

PAPER • OPEN ACCESS

## Sports Facilities: The Transition from The “Cost System” Model to The “Revenue System” Model

To cite this article: Valentina Puglisi and Liala Baiardi 2019 *IOP Conf. Ser.: Mater. Sci. Eng.* **471** 022037

View the [article online](#) for updates and enhancements.



**IOP | ebooks™**

Bringing you innovative digital publishing with leading voices to create your essential collection of books in STEM research.

Start exploring the collection - download the first chapter of every title for free.

# Sports Facilities: The Transition from The “Cost System” Model to The “Revenue System” Model

Valentina Puglisi <sup>1</sup>, Liala Baiardi <sup>1</sup>

<sup>1</sup> Politecnico di Milano, Department of Architecture, Built environment and Construction engineering (ABC), Via Bonardi 9 - 20133 Milano – Italy

valentina.puglisi@polimi.it

**Abstract.** The transition from the "cost system" model to that of the "revenue system" is one of the main goals still to be achieved by the Italian sports system. In recent years, there have been many factors that have slowed down this transition phase, starting with the complexity and length of the bureaucratic procedures required for implementing the various projects, as well as the actual difficulty for private and public stakeholders to invest in sports facilities. This article is a summary of the most important experiences in Italy with regard to the development and construction of sports facilities resulting from the encounter between the world of Real Estate and sports clubs in the various disciplines. In particular, the article analyses the technical, economic and financial arrangements that have made it possible to implement the projects, and the main problems that have been encountered. The article focuses on the comparison of some of the most important initiatives carried out at the European level in the field of improving sports facilities, with particular regard to the revenues generated by the stadium (subscriptions, catering, etc.) and the regulatory aspects (Stability Law 2014).

## 1. Introduction

The sports facility represents the home of the fan, the symbolic place that connects citizenship to sport. Therefore, the function of the stadiums is of primary importance, representing the point of reference for millions of people who dedicate their time to their favorite team every week. It is essential to adapt these systems to the needs of the fan, focusing on the services dedicated to him.

Every citizen should have, in fact, the right to watch sports performances in modern, usable, comfortable and above all safe environments. The ability to be able to guarantee such a scenario, especially in an extremely delicate economic moment, is closely connected to the creation of state-of-the-art sports facilities or the modernization of existing facilities, which often appear obsolete and crumbling in the Italian scenario.

The planning, construction and management of a new generation of sports infrastructures for football, can allow the growth of the business linked to the revenues from tenders, thus succeeding in diversifying the revenues of Italian clubs currently too tied to the revenues deriving from television rights.

## 2. The practice of sport

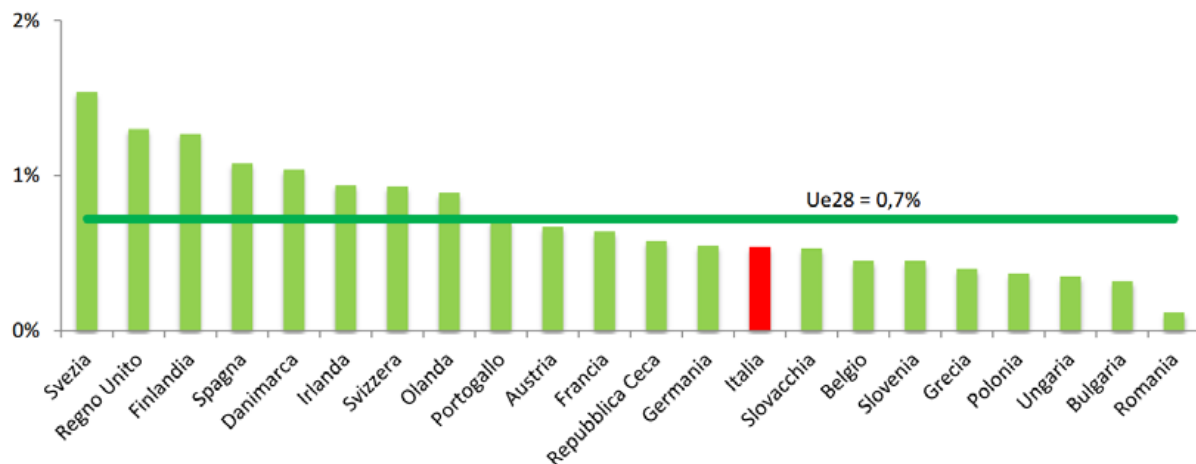
The Council of Europe, in the European Sports Charter of 1992, defines sport as “*all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels.*” [1]. This definition encapsulates the social value of sport: indeed, physical activity helps enhance individuals’ quality of life and is positively associated with their state of health, the extent to



which they satisfy their personal interests and their social relationships. Only recently have studies on the practice of sport reached a level, which is consonant with the social and cultural importance of the phenomenon and its economic significance in Italian society:

