INTERNATIONAL
OLYMPIC
COMMITTEE

# XXIII OLYMPIC WINTER GAMES 2018 WORKING GROUP REPORT

**LAUSANNE, 23 APRIL 2010**



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# Table of contents

Introduction ..... 3

Applicant City Projects ..... 8

1 → Government support, legal issues and public opinion ..... 10

2 → General infrastructure ..... 16

3 → Sports venues ..... 25

4 → Olympic Village(s) ..... 32

5 → Environmental conditions and impact ..... 36

6 → Accommodation ..... 41

7 → Transport concept ..... 45

8 → Safety and security ..... 49

9 → Experience from past sports events ..... 53

10 → Finance ..... 56

11 → Overall concept ..... 60

Conclusion ..... 61

Charts ..... 63

# Introduction

## Introduction

**Applicant Cities**

The XXIII Olympic Winter Games will be celebrated in 2018. Three cities ("Applicant Cities") have applied to become Candidate Cities to host these Games. In the order of drawing of lots carried out by the International Olympic Committee (IOC) Executive Board on 10 December 2009, the 2018 Applicant Cities are:

MUNICH (GERMANY)

ANNECY (FRANCE)

PYEONGCHANG (REPUBLIC OF KOREA)

**Acceptance of Candidate Cities**

In accordance with Rule 34 of the Olympic Charter and its Bye-law:

*"All Applicant Cities shall comply with a Candidature Acceptance Procedure, conducted under the authority of the IOC Executive Board, which shall determine the contents of such procedure. The IOC Executive Board shall decide which cities will be accepted as Candidate Cities."*

**Candidature Acceptance Procedure**

According to the 2018 Candidature Acceptance Procedure:

*"The following criteria will be considered when assessing the applications:*

- *The potential of Applicant Cities – including their countries – to host, organise and stage successful Olympic Winter Games in 2018.*
- *Compliance with the Olympic Charter, the IOC Code of Ethics, the Rules of conduct applicable to all cities wishing to organise the Olympic Games, the World Anti-doping Code, this Candidature Acceptance Procedure and all other rules, instructions and conditions which may be established by the IOC.*
- *Any other criteria, which the IOC Executive Board, at its sole discretion, may deem reasonable to consider."*

For the 2018 procedure, the IOC Executive Board will decide which Applicant Cities shall be accepted as Candidate Cities on 22 June 2010, in Lausanne, Switzerland.

**Executive Board instructions**

The IOC Executive Board has instructed the IOC administration to:

- Prepare and send to all Applicant Cities and their NOCs the Candidature Acceptance Procedure;
- Review all answers and other related information received from the Applicant Cities;
- Establish, for the attention of the IOC Executive Board, a technical report assessing the potential of each Applicant City – including its country – to organise successful Olympic Winter Games in 2018.

It will be up to the IOC Executive Board to determine which cities shall be accepted as Candidate Cities. The purpose of the Working Group report is to assist the IOC Executive Board in making its decision.

# Introduction, Continued

**Services provided to Applicant Cities**

In order to assist Applicant Cities in replying to the IOC Questionnaire, the following services were provided:

- An information seminar held in Lausanne from 2 – 5 December 2009. The aim of the seminar was to brief the cities on IOC requirements and to assist them in understanding the scope, complexity and cost of organising the Olympic Winter Games;
- Vancouver Olympic Winter Games Observers' Programme. This enabled the cities to take part in visits and round tables with OCOG officials and IOC advisors and to study the "behind the scenes" organisation of the Olympic Winter Games.
- Access to the IOC's Olympic Games Knowledge Management database which contains detailed information and statistics on previous editions of the Olympic Games, including the Olympic Games Technical Manuals.

The quality of the Application Files reflects the benefits of these services.

**Application Files**

All three Applicant Cities replied to the IOC's questionnaire by the deadline set by the IOC (15 March 2010) in compliance with the Candidature Acceptance Procedure. The IOC noted that Munich 2018 did not fully comply with the Candidature Acceptance Procedure in that the Munich 2018 Application File contained 75 pages (excluding appendices) instead of a maximum 50 pages as provided for in the Questionnaire instructions.

**Working Group**

In order to perform its task and prepare this report, the IOC has commissioned a number of studies, appointed a number of experts, including experts from the International Federations (IFs), National Olympic Committees (NOCs) and the IOC Athletes' Commission, and established an IOC Candidature Acceptance Working Group (hereafter the "Working Group").

The IOC has verified that none of the below-mentioned persons have been commissioned by any Applicant City, and their studies and reports have been carried out and submitted in full independence.

This report reflects the unanimous opinion of all members of the Working Group which was composed of the following persons (in alphabetical order):

| | |
|---|---|
| **Mr Philippe AUGSBURGER** | IOC Treasurer |
| **Ms Jacqueline BARRETT** | IOC Head of Bid City Relations |
| **Professor Philippe BOVY** | IOC Transport advisor since the Sydney 2000 Olympic Games<br>Retired Professor of transportation, Swiss Federal Institute of Technology, Lausanne<br>Member of the IOC Evaluation Commission (2012, 2014 and 2016)<br>Member of the IOC Candidature Acceptance Working Groups (2008 – 2016) |

# **Introduction,** Continued

| | |
|---|---|
| **Mr Michael CHAMBERS** | President of the Canadian Olympic Committee<br>Vancouver 2010 Board Member<br>Chair of the ANOC Commission for Sports Venues<br>Member of the PASO Executive Committee |
| **Mr Christophe DUBI** | IOC Sports Director |
| **Mr Gilbert FELLI** | IOC Olympic Games Executive Director |
| **Mr Gian-Franco KASPER** | IOC Member<br>President of the International Ski Federation<br>Member of the IOC Candidature Acceptance Working Group (2014)<br>Member of the IOC Coordination Commission (2006, 2010 and 2014) |
| **Mr Adam PENGILLY** | IOC Member<br>Member of the IOC Athletes' Commission |
| **Mr Grant THOMAS** | IOC Transport and General Infrastructure Advisor<br>Former Senior Vice-President for Venues and Transport, Organising Committee for the XIX Olympic Winter Games in Salt Lake City in 2002<br>Member of the IOC Evaluation Commission (2010)<br>Member of the IOC Candidature Acceptance Working Group (2010 and 2014) |

**Working Group Assessment**

The IOC Working Group met in Lausanne from 21 to 23 April 2010.

The Working Group's task has been to assess current conditions in each Applicant City and country and to determine the potential of each city and its country to organise successful Olympic Winter Games in 2018 on the basis of the concept proposed by each city and given the time and resources available.

The Working Group has based its analysis on the information provided by the Applicant Cities in their Application Files and during the video conferences organised during the Working Group meeting, as well as the reports provided by external experts and their own expertise.

The Working Group assessed the Applicant Cities on the following technical criteria:

# **Introduction,** Continued

**Working Group Assessment** (continued)

1. Government support, legal issues and public opinion (including compliance with the Olympic Charter and the World Anti-Doping Code)
2. General infrastructure
3. Sports venues
4. Olympic Village(s)
5. Environmental conditions and impact
6. Accommodation
7. Transport concept
8. Safety and security
9. Experience from past sports events
10. Finance
11. Overall concept

It should be noted that the legacy of a city hosting the Olympic Winter Games is taken into consideration in various sections of this report as it is relevant to several of the above criteria assessed by the Working Group.

**Criteria grading**

A grade (on a scale of 0 to 10) was given to each criteria, comprising a minimum and maximum number. The more uncertain a criterion's grade, the wider the span between the minimum and maximum grade.

The grades for the criteria are shown graphically at the end of the report.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Unsatisfactory | | ◄- - - - | - - - - | - - - -► | Average | ◄- - - - | - - - - | - - - -► | Satisfactory | |

**Sub-criteria**

To facilitate the assessment, certain criteria were divided into sub-criteria.

**Feasibility**

Certain grades were also given a feasibility factor. This is the probability of a project being achieved in the proposed timeframe, taking into account financing, political issues, time, location, speed of growth of the city/region and post-Olympic use.

A factor (value of 0.1 to 1.0) applicable to the grades can penalise the project to which it is attributed.

| **0.1** | **0.2** | **0.3** | **0.4** | **0.5** | **0.6** | **0.7** | **0.8** | **0.9** | **1.0** |
|---|---|---|---|---|---|---|---|---|---|
| Unfeasible | Low probability | | | Moderate probability | | High probability | | | Feasible |

# Introduction, Continued

**Travel Times**

All travel times represent average 2009 bus travel times, as provided by the Applicant Cities in their Application File.

**Video Conferences**

To clarify any issues following the analysis of the respective Application Files, a video conference was set up with each Applicant City on 23 April 2010.

Each video conference was structured in two parts: a verbal presentation by the Applicant City (maximum of 15 minutes) including a 2 – 3 minute video, followed by questions and answers.

**Olympic Games Study Commission**

In its assessment, the Working Group has also taken into consideration the main objectives and recommendations of the Olympic Games Study Commission where these refer to Olympic Games' planning. The Applicant Cities were made aware of the work of the IOC Games Study Commission, and its impact on the 2018 Olympic Winter Games was discussed with the cities during the seminar hosted by the IOC in December 2009.

The objective of the Games Study Commission was to make recommendations whereby the cost, complexity and size of the Olympic Games can be controlled, while recognising that the Olympic Games must remain the foremost and most successful sporting event in the world. The Games Study Commission noted that plans (including choice of venue location, capacity, construction, overlay and operations) have a major impact on the cost of any Olympic Games. Insufficient planning or consideration during the bid phase can have a major impact on the cost and complexity of organising the Olympic Games.

**Language**

The original version of this report was drafted in English. Consequently, in the event of a discrepancy between the French and English texts, the English text shall prevail.

# Applicant City Projects

**Terminology**

The IOC Working Group has based its assessment of the Applicant City projects on the IOC terminology as defined below.

