

## **CRITERIA AND GUIDELINES FOR GOLF COURSE PLANNING**

This publication is part of the systematic work of the Spatial Planning Council of the Republic of Croatia<sup>1</sup> at the advancement of the status of space. It contains general consideration on golf and guidelines, recommendations and criteria for planning and development of golf courses with accompanying facilities in the function of golf and maintenance, as well as the construction of tourist accommodation.

The entire study consists of three main parts:

1. The introductory part gives a general overview of the development and distribution of golf, the terms and basic definitions of golf as a sport, the types of courses and features of the area, as well as the impact of golf on economic development and improvement of the tourism offer, all in line with European and international criteria, knowledge and experiences. Also, an overview of the golf courses planned in the spatial-planning documentation of the Republic of Croatia is presented.
2. The second part contains starting points for the development of guidelines for planning activities, with an analysis of social factors for golf development, aims and basic positions for planning golf courses.
3. In the third and most important chapter the guidelines and criteria for planning of golf courses are given together with elements for the assessment of area suitability, nature and landscape protection, as well as the quantifying indicators for the development of various types of courses, basic accompanying facilities and construction of tourist accommodation facilities, and planning of golf courses in spatial plans, as well as authorities and competencies for planning and designing.

Annexes contain the history of golf and the current status of golf in Croatia, as well as the list of and extracts from acts and regulations related to golf courses.

Today, golf as a sporting activity is an indispensable element to complement the tourism offer. It is played on golf courses of various designations and sizes – from smaller-size recreational courses to large competition courses. All courses include the necessary accompanying facilities in the function of golf and of golf course maintenance.

Points of reference for golf course planning in the Republic of Croatia are based on the Physical Planning Programme and Strategy of the Republic of Croatia and the Strategic Development Framework for 2006-2013 of the Government of the Republic of Croatia.

Through analysis of the spatial-planning documentation – spatial plans of counties and physical plans of local self-government units – an uneven distribution in the planning of golf courses and a high concentration in certain areas, in particular along the sea coast are observed. This fact, together with the pressures by entrepreneurs and investors to develop tourist accommodation within golf courses, provided an impetus for the development of these criteria.

The performed analysis of basic laws and regulations related to golf development and development of golf courses shows that there is a need to align criteria, guidelines and

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<sup>1</sup> With a view to ensure the conditions for a more uniform spatial development of the State and to provide technical and scientific foundations for both spatial planning and other documents in the field of spatial planning, the Government established the State Spatial Planning Council. The Council provides opinions, proposals and evaluations on proposals of spatial planning documents and other documents at the national and regional level, recommendations on specific issues from the field of spatial planning in line with the Physical Planning and Building Act.

The Council members and the president are appointed by the Government from among scientific, expert, public and other employees and representatives of central state administration bodies competent for specific areas having an effect on spatial planning. The Council is comprised of 9 members including the president of the Council.

recommendations for the development of spatial plans at county, town and municipality level, and to encourage intersectoral cooperation of competent ministries.

These criteria and guidelines are applied to the entire territory of the Republic of Croatia, encompassing coastal and continental areas. They refer to the spatial component of development of various types of golf courses with the indispensable ancillary construction, the construction of tourist accommodation next to golf courses and their impact on the spatial environment. The criteria and guidelines consider the economic aspect of golf as a potential stimulus for tourism development, however without considering financing, legal matters related to the regulation of ownership or land use rights, the building process, golf course operation and management, cost-effectiveness, etc.

The criteria and guidelines for golf course planning are intended primarily for professional use in the field of spatial planning – for spatial planners, administration services and engineers in the construction sector, as well as for all those who in their work and activities deal in any way with matters related to golf courses – for regional and local self-government units, planners of economic development and tourism development, entrepreneurs and investors. The criteria and guidelines can also be useful to the general public in recognising the positive values of golf in terms of sport and recreation, as well as the possibilities for its positive impacts on tourism.

### **1.1. GOLF COURSES IN SPATIAL PLANNING DOCUMENTS OF THE REPUBLIC OF CROATIA**

Points of reference for planning activities in the Republic of Croatia are contained in documents of the Government of the Republic of Croatia, which have been worked on systematically since 1995. In spatial plans of the first generation completed by 2004 the possibility of developing some sixty golf courses was foreseen.

From 2004 until the end of 2009, in amendments to county plans and in spatial plans for the development of local self-government units (towns and municipalities) a total of 89 golf courses were planned, with the following distribution by counties:

County of Bjelovar-Bilogora	(BBŽ)	0 courses
County of Brod-Posavina	(BPŽ)	0 courses
County of Dubrovnik-Neretva	(DNŽ)	3 courses
County of Istria	(IŽ)	23 courses
County of Karlovac	(KŽ)	2 courses
County of Koprivnica-Križevci	(KKŽ)	0 courses
County of Krapina-Zagorje	(KZŽ)	5 courses
County of Lika-Senj	(LSŽ)	4 courses
County of Međimurje	(MŽ)	2 courses
County of Osijek-Baranja	(OBŽ)	3 courses
County of Požega-Slavonija	(PSŽ)	3 courses
County of Primorje-Gorski Kotar	(PGŽ)	7 courses
County of Sisak-Moslavina	(SMŽ)	1 course
County of Split-Dalmatia	(SDŽ)	2 courses
County of Varaždin	(VŽ)	4 courses
County of Virovitica-Podravina	(VPŽ)	1 course
County of Vukovar-Srijem	(VSŽ)	2 courses
County of Zadar	(ZDŽ)	15 courses
County of Zagreb	(ZGŽ)	10 courses

County of Šibenik-Knin	(ŠKŽ)	1 course
City of Zagreb	(GZG)	1 course

It results from the above that most golf courses are planned in the counties of Istria (23), Zadar (15) and Zagreb (10), one course each in the counties of Šibenik-Knin, Virovitica-Podravina and Sisak-Moslavina, as well as in the City of Zagreb, while no golf courses are planned in the counties of Bjelovar-Bilogora, Brod-Posavina and Koprivnica-Križevci. In the Adriatic counties a total of 55 golf courses are planned, and in continental counties a total of 34 golf courses.