- 21.6% of resident households in Italy (over 5,500,000 people) spend money on sports activities;
- 4.3% (over 1,100,000 households) spend money on sports equipment;
- households that spend money on sports equipment spend an average of 48 euros or 1.4% of their monthly expenditure on sports activities<sup>2</sup>.

According to Eurostat figures, 0.54% (over 120,000 people) of Italy's labour force was employed in the sports industry (sports services, instructors, technicians, etc.) in 2014. This was lower than the European average (0.72%).



**Figure 1.** Employment figures for the sports industry in Europe in 2014 (percentage of total labour force). Italy was fourteenth in the European rankings. Source: Eurostat, Labour Force Survey, 2014.

The latest figures regarding the practice of sport in Europe are for 2014. A survey conducted by Eurobarometer with the support of the European Commission places Italy near the bottom of the rankings among European nations in terms of sport and physical activity. The 59% of the 28,000 interviewees said that they never or seldom exercise or play sport, 31% said that they exercise or play sport at least once a week, and only 8% exercise or play sport five or more times every seven days. Cultural differences strongly influence these figures. In Scandinavian countries, people exercise or play sport more frequently: the percentage of people who exercise or play sport regularly has reached 70% in Sweden, 68% in Denmark and 66% in Finland. Italy ranked fourth last in the table of the least active in Europe (60%). Only Bulgaria (78%), Malta (75%) and Portugal (64%) fared worse.

### 2.1. The condition of sports facilities in Italy

Italy has 106 stadiums used for professional football, 69 of them have a capacity of less than 10,000. They are old (with an average age of 61 years) and uncomfortable, and do not fully satisfy safety standards, despite the efforts undertaken in recent years firstly under the so-called "Pisanu" decree [2] and subsequently in accordance with Decree Law no. 8 of 8 February 2007 [3], converted with amendments by Law no. 41 of 4 April 2007 [4]. Specifically, the average age of Italian stadiums is 62 years in Serie A (the top tier), 60 in Serie B (the second tier) and 59 in Lega Pro (the third tier of football in Italy).

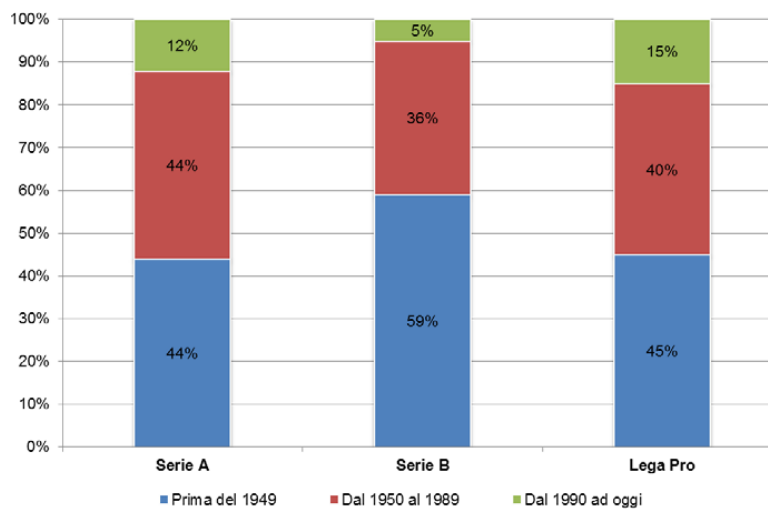
The 115<sup>th</sup> Italian Serie A football championship took place in 2016-17. Twenty teams took part, yet as some clubs are based in the same city (Internazionale and AC Milan) fewer stadiums (sixteen) were used in total.

