

## National Stadium Complex Abuja/Nigeria

### Project

Design of the Abuja/Nigeria national football stadium for the All Africa Games in October 2003

Client:  
Gov. of Nigeria via J. Berger  
Nigeria + Bilfinger-Berger AG  
(plc) int. as general contractor

### Design Data

Capacity: 60,491 seats  
Built area: 18,100 m<sup>2</sup>  
Building costs: approx. 180 mill. €

Period of work:  
08/2000 to 03/2003

### Services

Basic evaluation and brief  
Conceptual and final design  
Preparation of the awarding of contracts  
Bill of quantities

Cooperation with:  
WP-Consulting, Schlaich, Bergermann & Partner, IB Scholze



The coloration of the stadium seating is a mixture of seven rich yellow to red tones reminding of palettes of hot and spicy local herbs and vegetables

First design negotiations took place early July 2000. A tight schedule demanded work drawings by November 2000. Construction began at the same time subject to the rainy season. From April to August rainfall can amount to 600 litres per second and hectare. The stadium was turned over to the client on schedule, March 2003.

The extreme short planning and coordination period could only be kept, because all the people involved had long term experience in designing large stadiums.

Close contact to the resident engineers enabled precise planning and detail solutions, well adapted to local conditions.

### Type of stadium:

The stadium is an approved Olympic Stadium, built according to IOC, FIFA und IAAF standards with eight and ten 400-meter tracks.

### Construction:

Roofed stadium with an upper and a lower tier. Part of the lower tier is buried below ground level.

The upper tier is carried by 36 double columns, which also act as load transmitters for the roof construction.

The stadium has a membrane roof on a prestressed cable / spoke wheel construction with 36 frames, an interior cable tension ring and an outer compression ring made of concrete.

