SARANDA INTERNATIONAL AIRPORT (SIA)

TECHNICAL REQUIREMENTS

The Concessionaire shall refer to the following terms, *but not limited to*, for the purpose of completing and perfecting the works, products and services in the frame of the construction of the Saranda International Airport (SIA), acting and maintaining, at all times, updated practices and standards ICAO, EC, EASA, EN, ICE, BS (the latter where applicable).

1. **Technical Design**
   - 1.1 Prior to the commencement of works, based on the Land Use (High level Master Plan) of the Saranda International Airport, the Concessionaire shall prepare, Detailed Design as well as the Airport Master Plan, including the passenger terminal, perimeter security routes, taxiways, inbound vehicle routes, apron, runway, air traffic control tower, parking lots, administrative building. For all mentioned premises, the Concessionaire must submit the respective drawings.
   - 1.2 A General Plan of the Terminal Area (*the building and the apron* and the respective drawings.
   - 1.3 A Concept Design of the passenger Terminal building displaying the dimensions of each zone separately according to the respective drawings, and the conjunction of such planning if the terminal construction will be phased out.
   - 1.4 The description of the lighting mode and specification of the type of lighting for the Passenger Terminal as well as all offices and public areas and air traffic control tower, in accordance with the respective drawings.
   - 1.5 The perspective of the construction of the Passenger Terminal and Air Traffic Control Tower according to the respective drawings.
   - 1.6 Airport Traffic Planning, displaying the capacity and specification of roads as well as the direction of taxis, buses, available to departing passengers and parking for passenger cars and airport personnel.
     - *It outlines the separation of airside routes and land traffic roads as well as the security measures in a combination of both. It also displays how traffic will be oriented / allowed at each stage for Albcontrol and the local residents (outside the Concession Area)*.
   - 1.7 Detailed project implementation planning.

2. **The Airport Master Plan**
   - 2.1 The Concessionaire shall develop and continuously (every 5 years) update the Saranda International Airport Master Plan. This improvement ought to include as a minimum:
     - 2.1.1 A long-term main plan outlining the areas under development and land use inside and outside the Airport perimeter (airside and landside);
     - 2.1.2 Traffic Forecasts; for passengers, aircraft as well as cargo tonnage forecasts, including loading period and diagrams;
     - 2.1.3 Infrastructure airside layouts; the runway, taxiways and apron;
     - 2.1.4 Terminal area planning; the terminal, the hangars and terrain element drawings;
     - 2.1.5 Support infrastructure; fuel, firefighting and rescue, substations;
     - 2.1.6 Cargo Center;
     - 2.1.7 Airport Administration Building;
     - 2.1.8 Air navigation infrastructure, based on data obtained from Albcontrol, telecommunications and lighting;
     - 2.1.9 Security, *comprising of measures taken with regard to the safety of people and goods against unlawful interference*;
     - 2.1.10 Taxiways; perimeter road and other airside roads;
   - 2.2 The Airport Master Plan shall include a phased development program for the Airport to meet the anticipated air traffic requirements during the concession period.
   - 2.3 The Airport Master Plan shall include a Restricted Area to enable the Airport to operate.
   - 2.4 The Concessionaire shall determine the location of the wastewater treatment plant in the Airport Master Plan.

2.5 The Airport Master Plan shall contain detailed specifications for runway, taxiways and apron. The Master Plan may consider a phased construction of the runway and taxiways, without prejudice to the unlimited aircraft operations as foreseen in 3C Airport Category.
2.6 The Airport Master Plan shall include a modus of calculation of the *Pavement Classification Number* PCN for the runway, the taxiways and the apron.
2.7 The Airport Master Plan shall be completed and submitted to the Contracting Authority for review and approval.
2.8 The Concessionaire shall review and update the Airport Master Plan every five years.
2.9 The Concessionaire shall develop and operate the Airport during the Concession period in accordance with the Approved Airport Master Plan.

3. Passenger Terminal

3.1 The Concessionaire shall design, build, commission, operate and maintain the Terminal Building in accordance with the Approved Technical Design and the agreed stages of its development.
3.2 The Concessionaire shall ensure that the Terminal, after the commencement of operations and before commencing its expansion, can accommodate at least 130 000 passengers per year, and the equivalent of 340 passengers per hour under the TPHP Level (Total Peak Hour Passenger)
3.3 The Concessionaire shall ensure that the equipment necessary for Phase 1 of the Terminal will be suitable to handle the following levels of passenger traffic in accordance with the Standards:

TPHP (Total Peak Hour Passenger)	300	550	825
	Commencement of Operations after completion of the First Phase of the Terminal	Second Phase, 5 years after Commencement of Operations or when passengers numbers reach 300.000	Third Phase: 10 years Commencement of Operations or when passengers numbers reach 700.000
Number of passengers per year	130. 000	300 000	700 000

3.4 The Concessionaire shall ensure that during the Phases of Operation of the Terminal, that IATA standards shall be maintained for the level of service (LoS) in accordance with Airport Development reference Manual (ADRM), Eleventh Edition, IATA, March 2019. Level of Service shall be "optimum", meaning that there is sufficient space related to each of the processors and passengers areas. The Concessionaire will ensure that the Terminal is designed and maintained with the aim of expanding the Airport's capacity to 2 million passengers per year.
3.5 The Concessionaire shall ensure that the total area of the First Phase of the New Terminal is at least 5,000 square meters.
3.6 The Concessionaire shall plan (Phase I, Phase II and Phase III) in accordance with the requirements for distinctiveness and utilization in accordance with European Union standards and practices (*including but not limited to the Schengen Agreement*) and shall apply these standards and practices whenever they are applicable in Albania. The Concessionaire will respect Albanian standards and practices on security, border control (*immigration*) and customs.
3.7 The Concessionaire shall ensure that retail trade activities, such as bars and restaurants are available from the commencement of terminal operations.
3.8 The Concessionaire shall ensure that the Terminal Business Lounge will be available for use from the commencement of terminal operations.
3.9 The Concessionaire shall provide facilities at the Terminal to meet the needs of staff without including staff working in the maneuvering area.
3.10 The Concessionaire shall design office spaces in such a way as to provide the number of joint and individual offices needed to fulfill the required tasks.