## **1.2. GOALS OF DEVELOPING CRITERIA FOR GOLF COURSE PLANNING**

The information that somewhat more than 6.700 golf courses are developed in Europe, out of which in the Republic of Croatia only four, is an indication of the poor awareness of golf as a sports, recreational and tourism activity.

The goals of developing criteria for golf course planning are:

- Providing general information on the development and status of golf courses in the world and in the Republic of Croatia with an insight into matters related to planning and development;
- Creating a basis of equitable, realistic, positive and stimulating climate for golf course planning and development in Croatia;
- Establishing types of golf courses and essential spatial indicators for each of them, in particular with regard to „consumption“ of space, tourism and other construction;
- Popularisation of all types of golf courses, especially those promoting golf as a sport and recreation (driving ranges, short courses) and enriching the tourism offer;
- Encouraging professionally founded discussions on golf courses in Croatia, along with proposals of acceptable solutions to enable the development of golf as a sport and of golf courses to advance tourism;
- Alignment of indicators in order to advance the methodology of preparation of spatial-planning documentation and its quality;
- Quantification of spatial indicators related to golf courses and the accompanying construction;
- Justification, spatial indicators and guidelines for designing tourism accommodation facilities in the function of golf;
- Encouraging intersectoral cooperation among competent ministries.

Application of criteria for golf course planning shall enable:

- Redefining of the planned golf courses in county spatial plans;
- Improving the development and more effective control of spatial-planning documents;
- Determining realistic locations on state-owned land (former military areas etc.) on which the development of golf courses can be initiated;
- Planning of various types of golf courses in spatial plans of counties (PPŽ) and spatial plans for the development of local self-government units (PPUG/O), regardless of the dynamics of their implementation;
- Classification of golf courses by types and priorities;
- Selection of "pilot projects" of golf courses on state-owned land under realistic conditions of implementation, as a desirable model of golf courses development.

### **1.3. STARTING POINTS FOR PLANNING ACTIVITIES**

Starting points for planning golf courses in the Republic of Croatia are adopted in documents directly regulating spatial development and planning.

Basic positions in developing guidelines and criteria for golf course planning are summarised as follows:

- Golf is a widespread and popular type of sport and/or recreation;
- Golf can contribute to tourism and economic development as an accompanying activity within the tourism offer, since it significantly extends the tourism season;
- Golf tourism can be developed as a complement to the Croatian tourism offer, and not as a major factor of the Croatian tourism identity;
- Planning and development of golf courses is a complex procedure based on international expert criteria and standards clearly defining the programme requirements, and the requirements for development, protection and use of space;
- International professional criteria for golf course planning shall be adapted to legislative, spatial, landscape and social requirements and conditions of economic development in the Republic of Croatia;
- Expert criteria are a precondition for realistic planning and development of golf courses in Croatia, and in particular of golf courses in spatial plans of counties;
- Golf as a spatial and ecological and socio-economic category requires the establishment of methodology and standardisation of the administrative procedure for adopting plans and accepting golf course projects.

### **1.4. CLASSIFICATION OF GOLF COURSES BY TYPE OF USE / PURPOSE**

According to the international classification by type of use, golf courses are divided into four basic groups and sub-groups:

a) DRIVING RANGE

- Classical driving range
- Golfodrome

b) STANDARD GOLF COURSE

- Pitch and putt course
- Handicap allowance course (for acquiring playing permit)
- Public course
- Classical / standard course

c) COMPETITION GOLF COURSE

d) CHAMPIONSHIP GOLF COURSE

Before analysing the accommodation conditions it is essential to determine the designation or purpose of the course, which is of particular importance for entrepreneurs, investors and the public, since each golf course presupposes a different area size, necessary parking lot, access roads, municipal infrastructure, equipment etc. This determines also the level of spatial-planning documentation for planning the golf course. For investors classical (standard) and competition golf courses are of particular interest.

## **1.5. CRITERIA AND GUIDELINES FOR GOLF COURSE PLANNING**

According to the features of the areas of the Republic of Croatia in which they are planned, golf courses can be divided into the following groups: coastal- (along the sea, rivers, lakes), karst-, forest-, hilly/mountainous- or lowland-golf courses, golf courses in protected/park areas or in less valuable and devastated areas.

### **1.5.1. General criteria and guidelines**

General requirements for golf course planning need to be established and applied in view of the following:

- Protection of nature, environment and landscape (National ecological network – CRO NEN, or Natura 2000) and – protection of architectural heritage (pursuant to special regulation);
- All the golf course locations have to be verified in view of the adopted protection plans (CRO NEN, or Natura 2000, especially regulations on architectural heritage protection);
- Golf course development shall be in conformity with the local way of life;
- At the initial stage of planning co-operation with the local community, immediate neighbourhood and civil organisations needs to be established;
- Golf courses and accompanying facilities shall meet both the public and economic interest;
- In order to promote sport, recognition needs to be won for the development of golf courses for sport and recreational purposes (driving ranges, pitch and putt courses, possibility of combining with other sports grounds and public recreational grounds);
- In order to promote tourism, the development of competition golf courses shall be encouraged;
- For purposes of golf courses primarily existing tourism developments shall be used, while new tourist accommodation shall be planned within building zones in settlements and planned tourism areas;
- Tourist accommodation development within golf courses shall be conditioned by an overall increase in construction quality and tourist offer of high-quality accommodation, design, technical quality and technological equipment.