Nine of these stadiums were built before the Second World War (between 1911 and 1939), three in late 1960s, two in 1970s and only three can be considered modern:

- the Mapei Stadium, Reggio Emilia, Sassuolo's home ground, owned by Mapei S.p.A. and renovated in 2004 and 2008;
- the Juventus Stadium, inaugurated in 2011, the first stadium in Italy to be wholly owned by a football club (Juventus Football Club S.p.A.);
- the Stadio Friuli, owned by Udinese Calcio S.p.A., which was renovated in 2015.

With regard to the “younger” stadiums, the aspect that should give pause for thought is that for the 1990 World Cup only two totally new stadiums were built: the Stadio Delle Alpi in Turin – subsequently demolished to make room for the Juventus Stadium – and the Stadio San Nicola in Bari. The situation is worse if we analyse data regarding sports arenas, halls and facilities used for other sports: existing facilities are built without any kind of multi-purpose requirements, are not integrated into the social fabric and exhibit shortcomings in terms of management. A number of significant critical issues, which include, marks the Italian context:

- municipal ownership of sports facilities (with rare exceptions, such as Rome's Stadio Olimpico, owned by CONI, the Italian National Olympic Committee, or the Mapei Stadium, Reggio Emilia);
- costs relating to operation, management and safety, which are borne by the community;
- urban and heritage planning restrictions (stadiums are often located in the centre of cities and can cause public order problems).



**Figure 2.** Year in which stadiums used as professional football venues came into use, divided by clusters (Serie A, Serie B and Lega Pro). Sources: graph by author based on data from FIGC, Stadia Database, Lega Serie A, Lega Serie B, Lega Pro and publicly available data.

### 2.1.1. Structural condition

In recent years, numerous attempts have been made to reverse the decay of Italian stadiums through structural, architectural and functional restyling operations. Such operations, however, have only been carried out on the main facilities used for competition and have in any case proven inadequate over the course of the years. Compounding the situation is the fact that in many cases (6 out of the 16 stadiums hosting Serie A matches) worse is the fact an athletics track runs around the pitch and makes spectators' view of the match worse [5].

Another aspect that highlights the backwardness of the Italian stadium situation is the fact that only 7 of the stadiums have completely covered stands, while the other 9 only spectators seated in the central stands are guaranteed protection from the rain. The percentage of covered places reaches 77% in Serie A, while in Serie B and Lega Pro it is less than 35%.

Facilities, which use renewable energy sources, are still the exception rather than the rule (25% in Serie A, falling to 5% in Serie B).

The percentage of stadiums that can be used for purposes other than to stage football matches exceeds 50% only in Serie A (where it is 69%). Sales outlets for commercial enterprises, a resource upon which great value is placed in the main championships abroad, are only found in 27% of Serie B stadiums and 45% of Lega Pro stadiums, rising to 69% in Serie A. In terms of multi-purpose functionality, 11 of the 16 stadiums are also used for events other than football matches, 12 have sky boxes, 9 boast hospitality areas and 10 have facilities that can host commercial enterprises.

### *2.1.2. Stadium ownership*

Average attendance at Serie A matches is around 23,000: the fourth highest in Europe. Germany leads with 43,499 fans, followed by England with 36,670 and Spain with 26,955.

The information that emerges is cause for concern, starting from ownership of the stadiums [6]. Considering the 2016-17 season and Italy's four professional football leagues, it is significant that, only two of the 106 stadiums (16 in Serie A, 22 in Serie B, 33 in Lega Pro First Division and 35 in Lega Pro Second Division), are owned by their respective clubs, three are owned by third-party companies and the rest of the stadiums are owned by the local municipality:

- the two stadiums owned by the clubs that play there are the Juventus Stadium in Turin and the Stadio Friuli in Udine;
- the three stadiums owned by third-party companies, two are in Serie A and one is in Lega Pro. The two Serie A stadiums are the Stadio Olimpico in Rome, which is owned by CONI, while the second is the Mapei Stadium, which has become property of Mapei S.p.A., the company which makes it available for two clubs, Sassuolo Calcio (Serie A) and Reggiana Calcio (Lega Pro). The Lega Pro stadium is in San Marino, the Stadio Olimpico di Serravalle, which is owned by the San Marino National Olympic Committee.