- **Stand-alone venue:** A site of primary importance, operated by the OCOG, located within a secure perimeter, officially used to deliver the Olympic Games.
- **Precinct:** A number (more than one) of venues or facilities in close geographical proximity within a secure perimeter.
- **Cluster:** A number (more than one) of venues and facilities in close geographical proximity, which do not require a secure perimeter.
- **Zone:** Larger geographic area, too large to be considered a cluster, but still with a logical link between venues

According to the above, the IOC Working Group has analysed the three Applicant City projects as follows:

**Munich**

**Munich Zone**

- Munich Ice Park precinct (Curling, Figure Skating, Short Track, Ice Hockey 1+2, Speed Skating, Olympic Village)
- Munich Media Village stand-alone venue (Media Village)
- Munich "Media" precinct (IBC/MPC, Media Village)

**Garmisch-Partenkirchen Zone**

- Garmisch-Partenkirchen "East" precinct (Ski Jumping, Nordic Combined, Freestyle, Alpine Skiing)
- Garmisch-Partenkirchen "Central" cluster (Snowboard, Freestyle, Olympic Village)
- Garmisch-Partenkirchen "Alpine" stand-alone venue (Alpine skiing)
- Garmisch-Partenkirchen "Media" precinct (Mountain Media Centre, Media Village)
- Oberammergau precinct (Biathlon, Cross Country Skiing, Nordic Combined)

**Königssee stand-alone-venue (Bobsleigh, Luge, Skeleton)**

# Applicant City Projects, Continued

**Annecy**

**Annecy Zone**

- Annecy "Media" cluster (IBC/MPC, Media Village)
- Annecy "Olympic Village" stand-alone venue (Olympic Village)
- Annecy Speed Skating stand-alone venue (Speed Skating)
- Annecy Short Track/Figure Skating stand-alone venue (Figure Skating, Short Track)

**La Clusaz Zone**

- La Clusaz precinct (Cross Country Skiing, Ski Jumping, Nordic combined)
- Le Grand-Bornand stand-alone venue (Biathlon)

**Mont-Blanc Zone**

- Flaine stand-alone venue (Snowboard)
- Megève-Curling stand-alone venue (Curling)
- Megève-Freestyle stand-alone venue (Freestyle)
- Les Houches stand-alone venue (Alpine skiing)
- Chamonix stand-alone venue (Ice Hockey)
- Saint-Gervais cluster (Ice Hockey, IBC/MPC, Olympic Village)

**Morzine stand-alone venue (Alpine Skiing)**

**La Plagne stand-alone venue (Bobsleigh, Luge, Skeleton)**

**PyeongChang**

**Alpensia Zone**

- Alpensia "Nordic" cluster (Biathlon, Ski jumping, Cross Country, Nordic combined, Olympic Village, Olympic Stadium)
- Alpensia "Sliding" cluster (Luge, Bobsleigh, Skeleton, IBC/MPC, Media Village)
- YongPyong stand-alone venue (Alpine skiing)

**Coastal Zone**

- Gangneung Sport Complex cluster (Ice Hockey I, Figure Skating, Short Track, Curling, Olympic Village, Media Village)
- Gangneung Science Park stand-alone venue (Speed Skating)
- Youngdong College stand-alone venue (Ice Hockey II)

**Bokwang Phoenix Park cluster (Freestyle, Snowboard)**

**Jungbong stand-alone venue (Alpine Skiing)**

# 1 → Government support, legal issues and public opinion

(including compliance with the Olympic Charter and World Anti-Doping Code)

## Government support, legal issues and public opinion

**Introduction**

Under this topic, cities were required to provide a covenant and guarantees demonstrating support from the appropriate levels of government for their respective projects and their governments' commitment to respect the Olympic Charter. The capacity of these governments to fulfil their covenant and guarantees was also considered.

In addition, cities were required to provide information regarding the intended involvement of government and non-government agencies in the bid committee during the candidature phase.

An assessment was made of the legal framework in each of the Applicant Cities' countries in relation to sport and to any legal obstacles that might give rise to difficulties in organising the Olympic Winter Games in 2018.

The Applicant Cities were asked to identify the laws or other means in place in their respective countries to combat doping in sport, and whether the relevant authorities in their countries were in compliance with the World Anti-Doping Code. The governments of all three Applicant Cities have ratified the UNESCO International Convention against doping in sport. In the Candidate City phase, it would need to be determined whether national legislation has been brought fully in line with the WADA code.

With regard to public opinion, the Working Group used data provided by Sports Marketing Surveys in a research study conducted for the IOC. Each of the Applicant Cities also provided its own polling results. The mark given by the Working Group reflects the total support for the bid taken from the IOC poll (e.g. 85% support = a mark of 8.5).

# Government support, legal issues and public opinion, Continued

**Introduction** (continued)

The following covenant and guarantees were requested:

- A covenant from the government of the country guaranteeing respect of the Olympic Charter, that all measures will be taken to ensure that the city fulfils its obligations completely, and that all accredited persons enjoy free access to and free movement around the host country on the basis of a passport (or equivalent document) and the Olympic identity and accreditation card;
- A guarantee from the NOC and Applicant City authorities that each will respect and comply with all obligations set out in the Olympic Charter;
- A statement from the national tourist board regarding the accommodation rating system used in the country (this issue is dealt with under "Accommodation");
- A guarantee from the NOC and Applicant City to enter into a Joint Marketing Programme Agreement to the entire satisfaction of the IOC.

It is noted that all cities are required to comply with the IOC Code of Ethics from the beginning of the bid process through to the organisation of the Olympic Winter Games.

The Working Group assessed the cities on the basis of the following sub-criteria and weightings:

| | | |
|---|---|---|
| a) | Government support and commitment | 65% |
| b) | Olympic Charter, legal aspects and anti-doping measures / WADA compliance | 20% |
| c) | Public opinion | 15% |

# Government support, legal issues and public opinion, Continued

**Munich**

Munich's bid has the full support of all levels of government.

This support was formalised in the "Munich 2018 Joint Declaration" signed by the national government, the regional government of Bavaria and the local governments of Munich and the venue cities. The declaration states that the signatories are prepared to financially contribute to the successful hosting of the Games and to provide all the resources required for their safe and peaceful execution. Should Munich be selected as a Candidate City, this declaration would be followed by a more detailed Multi-Party Agreement.

The bid states that the national government has declared hosting the 2018 Olympic Winter Games a national priority.

The Bid Committee is organised as a private limited company under German law. The Supervisory Board, which is the ultimate decision-making authority, is chaired by representatives of the National Olympic Committee (NOC), the Free State of Bavaria, the City of Munich and the City of Garmisch-Partenkirchen. The Board also includes IOC members in Germany. An Athletes Advisory Council has been appointed, with one representative from each Olympic and Paralympic winter sport to provide advice on the Games project.

The four guarantees requested have been provided. The covenant provided by the Government and the Free State of Bavaria is subject to their respective "constitutional competence and authority" and to the "limits of applicable laws", of which the full extent and scope are not known. Should Munich be selected as a Candidate City, assurance of unqualified respect of the Olympic Charter would be required.

The Munich bid reports that there are no legal obstacles to hosting the Olympic Winter Games in Munich.

An opinion poll commissioned by the bid committee shows 76% support in Munich and 68% support nationally. The IOC poll shows 70% support for the bid in Munich and the surrounding municipal areas.

| MUNICH | | | | |
|---|---|---|---|---|
| Government support & commitment | | Olympic Charter & legal aspects | | Public opinion |
| Minimum | Maximum | Minimum | Maximum | |
| 8 | 9 | 6 | 8 | 7 |

# Government support, legal issues and public opinion, Continued

**ANNECY**

Annecy's bid has the full support of all levels of government.

The Application File contains a letter from the French President confirming the national government's support of the bid. The support of the government is coordinated by the "inter-ministerial delegation on major sporting events".

The State Council of the Canton of Geneva, Switzerland, provided a letter of support and guaranteed compliance with article 53 of the Olympic Charter across its territory for all accredited persons using Geneva Airport. It is to be noted that should Annecy be accepted as a Candidate City, a guarantee would be required from the Swiss national authorities with respect to compliance with the Olympic Charter, as the main gateway airport and some accommodation would be on Swiss territory.

The Bid Committee is organised as a non-profit organisation and would continue in the same form or as a government-based interest group if Annecy was selected as a Candidate City. The Supervisory Board is composed of the President of the National Olympic Committee (NOC), the Mayor of Annecy, a national government representative, the President of the Rhone-Alpes Regional Council and the President of the Haute-Savoie Council, who is also the chairperson. Many former Olympic and Paralympic athletes hold operational or leadership roles within the Bid Committee. The IOC members in France are on the Board of Directors which determines major strategies to be implemented by the Supervisory Board.

The four guarantees have been provided as requested.

The Annecy bid reports that there are no legal obstacles to hosting the Olympic Winter Games in Annecy.

An opinion poll commissioned by the bid committee shows 81% support in Annecy and 88% support nationally. The IOC poll shows 74% support for the bid in Annecy and the surrounding municipal areas.

| ANNECY | | | | |
|---|---|---|---|---|
| Government support & commitment | | Olympic Charter & legal aspects | | Public opinion |
| Minimum | Maximum | Minimum | Maximum | |
| 7 | 9 | 6 | 8 | 7.4 |

# Government support, legal issues and public opinion, Continued

**PyeongChang**

PyeongChang's bid has the full support of all levels of government.

This support was formalised at a national level by the establishment of a Government Support Committee headed by the Prime Minister and the Government Support Working Group consisting of the chief decision maker of each government body. The Korean National Assembly has established a support committee and intends to decree a Special Act aimed at supporting the 2018 Olympic Games, should PyeongChang be elected Host City. The Governor of Gangwon Province has established the Administrative Support Body for PyeongChang 2018 and the Gangwon Provincial Council has formed a special committee to support the bid.

The bid states that the national government has declared hosting the 2018 Winter Games a national priority.

The Bid Committee is organised as a non-profit organisation and would continue to exist in the same form if PyeongChang was selected as a Candidate City. The Bid Committee is headed jointly by the Governor of Gangwon Province and a private sector business leader, and includes members from various sectors including all levels of government, the National Olympic Committee (NOC) of Korea, the Korean Paralympic Committee, the IOC members in Korea, winter sports athletes and private businesses. The Bid Committee is assisted by an Athletes' Committee.

