributing to the **city rebranding and urban-economic development**.

### A.3. Project Description & Main Components:



**KIC** would best act as a *'Platform of Collaboration'* between the following stakeholders:

- **TENANTS/USERS:**
  - Individuals (Creative young grads, researchers, innovators, etc.)
  - Entrepreneurs, Startups and SMEs (Tech-based and service-based)
  - Foreign and Established anchor” tenants
  - Foreign and Established Companies. Such “Anchors” would be needed to act as market leaders, set market trends, act as principal outsourcing entities, encourage mergers and acquisitions, etc.
  
- **BUSINESS AND ENTREPRENEURIAL SERVICES:**
  - Incubator and Accelerator operators as part of KIC collaborative Platform
  - Business Advisory Services
  - Patenting, etc.
  
- **TRAINING:**
  - Training Academy with affiliated Training Professionals

- Universities/partners
- **FUNDS:**
  - KIC Fund
  - Liaising with Venture Capitalists, CSR programs by local organizations and Banks, private donations, etc.
- **OUTREACH AND PARTNERS:**
  - KIC could become a platform to encourage networking, cross industry-bridging, market outreach; in order to help match market demands with products and services produced at KIC

KIC would seek an agreement with an Investor/Operator to develop and operate the building(s) to host the program of commercial nature. It is deemed that such operation would be best managed by a dynamic operator, due to the dynamic and ever evolving market conditions of the knowledge economy sector.

#### A.4.Partnerships and Market Outreach

KIC aspires to succeed through a series of collaborative agreements and partnerships. It will become a launching pad for new businesses through local cooperation with various stakeholders.



## Appendix B: Rachid Karami International Fair (RKIF) Brief

### **Rashid Karami International Fair in Tripoli, Lebanon Master Plan and Design by Oscar Niemeyer (1907-2012) Text by Wassim Naghi, Architect**

Famed Brazilian architect Oscar Niemeyer created a dream in Lebanon's Tripoli which soon became a massive unrealized fairground.

This major project of Niemeyer isn't well known within the international community of architecture, since the 100 hectare site and its 15 buildings and monuments built during the mid-twentieth century, remain today like an incomplete concrete structures contained in a postponed utopian oasis in our contemporary times.

The story began in 1958. At that time, Lebanon was enjoying its "golden age", when in autumn of 1958 Fouad Chehab was elected as a President of the Republic. His aim was to consolidate national unity within a balanced regional and socio economic development for the country.

The construction of a large international fair in Tripoli, the capital of North Lebanon, was a pivotal project in this new policy, and it took several years of negotiations and land selection in collaboration with the Tripolitan politicians and public community actors.

Inspired from the idea of the great fairs and expositions of European capitals during the 19th and 20<sup>th</sup> centuries 20th (major facilities called "international or world fairs" in the capitals of newly independent Arab countries, such as the International Fair in Damascus (1955), and the International Fair in Baghdad (1956), the international fair in Izmir (1937), the decision came to create an international fair in Tripoli in order to assert Lebanon's central role in the region's economy.

In 1962, the Brazilian architect Oscar Ribeiro de Almeida Niemeyer Soares Filho, known by Oscar Niemeyer, who had just finished work on his country's modernist marvel of capital Brasilia along with his colleagues Lucio Costa and Roberto Burle, was commissioned on behalf of the Lebanese government to design a permanent international fairground. At the age of 52 years, this journey was especially significant, because it involved his first commission abroad, beyond the American continent.

A few days after Niemeyer arrived in Lebanon, he went to Tripoli (85 km to the north of the capital Beirut). There he spent two months during which he produced the essence of his ideas which gave shape to the international fair project. In his memoirs published 40 years later, he explained the principles which guided his approach.

Concept designing and design development consumed almost 2 years until the construction started in 1964 and almost completed in 1974. However, in 1975, the eruption of the Lebanese civil war interrupted the construction completion and the operation of this modernist landmark.

Brasilia seems to have been present in Niemeyer's head when he planned the site in 1963. At a first glance of the fair masterplan, with the dominant boomerang shape of the "grande couverture" designated for international exhibition booths, one can see a resemblance with Brazilian urban plan, noting that Niemeyer was against having the exhibition pavilions in separate houses "that creates confusion for the visitor." Instead, he designed all the pavilions under one wing or boomerang shape floating roof, which is also similar in structure to the University of Brasília, also with the heavy use of concrete and a tendency toward curves and reflective pools (3.3 hectare).

"Pavillion du Liban," the Lebanon Museum, reminds the visitors of the presidential palace in Brasilia (Palacio Alvorada), but with the arcades placed up-and-down to mimic traditional Lebanese architecture.

With this as a starting point, the visitor would wander among the out-spread structures, take a look at the small cylindrical housing museum and the underground space museum.

A collective housing, revolutionary in its concept was also designed by Niemeyer as a "warning against lack of understanding of the housing issue- this lack of understanding reducing collective housing to mere property interests".

The collective housing that has a lot of common with Brasilia palace hotel opened in 1958, and was subsequently turned into a three stars "Quality Inn" hotel in year 2000. This may have harmed Niemeyer's ensemble and rang an alarm bell for the need to preserve the buildings' authenticity. Ironically, this Hotel is the only remaining functioning facility currently along with main entrance administrative bureau.