This information is indicative of a lack of forward thinking on the part of Italian clubs in terms of investing in sports facilities, which can be considered one of the main assets on which the heritage of sports clubs can be built [7].

### *2.2. From cost-to revenue-generating facilities*

Although football (as the number one national sport) generates an annual turnover of more than 6 billion euros (almost half a percent of the Gross National Product), only a very small part (less than 5% of the total) comes from stadiums. For three of Italy's major clubs (Associazione Calcio Milan, Football Club Internazionale Milano and Associazione Calcio Roma), the "stadium factor" accounts for no more than 15% of their total turnover, generating just over 30 million euros a year. The percentage of turnover accounted for by matchday receipts in the Premier League (the English championship) is as high as 42% [8].

Estimated revenue associated with construction and rebuilding work on Italian stadiums used as professional football venues in Italy is 4 billion euros. If the estimate is extended to sports arenas, halls and facilities, this figure becomes anything up to 20 billion euros. In order to redevelop a stadium or build one from scratch, the current model of the "football stadium" needs to be transformed into the model of the "productive stadium", based on the various types of existing stadiums (e.g. "multi-purpose stadium" for several sports events or "American-style stadium" incorporated within an area, generally dedicated to entertainment and culture), in response to the specific cultural and social characteristics of the local area.

A "productive" stadium therefore means a multi-purpose stadium [9], which generates revenue and targets several parties that express a financial interest in the project.

Legislation to simplify the bureaucratic process necessary to build or renovate sports facilities is urgently required, laying down well-defined timescales and allocating a portion of the project investment to commercial purposes, thus making it possible to attract investors in both the public and private sectors. In this regard, the inclusion and approval of a specific amendment as part of the 2014 *Legge di Stabilità* (Stability Law) has already allowed and will continue to allow these significant critical issues to be overcome over the medium and long term. In terms of bureaucracy, for example, the amendment makes provision for a streamlined procedure for investment projects relating to sports facilities, in general terms enabling the various clubs to obtain a response from the local municipal authorities regarding the declaration attesting to the “public interest” of the preliminary project no more than 90 days after the date, on which it was submitted. Once this stage has been approved, the final project can be submitted, and the municipal or regional authority must draw up a formal response within 120 or 180 days, respectively.

### 2.2.1. Investments

A new generation of state-of-the-art sports facilities cannot be developed without a large number of investment initiatives. The success of such operations can be guaranteed through cooperation between sports clubs, investors, financial backers and institutions. The most noteworthy Italian example of sustainable investment is the Juventus Stadium, which required 145 million euros for its construction, an investment which was fully recouped over the next four seasons with matchday revenues totalling 31.8 million euros in the 2011-2012 season, 38.1 million euros in 2012-13, 41 million euros in 2013-14 and 51.4 million euros in 2014-15.

### 2.2.2. Project financing

Project financing is a long-term operation, in which investment costs are covered by cashflows deriving from the activity of managing the facility itself. A case in point is the example of the San Mamés Barria Football Stadium in Bilbao, the rebuilding of which required a mix of public and private investment. To this end, a new company (San Mamés Barria S.L.) was set up, with partners including Atletico Bilbao (with an investment of 50 million euros), the Basque government (50 million), the Diputación Foral de Bizkaia (50 million), KutxaBank (50 million) and the Municipality of Bilbao (11 million). In addition to public, private and mixed investment, sports facilities can also be financed through international crowdfunding campaigns, such as the one set up by the fans of Tartu JK Tammeka (a club, which plays in the Estonian first division), who initiated the process of purchasing the Sepa Stadium situated in the city of Tartu and who have acquired 59% of the area to date with the contribution of 1,600 supporters, who have raised approximately 77,000 euros.

### 2.2.3. Naming rights

The term “naming rights” refers to the rights acquired by a sponsor to name a sports facility in exchange for an economic consideration and a shared interest in placing value on the location, traffic and business. According to data provided by Repucom, the naming rights business is worth 591 million dollars globally; 403.5 million dollars invested in the USA and another 147.8 million in European football (a figure in continuous expansion, recording a Compound Annual Growth Rate or CAGR of 12.2% over the last seven seasons). In Italy, this sector remains as unexploited. However, it is possible to estimate potential revenues of around 70-75 million euros for each individual sports season, taking an average of 3 million euros a year in revenue from naming rights for the twenty clubs competing in Serie A and an average of 500,000 euros a year for those competing in Serie B.

