ANNEX A.1

D/SU/09/01

Provision and installation of sound absorbing equipment for acoustics and lighting system
TECHNICAL SPECIFICATIONS

Table of Contents

Technical specifications *3*

1 Objectives *3*

2 Title of the Contract *3*

3 Required services *3*

5 Requirement *4*

6 Description of profiles *12*

6.1 Engineer (Project manager) **12**

6.2 Foremen **13**

6.3 Construction worker **13**

7 Required information *13*

8 Inception meeting *14*

9 Annexes *14*

Technical specifications

1 Objectives

The Council adopted a Regulation establishing the European Union Agency for Fundamental Rights (16241/06) In December 2003, the European Council agreed to extend the mandate of the European Monitoring Centre on Racism and Xenophobia, established by Regulation (EC) No1035/97, and transform this Centre into the EU Agency for Fundamental Rights (hereafter referred as "the Agency"). The seat of the Agency will remain in Vienna (Austria).

The objective of the Agency will be to provide the relevant institutions, bodies, offices and agencies of the Community and its Member States implementing Community law with assistance and expertise relating to fundamental rights in order to support them when they take measures or formulate courses of action within their respective spheres of competence to fully respect fundamental rights. The Agency became operational on 01 March 2007.

The Agency intends to sign a contract for the Provision and installation of sound absorbing equipment for acoustics and lighting system as described in the present document.

2 Title of the Contract

The title of the contract is **"Provision and installation of sound absorbing equipment for acoustics and lighting system".**

3 Required services

The purpose of this contract is the provision and installation of sound absorbing equipment for acoustics and a lighting system in the atrium of FRA premises.

The agency is creating in the atrium an information point. This area will become a conference/meeting/student area where people can meet, hold talks, give presentations, invite guests etc.

As this area has always been designated for the above purposes a decision was reached to ensure that the acoustics of the atrium were suitable; this means that the atrium requires installation of sound-absorbing equipment to ensure that when large groups are present for presentations, speeches etc, there is no undue interference from echoes and poor sound quality. A basic and ambient lighting system should be installed to guarantee the required

intensity of light and to keep the ambience of the atrium. In addition, glass doors should separate the meeting room from the atrium.

As a first step, the Agency awarded a contract for consultants to deliver proposals how to optimize the acoustic ambience. The outcome of the consultancy report provides the basis for the tendering procedure.

The purpose of this invitation to tender is to award one (1) Contract.

4 Overview of the current situation.

The current size and design of the atrium can be seen on the plan attached.

5 Requirement

5.1 Planning activities

- Static proof of all appropriate work by stress analyses.
- Approval by SIGE planning authority
- Nomination of Coordinator (Project manager)
- Nomination of building project leader (Foreman)
- Obtaining the building permit from regulatory authority
- Provision the necessary detail and implementation plan
- Provision of a lighting plan in accordance with the lighting concept.
- Provision a building services plan including wiring
- Notification of commencement of construction work
- Further notification of completion
- Provision of interim reports
- Provision of co-ordination plan
- All requirements of regulatory authority including payment of all fees

5.2 Building equipment, Safety measures, Scaffolding

- Erection of fence around the storage space including fees.
- Temporary electical power supply
- Protection of slate floor inside the atrium against dust and/or damages
- Difficulties caused by curved stone steps and staircase to be included
- Protection of all access and other areas against damage
- Erection of anti-dust walls when necessary with lockable doors,

- Protection of all windows and doors in the atrium
- Timing of all protection measures must be included in the project plan.
- Erection of scaffolding in the atrium on all walls to the glass roof and from side-to-side with approval by the authorities (Arbeitsinspektorat)
- Difficulties for manual transport (without crane) of material must be considered especially in staircase – transport to the first floor.
- Daily cleaning of the site and access route to be included
- Removal of debris to be included
- Final cleaning on completion of the site work

5.3 Noise control foil at the rove

- Delivery and installation of sound absorbing foil to the following specification: Thickness 0,1 mm; diameter of hole: 0,2 mm; distance between holes: 2,0 mm; weight 0,14 kg / m2.
- A double layer of transparent micro-perforated foil each over an area of 85.9m2 to be placed below the glass rove.
- The absorptive properties as wall as the technical characteristic of the product show the sound absorption values after fixing as shown in the graph.

- Fixing to the double layer foil as show in the diagram

- The following difficulties must be considered and included:
  Manual transportation, working on the glass roof, irregular foil shape, overhead working
- Implementation according to consultants' plan

5.4 Noise control boards on walls

Supply and installation of sound absorbing boards on walls to the following specification
English version .