The typical house (Residence Type) with its one floor organic shape roof to cover the living and dining area overlooks through the curtain glass, an organic shape swimming pool with white ceramic and a natural look like artificial rock. This seems to be inspired from Niemeyer's house in Rio de Janeiro - the "casa das canoas" built in 1953 and used now for the headquarters of Oscar Niemeyer Foundation.

*"My concern was designing this residence in full freedom, adapting it to the unevenness of the terrain, without change, shaping it into curves, so as to allow vegetation to penetrate within them, without the presence of an overt straight line border..." - Oscar Niemeyer*

The concrete Dome shaped experimental theater with a 62m diameter that could accommodate around 1050 rotating seats was originally designed as a flexible theater layout with a circular hydraulically elevated rotating stage, where the performers' changing room and back stage facilities situated in a basement floor underneath the seated arena. It has the same appearance of the ibirapuera auditorium (1950's) and the Oca auditorium built in 1951; noting that it is called the "oca" because it resembles the traditional Native American dwelling.

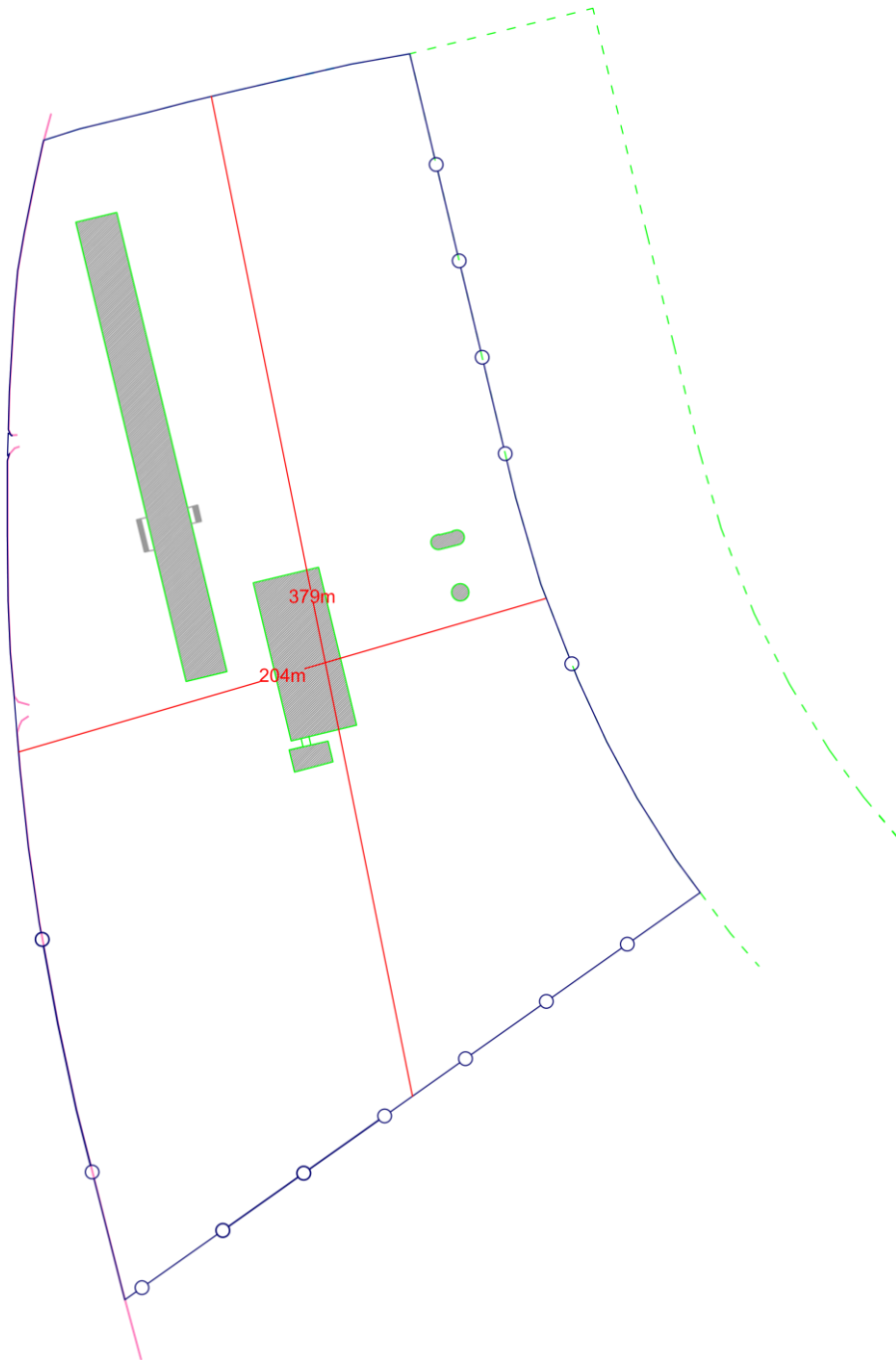
As one of the most influential members of modern architects - known as a great artist and one of the greatest architects of his time –

Niemeyer's innovations focused on a philosophy of form above functionality.

The fair has now been listed on the indicative list of the world architectural and cultural heritage.



## Appendix C: Site Plan



The above site plan shows the existing structures as well the dimensions of the site.



The RKIF Campus



The RKIF Campus with Niemeyer's original structures



The KIC Site



The Niemeyer's existing buildings within the KIC Site