The four guarantees have been provided as requested.

The PyeongChang bid reports that there are no legal obstacles to hosting the Olympic Winter Games in PyeongChang.

An opinion poll commissioned by the bid committee shows 93% support in PyeongChang and 91% support nationally. The IOC poll shows 90% support for the bid in PyeongChang and the surrounding municipal areas.

| PYEONGCHANG | | | | |
|---|---|---|---|---|
| Government support & commitment | | Olympic Charter & legal aspects | | Public opinion |
| Minimum | Maximum | Minimum | Maximum | |
| 8 | 9 | 9 | 9 | 9 |

**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Government support, legal issues and public opinion":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 7.5 | 8.5 |
| ANNECY | 6.9 | 8.6 |
| PYEONGCHANG | 8.4 | 9 |

# 2 → General infrastructure

## General infrastructure

**Introduction**

The Olympic Winter Games are the largest winter sports event in the world with seven International Olympic Winter Sports Federations effectively organising the equivalent of 15 world championships simultaneously in multiple venue locations during 16 days of competition. Transport requirements for 100,000 accredited persons and often more than 100,000 spectators per peak day place considerable pressure on any regional transport system.

In general, venues are split between:

- The Host City, which generally includes ice competition venues and major non-competition venues like the stadium for the Opening and Closing Ceremonies, the Main Press Centre (MPC) and International Broadcast Centre (IBC)
- The mountain areas (outdoor venues) for snow and sliding competitions

The Working Group took into consideration the transport infrastructure within and around the Host City and the infrastructure in the mountain areas (city), as well as the infrastructure linking the mountain areas to the Host City (links).

This assessment takes into account transport infrastructure and the city's airport(s), as well as the International Broadcast Centre (IBC) and Main Press Centre (MPC). The considerable time and investment required to develop major infrastructure, as well as their integration into a city's long-term development plans, have also been considered. (Competition venues and the Olympic Village(s) are dealt with under separate sections.)

Population figures mentioned have been sourced from the information provided by the Applicant Cities.

The following sub-criteria and weightings have been used:

| | | |
|---|---|---|
| a) | Transport infrastructure (city and links) | 85% |
| b) | Airport | 5% |
| c) | IBC/MPC | 10% |

# General infrastructure, Continued

**Introduction** (continued)

### Transport Infrastructure

For transport infrastructure, two sub-criteria have been assessed, using the following weightings:

- existing transport infrastructure – magnitude and performance 60%
- planned and additional general transport infrastructure 40%

With regard to the latter, a feasibility factor of between 0.1 and 1.0 has been attributed reflecting the Working Group's judgement of the feasibility of a city completing the infrastructure in time for the 2018 Olympic Winter Games (i.e. risk factor, including financing).

### Airport

The weighting is related directly to current and projected capacities (passengers and cargo) of a city's airport(s) to cope with specific Games-time demands, as well as road and rail links to the city.

### IBC/MPC

The assessment takes into consideration the location – planned or existing – of the IBC and MPC in relation to transport, media accommodation, the Olympic Village and competition venues; post-Games use and legacy; feasibility; and financing plans.

# General infrastructure, Continued

**MUNICH**

With a population of 1.4 million, Munich is Germany's third largest city. It is the capital city of Bavaria, which has a population of 12.6 million.

### Transport Infrastructure

Munich's concept is based on the optimal use of existing high quality road and rail infrastructure, in both Olympic zones.

Munich is one of the country's busiest multi-modal transport hubs, with an international airport, 8 main rail lines and a network of 7 motorways converging on Munich's ring roads. Both Olympic zones are also accessible from Austria.

The transport concept is based on two Olympic zones, Munich and Garmisch-Partenkirchen, 94 km apart and a single stand-alone venue at Königssee, 164 km Southeast of Munich. With the exception of Königssee, all venues can be reached by motorway and are served by rail.

The Munich Ice Park, the Olympic Village and the Media Village would all be within a 2 km radius and would be served by robust public transport systems, mainly metro and tram.

The main media centre and adjacent Media Village would be situated in the existing Munich Trade Fair area, which is well served by Munich's metro system.

The Bid does not envision any new transport investments in Munich as all venues have ample transport accessibility options. During the Games, an extensive network of Olympic lanes would facilitate Olympic traffic between venues.

The Garmisch-Partenkirchen zone, which is located approximately 94 km south of Munich, would host the snow venues which are all served by good road and rail connections and would be enhanced by an Olympic lane network and new rail stations.

The Nordic centre would be located 22 km to the north of Garmisch-Partenkirchen and would be accessible by road from Munich and Garmisch-Partenkirchen and by rail from Munich.

By far the largest transport investment announced by the bid (approximately 80% of a total of USD 900 million) would be for three major road improvements around Garmisch-Partenkirchen.

Three transport links would provide all Games interconnections:

- Munich Airport to Munich Zone (35 km): by existing high capacity motorway or two existing rail lines
- Munich Zone to Garmisch-Partenkirchen Zone (94 km): by existing high capacity motorway (four lanes after improvements prior to 2018) or by existing rail line (with planned operational capacity upgrades)
- Munich Zone to Königssee (164 km): by existing dual motorway and local mountain road or by existing rail lines (with planned upgrade works).

These motorway transport links are heavily utilised and would benefit from advanced traffic management measures during the Games, including 380 km of Olympic lanes.

Due to its already well developed motorway, road and rail infrastructure, Munich's general infrastructure plan presents a low risk.

# General infrastructure, Continued

**MUNICH**
(continued)

### Airport

Munich International Airport is proposed as the main gateway airport for the Games. It is a modern high capacity facility (35 million passengers per year) located 35 km North of Munich and 125 km North of Garmisch-Partenkirchen. It has ample capacity to host an event such as the Olympic Winter Games. Innsbruck airport, 60 km South of Garmisch-Partenkirchen, and Salzburg Airport, 30 km East of Königssee, both with Winter charter flights, would be additional options.

### International Broadcast Centre (IBC) / Main Press Centre (MPC)

Munich proposes a two Media Centre concept. The Main Media Centre would be located in Munich and the Mountain Media Centre in Garmisch-Partenkirchen.

The Main Media Centre would be housed in the existing Munich Trade Fair Centre (180,000 m2 of indoor space and 380,000 m2 of outside usable land area), which was previously already used for the 2006 FIFA World Cup. The IBC would be 40,000 m2 and the MPC 25,000 m2 meeting IOC space requirements. There would be a media village adjacent to the Main Media Centre and a second media village 18 km away.

The Mountain Media Centre in Garmisch-Partenkirchen would consist of modular (temporary) structures covering 28,000 m2. The exact features of the Mountain Media Centre were not addressed in the Application File. The Mountain Media Centre would be located within a Garmisch-Partenkirchen media precinct and walking distance from temporary media housing.

As an existing venue, the IBC/MPC in Munich would require minimum investment. Financing for the Mountain Media Centre would be met by the OCOG.

The Munich IBC/MPC would use an existing exhibition hall with a strong ongoing commercial use. The Mountain Media Centre would be temporary and thereby avoid any issues with future financial sustainability. Assuming that the temporary structures for the Mountain Media Centre can provide suitable Games time facilities, and assuming no post Games need for these facilities, the legacy plan is logical.

| MUNICH | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Transport infrastructure | | | | | | | | | | Airport | | | IBC/MPC | |
| City | | | | | Links | | | | | | | | | |
| Existing | | Planned and additional | | | Existing | | Planned and additional | | | | | | | |
| Min | Max | Min | Max | Feas | Min | Max | Min | Max | Feas | Min | Max | Feas | Min | Max |
| 8 | 9 | 8 | 9.5 | 1 | 8 | 8.5 | 8.5 | 9.5 | 0.95 | 9 | 10 | 1 | 7 | 9 |

# General infrastructure, Continued

**ANNECY**

Annecy, a city with a population of 150,000, is located in the Rhone-Alpes region (population 6.2 million), 140 km East of Lyon and 40 km South of Geneva, Switzerland. The Olympic region can be accessed from Switzerland and Italy.

### Transport Infrastructure

Annecy is connected by motorway to Grenoble, Lyon, Geneva and Italy through the Mont Blanc tunnel. There is also a high speed rail link to Paris (4 hours).

The dispersed Annecy Games concept, with many stand-alone venues, would require a diversified multi-valley, multi-axis transport system.

Approximately 50% of the venues would be accessed by improved rail transport, where clients would transfer to shuttle bus services or new high capacity cable cars to reach the venues. All other venues would be served by motorway and mountain roads.

With the exception of La Plagne and Flaine, all venues can be accessed by multiple routes.

In the Annecy zone, the 6 proposed venues would be located within a 3-4 km radius around the central rail station. A new 7 km tram line would connect the Olympic Village and a new speed skating oval to the railway station. All other traffic would use the existing urban transport network and the bid acknowledges that specific Olympic transport measures would need to be implemented to ease congestion and to cope with the additional Games-time traffic.

Approximately 70% of the USD 2.1 billion transport investment programme is dedicated to rail projects. USD 1.4 billion is planned for the upgrade, development and creation of new rail links to better interconnect Annecy with the Mont Blanc area and Geneva.

Annecy's ambition to develop a rail network to better interconnect Annecy and Geneva to the Mont Blanc mountain zone may be challenging to fully implement by 2018. The proposed road and rail improvements to the region's transport infrastructure would leave a very positive legacy for the region but the spread of venues could significantly complicate Games transport operations.

The stand-alone venue at Morzine (women's alpine competition) is 86 km from Annecy Olympic Village and 57 km from the St. Gervais mountain village. Very significant financial investment is proposed to provide dual access to this venue which would host only one competition.

# General infrastructure, Continued

**ANNECY**
(continued)

### Airport

Geneva International Airport (Switzerland) is proposed as the main gateway airport. With a recently built new direct motorway link, travel time between Geneva Airport and Annecy is 35 minutes. Given its capacity to handle high capacity winter tourist traffic, Geneva airport is considered suitable for the Games. By 2018 Annecy will also be connected to Lyon International Airport and to Paris-Roissy International Airport by high speed rail.