### **1.5.2. Criteria for the selection of areas and protection of cultural and landscape values**

When planning golf courses and selecting the respective areas, priority shall be given to areas:

- next to cities and tourist destinations,
- attractive tourist destinations and locations,
- with a richness of other types of tourism offer,
- with a longer duration of the tourist season,
- with a higher annual precipitation quantity and percolation soil,
- outside of water protection areas and groundwater flows,
- with the smallest possible number of owners,
- with the smallest possible number of requirements for various protection forms, or with no such requirements,
- without adverse impacts on the immediate neighbourhood.

When planning golf courses, priority shall be given to areas of lower natural and landscape value and to land which is primarily state-owned. In particular the following criteria shall be applied in order to protect cultural and landscape values:

- Golf course clustering (clusters of 3 or more courses) shall be planned, regardless of administrative borders of municipalities, counties and the state (at a distance of 30 minutes by car between them);
- Ensurance of good accessibility of golf courses, especially from airport and major communications;
- The location of golf courses shall ensure unhindered movement of the local population without relevant extension of roads (access to settlements, farming and agricultural estates, etc.);
- When planning golf courses, works shall be avoided which alter significantly the shape of the ground (topography), as well as steep sloping grounds;
- Golf courses shall not be planned in areas of valuable forests, high-quality farmland, water protection areas and significant archeological sites;
- When planning golf courses in the coastal area of the sea, rivers and lakes, their allocation along the coast at a distance of 25 m from the shoreline shall be ensured to allow passage along the shoreline;
- The planning of golf courses where the land use right of a desired scope cannot be achieved due to private property shall be adapted in such a manner that unhindered use is enabled – both of the private property (access, protection limit) and of the golf course;
- When planning golf courses preference shall be given to locations with existing infrastructural equipment or where such equipment can be easily achieved;
- For purposes of golf course maintenance, permanent water supply outside the public water supply system shall be provided (irrigation from alternative sources – rainwater, technical water, desalination, etc.);
- Golf course development and use shall not cause damages to the water supply and drainage system or reduction in drinking water resources;
- Space shall be evaluated and the acceptability of golf course development and use assessed with regard to the existing designations of space, as well as the natural and anthropogenic conditions;
- Golf courses and accompanying facilities shall be planned and developed under preservation of the spatial context, eco-systems, natural and cultural values and recognition of ambience values and special features of the landscape;
- Golf courses shall be planned in conformity with the ecological network, and areas shall be avoided in established wildlife habitats and migration routes, as well as on all locations at which ecological conditions would be threatened by their development;
- When planning golf courses, recording of all natural phenomena and artefacts shall be carried out, the role of which in the space requires a special approach – either through protection and conservation measures, or through special procedures when solving potential spatial projects;
- Individual buildings or groups of buildings of local architecture (stone houses in coastal and hinterland areas, wooden houses, water-mills, etc.) shall be integrated in the golf course project as a complement of the obligatory facilities or as part of the tourist accommodation facilities (abandoned villages);
- All artefacts under the responsibility of conservation departments (good quality historical and regional architecture, drystone walls, Illyric hill-forts, corbeled stone-huts, etc.) need to be recorded along with a clear maintenance regimen. Also, those artefacts which are not under the responsibility of conservation departments however represent landscape values (natural phenomena, megalithes, watering places, harvesting and washing places, cascade drystone walls, etc.) need to be verified by plan, whereby areas shall be defined which are under full protection as well as those in which projects are possible;
- Tourist accommodation within the scope of golf courses shall not be planned in visually valuable locations, and particularly not in highly protected natural and/or cultural landscape.

## 1.6. SPATIAL CRITERIA FOR GOLF COURSE PLANNING

As a model of quantified planning indicators the type of classical (standard) competition golf course with 18 holes was taken. Other golf course types are specific in terms of their use, however they have identical spatial features in planning terms. The criteria for planning golf courses with 27 holes arise from the basic golf course model with 18 holes, and it represents a combination of two courses – one with 18 and one with 9 holes. At present, the development of three golf courses (A+B+C) with 9 holes each is planned increasingly often, enabling combinations of all of them (A+B, B+C, A+C), and contributing thereby to course attractivity.

Golf courses consist of the playing field, the natural ground, developed ground and buildable ground. Sizes of golf courses with 18 holes are approximately:

- total surface area 55-120 ha (on average 90 ha) <sup>2</sup>
- total course length up to 6,500 m
- surface area of the playing field 20-21 ha
- surface area of natural ground 40-70 ha
- surface area of developed ground up to 10 ha
- surface area of buildable ground up to 2 ha

The indicated criteria represent approximate, generally accepted standards which can be modified with regard to the location, desired quality of golf course development and shaping. Differences are realised in the area of natural ground, as the area of the playing field is in most cases fixed.

### Golf playing field

The playing field is the basis of each golf course, and it represents a developed surface area with the appertaining infrastructure and water / ponded areas – water hazards. The playing field of a course with 18 holes generally has a surface area of 20-21 ha, with minor variations depending on the features of the area in which it is planned<sup>3</sup>.