3.11 The office space shall include toilettes, cafeteria, and other necessary elements in such a structure.

3.12 *Mechanical Equipment*

3.12.1 Cooling, ventilation and air conditioning

3.12.1.1 The Terminal will have ventilation and air conditioning systems installed so as to ensure appropriate temperature of air in the terminal facilities and administrative offices.

3.12.1.2 Closed Offices inside the Terminal shall be equipped with ventilator.

3.12.1.3 Depending on the intensity of cooling required, the capacity of this system will be optimized by the Concessionaire with the aim of saving energy, provided it maintains a certain temperature in the internal space.

3.12.1.4 The Concessionaire shall ensure that the temperature of the Terminal premises during the summer season does not exceed 26 ° C. The interior temperature of the Terminal shall be adjusted based on the outside temperature and the need to maintain a suitable level of temperature for all personnel working within the terminal, as well as for all categories of passengers. The cooling system shall be designed without redundancy in the system. Enclosed airport spaces of lower standards, such as warehouses, humid areas and technical plants, will be ventilated as well. The apparatus for adding moisture to the air will not be considered.

3.12.1.5 An integrated building management system shall control the capabilities of the Terminal's mechanical systems.

3.12.2 Hydraulic Works

3.12.2.1 The Concessionaire shall provide sanitary areas (*toilettes*) equipped with wall mounted water tanks, urinals, sinks and other accessories in accordance with international standards.

3.12.2.2 The Concessionaire shall guarantee the supply of potable water to plumbing and to customers through a water distribution network in the building. Hot water will be provided by individual electric heaters.

3.12.2.3 The Concessionaire shall install a sewer system at the terminal to ensure that sewage is drained to the external sewer line.

3.12.2.4 The Concessionaire shall provide the Terminal with a drainage system.

3.12.3 Terminal Fire Protection

3.12.3.1 The Terminal Building, being of a special nature, requires for an advanced fire protection system. The Concessionaire will install a sufficient number of fire extinguishers at the Terminal.

3.12.3.2 The Terminal shall be provided by the Concessionaire with a sprinkler protection system. Only closed rooms and low risk of fire areas may be excluded from this system.

3.12.3.3 A sufficient number of hydrants and fire extinguishers shall be installed in visible locations and those designated at the Terminal by the Concessionaire, in accordance with the best international design standards required and certified for fire protection.

3.12.3.4 The Concessionaire shall ensure that the mechanical smoke extraction system at the Terminal will reach a rate of change of air at 7 times per hour and this system shall be automatically adjusted.

3.12.4 Electrical Equipment

3.12.4.1 All following systems / equipment shall be provided by the Concessionaire, unless expressly provided otherwise in the legislation and other agreed documents.

3.12.4.2 The following codes are applicable to Electrical Systems and Installations:

3.12.4.2.1 ICAO International Civil Aviation Organization

3.12.4.2.2 EN European Standards

3.12.4.2.3 BS British Standards

3.12.4.2.4 IEC International Electrical Committee

3.12.4.3 The terminal shall be supplied with low voltage ("LV") power. For mainstream consumers like sprinklers, medium voltage supply may be an alternative. The secondary voltage supply ("MV") will match the description of the external power grid.

3.12.4.4 For low voltage supply to the Terminal, the Distribution Points (MOBs) and Sub-Distribution Points (SOBs) shall be installed in a separate building. The room in which MOB, SOB and related panels will be installed will be kept closed.

3.13 A telephone / intercom system shall be installed at the Terminal.

3.14 A network cable will be installed at the Terminal starting from the MOB central communications within the Terminal office area. The central equipment of these systems shall be located in the data center and will be deployed where necessary. All necessary active system equipment, such as server, router, nodes, bridges and anything of similar matter and use, will be provided.

3.15 For surveillance purposes, CCTV cameras and monitors for indoor and outdoor surveillance use shall be provided and maintained 24 hours a day.

3.16 Flight Information and Alert System

3.16.1 Flat screen displays shall be sufficiently located in suitable locations, including:

3.16.1.1 The departure hall,

3.16.1.2 The business premises,

3.16.1.3 The check-in area,

3.16.1.4 The Luggage Reception Area,

3.16.1.5 The arrival hall

3.17 The Baggage Handling System shall be provided, operated and maintained by the Concessionaire or its subcontractors and shall meet the following minimum or higher conditions if any.

3.17.1 The Terminal Baggage Handling System shall be suitable to handle at least luggage with a maximum length of 1,000 mm, a width of 750 mm and a height of 650 mm. The maximum weight will be 50 kg per luggage. This system is designed to operate in accordance with international standards and 100% luggage control. The methods for handling luggage larger than the capacity of the Luggage Handling System shall be provided by the Concessionaire.

3.18 *Luggage Handling for Departures*

3.18.1 All access control points shall be equipped with two conveyor belts. The first belt will have a dual-screen weight control device, one for the controller and the other for the passenger, while the second belt will be used to send luggage to the main conveyor belt behind the control windows.

3.18.2 The bottom of each of the conveyor belts shall be equipped with a photoelectric cell so that each of the luggage I halted until a space appears on the main conveyor belt, and then the suitcases shall pass to the main conveyor belt. Each main conveyor belt passes through a portion of rollers to the control area. Larger luggage may be checked manually at the two desks for cargo hours.

3.18.3 All luggage will be treated as "suspicious" when introduced into the Baggage Handling System. The luggage from the control will pass through the conveyor belt to the control machine. The suitcase image will be displayed on a computer screen through which the controller can decide whether the suitcase can pass or is still "suspicious". All "suspicious" luggage may be manually checked or cleared with the passenger. Manually checked luggage then slips into the conveyor belt. This conveyor belt will carry all luggage through a piece of rolls in a carousel. In the carousel, the luggage will rotate until it is placed into any of the carriages on the carousel side.

3.19 *Arrival luggage handling*

3.19.1 The Arrival System shall consist of a minimum of one conveyor belts for luggage. Arriving luggage can be manually loaded from trolleys to the reinforced part of the conveyor belt in non-public areas and shipped to the luggage compartment in the arrival area. In this area, passengers can retrieve their luggage from the carousel.

3.20 The Concessionaire shall provide and make use of proven systems in terms of capacity, functionality, reliability and robustness for all baggage, passenger and cargo control procedures. Airport Security personnel (*controllers and supervisors*) shall be trained on the use of these equipment.