### International Broadcast Centre (IBC) / Main Press Centre (MPC)

Annecy proposes a two Media Centre concept. The Main Media Centre would be located in Annecy and the Mountain Media Centre would be located in St. Gervais.

The Main Media Centre in Annecy would consist of a 40,000 m2 temporary structure for the IBC and a new permanent 25,000 m2 structure on 2 levels for the MPC, meeting IOC space requirements. The Main Media Centre would be within 10 km of the Annecy venues and 36 km from the La Clusaz Zone (cross-country and biathlon venues).

The Mountain Media Centre in St Gervais would consist of temporary structures of 6,000 m2 for radio and TV broadcasters and 4,000 m2 for press. The Mountain Media Centre would be within a 15 km radius of all of the Mont Blanc zone competition venues.

Financing for the IBC in Annecy and the Mountain Media Centre would be provided by the OCOG. Financing of the permanent works for the MPC would be private. All of the structures would be temporary except for the MPC in Annecy. Post Games, the MPC in Annecy would house service sector business activity.

| ANNECY | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Transport infrastructure | | | | | | | | | | Airport | | | IBC/MPC | |
| City | | | | | Links | | | | | | | | | |
| Existing | | Planned and additional | | | Existing | | Planned and additional | | | | | | | |
| Min | Max | Min | Max | Feas | Min | Max | Min | Max | Feas | Min | Max | Feas | Min | Max |
| 5 | 7 | 6 | 7 | 0.9 | 5 | 7 | 7.5 | 8.5 | 0.8 | 7 | 8.5 | 1 | 6 | 7 |

# General infrastructure, Continued

**PYEONGCHANG**

The City of PyeongChang is located in Gangwon Province, 240 km East of Seoul International Airport and 40 km West of the City of Gangneung on the east coast of Korea. The Games would be centered on the Alpensia resort in PyeongChang with a population of 45,000. Gangwon Province has a population of 1.5 million.

### Transport Infrastructure

PyeongChang is connected to the rest of Korea by the Yeongdong Expressway, an East-West Coast motorway bypassing the Seoul area and connected to Incheon International airport, the main Olympic gateway airport.

A USD 2.9 billion new high speed rail line is under construction to connect Seoul to Gangneung, significantly enhancing accessibility to and from Seoul. It would be mostly used to access PyeongChang from other provinces and the Seoul Metropolitan Area.

The Alpensia zone is the centre of the Games with the Coastal zone 40km to the East and one cluster and one stand-alone venue 45km to the West. All these sites are interconnected by the Yeongdong motorway and adjoining local roads undergoing improvements.

The proposed concept is very compact with maximum travel times from the Alpensia zone to all competition venues below 30 minutes, except the Jungbong Alpine skiing venue (40 min).

The venues in the Alpensia zone would all be within a 3 to 4 km radius and connected by two interchanges to the Yeongdong expressway. Substantial road investments are planned to ensure full accessibility to all Olympic venues without through-traffic.

The Coastal zone would host all ice venues within a 3 to 4 km radius. All venues would be served by bus.

Three transport links would provide all Games interconnections:

- Alpensia zone to Coastal zone, by motorway or national highway (approximately 40 km)
- Alpensia zone to Bokwang cluster by motorway and local road (approximately 45 km)
- Alpensia zone to Jungbong stand-alone venue by motorway and national road under full reconstruction (approximately 45 km).

The general infrastructure plan provides low risk given the good existing road and motorway infrastructure. Access to the Olympic zone as described in the Applicant City file however depends on the delivery of the high speed rail line.

# General infrastructure, Continued

**PYEONGCHANG** (continued)

### Airport

Seoul International Airport would be the main gateway airport for the Games and has ample capacity for the Olympic Winter Games. It is a high capacity, high performance facility located 240 km West of PyeongChang (30 km West of Seoul) directly connected by the East West YeongDong Expressway bypassing Seoul.

Yangyang International Airport located along the Coast approximately 65km North-East of PyeongChang would also be available. In the Winter it is used as a charter flight airport from surrounding Asian countries.

### International Broadcast Centre (IBC) / Main Press Centre (MPC)

PyeongChang proposes a Main Media Centre in the Alpensia Sliding cluster in PyeongChang with an expanded venue Media Centre in the Coastal Zone. The travel time between the two media centres would be 30 minutes.

The Main Media Centre in Pyeongchang would be built as a new permanent structure and would include an IBC of 40,000 m2, a MPC of 26,000 m2, and a common services building of 12,000 m2, meeting IOC space requirements. The Main Media Centre would be within 10 minutes travel time of 5 competition venues, the Alpensia media village (walking distance), the Alpensia Olympic village and the Olympic Stadium. The longest travel time from the Main Media Centre to any competition venue in the Pyeongchang Olympic region would be 40 minutes.

An 8,000m2 Media Centre would be built in the Coastal Cluster for media coverage of ice events.

The land for the Main Media Centre would be provided by a state owned entity. Financing and construction would be private. The Media Centre in the Coastal Zone would be temporary and financed by the OCOG.

Post Games the Main Media Centre would be converted into a solar energy plant providing renewable energy.

| PYEONGCHANG | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Transport infrastructure | | | | | | | | | | Airport | | | IBC/MPC | |
| City | | | | | Links | | | | | | | | | |
| Existing | | Planned and additional | | | Existing | | Planned and additional | | | | | | | |
| Min | Max | Min | Max | Feas | Min | Max | Min | Max | Feas | Min | Max | Feas | Min | Max |
| 6.5 | 7.5 | 7.5 | 8.5 | 0.95 | 6 | 8 | 8 | 9 | 0.9 | 8 | 9 | 1 | 7 | 8.5 |

# General infrastructure, Continued

**Summary table** The following table lists the grades attributed to each Applicant City for the criterion "General infrastructure":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 8.0 | 9.0 |
| ANNECY | 5.4 | 6.9 |
| PYEONGCHANG | 6.7 | 8.0 |

# 3 → Sports venues

## Sports venues

**Introduction**

The Working Group assessed the sports venues and sports concept taking into account the following sub-criteria and weightings:

**a) Existing venues** **30%**

The use and adequacy of existing venues, including plans for venue upgrading.

**b) Planned and additional venues** **30%**

**Planned** – New venues currently under construction or planned to be constructed, irrespective of the Olympic Winter Games.

**Additional** – New venues required to be built specifically for the Olympic Winter Games and the use of temporary venues where no legacy is identified.

Sub-criterion b) was balanced by a feasibility factor based on the potential of completing the project in terms of time, cost and quality to meet Olympic Winter Games requirements and post-Games legacy.

**c) Olympic Winter Games sports concept/legacy** **40%**

The overall sports concept, with a priority given to the quality of the Olympic experience for the athletes. The use of the fewest venues possible, the rational clustering of venues in close proximity to the Olympic Village(s), and the legacy value of new venues, including the use of temporary facilities where no legacy needs exist, were considered important.

Please refer to the introduction on page 9 for the Working Group's description of each Applicant City's concept.

# Sports venues, Continued

**Introduction** (continued)

The Working Group analysis was based on IOC venue capacity guidelines, of which the Applicant Cities were made aware, and are as follows:

| Sport/discipline | Capacity | IOC Standard | No. of venues | Sharing possibilities |
|---|---|---|---|---|
| **Biathlon** | Seating | 5 – 7,000 | 1 *A | Could share with Cross Country |
| | Standing | 10 – 15,000 | | |
| **Bobsleigh / Skeleton** | Seating | 1,000 | 1 *C | Shared with Luge |
| | Standing | 10,000 | | |
| **Curling** | Seating | 3,000 | 1 | |
| **Ice Hockey 1** | Seating | 10,000 | 1 | |
| **Ice Hockey 2** | Seating | 6,000 | 1 | |
| **Luge** | Seating | 1,000 | 1 *C | Shared with Bobsleigh / Skeleton |
| | Standing | 10,000 | | |
| **Figure Skating / Short Track** | Seating | 12,000 | 1 | |
| **Speed skating** | Seating | 6,000 | 1 | |
| **Ski jumping** | Seating | 3,000 | 1 *B | Shared with Nordic Combined |
| | Standing | 10 – 15,000 | | |
| **Cross country skiing** | Seating | 3,000 | 1 *A/*B | Shared with Nordic Combined |
| | Standing | 10,000 | | |
| **Nordic Combined** | | | 2 *B | Shared with Cross Country and Ski Jumping |
| **Alpine skiing** | Seating | 8,000 | 2 | |
| | Standing | 10,000 | | |
| **Freestyle** | Seating | 4,000 | 1 | |
| | Standing | 10,000 | | |
| **Snowboard** | Seating | 4,000 | 1 | |
| | Standing | 10,000 | | |
| | | | **TOTAL:** | **13 venues** |

* Refers to possible sharing of a venue e.g. *A shares with *A, *B shares with *B, and so on.

# Sports venues, Continued

**Notes**

- Standing areas

  Standing capacities for relevant outdoor sports venues have not been included in the IOC standard gross seating capacity numbers and are listed as a guide only. There are many variables that affect such areas (e.g. venue/city infrastructure, access road capacity, terrain, venue footprint and layout, popularity of the sport in the host city, region and/or country, etc.) To determine standing capacities for the relevant outdoor sports venues, the OCOG should propose standing capacities to the IF and the IOC.

- Where it is proposed that Biathlon and Cross Country use shared public/back-of-house facilities but have separate “fields of play”, they are counted as two venues.

- Alpine Skiing – Two or more courses with one common finish area are counted as one venue.

# Sports venues, Continued

**MUNICH**

Munich proposes 13 venues (5 existing with no permanent works required, 2 existing with permanent works required, none planned, 2 additional permanent and 4 additional temporary). At one of the existing venues requiring permanent works (ski jumping), a freestyle aerials course would be built that is Games-dependent. Construction of permanent works is planned from 2013 to 2016 at a total cost of USD 230 million - all publicly financed. Temporary (demountable) venues for speed skating, snowboard (half pipe), biathlon and cross country skiing would be financed through a combination of public and private funding. Munich's sports venue concept would be fairly evenly split between the use of existing venues (7) and new venues to be built (6).