Obligatory parts of the playing field are:

- the driving range – approx. 2 ha (regardless of the golf course size),
- water / ponded areas – 1-5 ha (depending on the accessibility of water and its shape)
- paths within the playing field.

### Natural ground

The natural ground of a golf course is its intact part which is not developed for golf purposes, but according to the respective criteria for landscape development – depending on the type of landscape, i.e., forest, karst, swamp or some other type. Its surface area is 40-60 ha, depending on the shape of the golf course and features of the area. The natural part of the course accounts for a significant part of recognisability and ambience value of the golf course, and reducing it is not favourable to its attractivity. When a golf course is developed in a degraded area (quarries, mineral pits, remediated waste landfills, etc.) landscape recultivation is possible with indigenous flora species.

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<sup>2</sup> The total surface area of a golf course with 18 holes can vary depending on the features of the area and the design. Today such courses are developed on areas of at least 55-60 ha or on larger areas up to 120 ha. Differences are realised mainly in the surface area of the natural ground, since the surface area of the playing field generally is constant.

<sup>3</sup> The size of 20 ha should be taken as approximate, since it directly depends on the purpose, design and conditions on ground. If it is a course for players of lower knowledge and capacities, the lanes are planned with more width (to avoid unnecessary extension of the play duration – mostly tourist destinations), also the surface area of the playing field shall be larger. Courses for competition purposes will have narrower lanes and shall be more challenging for good players.

## Developed ground

Developed ground includes the obligatory ancillary space along the playing field, of a total surface area of up to 10 ha. The part of developed ground consists of the entrance, access/service communications and the immediate environment of buildings and facilities for golf purposes (club houses, service buildings and other accompanying facilities).

The surface area of developed ground is variable and depends on the degree of development and course design. This surface area includes:

- a regulated parking lot for 100 cars,
- an area for occasional parking of 500 cars,
- a free surface area of 2,000 m<sup>2</sup> for competition purposes

## Buildable area

Buildable area is regarded to be the surface area on which accompanying buildings and construction works for purposes of sports and golf course maintenance are built.

Obligatory accompanying buildings/construction works along the playing field are:

- club house with appertaining ground<sup>4</sup> – 0.5-0.8 ha of ground,
- service buildings and construction works with appertaining ground – approx. 0.5 ha.

The CLUB HOUSE is generally located along the main parking area, close to the driving range and the initial hole no. 1 and 10 and the final hole (no. 9 and 18).

The basic contents of the club house is: reception and registration, administration and offices, golf equipment shop (*Pro Shop*), dressing rooms (ladies and gentlemen) with sanitary facilities, cafe and restaurant with terrace (with a view of the final holes) and with accompanying facilities and sanitary facilities for guests, storage room for golf equipment (*Caddy Room*) with area for cleaning of clubs and shoes (can also be located in a separate building).<sup>5</sup> The Club House does not provide accommodation possibilities.

SERVICE BUILDINGS AND CONSTRUCTION WORKS are:

- storeroom for tools and maintenance machines,
- storeroom for electrical vehicles (*Cart*) and
- infrastructure installations (substation, water pumping station, etc.).

### 1.6.1. Criteria for golf course planning by designation

The term "designation" of golf courses refers primarily to the designation and manner of use of the sports ground, as also described in international literature, with specific requests in terms of organisation and consumption of space. By type, golf courses are classified into two groups:

- golf courses for sport and recreation, and
- competition golf courses.

Golf courses for sport and recreation are primarily designated for a wide circle of interested persons, for the popularisation of sport, the enrichment of the tourist offer, and meeting the needs of those players who do not have time for the entire game (total duration 5-6 hours).

Competition golf courses are a part of the competition sport and of the tourism offer. Along with them tourism accommodation is planned as a possible however not obligatory accompanying possibility. Planning and development of tourist accommodation does not

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<sup>4</sup> This represents a planning category, a surface area within the golf course which is addressed according to its designation, and not determined as a separate plot.

<sup>5</sup> Also other designations are possible within the club house, e.g., congress activities etc., depending on the investor's assessment and business vision. The club house size depends on the indicated, however it has to be aligned with the criteria prescribed by the Physical Planning and Building Act.

have any impact on the sports aspect of golf, however it has a remarkable impact on the size of the area and the manner of its use.

In Croatia currently there is interest for the development of classical (standard) and competition courses with tourist accommodation facilities.

So far no local self-government unit (town or municipality) has shown interest for the development of a public golf course. With regard to the development of public golf courses in Croatia, the towns of Zaprešić (golf course Novi Dvori, developed driving range and three holes) and Poreč (driving range Molindrio, Zelena Laguna) are the most advanced.

#### **1.6.1.1. Criteria for planning golf courses for sport and recreation**

Golf courses for sport and recreation are courses of smaller surface areas serving for learning, practising and recreation. They are driving ranges (classical driving range and golfodrome), pitch and putt courses, handicap allowance courses (for acquiring playing permit) and public courses. Due to simplicity of design, path length and complexity, insufficient attractiveness and not high enough standards, sports and recreational golf courses cannot obtain the status of a competition course and therefore they do not attract better players. They can however be used for unclassified competitions.

Driving ranges are mostly developed within the framework of a golf course as an inseparable entity, but they can also be developed autonomously for club or public needs.