3.21 *Lighting*

3.21.1 The Concessionaire shall provide suitable lighting at the Terminal in order to make the use of this Terminal satisfactory and appropriate to the passengers and persons following them.

3.21.2 The Concessionaire shall provide orientation equipment so that terminal users can identify areas of interest, entrances / exits; and special areas, such as departure area, check-in, arrival-area, border control, customs, and commercial areas. Orientation assistance shall be provided by an easily understood system of different light temperatures to emphasize the above areas.

3.21.3 Direct lighting may be used in arrival, departure, customs, security check, passport control and commercial premises.

3.21.4 Indirect lighting may be used to provide general lighting to the Terminal building.

3.21.5 Trees or decoration outside the Terminal shall be illuminated by lights installed below them.

3.21.6 The Concessionaire shall prepare prior to implementation the lighting specifications as per the above requirements.

3.22 *Structuring*

3.22.1 The terminal shall be shaped in accordance with the Airport Master Plan.

3.22.2 The Concessionaire will present a construction narrative that will be part of the *technical design*.

3.22.3 The structural design shall be carried out in accordance with the European Construction Norms (Eurocodes).

4. Terminal Operating Spaces

4.1 The Concessionaire shall ensure that as a minimum the following facilities are available for use in the Terminal after Terminal Opening Date or any earlier date on which the New Terminal is open to passenger traffic:

4.1.1 check-in desks and user terminal system (in compliance with the Masterplan);

4.1.2 information display screens;

4.1.3 electric power at all outlets;

4.1.4 electric lighting;

4.1.5 emergency lighting;

4.1.6 water at all outlets and waste water disposal from all outlets;

4.1.7 voice and data telephone lines at all outlets;

4.1.8 baggage handling facilities in departure and arrivals halls;

4.1.9 information desk for passenger and public enquiries;

4.1.10 facilities for customs, border control, and health services;

4.1.11 first aid facilities and appropriate medical supplies;

4.1.12 public telephone kiosks;

4.1.13 lavatories (*male, female and disabled persons*);

4.1.14 foreign exchange facilities;

4.1.15 car rent facilities

4.1.16 baggage x-ray screening facilities;

4.1.17 equipment for detection of metal, explosives and unauthorized items on board of the aircraft;
4.1.18 baggage trolleys;
4.1.19 the designated public areas;
4.1.20 the specified facilities for the disabled;
4.1.21 fire detection and sprinkler systems; *and*
4.1.22 Supporting IT systems.

5. Air Traffic Control Tower

5.1 The Concessionaire in cooperation with Albcontrol shall design and build the air traffic control tower at Saranda International Airport.
5.2 Design and construction shall be based on the concept design pertaining to the functionality of spaces to be used by Albcontrol
5.3 The exterior of the control tower shall be unchanged by and pursuant to that of the Master Plan design.
5.4 The construction shall be of high standards in compliance with EN, ICE, BS and FAA.
5.5 From an operational point of view construction should in compliance with ICAO, EASA standards.

6. Airport Infrastructure

6.1 ***The Apron***

6.1.1 The Concessionaire shall build the apron as specified in the Saranda Airport Updated Master Plan. The design and extension model of the apron shall be carried out in accordance with Annex 14 of ICAO Volume 1: *Airport Design and Airport Design Activities and Manuals* Volume 2: *Connection Roads, Aircraft Stations and Holding Bays* and Volume 3: *Surfaces*.
6.1.2 The Concessionaire shall be responsible for ensuring that all concrete work related to the construction of the apron is carried out in accordance with the BS EN ISO 9000 Quality Assurance Scheme or other scheme of the same international or higher standards.
6.1.3 The various components, materials and treatment, mixing and laying of concrete shall comply with the following British Standards or similar internationally recognized standards.
6.1.4 The apron may be developed in Phases during the concession period. The construction phases of the apron shall be set out in the approved Airport Master Plan.
6.1.5 The *Pavement Classification Number* PCN of the apron shall be the same as that of runway.

6.2 ***Taxiways***

6.2.1 The Concessionaire shall design and build the taxiways in accordance with the approved Saranda Airport Master Plan. The PCN of the taxiway must be the same as that of the runway.
6.2.2 The Concessionaire shall build a taxiway strip in accordance with the requirements of the approved Master plan and adapted to the same parameters as those of the taxiways.
6.2.3 Planning, design and construction of taxiways must be carried out in accordance with the requirements of Annex 14 to ICAO Volume 1 and the Airport Design Manuals Part 2 and 3.
6.2.4 The taxiways may be developed in Phases during the concession period. The construction phases of the taxiways shall be set out in the Approved Airport Master Plan.
6.2.5 The Concessionaire shall guarantee and thereof held responsible that all concrete works for the construction of taxiways shall be carried out in accordance with the BS EN ISO 9000 Quality Assurance Scheme or any other scheme of the same international or higher standard.
6.2.6 The various constituents, materials and treatment, mixing and casting of concrete shall comply with the following British Standards or similar internationally recognized standards.

6.3 ***Drainage***

6.3.1 The Concessionaire shall design and construct the field drainage system where the Airport will be constructed in accordance with the requirements of FAA Circular 150/5320 (Airport Drainage System) or latest edition and, where appropriate, BS EN 752 or similar or where possible higher internationally recognized standards.

6.3.2 The Concessionaire shall design the drainage system for a period of 100 years with a standard that ensures that the Airport infrastructure cannot be flooded more than 1 (one) time in 10 (ten) years, while the Terminal no more than 1 (once) 50 (fifty) years.

6.3.3 The Concessionaire shall maintain and improve the drainage system so that the Airport field complies with the conditions and standards required at the time it is transferred to the Government of Albania upon completion of the Concession Period.

6.3.4 The Concessionaire shall install fuel / oil collectors at the Aircraft Station and at all other refueling areas. Collectors must be of 2nd Class and comply with the standard BS EN 858, or similar or higher internationally recognized standards.

6.3.5 The Concessionaire shall ensure, throughout the Concession Period, that waste at the apron site and waste due to refueling will be disposed of through a collector in order to prevent pollution of the environment and especially water resources.

6.3.6 The Concessionaire shall ensure that any area used for refueling meets the requirements set forth in NFPA 415 (Airport Terminal Building Standards, Fuel Pits, and Charging Routes) or similar or higher internationally recognized standards.

