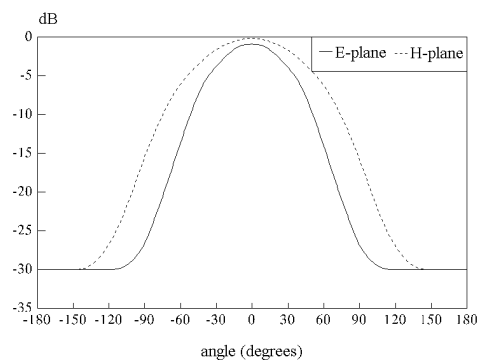
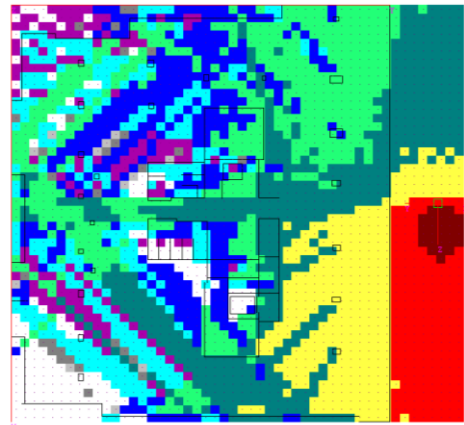
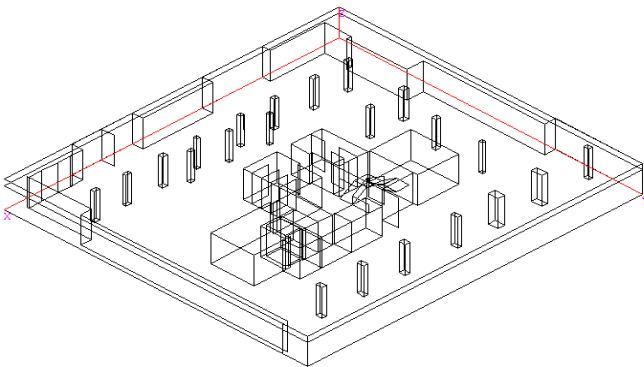


# NEWFASANT FASANT MODULE

- FASANT is a computer tool for the analysis of the coverage and other radio channel parameters in indoor and outdoor scenarios. It can calculate the levels of signal generated by one or several antennas placed inside or outside the building.
- FASANT works in any modern PC with Windows. Versions for other operating systems and computers are also available. Parallelized versions of the module are available.
- FASANT is very flexible and can be adapted to the needs of each user. Partial or total services assistance under client demand is also available.
- The code has a friendly graphical user interface that permits to build the geometry, to show the geometry from any point of view, situate the antenna, visualize the ray tracing, input all the analysis data, see graphically the result and many other options. FASANT can import geometries from many CAD tools such as: AUTOCAD, RHINO, etc.



# NEWFASANT FASANT MODULE

- FASANT is a computer tool for the 3D analysis of the radio coverage and the radio channel in indoors and outdoors communications. The code is based on the Geometrical Optics (GO), the Uniform Theory of Diffraction (UTD) and Physical Optics.
- Electric fields values can be obtained considering the direct ray, reflected rays (R), transmitted rays (T), diffracted (D) rays, as well as any combination until 10 order effects (eg, TTTT, DTRTT, TRRTRT, etc). The scattering produced by the obstacles in the scene can also be treated.
- A combination of the Angular Z-Buffer (AZB) and the Volumetric Space Partitioning (SVP) and the A\* heuristic algorithms is applied for accelerating the ray-tracing. This combination permits computing very efficiently in terms of CPU-time and memory storage taking into account rays with multiple reflections and diffractions.
- FASANT has been successfully validated by comparing predictions and measurements in an office building of Telefónica Móviles in Bilbao. FASANT is operative and commercially available.