General features of golf courses for sport and recreation are:

- they serve mostly for practising,
- they do not occupy large surface areas,
- they do not offer the necessary attractiveness and variety to attract better golfers-amateurs,
- the playing area is not of demanding design,
- they can be a quality complement to the tourism offer,
- no tourist accommodation is developed along the golf course,
- the construction of a club house is not indispensable,
- the course does not have to include natural ground, and if it does, its surface area is added to the surface area of the playing field and does not have an impact on the criterion of built-up surface area,
- courses can be planned and combined with other sports, recreational and entertainment facilities (hippodromes, athletic tracks, public parks, hotel complexes, shopping centres, etc.),
- they differ in the manner of use and the surface area of the course required for specific types.

#### **Classical driving range**

A classical driving range is a constituent part of every golf course of 9, 18 or 27 holes, however it can also be used for independent play. It does not necessarily include natural ground. If it is developed within a golf course, it uses all of the course's accompanying facilities. It consists of a driving area, putting green, pitching/chipping green and a sand hazard (bunker). The total surface area of a classical driving range is approximately 2 ha. The size of the driving area should not be smaller than 80 x 200 m.

If developed as an independent ground, to the surface area of a classical driving range the surface area of the buildable part for the development of accompanying facilities (approx. 0.2 ha) should be added, e.g.:

- club facility (most often called also *Pro Shop*) for registration and rental/sale of equipment for practicing/playing,
- smaller catering facility with terrace, sanitary facilities and locker rooms,
- caddy room,

- repository for maintenance equipment, tools and machinery.
- parking lot (layout according to criteria for sports grounds).

### **Golfodrome**

A golfodrome is a golf playing field - practising ground enabling high frequency of play, up to 200 players concurrently. Usually it is of an oval or round shape with a driving area on one or several levels. By division into sections various situations on the playing field can be simulated, enabling players to gain necessary experience even before accessing the golf course. Golfodromes are particularly appropriate for development in large town environments with a higher concentration of players - beginners and potential future golfers.

Spatial indicators for golfodromes are:

- total surface area of ca. 9 ha,
- accompanying facilities are the same as those of classical driving ranges,
- the construction of a club house is possible, however not indispensable,
- although not obligatory, natural ground is desirable,
- parking lot with layout according to criteria for sports grounds.

### **Pitch and putt course**

A pitch and putt course is mostly developed as an initial phase, until completion of a classical or competition course. A pitch and putt course can be developed as an independent course or as an additional practising field for short game. As an additional practising ground this type of course is not particularly popular with players, since only one or two clubs are used and there is no sufficient variety of play, while on the other hand good conditions for practise and improvement of short strokes are provided.

If it is developed as independent, the course is longer (as in the case of a handicap allowance course), the number of holes is arbitrary, however it cannot be less than three. All clubs are used in the play. Pitch and putt courses are becoming increasingly popular, since they enable a quicker play and shorter stay, over less time.

Spatial indicators for a pitch and putt course are:

- total surface area up to 10 ha, depending on the terrain and playing ground design,
- number of holes arbitrary, however not less than 3 up to a maximum of 8,
- course length at least 60 m, and not exceeding 100 m,
- obligatory classical driving range,
- natural ground not obligatory however desirable,
- accompanying facilities are the same as in the case of classical driving ranges,
- parking lot with layout according to criteria for sports grounds.

### **Handicap allowance course**

Handicap allowance courses serve the purpose of training players for obtaining playing permits. On this course the playing ability of players is tested. It may serve also for qualification competitions, as play with all clubs is enabled.

Spatial indicators for golf courses for acquiring playing permits are:

- total surface area up to 10 ha (if no natural ground is included),
- obligatory 9 holes,
- total course length 90-440 m, with a minimum standard of approx. 30 strokes,
- although not obligatory, natural ground is desirable,
- construction of a club house (without accommodation units) and service facilities possible,
- parking lot with layout according to criteria for sports grounds.

## **Public course**

A public (or municipal) course regularly includes 9 holes and is financed by the state and/or local self-government unit. It primarily serves to popularise golf as a sport and is rarely built with more than 9 holes. It can also be financed by private funds or as a public-private partnership. It is not demanding in terms of play, as it is primarily intended for beginners with playing permit, family golf and recreational players. To golf players it is not particularly interesting as it is too easy. It is accessible to all those interested, without obligatory membership.

The term *public* is primarily linked to the manner of financing, which regularly is carried out by the community. „Publicity“ of the courses does not imply that such courses are open to the golf public, while other courses are private and as such not accessible to the public. As a rule almost all golf courses, except for some championship courses, are open to golfers – beginners, players and others complying with customary and traditional rules of stay, behaviour, dress code and play on the golf course.

Spatial indicators for public golf courses are:

- total surface area 10-15 ha,
- although not obligatory, natural ground is desirable and added to the total surface area,
- obligatory 9 holes with a minimum standard of approx. 30 strokes,
- average course length 1,500 m,
- construction of a club house and service facilities possible,
- no tourist accommodation is planned,
- accompanying facilities are the same as in the case of classical driving ranges,
- parking lot with layout according to criteria for sports grounds.

### **1.6.1.2. Criteria for planning competition golf courses**

The area occupied by competition courses is of a large surface (on average 90 ha) and the same refers to each of the described types – classical/standard course, competition course and championship course.

General features of competition golf courses are:

- they occupy a large surface area of the terrain (as a minimum 55 ha, depending on the features of the area and their design),
- spatial criteria are the same as in the case of courses with 18 holes,
- obligatory inclusion of natural ground and accompanying facilities,
- located in attractive parts of the landscape,
- the playing field provides sufficient variety, depending on the landscape and the design,
- the course designer is usually well known,
- along with accompanying facilities also the construction of tourist accommodation is possible, however not obligatory (hotels, tourist villas).