6.3.7 The Concessionaire shall be responsible for ensuring the maintenance and isolation of manholes and other drainage structures in order to prevent maximally the possibility of damage to aircraft veering of the runway / track accidentally or in an emergency.

6.4 ***The Runway***

6.4.1 The Concessionaire shall design, build, commission, operate and maintain the runway and related components. The Concessionaire shall build the runway by calculating the appropriate *Pavement Classification Number* PCN based on Category 3C of the Airport, with an unlimited operating guarantee of at least 20 years.

6.4.2 The Runway direction shall be in determined during planning phase of the Airport and its length will be such to allowed operation of Cat C aircraft 9A320 families as well as B737 families)

6.4.3 The Concessionaire shall build the runways trip in compliance with the requirements of the approved Master Plan with the same parameters as the Runway.

6.4.4 The Concessionaire shall provide the appropriate signage and shall ensure that signposts are constructed and maintained under the conditions set forth by ICAO Annex 14; and be upgraded to the standards set forth in BS 3262, or similar or higher internationally recognized standards.

6.4.5 The Concessionaire shall ensure that no stagnant ponds are formed on the runway and that all surface water will flow and collect efficiently in the drainage system.

6.4.6 The planning, design and construction of the runway shall be carried out in accordance with the requirements of ICAO Annex 14 and Airport Design Manuals.

6.4.7 The Concessionaire shall take measures and ensure that all concrete works for the construction of connecting roads are fully complied with BS EN ISO 9000 Quality Assurance Scheme or similar or higher internationally recognized standards.

6.5 ***The Runway / taxiway Strip***

6.5.1 The Concessionaire shall build and maintain the runway and taxiway strip in accordance with the updated and approved Airport Master Plan, in compliance with the standards set forth in Annex 14 to ICAO and the Manuals of Airport Design.

6.5.2 The Concessionaire shall ensure that runway strips are at all times clear of any obstruction that may endanger the aircraft using the airport.

6.5.3 The Concessionaire shall remove any static barriers within the runway and taxiway strips in accordance with the standards and practices set forth in ICAO Annex 14.

6.5.4 The Concessionaire shall ensure that the taxiway and runway shoulders and strips have adequate gradients to facilitate surface water runoff. The shoulders shall be of sufficient strength to minimize the probability of damage to an aircraft running off the runway accidentally or in an emergency. The shoulders shall have at all time sufficient bearing capacity to support access by rescue and fire fighting vehicles and other ground vehicles.

6.5.5 The Concessionaire shall maintain throughout the concession period the surface of the Airport field in accordance with the conditions as prescribed by ICAO Airport Services Manual Part 2 and ICAO Airport Design Manual Part 3. The Concessionaire shall produce and keep up a maintenance program for all surfaces of the Airport in accordance with the format agreed upon by the CAA and the Company prior to the commencement of operations.

6.5.6 The Concessionaire shall maintain all strips and shoulders as well as connecting roads in accordance with the requirements set forth in ICAO Annex 14 and ICAO Airport Design Manual Part 2.

7. *The Runway*

7.1 The Concessionaire shall be responsible for the provision, operation, maintenance and refurbishing of sufficient vehicles operating in the airside area to facilitate airport operations, in accordance with the volume of passenger and cargo traffic, and adapted to types of aircraft operating to and from the Airport; making due allowance for normal maintenance requirements (referent to quality measurement).

7.2 The concessionaire shall design and build a facility for the purpose of housing vehicles and maintenance equipment to be used airside during the time when such vehicles and equipment are not in use or during the maintenance period.

7.3 The Airside Equipment Building shall be located in close proximity to the apron, as provided in the approved Airport Master Plan.

8. *The Airside Perimeter Road and Airport Perimeter Fencing*

8.1 *The Airside Perimeter Road*

8.1.1 The Concessionaire shall construct the airside perimeter road, which will form part of the airport perimeter security system. The alignment of such road is to follow the alignment of the perimeter fencing in order to allow surveillance of the entire length of fencing.

8.1.2 Such airside perimeter road shall be a 3.5 meters wide single carriageway with adequate cross fall to facilitate surface runoff. The Concessionaire shall ensure that such road is adequately paved and maintained to accommodate security patrol vehicles. The Concessionaire will ensure that this road be paved and maintained in a way that facilitates the movement of security patrol vehicles.

8.2 *Perimeter Fencing*

8.2.1 The Concessionaire shall design and build the perimeter security fence and shall keep maintained such perimeter security fence in order to provide controlled access to restricted areas of the Airport in accordance with ICAO Annex 17 – International Standards and Recommended Practices.

8.2.2 Such completed perimeter security fence shall comply with BSl 722: Part 10 or a similar or higher internationally recognized code. Such fence is to be buried 300mm below finished ground level. The exposed height of the fence is to be 2.4 metres with the tops of the posts outward facing with 3 strands of barbed wire.

8.2.3 The Concessionaire shall operate a system of closed circuit television (CCTV), with high resolution cameras along such perimeter security fence to enable the monitoring of all parts of the perimeter from one central control point. The CCTV will enable high resolution monitoring regardless of weather, day or night.

8.2.4 The Concessionaire shall operate a system of lighting along such perimeter security fence with an average illumination of 5 lux.

8.2.5 The Concessionaire shall establish and keep maintained a 3 meter clear zone to either side of such perimeter security fence.

8.2.6 The Concessionaire shall ensure that all vehicle access security gates, pedestrian gates and crash gates along all such perimeter are to comply with BS 1722: Part 10 or a similar internationally recognized code.

9. ***Utility Services***

9.1 *Power*

9.1.1 The Concessionaire shall procure the provision of reliable (*continuous*) electric power supply for the New Terminal, the operations center, the air traffic control tower and all airfield systems, with a capacity for expansion to handle the likely maximum requirements of the Airport in later Phases of development.

9.1.2 The Concessionaire shall ensure that the stand-by power supply systems have sufficient load capacity to fully supply all Airport operations during times of primary power loss. The stand-by system shall be designed to provide additional emergency power for airfield lighting, lighting in public areas, fire station and other essential facilities for the safe operation of the Airport.

9.1.3 The Concessionaire shall ensure that the design and installation of the electrical supply systems at the Airport is to be in accordance with ICAO Airport Design Manual Part 5 - Electrical Systems.