### 2.2.4. Business diversification

Business diversification is one of the main characteristics of the transition from the “cost-generating” to the “revenue-generating” stadium model; it is essential to invest in diversifying revenue streams and in multi-purpose functionality so that sports facilities are enjoyed and used twenty-four hours a day, seven days a week and not only once a week on matchdays.

Apartments, restaurants, cinemas, bars, museums and offices are just a few concrete examples of how a club can use its own stadium, maximising use of it and thus producing additional revenues. An example of such diversification is represented by the Ricoh Arena (the stadium, which hosts Coventry City FC's home matches), where matchday revenues account for 15% of the total, as against 42% from conferences and exhibitions and 18% from other sponsors. By pursuing a process of diversification, sports facilities may also be used to organise sports events beyond football, as demonstrated by the recent success of the French Rugby Top 14 final, which was contended at Barcelona's Nou Camp in 2016 and which attracted 99,194 spectators).

### 2.2.5. *Customer Relationship Management (CRM)*

CRM is an integrated approach, which enables companies to identify, acquire and build loyalty among customers profitably by leveraging its in-depth, integrated knowledge of their characteristics, motivations and behaviour and adapting marketing, sales and service operations to the diversity of specific customer segments and geographical areas. This approach, which places the customer at the centre of the business, began to develop in football in the late 1990s, when it was realised that stadiums could be used for other purposes than the enjoyment of the individual football event, starting from stadium tours before going on to develop a range of services and facilities that meet fans' demands. There is no single, perfect model of CRM, as such a strategy is based on the demands of one's fans. Nevertheless, it is possible, by way of example, to list cases, which show how Customer Relationship Management can help to build supporter loyalty while at the same time being able to generate new sources of income.

- Travel agencies: Borussia Dortmund (with a 51% stake) and Best Travel (contributing with 49%) have set up a travel agency to organise away travel for fans. The agency has achieved its goal of increasing the quality and range of services on offer and produced a profit of 573,000 euros in the 2014-15 season.
- Ticket exchange services: given high attendances at the Emirates Stadium, Arsenal have developed a ticket exchange service that makes it possible for fans to purchase a season ticket holder's seat for any match which they are unable to attend. Another service is the ticket alert service, which enables members to receive the number of tickets still available for home league matches in real time on their mobile phones.
- Visiting stadiums in Europe: a growing trend among football fans. The stadiums of the most important clubs, like their museums, have become established fixtures on international tourism circuits, enabling clubs to increase their revenues. In this regard, Real Madrid and Barcelona represent best practices at the world level. With 1.2 million visitors in a year, behind the Madrid-based club's museum has recently become the city's third most popular, behind the Museo Nacional Centro de Arte Reina Sofía (with 2.6 million visitors) and the Prado Museum (2.5 million). With 1.5 million visitors, Barcelona's museum has established itself as the most popular tourist destination in the whole of Catalonia, ahead of the Dalí Museum in Figueres (1.3 million) and the Picasso Museum in Barcelona (920,000). Bayern Munich is the only European club that can compete with the two Spanish clubs, with 1.3 million people deciding to visit the Allianz Arena and the FC Bayern Erlebniswelt, the club museum located inside the stadium. Regarding Italian clubs, Casa Milan with 310,000 annual visitors (shared between Museo Mondo Milan, Milan Store and Cucina Milanello), the San Siro Museum with 250,000 and the Juventus Museum with 170,000 visitors a year record the best figures. In South America, the most frequently visited club museum belongs to Boca Juniors with the Museo de la Pasión Boquense, which boasts around 300,000 yearly visitors, followed by the River Museum with 125,000 visitors a year.

### **2.3. Comparing Italy and other European nations**

There is an essential difference between Italy and other European nations such as England and Germany with regard to the decision to invest in a club-owned stadium.