The venues would be located in two compact zones, Munich and Garmisch-Partenkirchen, with a stand-alone sliding centre at Königssee.

The Munich Zone would contain 5 ice sports venues (short track/figure skating, speed skating, 2 ice hockey venues and curling) and an Olympic Village within the Ice Park Precinct. All of the ice sports venues would be within 5 minutes of the Munich Olympic Village.

The Garmisch-Partenkirchen Zone would contain 7 snow sports venues (biathlon, cross country, ski jumping/freestyle aerials, freestyle moguls/alpine skiing slalom, snowboard/freestyle ski cross, snowboard (half-pipe) and alpine skiing speed) and the mountain Olympic Village. The zone would contain 2 precincts, 1 cluster and 1 stand-alone venue. All snow sports venues would be within 10 minutes travel time of the mountain Olympic Village, except the venues for biathlon, cross-country, nordic combined, which would be within 25 minutes.

Bobsleigh, skeleton, and luge would take place in the stand-alone venue in Königssee, which would be within 5 minutes of additional athlete accommodation and would be 2 hours 10 minutes travel time from the Munich Olympic Village.

The improvements to existing venues would support a strong winter sports legacy in the Garmisch-Partenkirchen area. The construction of 2 new ice hockey venues in the Munich Ice Park precinct would provide a new multi-sports arena (Hockey 1) and improved existing ice sports facilities (Hockey 2) post-Games. The concept of a demountable venue for speed skating appears to make sense from a sustainable development standpoint, as Munich 2018 stated that the facility would be used elsewhere in Germany. The technical implementation of a long span temporary structure for speed skating could be challenging.

| MUNICH | | | | | | |
|---|---|---|---|---|---|---|
| Existing venues | | Planned and additional venues | | | Sports concept & legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 7 | 9 | 7 | 8.5 | 0.9 | 7.5 | 9 |

# Sports venues, Continued

**ANNECY**

Annecy proposes 13 venues (1 existing with no permanent works required, 6 existing with permanent works required, 2 planned and 4 additional) with construction to take place from 2010 to 2016 at a total cost of USD 419 million. This would be financed by a combination of public and private funding. Annecy's sports venue concept would be fairly evenly split between the use of existing venues (7) and new venues to be built (6).

The venues would be located in three zones, Annecy, Mont Blanc and La Clusaz, with one stand-alone alpine skiing venue at Morzine and one stand-alone sliding centre in La Plagne. The distribution of the venues would be very spread-out with a high number of stand-alone venues (10).

The Annecy zone would contain 2 stand-alone ice sports venues (speed skating and short track/figure skating) and the Annecy Olympic Village. The sports venues in Annecy would be within 10 minutes travel time of the Olympic Village.

The La Clusaz zone would contain 3 snow sports venues (cross country, ski jumping and biathlon) with additional athlete accommodation due to the difference in altitude between Annecy and La Clusaz. These sports venues would be within 10 minutes of the La Clusaz athlete accommodation and within 40 minutes of the Annecy Olympic Village.

The Mont Blanc zone would contain 5 stand-alone venues (snowboard, curling, freestyle skiing, ice hockey and alpine skiing) and one cluster containing the ice hockey venue and the Mont Blanc Olympic Village in St Gervais. All of the Mont Blanc venues would be within 35 minutes travel time of this Olympic Village.

The stand-alone venue at Morzine (women's alpine speed events) would be 70 minutes travel time from the closest Olympic Village (Mont Blanc Olympic village).

Bobsleigh, skeleton and luge would take place in the stand-alone venue at La Plagne which would be within 10 minutes from additional athlete accommodation and would be approximately 2 hours travel time from the Annecy Olympic Village.

Both the improvements to existing venues and the new venues to be built would provide a sound winter sports legacy in the Annecy region. Conversion of a new figure skating/short track arena for multi-sport use post-Games would help ensure its economic sustainability beyond the Games. However, the overall venue concept, with 10 stand-alone venues, 2 Olympic Villages and the need for 3 additional athletes' accommodation centres, would present major operational and financial challenges and would affect the Games experience for all client groups, particularly the athletes.

| ANNECY | | | | | | |
|---|---|---|---|---|---|---|
| Existing venues | | Planned and additional venues | | | Sports concept & legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 7 | 9 | 7 | 8 | 0.9 | 4 | 5 |

# Sports venues, Continued

**PYEONGCHANG**

PyeongChang proposes 13 venues (5 existing with no permanent works required, 2 existing with permanent works required, 2 planned, 3 additional permanent and 1 additional temporary). Construction of permanent works is planned from 2011 to 2016 at a total cost of USD 375 million – all publicly financed. The one temporary (demountable) venue (ice hockey 1) would also be publicly funded. PyeongChang's sports venue concept would be fairly evenly split between the use of existing venues (7) and new venues to be built (6).

The venues would be located in two zones, the Alpensia and Coastal zones, with one cluster (Bokwang) and one stand-alone venue (Jungbong). The relationship of the two zones to one another, with a travel time of 30 minutes between the Olympic Villages in each zone, and the short travel times within the zones, would provide a very compact Games concept.

The Alpensia zone (PyeongChang) would contain 5 competition venues for biathlon, cross country, ski jumping/Nordic combined, bobsleigh/skeleton/luge and alpine skiing and the Alpensia Olympic Village. All the above mentioned venues would be within 10 minutes travel time of the Alpensia Olympic Village.

The Coastal Zone (Gangnueng) would contain 5 ice sports venues (ice hockey 1+2, short track/figure skating, curling and speed skating) and the Coastal Olympic Village. All of the venues in the cluster would be within 5 minutes travel time of the Coastal Olympic Village.

The stand-alone venue at Jungbong (alpine skiing speed events) would be within 40 minutes of the Alpensia Olympic Village and the Bokwang Phoenix Park Cluster would be within 30 minutes.

Ongoing upgrades and planned permanent works to improve existing venues, planned venues to be built irrespective of the Games and the additional venues required for the Games would support a strong winter sports legacy in Gangwon Province and the PyeongChang region. The 10,000 seat temporary arena for ice hockey 1 would be moved post-Games to Wonju, where it would serve two professional ice hockey teams.

| PYEONGCHANG | | | | | | |
|---|---|---|---|---|---|---|
| Existing venues | | Planned and additional venues | | | Sports concept & legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 7 | 9 | 7 | 8 | 0.9 | 7 | 9 |

# Sports venues, Continued

**Summary table** The following table lists the grades attributed to each Applicant City for the criterion "Sports venues":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 7.0 | 8.6 |
| ANNECY | 5.6 | 6.9 |
| PYEONGCHANG | 6.8 | 8.5 |

# 4 → Olympic Village(s)

## Olympic Village(s)

**Introduction**

In evaluating the Olympic Village(s) criterion, the Working Group assessed the cities on the basis of the three following sub-criteria and weightings:

**a) Location** **40%**

Travel distances to competition venues

**b) Concept** **40%**

- Number of villages
- Additional athlete accommodation
- Type of accommodation
- Area of land available
- Surrounding environment
- Temporary versus permanent

A feasibility factor was assigned to the village concept, based on the likelihood of the proposed projects being completed.

**c) Legacy** **20%**

- Post-Games use
- Financing

The Olympic Village is one of the most important venues and is the heart of the Games for the athletes. The opportunity for athletes to live together with their peers from different countries, cultures and sports is what sets the Olympic Games apart from any other sports event. The location of the village vis-à-vis the competition venues is of the utmost importance. At this stage of the bid process, general information is required. In phase two, Candidate Cities will need to demonstrate their understanding of the very complex issues with regard to the scope and size of such a project, from the perspective of both Games operations and legacy.

# Olympic Village(s), Continued

**MUNICH**

Munich proposes a two-village concept, 93 km apart (70 minutes travel time). The Munich Olympic Village (22 hectare site, 3,500 beds) would be situated adjacent to the Munich Ice Park. The mountain Olympic Village (21 hectare site, 2,500 beds) would be centrally located in the Garmisch-Partenkirchen zone.

Additional athlete accommodation is planned in Königssee (400 beds) in a planned hotel to be built irrespective of the Games within walking distance of the existing sliding centre.

There would be short travel times (less than 10 minutes) for most athletes, with the exception of those competing at Oberammergau (biathlon, cross-country, Nordic combined), 25 minutes away.

Taking into consideration the number of athletes and officials, there is ample capacity in the Munich Olympic Village, but accommodation requirements in Königssee appear somewhat under scoped.

The land required for the Olympic Village in Munich is owned by the federal, state and municipal authorities. The land for the mountain Olympic Village in Garmisch-Partenkirchen is owned by a combination of municipal and private entities, but would be assembled by the municipality through contract options.

Post-Games, the Munich Olympic Village would be converted into market housing. The mountain Olympic Village would include chalet-type residential housing, a holiday village and a hotel.

| MUNICH | | | | | | |
|---|---|---|---|---|---|---|
| Location | | Concept | | | Legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 6 | 8 | 7 | 8 | 0.8 | 8 | 9 |

# Olympic Village(s), Continued

**ANNECY**

Annecy proposes a two-village concept, 76 km apart (50 minutes travel time). The Annecy Village (30 hectare site, 2,500 beds) would be situated in Annecy. A second 2,300 bed mountain village (25 hectare site) would be situated in the Mont Blanc zone although the exact location of this village has not yet been defined. Both villages would offer 3-4 star accommodation in units with a maximum of 3 bedrooms.

Additional athlete accommodation is planned in La Clusaz (1,000 beds in hotels and tourist residences for cross country, Nordic combined and biathlon athletes). This would appear to be necessary as the difference in altitude between the Annecy Village and these venues would be approximately 700 m.

Additional athlete accommodation is also planned in La Plagne (800 beds for bobsleigh, skeleton and luge) due to the distance from the nearest Olympic Village in Annecy (110 km).