9.2 *Water Supply*

9.2.1 The Concessionaire shall be responsible for the provision of water supply (*from more than one source*) to meet operational demand at the Airport

9.2.2 The Concessionaire shall procure adequate supply of potable water to cover the total demand of up to 2,5 l/s, for to meet passenger demand, catering as well as demand from other administrative and operational units.

9.2.3 The Concessionaire shall procure sufficient supply water for firefighting, fire extinguishment and irrigation. Water supply for the firefighting station shall be provided by a 25,000 liter water reservoir which shall be build / ensemble and enlarged accordingly during the Concession Period, taking into account traffic levels and types of aircraft using the Airport.

9.2.4 The Concessionaire shall provide a booster station capable of meeting a peak demand of 2,5 l/s.

9.2.5 Such booster station shall include (*but not be limited to*) a clear water balance tank, a control house (*including a watch room*) and all required mechanical and electrical equipment for operation of the pressure adjustment with spare aggregates for system redundancy. This station will be complemented by a generator as secondary power supply system, with sufficient capacity for the operation of the potable water booster station.

9.3 *Waste Water*

9.3.1 The Concessionaire shall provide, operate and keep maintained during the Concession Period a waste water treatment plant at the Airport to treat all waste water before it is discharged into natural water courses. The waste water treatment plant shall comply with Applicable Laws and shall be of adequate capacity for the Terminal needs to be covered from Phase I (New Terminal) until the completion of expansion.

9.3.2 The waste water treatment plant shall also be designed to be capable of treating waste water pursuant to the projection load data of 130 thousand passengers per 1 (one) year, and shall expand adequately to the passenger traffic increase is such a load projection is exceeded progressively.

9.3.3 The wastewater treatment plant shall also be designed to be capable of treating wastewater from aircraft.

9.3.4 The sewage system shall be established by the Concessionaire as a complete, separate system for sewage/waste water without surface water drainage connections.

9.3.5 Such sewage system shall collect the sewage/waste water of the New Terminal. All newly build airport facilities and shall be connected to the system. The collected waste water shall then be drained off to the airport sewage treatment plant provided by the Concessionaire.

9.4 *Telecommunications*

9.4.1 The Concessionaire shall be responsible for the design, installation, maintenance and improvement of appropriate telecommunication and IT systems (*with the exclusion of Albcontrol*) to serve the needs of the Airport. The Concessionaire may also offer such systems to the other third Persons, if so agreed upon between Parties mentioned in this paragraph.

10. Airport road network and Parking

10.1 The Concessionaire shall design, build and maintain a network of roads within the airport including the point where the national or local road system will be accessed.

10.2 The design (drawings) and the respective maps shall be presented before the commencement of works.

10.3 The Concessionaire shall design, construct and maintain a Car Parking lot, with the capacity to accommodate long and short stay parking for a minimum of 350 vehicles (local bus, charter bus, Mini bus, taxi, private Car, rental car) cars in the vicinities of the Terminal, as well as temporary parking according to the "*kiss and fly"* concept.

10.4 The Parking lot shall be expandable throughout the Phases of the Concession Period, in accordance with operational needs, and shall include areas for accommodation of urban, intercity and international public transport, cab areas, vans, and tourist buses. Fifty percent (50%) of the Parking Area shall be covered (*with such a structure as to withstand climate conditions in the Concession Area*) to protect parked vehicles from direct sunlight.

10.5 The Concessionaire shall provide parking lighting during night hours and shall take the necessary measures to ensure safety for the public and the parked vehicles as well. Tickets will be given to Drivers at the entrance of the Parking lot and exit from the parking lot will only be allowed in exchange for a valid receipt after payment of the fee.

11. Airfield Ground Lighting

11.1 The Concessionaire shall design, install, integrate, commission and maintain the lighting system on the sides of the taxiways. The design and installation of such a system shall be in accordance with ICAO Annex 14, ICAO Airport Design Manual, Part 4, Visual Instruments and Part 5, Electrical Systems.

11.2 The Concessionaire shall ensure that the power supply at the Airport is sufficient to meet the increasing demand for the use of the lighting system, which the Concessionaire shall install on the edges of taxiways.

11.3 The Concessionaire shall install, integrate, upgrade and maintain a monitoring and control panel for the lighting system in the air traffic control tower.

11.4 The Concessionaire shall install, integrate, improve and maintain the approach lighting system. The design and installation of such a system shall be in accordance with ICAO Annex 14, ICAO Airport Design Manual, Part 4, Visual Instruments and Part 5, Electrical Systems.

11.5 The Concessionaire shall install, integrate, improve and maintain the runway lighting system. The design and installation of such a system shall be in accordance with ICAO Annex 14, ICAO Airport Design Manual, Part 4, Visual Instruments and Part 5, Electrical Systems.

11.6 The Concessionaire shall collect the relevant Airport lighting fees from all Airport Users.

11.7 The Concessionaire shall be responsible for the operation, maintenance, replacement and, whenever necessary in the cases of runway/taxiway widening, to extend all lighting available at the Airfield.

11.8 The lighting system that the Concessionaire will install on the airport site is composed of the following:

11.8.1 Runway lighting consisting of runway edge, runway end and threshold lighting;

11.8.2 Taxiway lighting consisting of taxiway edge lighting and runway guard lights;

11.8.3 Taxiway guidance signs;

11.8.4 Design, construction, commissioning, development and maintenance of lighting station equipment;

11.8.5 Installation of airfield ground lighting control and mimic panel of the lighting system at the Air Traffic Control Tower and the lighting station;

11.8.6 Cabling and grounding/lightning protection.

11.9 The Concessionaire shall design all facilities, equipment and systems to satisfy the requirements of ICAO for CAT I precision approach runway and taxiway lighting systems and to serve runway operation for arrivals and departures in both directions.

11.10 The Concessionaire shall ensure that all equipment delivered shall comply with current international practices and standards and shall have proven application reliability at major international airports.

11.11 Runway edge lighting suitable for CAT I operations installed at both edges along the full length of the runway shall be checked and repaired by the Concessionaire where necessary.

11.12 Runway end lights shall be installed by the Concessionaire at both runway ends. The runway end lights shall be elevated uni-directionally and emit variable intensity red light in the direction of the runway. The runway end lights shall be connected to the runway edge light circuits and controlled jointly.

11.13 Runway threshold lighting shall be installed by the Concessionaire on both runway thresholds at right angles to the runway axis.