Italian football is experiencing a period of profound economic crisis [10]. There is a large difference between the main English, Spanish, German and Italian clubs in terms of revenue. If we group their sources of income into three main areas (matchday revenues, television broadcasting rights and commercial revenues), in terms of sales of the rights to broadcast their matches on television Italian clubs are still able to compete with the main overseas clubs. However, if the focus is shifted onto revenues from merchandising, commercial revenues earned by Juventus and Milan are not enough to match the figure for the six largest European clubs. The poor performance of Italian clubs on this front can be accounted for by widespread counterfeiting of their brands, which discourages clubs from developing their merchandising activities: indeed, around most stadiums one may come across street vendors selling unofficial team shirts, caps and scarves. Ultimately, an analysis of matchday revenues shows – in this area as in others – Italian clubs are unable to compete with the figures recorded by clubs such as Real Madrid, FC Barcelona, Manchester United, and so on. This is due to both the smaller dimensions of Italian stadiums and the fact that the stadiums are not managed directly by the clubs that play their matches there; this entails greater costs for the clubs (operating costs, rent, etc.) and lower receipts (as they are unable to manage the spaces inside and outside the stadium in a profitable manner), not in keeping with the economic, business and entrepreneurial approaches that a football club wishing to compete at the national and European level needs to take.

Research developed by StageUp – Sport and Leisure Business, which analyses the characteristics of some of the main club-owned stadiums in Europe, highlights a number of common aspects and factors. For example:

- the average level of investment should not exceed 150 million euros;
- average annual revenues should not be less than 20 million euros;
- at least 60% of revenue should derive from sports events, while the remaining 40% should be from other events, such as concerts and shows;
- stadium seating capacity should not exceed 50,000, with 12,000 parking spaces for so-called “top clubs”, and should be reduced to 30,000 for other clubs;
- season ticket sales should account for around 70% of available seating;
- stadiums should have a catchment area of at least 500,000 local residents.

With regard to spectator numbers, Italy finds itself in a highly critical situation: on average, over 50% of stadium capacity is filled only in Serie A, falling to 41% in Serie B and 24% in Lega Pro. Figures for Italy’s top flight suffer severely in comparison with other examples of best practice in Europe, to the extent that the number of unsold tickets during the 2014-2015 season was in excess of 8.4 million, compared with just 1.3 million in Germany’s top flight and 1.4 million in the English Premier League.

## **3. The main stadium redevelopment initiatives in Italy**

### **3.1. Stadio Friuli redevelopment**

The main aim of the redevelopment project for the new Stadio Friuli was to create a modern, safe, sustainable sports stadium, which is capable of offering a unique experience for all users and at the same time one, which continues to represent a positive, distinctive landmark in relation to the morphology and architecture of the region. The new stadium was conceived and designed to meet all of the requirements for a stadium that will have to host international competitions; ensuring UEFA Category 4 status, and to “live” every day of the week for daily activities, thanks to the use of the new surface areas obtained from the layout of the stadium’s volumes, yet, connected with the primary sport activity (a rehabilitation clinic, gymnasiums, restaurants, etc.). The project set out to maintain the stadium’s historical image, with its distinctive arched stand roof as its prominent architectural feature. Although



the redevelopment project preserved the main architectural elements of the existing stand, it sought to lend the stadium a new image by improving levels of functionality, usability and comfort and introducing new social interaction dynamics.

The morphology of the design structure was developed by restyling the tiers of the West Stand with the addition of skyboxes and modernising football-related facilities both in the areas used daily by Udinese Calcio S.p.A. and those to be used on matchdays by the visiting team and its staff, referees, and so on. The complete demolition of the remaining structure and the rebuilding of the new terraces enabled maximum synergy to be achieved in terms of enjoyment of the sporting event; from the stands, spectators can appreciate the sensation of being on the field of play while the players can feel the presence and support of their fans. From this point of view, the project downsized the stadium from a capacity of around 41,000 to 25,000, thus creating a new kind of sports stadium, which is closer to the architectural concept of the amphitheatre, a place of entertainment and celebration of sporting events. The stadium itself, in contracting, has thus taken on a more domestic character; what was an impersonal place has become an ideal place for enjoying not just football events, as the occasional use of the stadium has been ensured also for other kinds of public entertainment activities. The project therefore made provision for all seating to be covered.