## **Classical/standard golf course**

Classical/standard courses are the most frequent type of courses with 18 holes, the development of which is most often promoted and stimulated by like-minded persons, golf lovers or passionate golfers. The planning and degree of equipment within a set spatial framework and with indispensable functions depends on the investors' financial power. The minimum stroke standard is 60. Tourist accommodation is most frequently planned along with classical or standard courses, as an essential element of financial viability.

There is often a tendency to upgrade classical or standard courses to the category of competition courses, and therefore when planning classical/standard courses potential later spatial requirements, e.g., parking of vehicles, free surface area etc. should be taken into account. The course is appropriate for club or other smaller competitions.

Spatial indicators for classical/standard golf courses are:

- total surface area for the course 55-120 ha,
- 18 holes of a total length of approx. 6,500 m,
- playing field area on average 21 ha,
- the necessary construction works along the playing ground are the club house, service facilities, communications and water / ponded areas,
- the share of natural ground amounts to approx. 50 ha, depending on the landscape features and course design,
- regulated parking lot for 100 cars required,
- tourist accommodation may be planned along the golf course, however in compliance with requirements from the spatial planning documentation at the county and local self-government level.

### **Competition golf course**

With regard to competition courses also special requirements need to be fulfilled, e.g. good connection of courses with state communications and airports and the distance from a larger settlement should not exceed 30 minutes of drive by car. In landscape terms the course should be interesting, possibly without traffic noise and with a hotel of higher category in its immediate vicinity. During competitions additional temporary parking spots need to be ensured as well as a free area for competition purposes (pavilions, presentations, sponsors' needs, etc.). The holes are designed individually, variedly and creatively, with inclusion of water areas typical for the landscape into the degree of difficulty of the course.

Competition courses are appropriate for regional, national and smaller international competitions. Construction of tourist accommodation is possible (not indispensable), and it significantly contributes to the cost effectiveness of the golf course investment.

Spatial indicators for competition golf courses are:

- total surface area for the course 75-120 ha,
- 18 holes of a total length of approx. 6,500 m and with a minimum 70 strokes,
- playing field area of approx. 20 ha, depending on the landscape features and course design,
- the necessary construction works along the playing ground are the club house, accompanying and service facilities, communications,
- the share of natural ground amounts to approx. 50-70 ha, depending on the landscape features and course design,
- regulated parking lot for 100 cars required,
- areas for temporary parking of 500 cars need to be ensured,
- free areas of a minimum of 2,000 m<sup>2</sup> need to be ensured for competition purposes,
- tourist accommodation may be planned along the golf course, however in compliance with requirements from the spatial planning documentation at the county and local self-government level.

### **Championship golf course**

Unlike other (amateur) courses, on these courses professional tournaments are held with the participation of famous international golfers, they are supported by powerful sponsors which provide rich prizes, and they are exceptionally interesting to the media.

In the design of the playing field single holes are conceived in such a manner that through the shape of the terrain and the degree of difficulty they considerably differ from courses on which golf is played by amateurs. Due to the length of the initial shot of a professional player the tees are located at a greater distance, the shape and location of bunkers and other hazards is significantly more difficult, the greens are shaped in a more plastic manner and with more sections. The ambience features of such a golf course type are unique.

On championship courses tournaments are held several times or even once a year, they are very expensive and they are therefore operated by financially powerful international companies.

Spatial indicators for championship golf courses are:

- total surface area for the course is 75-120 ha,
- 18 holes of a total length of at least 6,500 m and with a minimum of 72 strokes,
- the surface area of the playing field area is approx. 20 ha, depending on the landscape features and course design,
- the necessary construction works along the playing ground are the club house, accompanying and service facilities, communications,
- the share of natural ground amounts to 50-70 ha, depending on the landscape features and course design,
- regulated parking lot for 150 cars required,
- areas for temporary parking of 2,000 cars need to be ensured,
- free areas of a minimum of 8,000 m<sup>2</sup> need to be ensured for competition purposes,
- in marginal parts along the playing ground areas for spectators need to be ensured, and close to final holes grandstands with seats need to be installed,
- in the immediate vicinity of the golf course a hotel of high category needs to be located/planned.

## **1.7. PLANNING OF GOLF COURSES AND TOURISM AREAS WITH GOLF COURSES IN SPATIAL PLANS**

Golf courses may be planned within building areas of settlements and detached building areas outside settlements.

### **1.7.1. Golf courses within building areas of settlements**

Requirements for golf course planning within building areas of settlements are determined by spatial plans for the development of towns and municipalities (PPUG/O), by urban plans for the development of settlements (UPU) pursuant to these criteria and guidelines, and the prescribed requirements for the development of space for the specific designation of the area (within which the golf course is planned).

Golf courses may be planned within building areas of settlements in areas intended for:

- sports and recreation (R) – without tourist accommodation,
- tourism designation (T) – with or without tourist accommodation,
- residential and mixed use (S, M,) – as part of thematic gardens/parks without tourist accommodation.

Golf courses within building areas of settlements cannot be planned within the designations Z1 (public green areas) and Z (protected green areas).

### **1.7.2. Golf courses in detached building areas outside settlements**

Requirements for golf course planning in detached building areas outside settlements are determined by these criteria and guidelines, and by urban plans for the development of towns and municipalities (PPU). Three golf course planning types are possible: R (Rg), Rgt and Tg.

