



Description: **Implementation of Cellular Coverage at Australia's Ashes Ground**

Requirement: **Updated Cellular Coverage in Time for The Ashes**

Solution: **New Multi Operator Carrier Grade Distributed Antenna System**

◆ **Overview**

Sydney Cricket Ground is at the heart of Australia's identity as a sporting nation. Constructed 160 years ago, the venue is one of only three grounds worldwide to have hosted over 100 cricket tests. Almost every famous Australian cricketer has competed at the ground, as well as many other famous sports stars. The building is historic with the Members Pavilion (1886) and the Ladies Pavilion (1896) among the nation's architectural treasures.

CAM was asked to deploy a new multi operator carrier grade Distributed Antenna System (DAS) as the existing system was not able to accommodate today's requirements for 3G and 4G.

◆ **What did the Project Involve?**

A new cellular system was required to provide a dedicated coverage solution for 3G/4G before the Ashes Series took place.

The design process was implemented in May 2013 with construction taking place from September to December 2013. The project drew on many of CAM's key personnel including Jim Hazelden, one of CAM's most experienced project managers, site control personnel and RF engineering experts.

The project involved collaboration with a large number of stakeholders including Comtex, the Construction Sub-Contractor, Huawei who supplied VHA RAN, the electrical installations company Barnwell Cambridge, Rigcom who supplied high level antenna rigging, Optus, Telstra, the Heritage Council and the Sydney Cricket Ground Trust. CAM provided a single point of contact to the client for all project related activities. Embedded Contractors with a detailed knowledge of the site were engaged to complete installation works, saving considerable time and effort for the installation.

A best pricing exercise with active equipment was carried out to ensure that the project used the most cost effective solution.

The system was future proofed at the design stage to allow for future expansion for additional technologies such as 700, 2300TDD and 2600MHz. All cabling was specified as MIMO ready (across all components, feeder and antennas) enabling future upgrades and negating the requirement for intrusive cabling works for the foreseeable future.



CAM provided the interface into Telstra and Optus to capture their specific requirements, removing the need for VHA management in terms of the project's RF requirements.

◆ **Why was the Project so Successful?**

Clearly the technical implementation was of the highest quality. However, a key element of the project's success was CAM's ability to accommodate the needs of the venue, both in terms of timescales and its architectural heritage.

There were a number of companies and individuals involved in the project and its success can also be attributed to the strong project management skills demonstrated by the team at CAM who ensured that all key participants were consulted at the appropriate moments.