11.14 Omni-directional Taxiway edge lighting shall be provided at the edges of Taxiway.

11.15 Runway guard lights shall be installed by the Concessionaire at each holding position, in accordance with ICAO Annex 14. Runway guard lights consist of two pairs of unidirectional alternately blinking yellow lights located on both edges of the taxiway.

11.16 Taxiway guidance signs shall be provided by the Concessionaire, in accordance with ICAO Annex 14, and shall comprise mandatory signs and information signs (location signs, direction signs and destination signs). These signs shall be completed by the Concessionaire. All taxiway guidance signs shall be internally illuminated and mounted on frangible couplings in order to provide clear vision to pilots approaching the sign while maintaining clearance from the pavement edge, engine pods and excessive jet blast.

11.17 All buildings and structures on the airport site constituting an obstacle according to ICAO Annex 14 shall be marked with obstruction lights by the Concessionaire (*or Albcontrol in the case of air traffic control structures or buildings or other buildings and structures under the control of Albcontrol*).

12. Fire and Rescue Facilities

12.1 The Concessionaire shall provide fire and rescue facilities in full compliance with the standards defined in ICAO Annex 14 and ICAO Airport Services Manual Part 1.

12.2 The Concessionaire shall design, ensure and maintain the firefighting facilities in the required category from ICAO SARP, in accordance with the plane characteristics that they will treat and the category of the airport.

12.3 The Concessionaire shall increase the level of fire fighting provision in full compliance with ICAO Annex 14 during the Concession Period as the Airport and its traffic expands.

12.4 The Concessionaire shall provide a fire station on the Airport to accommodate the fire fighting vehicles, personnel and equipment.

12.5 The Concessionaire and location of the fire station shall be as set out in the approved Airport Master Plan.

12.6 The Concessionaire The Company shall ensure that the location of the fire station and equipment for fire and rescue enables the following minimum response times to be achieved; *two minutes, and not exceeding three minutes to reach the end of each runway, as well as to any other part of the movement area, in optimum conditions of visibility and surface conditions*.

12.7 The Concessionaire shall ensure that the fire station houses a self-contained rescue and fire fighting unit, with appropriate facilities for the accommodation and protection of vehicles, crew members and such operational services as are necessary to ensure their continuous ability for effective and immediate response in an emergency.

12.8 The Concessionaire shall ensure that a safety and security officer shall conduct regular audits of the fire fighting services at the Airport, the results of such audits to be provided on request to the relevant State Entity.

12.9 The Concessionaire shall draft and test emergency procedures ensuring the adequacy of fire exits and signage.

13. Operational Management after Commencement of Operations

13.1 The Concessionaire shall ensure that the operations listed below are made available any time during all operational periods in compliance with the safety and security requirements, as prescribed in the Chicago Convention, and in compliance with the standards of ICAO, EC and EASA.

13.2 The Concessionaire shall ensure curbside management of the operation and access to the Terminal and shall control and supervise the entire area to ensure an adequate curbside operation (*including, without limitation, voiding vehicle traffic congestion, avoiding delays to passengers and preventing nuisance to passengers*).

13.3 The Concessionaire shall comply with IATA level of service (LoS) standards, which at any time, at any airport area will not be lower than 'Optimum".

13.4 The Concessionaire, in cooperation with the State Police, shall ensure an unimpeded traffic flow with particular emphasis on preventing illegally parked cars both from a security and operational perspective.

13.5 The Concessionaire shall operate and supervise the car parking facilities and ensure availability of all equipment relating to the car parks and in the event of technical malfunction shall ensure prompt rectification of such malfunction, as well as ensure temporary functioning with alternative means.

13.6 The Concessionaire shall ensure that facilities for passengers with reduced mobility are located both in the parking areas and on the curbside and provide staff to assist such passengers. This shall include designated parking and drop off points for disabled passengers as well as ramp access suitable for wheelchair passengers or persons with challenged ability to walk. The Terminal shall be operated in such a manner that any wheelchair bound passenger can be moved in a wheelchair through such terminals from normal curbside entry point to normal exit on the apron.

13.7 The Concessionaire shall monitor all commercial activities on the landside within the Concession Area and ensure such activities do not impede the operation the Terminal.

13.8 The Concessionaire shall ensure that the facilities, equipment and staff are available in order to efficiently operate the functions in the Terminal.

13.9 The Concessionaire shall ensure up to twenty-four hour management and supervision of the terminal operation and shall ensure that all the following processes within the terminal operation are performed to recognized IATA LoS – "Optimum".

13.9.1 **Ticketing**: The Concessionaire shall ensure availability of ticket offices to carry out the ticketing process in accordance with demand for such services.

13.9.2 **Check-in**: The Concessionaire shall ensure sufficient availability of check-in counters; equipment and staff in order to comply with IATA level of service 'Optimum".

13.9.3 **Business lounge**: The Concessionaire shall design, supply and operate an enclosed business lounge to accommodate all airlines business passengers, or other passengers that wish to attain such service by payment of relevant fees.

13.9.4 **Gate boarding and de-boarding**: The Concessionaire shall ensure that sufficient staff are in position and available for the boarding and de-boarding of all flight departures and arrivals to and from Saranda Airport in order to achieve an on time departure operation and an efficient arrival operation.

13.9.5 **Lost and found**: The Concessionaire shall supply and operate a lost and found office with trained staff capable of operating the world baggage tracing system.

13.9.6 **Passenger Terminal services center**: The Concessionaire shall staff and operate an information center in the New Terminal providing terminal supervision, an information desk for all airport users, and a telephone exchange providing information to both internal and external customers and where all public address announcements are carried out.

13.10 The Concessionaire shall ensure a multi-skilled staff (*trained in all relevant aspects of passenger and terminal services, including without limitation check-in, lost and found, passenger boarding, information desks, public address and telephone exchange*) for the passenger terminal, formally trained in emergency and evacuation procedures.