In order to serve all of the surface areas used on a “daily” basis, two monumental stairways were located at the opposite corners of the new “Distinti” stand, the inclusion of which strongly distinguishes the external view of the stadium with two glass openings in the metal cladding of the façade. The new structure restores the optimal view of the pitch from the West Stand, with the field of play being moved eleven metres closer to it, as well as from the new stands, where spectators seated in the front rows can enjoy being close to pitchside (around 8.3 metres for the central and ten metres for the stands behind the goals) with separation elements, which incorporate glass in order not to obstruct the view.

### ***3.2. The J. Village project for the Juventus Stadium***

On conclusion of the demolition of the old Stadio Delle Alpi (which commenced in November 2008) and the opening of the site to the construction company, starting from late June 2009 the construction phase of the new J. Village and new Juventus Stadium, with the latter being completed in August 2011 [11]. The Municipality of Turin had granted Juventus Football Club S.p.A. a leasehold of 99 years, which was subsequently transferred to the J. Village property fund. The deed of sale was drawn up in July 2015 and the area was transferred to the J. Village Fund for the price of 24.1 million euros. To cover the amount Juventus underwrote 12.1 million euros of class J shares, non-transferable for the entire duration of the fund, and 12 million euros of class A shares, with equal rights for all fund participants and freely transferable.

The transformation project for the area, for private use, comprising a functional mix, which would regenerate the area and lend it a newly central status. The project in fact centres around the creation of the Cittadella Juventus, which consists of the Juventus Training Center (which will serve as the new training centre for the first team and will also host the Media Centre), the new Juventus headquarters, an international school (WINS, World International School Torino) and a concept store. A power station, which will be built by BEIT-Bosch and meet all of the energy demands of the new buildings with district heating and cooling, will complete the project. The Continassa Area will represent one of the first – replicable – examples in Italy of an urban development project whose energy requirements are satisfied by high-efficiency poly-generation systems and renewable energy sources based on an energy platform of the “Smart Grid” type.

### ***3.3. The Mapei Stadium***

Located on the edges of the northern outskirts of Reggio Emilia, the stadium was built as a result of the inadequacy of the old municipal Stadio Mirabello in the city centre and therefore the main source cause

of many kinds of disruption for residents. Erected in less than eight months, the stadium is unique among Italian sports facilities. Completed in 1995, when it opened the Stadio del Giglio was at the leading edge among Italy's football stadiums, with innovative systems such as its turnstiles, a closed-circuit television camera service, and heated benches with a telephone line and an action replay system. In the stands were tiers with televisions and minibars and a new ticket sales system was devised resembling the *tessera del tifoso*, a "fan identity card" system which would later be introduced in Italian football.

It was named "Stadio del Giglio" after the famous dairy product brand (the first case of naming rights in Italy). This name was indicative of a plan: the desire to obtain private funding for the construction of the first stadium in Italy not to benefit from public funding. In addition to the sponsors and Reggiana, the football club behind the enterprise, over one thousand fans took part in the pool by purchasing season tickets for the next ten years in support of the project. The stadium was a futuristic prototype also in functional terms: from its location (served by infrastructure services) to its design (with its reduced space between spectators and field of play) and amenities (sectors for VIPs and disabled fans, turnstiles, etc.).

However, despite initial high expectations, Reggiana's poor performance on the field soon combined with economic difficulties, which made the commitments undertaken impossible to meet. The original idea of reaping profits from new functions to be located within the stadium became impossible to achieve when under land-use planning legislation the surrounding areas were relegated to "accessory" (i.e. subordinate or incidental) land use activities (2002), leaving the owners with no alternative but to sell the reassessed areas in order to pay off their debt. When Reggiana declared bankruptcy in July 2005, the receiver decided to put the stadium up for auction in order to pay off creditors. The first auction in 2010 attracted no bidders, while the second auction held in the same year saw Mapei acquire the stadium, which in the 2013-2014 returned to hosting Serie A matches. As it was under the direct ownership of Mapei S.p.A. and not the club, Sassuolo Calcio, the stadium was able to host matches of other teams such as Reggiana (who compete in Lega Pro, the third tier), Italy's various national teams as well as other sports events and conferences. In May 2016 the stadium hosted the final of the UEFA Women's Champions League.



**Figure 3.** Top left: bird's-eye-view rendering of the new Stadio Friuli with a view from the outside of the West Stand. Source: Archest S.r.l. Top right: general overview of the Continassa Area project. Source: Studio Rolla. Bottom: Mapei Stadium. Source: Mapei S.p.A.