Taking into consideration the number of athletes and officials, there is ample capacity in the Annecy Olympic Village. The additional athlete accommodation in La Clusaz with a capacity of 1,000 beds seems to be under scoped.

The overall concept relies on dispersed athlete accommodation to achieve acceptable travel times. In Annecy, travel times from the Annecy Olympic village to all of the competition and non-competition venues would be short. The venues in the Mont Blanc Zone would be much more spread out.

Given the travel time from the Mont Blanc Village to Morzine, additional athlete accommodation would be required, which is not currently proposed.

The land required for both villages is currently privately-owned, but would be purchased by the relevant local authorities, although the exact location of the mountain village is still to be decided. Financing of the villages would be carried out through a public/private partnership.

Post-Games, both villages would be converted into housing districts. The Annecy Village would include facilities and housing for sports camps. The Mont Blanc Village would provide housing for seasonal workers from the surrounding resorts.

| ANNECY | | | | | | |
|---|---|---|---|---|---|---|
| Location | | Concept | | | Legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 4 | 6 | 4 | 5 | 0.8 | 8 | 9 |

# Olympic Village(s), Continued

**PYEONGCHANG**

PyeongChang proposes a two-village concept, 37 km apart (travel time 30 minutes). The Alpensia Village (43 hectare site, 3,500 beds) in Pyeongchang would be centrally situated in the Alpensia zone and the Coastal Olympic Village (11 hectare site, 2,300 beds) would be centrally located in the Gangnueng Coastal zone. Optional additional hotel accommodation at Jungbong (192 rooms) and Bokwang Phoenix Park (300 rooms) would offer the same services as at the two villages.

Taking into account the optional accommodation, all athletes could be housed within 10 minutes of their respective venues.

The Coastal Village, with a planned capacity of 2,300, appears to be over scoped taking into consideration the number of athletes and officials from sports in the coastal zone.

The land required for the Olympic Village in PyeongChang is owned by a private developer who would also finance the construction of the village. The Coastal Olympic Village would be built by a state-owned corporation, which would also secure the land required.

Post-Games, the Alpensia Olympic Village would revert to a tourist hotel. The Coastal Village would be converted into market housing.

| PYEONGCHANG | | | | | | |
|---|---|---|---|---|---|---|
| Location | | Concept | | | Legacy | |
| Minimum | Maximum | Minimum | Maximum | Feasibility | Minimum | Maximum |
| 6 | 8 | 7 | 9 | 0.8 | 8 | 9 |

---

**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Olympic Village(s)":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 6.2 | 7.6 |
| ANNECY | 4.5 | 5.8 |
| PYEONGCHANG | 6.2 | 7.9 |

# 5 → Environmental conditions and impact

## Environmental conditions and impact

**Introduction**

The environmental assessment reflects each city's current general environmental conditions and the impact hosting the Olympic Winter Games would have on each city.

Within the criterion of Environmental Conditions and Impact, the following sub-criteria and weightings were used:

**a) Current environmental conditions** **40%**

This assessment is based on existing conditions, including meteorological information provided by the Applicant Cities.

**b) Environmental impact** **60%**

The impact of hosting the Olympic Winter Games can be adverse (e.g. degrading natural areas) or positive (e.g. rehabilitation of degraded areas or improvements in standards and policies). As such, the overall assessment of environmental impact is based on weighing up any adverse impact against positive impact and policies to mitigate potentially adverse effects such as the use of existing or temporary venues.

# Environmental conditions and impact, Continued

**MUNICH**

Meteorological conditions indicate light to moderate wind and cold average weather temperatures. On average there are 8.1 days of precipitation in the primary mountain area and 3.8 days of fog during the Games period. There is a potential of maximum temperatures in the mountain zone of between 13.7 and 16.9 degrees. Average snow depth in the primary mountain area appears low at 28.7cm. According to the documentation provided, Munich and its region have "very high" air and water quality.

Munich proposes an Olympic concept comprising two primary competition zones that are well serviced by existing intermodal transport infrastructure. The existing sliding venue is located 171 km from the Munich Olympic Village, with athletes and media being accommodated close to the venue.

The small amount of construction required, together with the fact that all venue locations are already accessible by direct rail connection, would assist in reducing the overall environmental impact of the Games.

Supported by eight planning strategies, Munich's environmental focus is driven by the following three goals:

- Climate protection
- Environmental protection
- Sustainable sport and regional development

In line with Munich's objective to have minimal land-use for Games development, the majority of competition venues exist and/or are planned irrespective of the Games. The two new permanent competition venues are to be built on or within sites of existing sports venues, with the four temporary venues on land that is part of a sports recreation community. Following the Games, this land would be restored to natural conditions or new green space created.

Germany requires environmental impact assessments (EIA) to be carried out in the planning phase and prior to construction. Authority to commence construction is dependent upon approval of plans and EIAs. Munich has conducted a preliminary screening of the proposed venues and sites in its early planning stages and would proceed with an eco-management audit scheme if selected as a Candidate city.

| MUNICH | | | |
|---|---|---|---|
| Conditions | | Impact | |
| Minimum | Maximum | Minimum | Maximum |
| 7.5 | 8.5 | 8 | 9 |

# Environmental conditions and impact, Continued

**ANNECY**

Meteorological conditions indicate moderate to low winds, cold average weather temperature and good snow coverage. On average there are 4 – 5 days of precipitation in the primary mountain area and 1.6-2.2 days of fog during the Games period. Average snow depth in the primary mountain area is between 97 and 150 cm. According to the documentation provided, Annecy and its region have "pure" air and water quality.

The three proposed primary competition zones, Annecy, Mont Blanc and La Clusaz are located in a well known winter region that is serviced by an existing road, rail and motorway system. The existing sliding venue is located 110 km from the Annecy Olympic Village. The distribution of the venues within the mountain areas is quite spread out which would affect the overall environmental impact of the Games.

Annecy's environmental focus is to stage an Olympic Games with a positive ecological footprint, based on four measures:

- Use of clean mass transit
- Development of a new-generation mountain resort, i.e. an eco-resort
- Promotion of local economic sectors
- Environmental awareness

In line with Annecy's objective of conducting the Games with a positive ecological footprint, the majority of competition venues exist and/or are planned irrespective of the Games. Additional works and construction of new infrastructure are to be carried out in compliance with the highest international standards (Minergie P – Eco label). Rail public transport to connect most Games venues is planned.

In compliance with the French Environmental code, environmental impact assessments are obligatory for all infrastructure projects (renovated or newly built).

Annecy has created a Sustainable Development Guidance Board that is comprised of representatives of key regional environmental associations and public administration, environmental experts and athletes.

| ANNECY | | | |
|---|---|---|---|
| Conditions | | Impact | |
| Minimum | Maximum | Minimum | Maximum |
| 7.5 | 8.5 | 6 | 7.5 |

# Environmental conditions and impact, Continued

**PYEONGCHANG**

Meteorological conditions indicate light to moderate wind and cold, dry weather. On average there are 4.4 days of precipitation during the Games period in the primary mountain area and 2.9 days of fog. Average snow depth in the primary mountain zone Alpensia is 37.1cm. Average snow depth in Jungbong (alpine skiing (speed)) over the last 10 years appears very low at 7.3 cm, although figures are based on the entire region. According to the Application File, PyeongChang and the venue cities have air and water quality levels that "surpass international standards".

PyeongChang offers a compact Olympic concept comprising two primary competition zones that are well serviced by existing transport infrastructure.

The two primary competition zones are located approximately 40 km apart. The alpine skiing (speed), freestyle skiing and snowboard events are located outside the two primary zones, 45 km from the mountain Olympic Village. In addition, most competition venues would be accessible by rail. This concept proposal would limit the overall environmental impact.

PyeongChang would position the Games as the "Green Olympic Games for the next generation" and the "low-carbon Olympic Games". The key programmes are:

- Low carbon Green Growth Project
- Zero waste Material Management Programme
- Non-Point Pollution Source Control Programme
- Low-carbon Green Growth Model City Programme

Within the Alpensia zone, traffic would be restricted to environmentally friendly modes of transport including a new 10 km Electric Bus Rapid Transit line.

Korea adopted the Green Building Certification Programme within its building legislation in 2006 and all competition and non-competition venues to be built would be certified in accordance with this law. Existing venues would be upgraded to low-carbon eco-friendly facilities.

Korea's Framework Act on environmental policy and the Environmental Impact Assessment Act stipulate that construction is subject to prior environmental reviews (PER) and Environmental Impact Assessments from the planning stage through to completion. PERs have been conducted on the planned facilities and post-environmental impact assessments are conducted periodically on existing sites.

| PYEONGCHANG | | | |
|---|---|---|---|
| Conditions | | Impact | |
| Minimum | Maximum | Minimum | Maximum |
| 7.5 | 8.5 | 7 | 8.5 |

# Environmental conditions and impact, Continued

**Summary table** The following table lists the grades attributed to each Applicant City for the criterion "Environmental conditions and impact":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 7.8 | 8.8 |
| ANNECY | 6.6 | 7.9 |
| PYEONGCHANG | 7.2 | 8.5 |

# 6 → Accommodation

## Accommodation

**Introduction**

The accommodation assessment is based on Olympic Games requirements contained in the IOC Technical Manual on Accommodation (provided to the Applicant Cities).

The benchmark for the Olympic Winter Games is **23,300 rooms** predominantly in 3 – 5 star hotels or other types of accommodation of an equivalent level.

In evaluating the accommodation criterion, the two following sub-criteria and weightings were taken into account.

**a) Number of rooms (50%)**

The assessment took into consideration the following accommodation:

- existing hotel rooms in 3 – 5 star categories (or equivalent level apartments) within a radius of 50 km of the Games centre and 10 km of the other clusters/precincts/stand-alone venues, as defined by the Applicant Cities
- planned and additional hotel rooms in 3 – 5 star categories within a radius of 50 km of the Games centre and 10 km of the other clusters/precincts/stand-alone venues, as defined by the Applicant Cities
- 50% of existing, planned and additional hotel rooms in the 2 star category within a radius of 50km of the Games centre and 10 km of the other clusters/precincts/stand-alone venues, as defined by the Applicant Cities
- planned or existing media villages, if proposed

For hotel rooms and/or media village(s) and/or other types of accommodation which do not exist today but would be required to host the 2018 Olympic Winter Games, a feasibility factor was introduced representing the Working Group's belief that plans would be fully implemented.