Golf courses may be planned in detached building areas outside settlements in areas designated for:

- sports, recreation (R1, R2) – without buildings for tourist accommodation,
- sports and recreation (Rgt) – with buildings for tourist accommodation,
- tourism (Tg) – with buildings for tourist accommodation, where golf courses are planned as thematic parks.

### **1.7.3. Sports and recreational golf courses (Rg) - without tourist accommodation in areas „designated for sports and recreation“ (R)**

Sports and recreational golf courses (Rg) are planned within building areas of settlements or within detached building areas outside settlements (for sports) in areas „designated for sports and recreation“ (R). On sports and recreational golf courses construction of buildings for tourist accommodation is not allowed.

Planning of sports and recreational golf courses shall be directed towards:

- peripheral building areas of towns and major tourist destinations,
- areas with built high-quality tourist accommodation,
- areas attractive to tourists and with good communications,
- areas which are under no protection through legislation or plans,
- areas of landscape rehabilitation,
- spaces with other specific features described in these guidelines.

Sports and recreational golf courses are to be planned under rational use of space and in line with the provisions of these guidelines, and in particular outside areas:

- of protected nature,
- of cultural heritage protection,
- with highly valuable and valuable arable soil (P1, P2),
- covered by forest.

### **Quantified indicators for sports and recreational golf courses (Rg) <sup>6</sup>**

- Surface area for golf:  $P_g < 120$  ha
- Smallest share of surface area of the golf playing field:  $P_{tg} \geq 20$  %
- Usability coefficient (of buildings in the function of sports):  $K_{is} \leq 0,05$  ( $\leq 5$  %) (depending on the size of the golf playing field and local requirements  $K_{is} = 2-5\%$ )
- highest permitted gross construction surface area of all buildings (BRP) on a golf course:  $\leq 3,500$  m<sup>2</sup>.

### **1.7.4. Golf courses with tourist accommodation (Rgt) – „golf resort“**

Tourist accommodation in golf course areas may be planned for courses with a total surface area exceeding 90 ha and with more than 18 holes, as well as meeting international criteria for championship courses.

Golf courses with tourist accommodation have to be planned under rational use of space and in line with the provisions of these criteria and guidelines, and in particular outside areas:

- of protected nature,
- of cultural heritage protection,
- special protection requirements laid down in spatial plans,
- with highly valuable and valuable arable soil (P1, P2),
- on borders of water abstraction sites,

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<sup>6</sup> The calculation of quantified spatial indicators for the construction of buildings has to be determined on the basis of the complete golf course surface area comprising the areas of: golf course playing field (sports ground); club buildings maintenance facilities, repository buildings for equipment, etc.; parking lots, internal vehicle and pedestrian communications; gardens/parks surrounding the club house, etc.; „natural ground“ – nonbuildable natural or park space of the golf course area.

- covered by forest,
- of conservation and respect of spatial values – particularly valuable spatial units of the sea coast and inland waters.

Within golf course areas with tourist accommodation the following has to be planned:

- concentrated forms of distribution of buildings for tourist accommodation,
- buildings have to be located into the depth of golf course areas and as distant as possible from the sea coast-line and inland waters,
- buildings have to be located and designed in such a way to preserve the existing and to create new scenic views from and on the golf course playing field,
- landscape and garden/park development of the entire golf course surface area.

Within golf course areas, the area for the construction of buildings for tourist accommodation has to be a separate spatial and functional unit with transport and utility infrastructure (designation T).

Within golf course areas with tourist accommodation the following is not desirable:

- linear forms of location of buildings for tourist accommodation (tourist villas surrounding, intersecting or meandering between holes of the golf course playing field),
- tourist villas in rows comprising more than 5-6 units (uninterrupted rows of buildings longer than 40 m, i.e. with spaces between buildings < 20m),
- dispersed forms of distribution of tourist accommodation (three or more separate building areas including the area for construction of buildings in the function of sports).

It is recommended to plan golf course areas with tourist accommodation – so-called „golf resort“ (Rtg) outside the protected coastal area in the coast hinterland. Change of designation of golf courses with tourist accommodation (Rgt) into tourism areas (T1, T2) is not allowed. If additional tourist accommodation is necessary and justified, it may be foreseen in spatial-planning documents in the vicinity of golf courses as tourist areas T1 and T2, under application of the provisions of the Physical Planning and Building Act (OG 76/07).

### **Quantified indicators for planning golf course areas with tourist accommodation (Rgt)**

- The planned surface area designated for tourism which is laid down in county spatial plans and spatial plans for the development of towns and municipalities may amount to a maximum of 10% of the surface area of a golf course with 18 holes.
- The total calculated surface area of a golf course area for which maximum allowed construction surface areas of tourist accommodation are laid down is 90 ha (18 fields).
- In cases when the golf course (18 fields) has a greater total surface area (more than 90 ha), the share of buildable areas and the gross construction surface areas are not allowed to be increased proportionally.
- In cases when a golf course with 18+9 holes is built, the calculated surface area is increased to 100 ha.
- The maximum permitted construction surface area of the ground (covered by buildings) is 1.2% of the total golf course surface area (or a maximum of 1.1 for golf courses with 18 holes or a maximum of 1.2 ha for golf courses with 18+9 holes).
- The highest permitted gross construction surface area of buildings (BRP) amounts to 22,000m<sup>2</sup> for golf courses with 18 holes, or to a maximum of 24,000 m<sup>2</sup> for golf courses with 18+9 holes.

