"The design of the Oval derives from the synthesis of three requirements: to realise a Sports facility suitable for the Olympic Games Torino 2006, to provide the town with a building able to hold exhibitions, to pursue a re-qualification of the area. " In this way Alessandro Zoppini presents the design of the Oval.

Strategies and criteria

Simplicity, clarity and functionality are the concepts by which the architecture of the Oval is inspired: "We aimed at reinterpreting the language of the adjacent Lingotto building and recent reconversion" Alessandro Zoppini adds. For this reason the building has a very simple and regular layout except for the irregularity of three big pods, which during the Olympic Games identify the three separated accesses for the different users. In the post-Olympic use they will allow the subdivision of the building into three areas".

The internal surface is very large: 20.000 square meters. "The Oval is a building with impressive features: it spans one hundred meters, it's really huge. That's why we have paid great attention to its layout: six main beams of 95 meters and a series of secondary beams which transmit the spatial sense of the old railway stations". Therefore the covering has been realised with a reticular metal ribbing and the supporting structure is totally exposed inside, in order to show the technological contents. An architectural sign that interprets the link between the past and the future. But it is also a creative response to the challenge imposed by the strict restraints of a Sports facility at international level.

Sochi Arena / STUDIO ZOPPINI ASSOCIATI
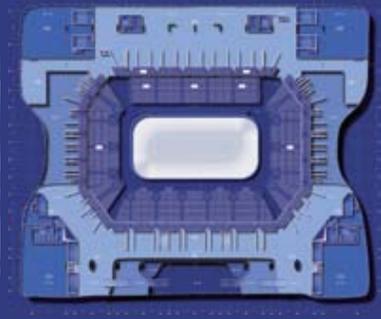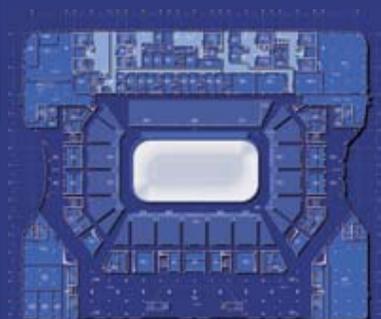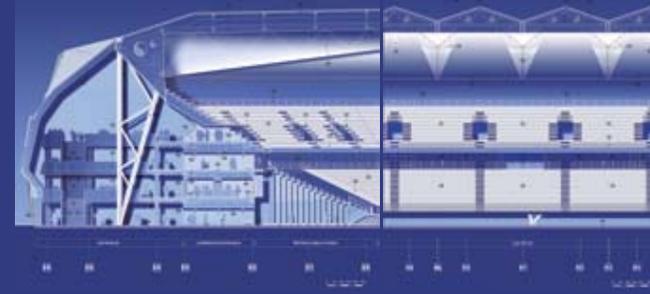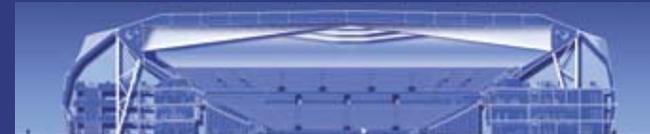
The design of the Figure Skating – Short Track Skating Arena aimed to create a unique public space which will be able to:

1. Provide the town of Sochi with a Sports facility of high functional and architectural quality and in the same time a skating rink which can assure the highest performances during the Olympics;

2. Realise a multipurpose building to be used after the Olympic Games as a structure able to hold both exhibitions in particular and Sports events;

3. Become one of the centerpieces of an urban, social and human re-qualification of a suburban area.

The design aims to take the best advantage from the surroundings and site feature: the great advantage to be able to view simultaneously the mountains at North and the sea at South. The designers incorporated such unique opportunity in the design.

The main objective of the design is to realise a flexible and multifunctional facility. It will have a capacity of about 12,000 spectators, 6,400 of which on retractable stand. The complete removal of the stands will allow for direct carriage access to the field of play thus facilitating the different use configurations.

The facility has been designed in order to host Sports and leisure events such as ice skating, baseball, gymnastics, tennis, spectacles, concerts, exhibitions etc.