The remaining rooms, including all lower categories of hotel rooms, are expected to cover the needs of the OCOG and spectators.

Cities were graded as follows: the IOC's benchmark of 23,300 rooms was measured against the number of existing, planned and additional rooms (as mentioned above) multiplied by a feasibility factor for planned accommodation. If, for example, a city has 23,300 rooms, a grade of 6 was awarded.

**b) Accommodation concept (50%)**

The assessment took into consideration the following aspects:

- type of rooms (hotels, villages, apartments, etc.)
- number of existing 3-5 star rooms within a radius of 10 km of the Games centre and 10 km of the other clusters/precincts/stand-alone venues, as defined by the Applicant Cities
- the accommodation concept of operations, where provided
- 3-5 star average convention rates provided by each city

# Accommodation, Continued

## MUNICH

### Number of rooms

The number of existing 3 to 5 star hotel rooms (approximately 36,000) exceeds the IOC benchmark.

Munich also plans to construct three media villages, with a total of 6,200 rooms.

There appears to be ample accommodation for spectators.

### Accommodation concept

A total of approximately 24,700 existing 3 to 5 star hotel rooms are located within a radius of 10 km of the Munich Games centre and of the other clusters/precincts/stand-alone venues, reflecting a compact accommodation plan.

1/3 of media would be accommodated in hotels and 2/3 in three media villages. Two villages would be located in the Munich zone and a third village would be located within the Garmisch-Partenkirchen zone.

The 2009 average convention rates (provided by the different local tourist offices and associations) appear to be reasonable.

| MUNICH | | | |
|---|---|---|---|
| Number of rooms | | Concept | |
| Minimum | Maximum | Minimum | Maximum |
| 10 | 10 | 8.5 | 9.5 |

# Accommodation, Continued

**ANNECY**

### Number of rooms

Taking into consideration existing and planned hotels across all zones, there is a shortage in the number of 3 to 5 star hotel rooms. To overcome this shortage, Annecy proposes to use existing 3 to 4 star apartments in "classified tourism residences" and plans to construct a media village with 3,000 rooms.

There appears to be ample accommodation for spectators in other categories.

### Accommodation concept

A total of approximately 8,300 existing 3 to 5 star hotel rooms are located within a radius of 10 km of the various clusters/precincts/stand-alone venues. Within this radius there are also approximately 6,600 existing 3 to 4 star apartments. However, approximately 4,300 of these are located at La Plagne (sliding venue). This spread-out accommodation plan could create operational challenges for the organisers across all client groups, particularly the media.

70% of media would be accommodated in hotels and 30% in a media village in Annecy.

There is currently an insufficient number of existing 4 to 5 star hotel rooms (609) within a 10 km radius of the Annecy Games Centre to meet Olympic Family requirements (950). However, Annecy plans to build a new international convention centre by 2014, including four additional 4 to 5 star hotels with a total of 500 rooms. The limited number of 4 to 5 star hotels would also have an impact on Olympic Family hotel rates.

The 2009 average convention rates (provided by the Annecy tourist board) appear to be reasonable with the exception of 5 star rooms.

| Room type | Existing | Planned | | | Additional | | | Concept | |
|---|---|---|---|---|---|---|---|---|---|
| | Number of rooms | Number of rooms | Feasibility | | Number of rooms | Feasibility | | | |
| | | | Min | Max | | Min | Max | Min | Max |
| 3-5 ★ hotels | 17,483 | 156 | 0.8 | 1 | 635 | 0.8 | 1 | 4 | 6 |
| 3-4 ★ apartments | 7,961 | 185 | 0.8 | 1 | 809 | 0.8 | 1 | | |
| 2 ★ hotels | 5,696 | 75 | 0.8 | 1 | | | | | |
| Media village(s) | 0 | | | | 3,000 | 0.7 | 0.9 | | |

# Accommodation, Continued

**PYEONGCHANG**

### Number of rooms

The number of existing 3 to 5 star hotel rooms (approximately 45,000) exceeds the IOC benchmark.

PyeongChang also plans to construct two media villages with a total of 10,500 rooms.

There appears to be ample accommodation for spectators.

### Accommodation concept

A total of approximately 18,000 existing 3 to 5 star hotel rooms are within a radius of 10 km of the PyeongChang Games centre and of the other clusters/precincts/stand-alone venues, reflecting a compact accommodation plan.

Media would be accommodated in two media villages, located in the Alpensia and the Coastal zones (5,250 rooms in each media village).

The 2009 average convention rates (provided by the Korean Tourism association) appear to be very reasonable.

| PYEONGCHANG | | | |
|---|---|---|---|
| Number of rooms | | Concept | |
| Minimum | Maximum | Minimum | Maximum |
| 10 | 10 | 8.5 | 9.5 |

**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Accommodation":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 9.3 | 9.8 |
| ANNECY | 6.1 | 7.2 |
| PYEONGCHANG | 9.3 | 9.8 |

# 7 → Transport concept

## Transport concept

**Introduction**

The assessment is based upon the potential performance of the proposed transport system at Games-time. This is evaluated from an operational point of view, taking into account previous Olympic Winter Games experience. The two following sub-criteria and weightings were used:

**a) Distances and travel times** **50%**

Transport requirements for the various constituent groups and Olympic logistics are highly dependent on distances and average bus travel times between key Olympic competition and non-competition venues.

This sub-criterion reflects the quality of the cities' answers to the questionnaire, map legibility and the reliability of urban travel times between major traffic generators.

**b) Transport organisation and traffic management at Games-time** **50%**

Assuming that all planned and additional transport infrastructure will be built, this sub-criterion evaluates the coherence of the proposed traffic and transport concept against Games-time mobility requirements of the main Olympic client groups.

# Transport concept, Continued

## MUNICH

### Distances and travel times

Distances and travel times within the two compact zones of Munich and Garmisch-Partenkirchen would be reasonable for all client groups. They would be particularly short for athletes and media who would be accommodated close to the venues located in these two zones.

The bid states that the 93 km "Munich to Garmisch-Partenkirchen" transport link would take 65 minutes by motorway if effective traffic management and surveillance systems are implemented on the full length of the journey. The bid states that train travel times would be reduced to 90 minutes (from the current 105 minutes).

The distance and travel time from Munich to Königssee (sliding venue) are 171 km / 130 minutes by bus.

### Transport organisation and traffic management at Games-time

Munich has a robust and well thought-out Olympic transport proposal which is fully coherent with its Games concept.

All competition and non-competition venues would be directly served by rail, tram or metro stations less than 750 metres away. The only exception would be the Königssee venue, which is 4.5 km from the Berchtesgaden rail station terminal.

In addition to the strong and effective public transport system, a substantial network of Olympic lanes (380 km) is proposed.

| MUNICH | | | |
|---|---|---|---|
| Distances and travel times | | Transport organisation and traffic management at Games-time | |
| Minimum | Maximum | Minimum | Maximum |
| 7.5 | 8.5 | 8.5 | 9 |

# Transport concept, Continued

## ANNECY

### Distances and travel times

Given Annecy's position west of the Olympic area with few competition venues in Annecy itself, distances to reach most venues would be quite long for most client groups.

Travel times seem reasonable when motorways or high speed rail can be used. However, many venues would depend on narrow mountain roads. This would require very strong transport management measures, including the implementation of general traffic restrictions to cope with Games traffic.

Travel times from the Morzine venue to both the Annecy and the Mont Blanc Olympic Villages would be rather long (90 minutes and 70 minutes respectively).

The distance and travel time from Annecy to La Plagne (sliding venue) are 110 km / 125 minutes by bus.

### Transport organisation and traffic management at Games-time

The Annecy 2018 bid has two Olympic transport objectives:

- maximum use, with limited new developments, of motorways and mountain road networks
- development of rail transport in the Annecy - Mont Blanc - Geneva area.

Six new multimodal rail stations would provide Olympic and long-term legacy access to venues in Annecy and the Mont Blanc area.

Annecy states that its Olympic Transport Plan objectives are to provide 100% spectator access to competition venues by public transport. Given the current low use of rail and public transport in the region, conversion to 100% public transport could present challenges, particularly taking into account the dispersed Games venue and accommodation concept.

| ANNECY | | | |
|---|---|---|---|
| Distances and travel times | | Transport organisation and traffic management at Games-time | |
| Minimum | Maximum | Minimum | Maximum |
| 5.5 | 7.5 | 5.5 | 7.5 |

# Transport concept, Continued

**PYEONGCHANG**

### Distances and travel times

Distances and travel times within the Alpensia and Coastal zones, where most Olympic venues would be concentrated, would be very short for all client groups and often below 10 minutes.

Overall travel times from the Alpensia zone to all outlying venues would be less than 30 minutes (except Jungbong – 40 minutes). PyeongChang proposes a very compact Olympic transport concept.

### Transport organisation and traffic management at Games-time

PyeongChang has a well thought-out Olympic transport proposal fully coherent with its Games concept.

The new high speed Seoul-PyeongChang-Gangneung rail line would provide improved access from Seoul to the east coast of Korea.

Most transfers between Olympic venues would be by bus, on an improved regional road network.

| PYEONGCHANG | | | |
|---|---|---|---|
| Distances and travel times | | Transport organisation and traffic management at Games-time | |
| Minimum | Maximum | Minimum | Maximum |
| 8 | 9 | 8.5 | 9 |

---

**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Transport concept":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 8.0 | 8.8 |
| ANNECY | 5.5 | 7.5 |
| PYEONGCHANG | 8.3 | 9.0 |

# 8 → Safety and security

## Safety and security

**Introduction**

The Olympic Winter Games represent one of the largest security operations in the world. Preparation takes many years of planning and the installation and absorption of new technologies can be complex. Training and rehearsing operational plans and procedures are time-consuming. Security agencies must be capable of absorbing this level of activity. In the context of the Olympic Winter Games, the security operation includes the emergency services of the city/region/country that would respond to any critical incident threatening the safety or security of the population generally, including any person attending the Games. Safety and security also includes the management of critical incidents, civil disasters or other events that threaten the safety of the population and the consequence management arrangements and capabilities in place.