Product data PHONSTOP V		
Characteristics	DIN	Data
Basic material		Granulat without grider
Colour		grey
Density	EN ISO 845	270kg/m3-+10%
Burst strenght	DIN 1164	1,2 N/mm2-+10%
Bending tensile strength	DIN 1164	0.5 N/mm2-+10%
E-modul (static)	DIN1048-5	760-+80 N/mm2
E-modul (dynamic)	DIN1048-5	1.020-+50 N/mm2
Heat conductance	DIN 52612	10tr 0.08 W/mK
Fire behavior	DIN 4102 Part 4	A1
Lenght specific flow resistance	DIN EN 29053	10 to 20 kPa s/m4
Water vapor antagonism	DIN 52615	25
Freezing dew	DIN 12041	0.25 Lost in M%
Substance at d = 50mm		About 13.5 kg/m2

German version

Produktdaten PHONSTOP V

Eigenschaft	DIN	Wert
Grundmaterial		Blähglasgranulat ohne Binder
Farbe		grau
Rohdichte	EN ISO 845	270 kg/m³ ± 10 %
Druckfestigkeit	DIN 1164	1,2 N/mm² ± 10 %
Biegezugfestigkeit	DIN 1164	0,5 N/mm² ± 10 %
E-Modul (statisch)	DIN 1048-5	760 ± 80 N/mm²
E-Modul (dynamisch)	DIN 1048-5	1.020 ± 50 N/mm²
Wärmeleitfähigkeit λ	DIN 52612	$\lambda_{10,tr}$ 0,08 W/mK
Brandverhalten	DIN 4102 Teil 4	A1
Längenspezifischer Strömungswiderstand	DIN EN 29053	10 bis 20 kPa s/m⁴
Wasserdampfdiffussions-widerstand	DIN 52615	25
Frost-Tauwechsel-Beanspruchung	DIN 12041	0,25 Verlust in M %
Flächengewicht bei d = 50 mm		ca. 13,5 kg/m²

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Absorptive properties and technical requirements

- Product - Phonstop V acoustic plates with a thickness of 50mm

- Layout with open pore acoustic plates with the possibility of coloring.
- The fixing should be in one or two layers, pressure-resistant, fiber- free and to a fire resistant class A2.

Technical characteristics

- Supply and installation of a concrete frieze (Lichtvoute) around the atrium, suitable for indirect lighting and attachment of noise control materials.

- Covering all walls of the atrium. covering with 50mm or 100mm of acoustic absorbing material. (detail plan attached)

- Difficulties of manual pre-preparation and assembling must be included, including levelling of brickwork walls, priming and colors required.

- All additional small work must be included e.g. patterned facade on ground floor
- Implementation according to consultants‘ plan
- Fixing to windows, doors and decorative features must be included

5.5 Painting of the facade

- The entire facade must be restored and painted
- Filling the cracks
- Remove loose plaster and paintwork
- Priming brick walls.
- Making good and painting all surfaces with as many coats as necessary
- Difficulties caused by decorative features, windows and oriel must be included
- Cost for additional color to be included
- Provision of sampling must be included
- Implementation according to consultant plan

5.6 Light installation including inlets and cutting works

- Erection lighting including controls and inlets.
- Basis and ambient lighting to be supplied and installed.

5.6.1 Basis lighting:

- To provide a light intensity of 500 lux at 85 cm hight above the ground in the whole Atrium.
- Prove of light level by calculation and equipment
- The fixing to be of a height level of 10m-18m to avoid dazzle.
- If necessary fixing shades to be installed to avoid dazzle in adjacent offices.
- No suspended lamps to be installed.
- Only wall lamp to be used
- For ambient lighting in particular with LED coordination must ensure there is no overlap

5.6.2 Ambient lighting

- Only wall lamp to be used
- LED lighting should be fixed in the concrete frieze (Lichtvoute) directly under the glass roof with the possibility of change color
- Another LED band should be fixed at ground floor level also capable to change color
- At the second window level wall lamp to be fixed alternately to illuminate the wall surface

- At the oriel on both the left front and the right front window similar lamp to be installed
- At floor level only focus light to be installed flush to the wall
- All fittings and wirings included
- All cuttings included
- In all cutting works full attention to the historical character with additional cost included
- Sufficient electric circuits for control and capacity are included
- All difficulties from the fassade work are include
- Emergency lighting must meet legal requirements and has to be coordinated with authorities, and the landlord Uniqa (including an escape route making)
- Wiring to the next transformer included
- The entire electric installation to meet current standard
- Provision an e-installation plan according to ÖVE test certificate including new and old fittings and fees