13.11 The Concessionaire shall ensure a high awareness of disabled passengers with dedicated staff offering assistance.

13.12 The Concessionaire shall have staff available at the information center dealing with passenger complaints.

13.13 The Concessionaire shall ensure that the following ground handling ramp services are provided when required by aircraft using the Airport:

13.13.1 Aircraft handling;

13.13.2 Aircraft refueling;

13.13.3 Aircraft loading and unloading;

13.13.4 Load control;

13.13.5 Flight operations and crew administration;

13.13.6 Ground transport; *and*

13.13.7 Aircraft cleaning, water and toilet service.

13.14 The Concessionaire shall provide a skilled, trained work force with sufficient staff and equipment to cover all ramp activities. Traffic demand shall be regularly monitored by the Concessionaire to ensure that adequate resources and ground service equipment plant and buses are available.

13.15 The Concessionaire shall provide continuous ramp supervision to ensure efficient, safe and secure operations.

13.16 The services provided by or on behalf of the Concessionaire to airlines operating at the Airport shall be in accordance with the service level agreement(s) to be agreed and each such airline shall be entitled to receive the same standard of service for all ground handling activities.

13.17 *Embarkation***:** The Concessionaire shall ensure sufficient staff are available in good time at each boarding gate in use to ensure that passengers reach the relevant aircraft in good time and such aircraft are able to achieve on-time departure. The Concessionaire shall ensure the provision of an adequate number of buses taking into account traffic levels for the boarding of aircraft parked on remote positions, with special consideration for rush hours.

13.18 *Disembarkation***:** The Concessionaire shall ensure availability of buses on aircraft arrival, including availability of staff to ensure immediate disembarkation of passengers after aircraft parking, with special consideration for rush hours. This process shall be supplemented with a bus operation for aircraft parked on remote positions.

13.19 The Concessionaire shall provide staff to escort all passengers at all stages of embarkation up to the relevant aircraft and at all stages from disembarkation after aircraft parking with added attention to passengers with reduced mobility.

13.20 The Concessionaire shall ensure that circulation space within the arrivals baggage reclaim hall complies with IATA Level of service standards “Optimum”.

13.21 The Concessionaire shall ensure baggage delivery standards as set out in *Performance Criteria.* For this purpose, the Company shall provide the following:

13.21.1 The Concessionaire shall operate a manual baggage handling system that is fed from the check-in desks. The system shall incorporate an inbuilt screening machine for 100% hold baggage screening.

13.21.2 The Concessionaire shall also operate a second baggage handling system that shall be initiated during peak periods and shall also process the all oversized baggage (AOG).

13.21.3 The Concessionaire shall use this second baggage system to segregate high risk flights that require extra security measures. The system shall also be used as a back up if the primary baggage system encounters technical problems.

13.21.4 The Concessionaire shall calculate the necessary amount of reclaim belts according to the Peak hour number of passengers. Each reclaim belt shall have a separate conveyor system.

13.22 The Concessionaire shall at all times ensure compliance to the Standards and Recommended Practices specified in ICAO Annex 14 Volume I. Regular planned monitoring through airfield inspections shall be undertaken. Records shall be maintained and shall be available for review by the relevant Civil Aviation Authority jointly with the action plan.

13.23 The Concessionaire shall prepare and update regularly an aircraft stand and parking manual so as to ensure that the Aeronautical Information Publication (AIP) displays the details of the aircraft stand layouts.

13.24 The Concessionaire shall operate an airport duty office which shall be the control center for the entire airport operation both landside and airside. In addition, the Concessionaire shall provide the airport duty office with the necessary equipment and personnel up to 24 hours as well as the systems to facilitate the operation.

13.25 The Concessionaire shall ensure that all staff are highly trained and are multi functional.

13.26 Emergency situations shall be coordinated in the airport duty office. The Concessionaire shall provide a room in the Terminal Building to be used as a crisis management center during an emergency situation.

13.27 The Concessionaire shall provide an Airport First Aid Office with necessary trained personnel and supplies in order to provide rapid medical services to passengers and the Airport Users in accordance with Applicable Law.

13.28 The Concessionaire shall provide a health check point in the arrivals hall in order to implement quarantine restrictions, if necessary. The staffing of such health check point shall be the responsibility of Government of Albania.

13.29 The Concessionaire shall negotiate a Service Level Agreement with the Albanian Customs Authority to ensure adequacy of staff to man the customs channels and allow an efficient passenger flow through the terminal.

13.30 The Concessionaire shall provide the standard (green and red) customs channels and in the future shall incorporate blue lanes when / if Albania joins the European Union.

14. Airport Operational Manual

14.1 The Airport Operational Manual ("UAOM") shall be prepared by the Concessionaire containing all information, procedures and instructions necessary to enable the operating staff to perform their duties in such a manner that shall ensure that the Airport is safe for use by aircraft. The UAOM shall contain as a minimum the following information:

14.1.1 *Introduction*: Detailing the legal status, distribution and quality procedures for amending the UAOM.

14.1.2 *Technical administration*: Detailing the full name and address of the Airport, co-ordinates (Airport Reference Point), name and status of key personnel, procedures for promulgating Airport information, procedures for the control of works, procedures for the removal of aircraft, and procedures for maintaining the apron control, refueling etc.

14.1.3 *Airport characteristics*: Detailing any obstacles that could affect the operation, Airport survey data, details of surfaces and bearing strengths of runways, taxiways and aprons. Data for the calculation of declared distances and elevations as well as the methods and procedures for calculating temporary objects that infringe the runway strip, transitional surfaces and approach and landing surfaces.

14.1.4 *Operational procedures*: Procedures for routine Airport inspections and reporting. Procedures for the measurement of runway and surface friction conditions. Procedures for bird control, runway, taxiway and apron sweeping.

14.1.5 *Rescue and firefighting services ("RFFS")*: The RFFS category of operation, details of the appliances, extinguishing media. The numbers of trained staff, emergency procedures and training requirements for maintaining the service.

14.1.6 *Medical services*: Details of arrangements for requesting medical support, list of trained personnel and equipment available.

14.1.7 *Airport lighting*: A brief description of the Airport lighting, its method of operation, methods of recording inspection and maintenance. The location of and responsibility for obstacle lighting on and off the Airport. The arrangements for standby power.

14.1.8 *Air traffic management*: The system for management of the air traffic on the ground. Rules for governing the selection of the runway in use, taxiway routings, runway availability in the event of an incident or accident at the Airport. Notification of any noise abatement procedures, search and rescue alerting. Methods of reporting and distribution of meteorological information.

14.1.9 *Communications and navigational facilities*: Description of and instructions for the use of air/ground and operational ground radio communications where these are not covered by ATC.