- The minimum share of the surface area of the golf playing field amounts to 23% of the total golf course surface area (or a minimum of 21.0 ha).
- The minimum share of the surface area of natural ground amounts to 40% of the total golf course surface area (or a minimum of 36.0 ha).
- The highest permitted number of floors has to be determined in line with local requirements (with regard to construction and landscape).
- The planned surface area for tourism designation is demarcated in detail in graphic attachments to urban development plans or detailed development plans (UPU or DPU).

#### **1.7.5. Tourism areas with golf courses (T1g, T2g) – on surface areas of „hospitality and catering and tourism designation“ (T)**

Tourism areas/zones with golf courses are existing or newly planned tourism areas (T1g, T2g) planned pursuant to the spatial criteria prescribed for tourism areas.

Golf courses (sports grounds) and surface areas for the construction of tourist accommodation within tourism areas have to be spatially divided in terms of design and in functional and spatial terms through garden/park development.

Planning of tourist accommodation units within tourism areas with golf courses has to be:

- in spaces which are intensively used - within building areas of larger settlements,
- in areas of lesser natural and landscape value and areas of landscape rehabilitation.

#### **Quantified indicators for tourism areas with golf courses T1g, T2g <sup>7</sup>**

The minimum share of surface area of „natural ground and plantation“ with a golf course playing field is  $\geq 50\%$ .

In order to promote the expansion of the tourism offer and to increase the usability of tourism capacities, it is proposed to indicate the calculated surface area of a golf course with a maximum of 9 holes as natural ground and plantations.

### **1.8. PROCEDURES OF PLANNING GOLF COURSES AND TOURISM AREAS WITH GOLF COURSES IN SPATIAL PLAN DEVELOPMENT PROCEDURES**

#### **Spatial plans of counties**

In spatial plans of counties (PPŽ) the fulfilment of requirements needs to be verified with regard to proposed golf course locations through application of these criteria and guidelines, in particular by:

- Verifying the justification of planned golf course locations on the basis of these criteria and proposing amendments as needed – develop expert background documents (including background documents of special investigations) to enable a founded assessment of development requirements and justification for using golf course locations (particularly with regard to the use and protection of water, soil protection, environment protection, nature protection and protection of cultural values),
- Determining guidelines for planning contact areas around golf courses,
- Determining the location of golf courses with surface areas exceeding 70 ha in detached building areas outside settlements.

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<sup>7</sup> The calculation of quantified spatial indicators is determined by provisions of the Physical Planning and Building Act.

## **Spatial plans for the development of towns and municipalities**

In spatial plans of towns and municipalities (PPUG/O) the fulfilment of requirements needs to be verified with regard to proposed golf course locations through application of the criteria prescribed in spatial plans of counties as well as of these criteria and guidelines, in particular by:

- Carrying out additional investigations and developing expert background documents for new golf courses for which locations are determined in the procedure of developing spatial plans of towns and municipalities (PPUG/O),
- Determining the requirements for developing areas of all golf courses in detached building areas outside settlements.

## **Urban development plans and detailed development plans**

In urban development plans (UPU) and detailed development plans (DPU) the fulfilment of requirements needs to be verified with regard to proposed golf course locations through application of the criteria prescribed in spatial plans of towns and municipalities (PPUG/O) as well as of these criteria and guidelines, and detailed spatial development requirements for each golf course have to be determined, in particular:

- the surface area of the golf playing field with natural ground and plantation,
- the location and size of the largest permitted buildable area (surface area covered by buildings),
- the highest permitted gross construction area of all buildings (BRP),
- the highest permitted construction height,
- the location and surface areas of accompanying buildings,
- vehicle and pedestrian traffic area (except internal paths for golf purposes),
- requirements with regard to use and protection of water,
- requirements for energy and utility connection.

## **1.9. FINAL REMARKS**

Criteria and guidelines for golf course planning represent a previous investigation for purposes of developing subordinate regulatory documents and instructions for the development of spatial plans.

Golf as a means for improving the quality of the tourism offer may also enjoy development support by the state and/or local authorities, whereat the general framework of support is determined at three basic levels:

- General normative level determining a public purpose and public asset;
- Public–private partnership model used by the state and/or local authorities in their relationship with private entrepreneurs as parties involved in development, and
- Spatial planning documents and laws defining how and where golf courses may be developed in order to complement the tourism offer.

Application of the said criteria shall enable:

- redefining the planned golf courses in spatial plans of counties;
- promoting the development and more effective control of spatial planning documents;
- determining realistic locations on state-owned land (former military areas etc.) on which development of golf courses is possible;

- planning of various types of golf courses in spatial plans of counties and spatial plans of towns and municipalities, independently of their implementation dynamics;
- classification of golf courses by type and priority;
- selection of golf course "pilot projects" on state-owned land under realistic implementation conditions, as models for golf course development.

The application of these criteria, aiming at sustainable development, should result in the adoption of spatial standards which would improve spatial planning in terms of:

- Quality – through methodology of spatial plan development and implementation,
- Implementation – through simplified spatial plan development and implementation procedure,
- Identity – through preservation, emphasis on and promotion of specific spatial features both of natural landscapes and through valuable design and construction, and
- Control of planning documents – through unification of their contents, especially in the part relating to the foundations for the quantity and concentration of planned golf courses and tourist accommodation.

As guidelines for the development of spatial plans and as expert background documents for the development of subordinate regulatory documents, the criteria shall enable control of the development and implementation of spatial plans of counties (PPŽ) and spatial plans for the development of towns and municipalities (PPUO/G), as well as foster intersectoral cooperation of competent ministries.