5.6.3 Control and switching

- All light to be regulated and adjustable at a central operating console up to 6 light effects to be available, basic light in addition with a switch.
- Color light separate adjustable with possibility of automatic change
- Basis light adjustable in 4 zones
- Lamp between the windows to have dimmer switches

5.6.4 Projection

- Samples of proposed light – more variants
- Light calculation
- Approval of light plan by both parties before starting the work

5.7 Making good and painting windows and doors including fittings when necessary

- Remove existing paint, re-puttying glass panes where necessary.
- Painting - coats as required: color to be co-ordinated
- Implementation according to consultant plan

5.8 Glass-doors

- Provision and fitting a glass wall 138cmx228cm and a sliding door 222cm x 228cm
- 10 mm reinforced floated glass
- Without supports for the glass
- Wall fittings to be high grade steel
- All visible parts to be high grade steel
- Lockable
- All handle to be high grade steel
- All adages to chamfered and polished
- Sliding door of hanging construction without rail
- Difficulties to transport to 1st floor to be included
- Additional construction for sliding door rail assembling included
- Open and close of dry construction including painting

5.9 General

- Cost of all work outside normal hours must be included
- Difficulties of work interruption due to continued occupation of the building must be include

5.10 place of work and delivery

The contractor shall undertake the delivery and installation at the Agency's premises. Meetings between the Agency and the contractor will be made at the Agency's premises in Vienna. The services under the framework contract will be provided by means of:

- Fixed price: These assignments will be executed on the contractor's premises. The Agency and the contractor will agree on the deliverables, the delivery schedule and the price of these orders.

The ordering process will be initiated by the Agency requesting from the contractor that has been awarded the contract to provide an offer based on the technical specifications provided by FRA.

Travel costs, subsistence allowance or any other related costs for the team of the tenderer will not be paid separately by the Agency. All prices should be all inclusive.

6 Description of profiles

The following profiles are applicable

ID	Profile
1	Engineer (Project Manage)r
2	Foremen
3	Construction worker

6.1 Engineer (Project manager)

Nature of the tasks	• Project management including proposals for project strategies, planning, definition of tasks and deliverables, review of project deliverables, quality control, risk analysis and management, project status reports, problem reporting and management systems, follow up and organization. • Provide effective leadership for the project team and review deliverables. • Participate in functional and technical working groups and progress meetings. • Estimate and monitor costs, time-scales and resource requirements for the successful completion of each project to agreed terms of reference. • Prepare and maintain project and quality plans and track activities against the plan, providing regular and accurate reports. • Manage the change control procedure following agreement for revisions to the project from project sponsors.
Knowledge and skills	• Project management and leadership. • Usage of project management tools (e.g. MS Project, XLS etc). • In depth technical knowledge of the project's main aspects. And general technical knowledge on the other aspects related to the project. • Usage of methods and techniques for reporting. • Ability to give presentations. • Participate in meetings and give status report presentations, be an effective communicator. • Capable of integrating with an international/multi-cultural environment.

Education	• Higher technical school on engineering
Experience	• Minimum 6 years in the relevant field. • Minimum 4 years experience in Project Management.. • Proven experience with quality procedures.

6.2 Foremen

Nature of the tasks	• Leading technical projects. • Providing technical solutions to achieve predefined requirements. • Giving training for construction workers
Knowledge and skills	• Knowledge of engineering as requested in tender specs. • In-depth technical knowledge of the project's main aspects. with general technical knowledge on the other aspects
Education	• Training in leadership in construction works
Experience	• Minimum 6 years in the field of construction works

6.3 Construction worker

Nature of the tasks	• Different type of construction works
Knowledge and skills	• Knowledge of construction work
Education	• No special education required
Experience	• Minimum 4 years in the field of construction work

7 Required information

Tenderers are invited to propose their best organisation and resource allocation to carry out the different tasks. The tenders should contain their technical proposal in Point 5. Requirement.

The tenderer should deliver a work plan program including time schedule for the work to be undertaken including the different profiles of the staff proposed to carry out the work.

In order to allow a correct evaluation of the tenders, unit prices shall be provided by the tenderers using the relevant table under the SSF.

To allow correct evaluation of the effort and cost estimate, the tenderers shall use the related Annex under the SSF.

8 Inception meeting

As soon as possible after contract signature the Agency will convene at the Agency's premises an inception meeting with the contractor, at its own expense, to discuss various aspects of the project's work, as set out in the technical specifications and in the successful tenderer's technical offer. This is to clarify specific points with respect to issues related to the project.

The outcome of the inception meeting will be detailed by the contractor in a brief Inception Report to be submitted to the Agency within 5 working days after the meeting.

9 Annexes

Annex 1: Atrium plan (current situation)
Annex 2: Atrium (Variant A – implementation plan)