15. Airport Safety Management System

15.1 The Concessionaire shall prepare the Airport safety management system that shall include the following items:

15.1.1 Safety documentation relating to the UAOM and internal safety procedures.

15.1.2 Data gathering and reporting system relating to all safety aspects

15.1.3 Evaluation of airport data and determination of trends.

15.1.4 Recommended safety actions

15.1.5 Legislation for occupational safety and health law as per EU directives and other international highly regarded practices and standards.

15.1.6 The Concessionaire shall ensure that all Airport Users comply with the specified safety requirements pursuant to the Concession Agreement.

15.1.7 The Concessionaire shall appoint all safety aspect personnel that will perform inspections and ensure that criteria are met fully during the Concession Period.

15.1.8 The Airport safety management system shall be subject to annual reviews and updates by the Company to ensure compliance with national and international standards and practices. The Airport safety management system shall comply with ICAO Doc. 9774 concerning the Manual of Certification of Airports.

16. Airport Maintenance

16.1 The Concessionaire may outsource the routine and corrective maintenance activities to a third party organization. The Concessionaire shall ensure that the following standards are achieved with respect to both types of maintenance detailed below:

16.1.1 Planned preventative maintenance: The Concessionaire shall establish the planned maintenance intervals based on the recommendations and standards specified by the individual manufacturers to ensure the required system availability and reliability. Where possible, planned maintenance shall be conducted during non operational or low traffic periods in order to minimize the impact on the airport operations.

16.1.2 *Corrective and emergency maintenance:*

16.1.2.1 For those systems that are characterized as critical to the airport operation and have a response time of less than half an hour, the maintenance Contractor shall provide up to 24 hours coverage on site.

16.1.2.2 For the non-critical systems, with a response time of more than half an hour, the maintenance contractor shall provide up to 24 hours coverage but on an "on call" basis. Where possible the mean time to repair shall be two hours. Equipment spares holding shall be subject to reviews to ensure compliance with the above criteria.

16.2 *Airport inspections and maintenance* The inspection system shall ensure that all defects in the physical facilities provided are quickly reported and corrected where required and any failures, service unavailability or obstructions that may affect the safety of aircraft and personnel on the airfield can be promulgated by the airport directly or by NOTAM. To achieve this policy a three tier inspection system shall be implemented as follows:

Level 1	Routine daily checks of runways, taxiways and aprons by airfield operations staff to include approach, runway, taxiway and apron lighting.
Level 2	A detailed inspection by airfield operations covering the airfield on a weekly basis. This inspection, elements of which shall be carried out on foot, shall cover all that is included in a Level 1 inspection but with particular concentration on: • Security of light fittings and tightness of security nuts. • Condition or approach lighting and associated cabling (monthly only).
Level 3	Inspections by the operations management team covering all areas of the airfield on a quarterly basis.

16.3 *Runway strips maintenance*, the area surrounding the runways, shall also be checked regularly by the Concessionaire.

17. Quality Management

17.1 *Service level agreements*

17.1.1 The Concessionaire shall prepare service level agreements (SLAs) for all other Persons providing services at the Airport based on the standards required under this Agreement, Applicable Laws and Conventions and Good Industry Practices and shall clearly state the performance standards, service rates, and responsibilities of each organization operating at the Airport from Terminal Opening Date as listed below:

17.1.1.1 Air-traffic control;
17.1.1.2 State Police (Border control and immigration / traffic services)
17.1.1.3 Customs Authorities;
17.1.1.4 Fire and rescue services;
17.1.1.5 Meteorological services;
17.1.1.6 Other utility providers (either state-owned or private);
17.1.1.7 Airport safety and security;
17.1.1.8 Ground handling services;
17.1.1.9 Maintenance contractor;
17.1.1.10 Airlines; *and*
17.1.1.11 Others.

17.1.2 All such Service Level Agreements (SLA) proposed to be entered into with State Entities shall be provided in finalized draft form, including a translation into the Albanian language if the language of such draft agreement is not Albanian.

17.1.3 The Service Level Agreements shall be subject to annual monitoring by the Concessionaire and the Government of Albania and the relevant State Entities, including AAC, to ensure that standards are maintained to the levels specified.

17.2 *Customer satisfaction monitoring,*

17.2.1 The Concessionaire shall employ quality management staff. This personnel shall operate on a daily basis and respond to all customer complaints and recommendations.

17.2.2 The Concessionaire shall hold regular meetings with the Airport Users to discuss any complaints or ideas for improving the airport operation when required.

17.2.3 The Concessionaire quality management staff shall conduct surveys at the Airport in order to assess the level of service offered.

17.3 *Environmental Management*

17.3.1 The Concessionaire shall prepare an environment management plan ("EMP") dealing with all the environmental issues within the Concession Area, and ensure compliance with such EMP, as follows:

17.3.1.1 *Reduction of noise levels*

a) Introduction of noise monitoring program and noise abatement procedures in consultations with all airport users

b) Communication with the competent authorities and local community on aircraft noise issues.

17.3.1.2 *Introduction of an air quality program including the*:

a) Optimization of ground handling *I* operations to avoid circles and as a result to minimize kerosene consumption and air pollution *and*

b) Air quality measurements.

17.4 Establishment of a waste management system for collecting, recycling, treatment and disposal of waste inclusive of hazardous waste on the bases of best international practices.

17.5 Cooperation with State Entities to monitor and control bird activity within the Concession Area.

17.6 Introduction of environmental standards to be abided by all Persons operating within the Concession Area as well as environmental audits on an annual basis

17.7 Development of a legal register for permits and approvals of operational, environmental and architectural/design relevance.

17.8 Protection of and showcasing of the region's cultural heritage, if available.

17.9 Support of EU projects related to the environment of the airport and immediate neighborhood.

17.10 Promotion of environmental awareness among the public at large.

17.11 The implementation of the EMP and the results shall be annually published by the Concessionaire in the environmental report.

17.12 The realization and implementation of these objectives shall be in accordance with Applicable Law including:

17.12.1 Annex 16, ICAO Convention on International Civil Aviation (Chicago Convention), signed on 7 December 1944 in its present form;

17.12.2 European Economic Community: Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment amended by Council Directive 97/11/EC of3 March 1997;

17.12.3 UNECE Convention on Environmental Impact Assessment in a Trans boundary Context (convened in Espoo, Finland, on 25 February 1991).