When the retractable stands are closed, the field of play will be 99X67 meters.

During concerts, the layout and structure of the stands will allow for a complete exploitation of the concourse space with no limits.

Since it was necessary to realise a facility that can host the Olympic Games and at the same time assures a high flexibility for a multipurpose use in the post-Olympic period, the designers chose an asymmetric structure of the stands in order to:

-allow for a seating reduction in the post-Olympic mode compared to the capacity required in the bid;

-assure the best seating arrangement during concerts and spectacles thus meeting the requirements of a town like Sochi for what concerns the future management of the facility.

The designers therefore considered the management issue as a basic one.

Flexibility means that the facility has to be provided with particular systems that make it adaptable to possible different functions, that today cannot be foreseen.

Other main objectives of the design were to choose simple design solutions, to minimise volumes, to adopt automatism systems in order to limit the staff: all these choices contribute to make the facility economically sustainable.

The process of designing a building is an interactive experience, in which the different requirements of client, users and community are analysed, defined and realised.

Sochi Oval / STUDIO ZOPPINI ASSOCIATI
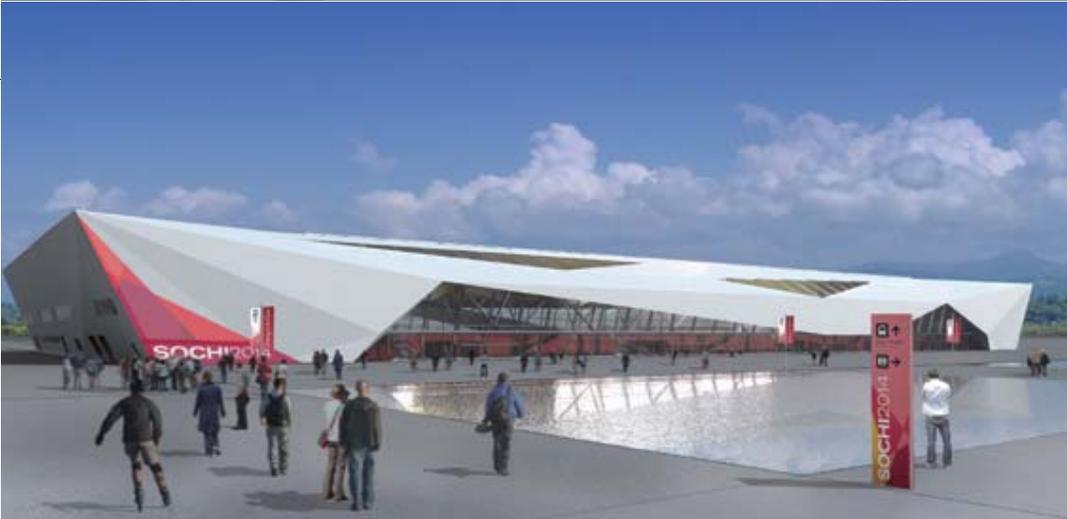
The design aims to take the best advantage from the surroundings and site feature: the great advantage to be able to view simultaneously the mountains at North and the sea at South. The architects incorporated such unique opportunity in the design. The architects left therefore open the longer sides where you get the most predominant architectural image. It also complies with the master plan where VIP, Media, Athletes. etc. access from North and general spectators from South. Clearly the long elevations are more desirable during the Olympic event as it allows increased direct access to the various seating areas in a controlled manner

to achieve segregation and maintain security between spectators, VIP's Media and Athlete's. For legacy operation, the larger concourse areas allow improved access to exhibitions and events. The generous concourses and the main hall itself have been designed to give the users the sense of being immerged and surrounded by mountains and forests: an extensive use of timber was used as finishes for this purpose.

Plant rooms and services are therefore concentrated in the East and west sides which are the least desirable.

They are located on the east and west sides for a number of good

reasons.

There is the other advantage that the architects need to limit direct solar gain which is not an issue on the North Elevation and is easier to control on the South when the sun is at its highest azimuth. Glazing to the East and West causes more problems due to low sun angles which can create glare and unwanted solar gain to the internal space - particularly if there is ice in front of the windows.