



DJAMAÂ EL DJAZAÏR, ALGIERS, ALGERIA

PROJECT SUMMARY. The new Djamaâ el Djaïr mosque was built about six kilometers east of the historic center of Algiers. With its gross floor area of almost 400,000 square meters, it is the third largest mosque in the world after Mecca and Medina. The Great Mosque of Algiers has a prayer hall for up to 37,000 people and a minaret about 265 meters high. In addition to the prayer hall and the minaret, the complex includes other facilities such as a museum with a research center for Islam, a culture and congress center with a library, a madrasa as well as apartments and infrastructure buildings.

FOCUS OF CONSULTING SERVICES. Special attention was paid to the exceptionally large prayer hall and its 45 meter high dome. The skillful combination of room acoustic measures and innovative sound reinforcement solutions provides a high level of speech intelligibility in this huge space. Room acoustic and electroacoustic simulations were used for determining the loudspeaker positions and for optimizing them with regard to design. A modern sound system for the minaret, which is open to the public, ensures that the muezzin's call can still be heard at a distance of over 2 km. In addition to creating excellent room acoustics in the event hall of the culture and congress center, the sound insulation of the movable partition walls was designed in such a way that two events can take place simultaneously without causing any disturbances.



CLIENT

Agence Nationale de Réalisation et de Gestion de la Mosquée de l'Algérie, Algeria

ARCHITECT

KSP ENGEL GmbH, Berlin, Germany

PROJECT DATA

Planning and construction period 2011 – 2020
Gross floor area / gross volume 374,000 m² / 1,768,150 m³

SERVICES RENDERED

Room acoustics, electroacoustics, building acoustics, thermal building physics

Planning, consulting, simulations

1 Main entrance to the mosque

2 Large square with portico

3 Event hall

4 Large prayer hall

Pictures: © KSP ENGEL GmbH