The Mapei Stadium is the main stadium of the Reggio Emilia region and is multi-purpose, although the main activity is football. It currently hosts the home games of the city's team, Reggiana, as well as those of Sassuolo. It was also, briefly, Carpi's home stadium. It is a stadium in the traditional English mould, with roofed stands close to the pitch and seats with backs.

#### 4. Conclusions

As shown above, a key role belongs to professional consulting services, which have begun to be offered in Italy both by institutions such as the football leagues and by private firms, whose varied forms of established design, technical, financial, legal, commercial and real estate expertise can potentially provide the best support with a view to achieving the virtuous results required for effective progress in the area of real estate pertaining to sports facilities.

Models of modern, harmonious economic development, achievable with virtuous international examples effectively combined with new legislation, can constitute the main driver in Italy as elsewhere for modern sports facilities capable of occupying a new, attractive niche within the real estate system.

New-generation sports facilities may also constitute the linchpin of a complex yet fruitful activity of urban renewal, a moment of urban regeneration of which London, with Tottenham Hotspur and Highbury with the Emirates stadium represents one of the most significant examples.

#### References

- [1] Council of Europe, European Sports Charter, Seventh Council of Europe Conference of Ministers Responsible for Sport, Rhodes, p. 3, 13-15 May 1992.
- [2] Decree Law no. 162 of 17 August 2005, "*Ulteriori misure per contrastare i fenomeni di violenza in occasione di competizioni sportive*" ("Additional measures to counter violence during sports competitions"), published in *Gazzetta Ufficiale* (Official Journal of the Italian Republic) no. 191, 18 August 2005. Converted, with amendments by Law no. 210 of 17 October 2005, "*Ulteriori misure per contrastare i fenomeni di violenza in occasione di competizioni sportive*", published in *Gazzetta Ufficiale* no. 242, 17 October 2005.
- [3] Decree Law no. 8 of 8 February 2007, "*Misure urgenti per la prevenzione e la repressione di fenomeni di violenza connessi a competizioni calcistiche*", published in *Gazzetta Ufficiale* no. 32 of 8 February 2007 (corrigendum, *Gazzetta Ufficiale* no. 33, 9 February 2007).
- [4] Law no. 41 of 4 April 2007, "*Conversione in legge, con modificazioni, del decreto-legge 8 febbraio 2007, n. 8, recante misure urgenti per la prevenzione e la repressione di fenomeni di violenza connessi a competizioni calcistiche*", published in *Gazzetta Ufficiale* no. 80, 5 April 2007.
- [5] E. Faroldi, *Progettare uno stadio: architetture e tecnologie per la costruzione e gestione del territorio*, Maggioli, Santarcangelo di Romagna, 2007.
- [6] J. C. Cataliotti, T. Fabretti, *Il business nel pallone. Analisi dei modelli organizzativi e gestionali delle società di calcio*, 1<sup>st</sup> edition, Ugo Mursia, 2015.
- [7] E. Faroldi, *Paesaggi tecnologici: gli stadi per il calcio: progettazione, costruzione, gestione di strutture multifunzionali integrate*, Libreria Clup, Milan, 2006.
- [8] A. Pedicini, T. Tiani, "*Lo sport e le risorse finanziarie nell'Unione Europea: l'inquadramento della disciplina a favore della costruzione e ristrutturazione degli impianti sportivi*", *Rivista di diritto ed economia dello sport*, Vol. VIII, Fascicolo 1, pp. 53-85, 2012.
- [9] Decree of 6 June 2005, "*Modalità per l'emissione, distribuzione e vendita dei titoli di accesso agli impianti sportivi di capienza superiore alle diecimila unità, in occasione di competizioni sportive riguardanti il gioco del calcio*" ("Means of issue, distribution and sale of tickets for admission to sports venues with capacities exceeding ten thousand for sports competitions concerning the game of football"), published in *Gazzetta Ufficiale* no. 150, 30 June 2005.
- [10] Fimmanò, F., "*La crisi delle società di calcio e l'affitto di azienda sportiva*", *Rivista Diritto Fallimentare*, 2006.
- [11] Various, "*Nuovo stadio della Juventus*", *Imper Italia periodico d'informazione* no. 11, pp. 1-7, 2011.