The human resources required for the security operation are very large and the personnel normally has to be deployed over an extended period of time, which could last for 50 days, 24 hours per day (from the date of the first “lock down” to the end of the Paralympic Games). Deployment on this scale has a significant impact on the city’s ability to provide normal, everyday law enforcement to the community.

The whole operation places the security forces of any country under considerable strain. The ability to withstand this pressure, respond to identified risks and prepare for critical incidents and their consequences over an extended time frame and theatre of operations, is an important requirement for Olympic Winter Games security.

The Olympic security operation assessment is based upon the potential performance of the security agencies proposed by the Applicant Cities. This is assessed for both the planning and operational period of the Olympic Winter Games.

Previous experience of the security forces in planning for and managing security operations for large scale sports and other events and the challenges that such environments present, are also taken into consideration.

In the challenging and uncertain world security environment, many countries have invested in training and equipment for security forces to combat the threat and incidence of terrorism.  This development has been taken into account in the overall grading of the assessment.

# Safety and security, Continued

**Introduction** (continued)

In addition, the following sub-criteria were taken into consideration:

a) The overall technical and professional competencies of the main security forces and the proposed command and control structure;

b) The existing investment in security and related technology and the proposals to improve in this area to meet the Olympic Winter Games security requirements;

c) The complexity of the proposed Olympic Winter Games "theatre of operations"* and the required security response.

* The theatre of operations refers to the entire Games geographic area of activities and all of the villages, venues, facilities, transportation systems and public places used to support the Olympic Games.

The amount of resources, logistic and technical support, adequately trained personnel and their deployment are all affected by the complexity of the overall proposals, including the geographical spread of venues and facilities, the terrain and the transport network.

Thus the overall complexity of a security planning and operational response for the proposed Olympic Games theatre of operations is given due consideration in the assessment and weighted accordingly.

In carrying out an assessment of the risk of terrorism in the Applicant Cities, the Working Group concluded that any city in the world can be subject to a terrorist attack either by local or international terrorist groups. The risk to Candidate Cities will need to be continuously monitored to take into account changing world circumstances.

The Working Group also took into account the fact that proposals for security operations in the build-up to and during the Olympic Winter Games can be amended more easily to meet the assessed threat than, for example, the provision of fixed Olympic Games infrastructure.

# Safety and security, Continued

**MUNICH**

Munich is regarded as a safe and secure environment for both residents and tourists.

The command and control structure is clear and the ultimate responsibility for Games security would reside with the national government through the Ministry of the Interior. The security forces gained valuable experience during the 2006 FIFA World Cup which was delivered without a major security incident.

The German security entities are well equipped with state-of-the-art communication systems and security technology.

The theatre of operations for security is concentrated around the two zones of Munich and Garmisch-Partenkirchen and the stand-alone venue in Königssee. The existing proposals appear appropriate from a security planning perspective.

| MUNICH | |
|---|---|
| Minimum | Maximum |
| 7.5 | 8.5 |

**ANNECY**

Annecy is regarded as a safe and secure environment for both residents and tourists.

The command and control structure is clear and overall responsibility for Games security would lie with the Head of State who would appoint a high-ranking official with authority over the security plan at all levels (from local to national). The security forces gained valuable experience during the 2007 IRB Rugby World Cup which was delivered without a major security incident.

The French security forces are well equipped with state-of-the-art communication systems and security technology.

The theatre of operations for security is relatively spread-out over a high number of stand-alone-venues. This could present challenges for resource deployment, logistics and operations.

The theatre of operations for Games security also includes Geneva, Switzerland, (arrivals and departures, transport and accommodation). Should Annecy be selected as a Candidate City, assurance would be required from the relevant Swiss authorities for security in Switzerland.

| ANNECY | |
|---|---|
| Minimum | Maximum |
| 7 | 8.5 |

# Safety and security, Continued

**PYEONGCHANG**

PyeongChang is regarded as a safe and secure environment for both residents and tourists.

The command and control structure is clear and the Prime Minister of Korea, through a Security Measures Committee, would have ultimate responsibility for Games security. The security forces gained valuable experience during the 2002 FIFA World Cup and the 2002 Busan Asian Games which were delivered without a major security incident.

The Korean security forces are well equipped with state-of-the-art security technology.

The theatre of operations for security is concentrated around the Alpensia Zone, the Coastal Zone, the Bokwang Phoenix Park cluster and the stand-alone-venue in Jungbong. The existing proposals appear appropriate from a security planning perspective.

| PYEONGCHANG | |
|---|---|
| Minimum | Maximum |
| 7.5 | 8.5 |

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**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Safety and security":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 7.5 | 8.5 |
| ANNECY | 7 | 8.5 |
| PYEONGCHANG | 7.5 | 8.5 |

# 9 → Experience from past sports events

## Experience from past sports events

**Introduction**

The Working Group assessed each Applicant City's experience from sports events held during the last ten years, with some consideration given to the organisational capacity of the country.

The assessment was based on the following two sub-criteria and weightings:

| | | |
|---|---|---|
| a) | General experience based on the number of major international sports events organised in the past ten years. | 40% |
| b) | Winter experience with an emphasis on international events in Olympic winter sports and multi-sports games organised in the last ten years. | 60% |

# Experience from past sports events, Continued

**MUNICH**

Germany has successfully hosted many major international sports events such as the 2006 FIFA World Cup and the 2009 IAAF Athletics World Championships, and the region of Bavaria has proven winter sports experience. In the past decade, the region has organised major international events in five of the seven Olympic winter sports (curling and ice skating not organised).

| MUNICH | | | |
|---|---|---|---|
| General experience | | Winter experience | |
| Minimum | Maximum | Minimum | Maximum |
| 9 | 10 | 9 | 10 |

**ANNECY**

France has successfully hosted many major international sports events such as the 2003 IAAF Athletics World Championships and the 2007 IRB Rugby World Cup, and the Rhône-Alpes region has proven winter sports experience. In the past decade, the region has organised major international events in five of the seven Olympic winter sports (curling and ice hockey not organised).

| ANNECY | | | |
|---|---|---|---|
| General experience | | Winter experience | |
| Minimum | Maximum | Minimum | Maximum |
| 9 | 10 | 9 | 10 |

**PYEONGCHANG**

Korea has successfully hosted major international sports events such as the 2002 FIFA World Cup and the 2002 Busan Asian Games, and the region of Gangwon has proven winter sports experience. In the past decade, the region has organised major international events in four of the seven Olympic winter sports (ice hockey, bobsleigh/skeleton and luge not organised).

| PYEONGCHANG | | | |
|---|---|---|---|
| General experience | | Winter experience | |
| Minimum | Maximum | Minimum | Maximum |
| 8 | 9 | 8 | 9 |

# Experience from past sports events, Continued

**Summary table** The following table lists the grades attributed to each Applicant City for the criterion "Experience from past sports events":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 9 | 10 |
| ANNECY | 9 | 10 |
| PYEONGCHANG | 8 | 9 |

# 10 → Finance

## Finance

**Introduction**

The aim of this criterion is to provide an overall assessment as to whether an Applicant City's intention to provide government funding, together with private sector commercial revenues would provide the financial support required to organise the 2018 Olympic Winter Games.

The financing of the major infrastructure required for the Olympic Winter Games has been taken into account under the following headings: General Infrastructure, Sports Venues and Olympic Village(s).

For the purpose of this assessment, the following two sub-criteria have been taken into consideration:

a) Government contributions and financial plan (information provided by the Applicant City) in relation to the country's financial ability to deliver (Coface Country Risk rating*).

b) Feasibility of revenue projections.

In addition to the above, the budgets of both phases of the bid process were also considered, although no grades were attributed.

As Applicant and Candidate Cities are required to present the IOC with detailed audited accounts at the end of the bid process, the IOC asks them to provide details of their budgets in their bid documents.

Bid expenditure budgets range from USD 6 million to USD 19.7 million for the Applicant City phase and from USD 14 million to USD 25.5 million for the Candidate City phase, with total bid budgets ranging from USD 21 million to USD 42.5 million.

# Finance, Continued

**a) Government contributions and financial plan in relation to the country's financial ability to deliver.**

Applicant Cities were requested to provide information about their overall financial plan for the Olympic Games together with potential government support in the following areas:

- provision of services (medical, security, transport, etc.)
- competition and non-competition venues
- infrastructure developments
- underwriting of a potential OCOG deficit

**MUNICH**

The Application File states that "the OCOG budget will be structured along the "traditional lines" with OCOG and non-OCOG expenditures divided into separate categories." Some temporary structures (speed skating, snowboard (half-pipe), biathlon and cross country venues and the Mountain Media Centre) would be partly financed by the OCOG budget.

Munich 2018 states that the federal, state and municipal governments have committed to finance all capital investments in venue and transport infrastructure as detailed in the Application File, together with the private sector. However, clarification would be required concerning the share of responsibility between the public and private sector.

The aforementioned public authorities have committed to providing a share of the financial resources necessary to host the Games and would provide all the resources required for holding safe and peaceful Games.

These commitments would be further defined by a Multi-Party Agreement in the Candidate City stage.

There is evidence of strong support from all public authorities for the bid. Should Munich be selected as a Candidate City, a clear delineation of the financial responsibilities between the various bodies would be required.

**ANNECY**

Annecy's OCOG budget would be financed mainly from the private sector. However, the budget would include a public subsidy covering two-thirds of the operational costs arising from the Paralympic Games. Some temporary structures (IBC, Mountain Media Centre and Media Village) would be financed by the OCOG budget.

The national government would cover any potential shortfall in the OCOG budget.

The public authorities commit to providing all services necessary for hosting the Games (security, rescue and medical services, as well as customs and immigration services) free of charge. This would also include making facilities owned by them available to the OCOG at no charge.

The Application File states that the public authorities would guarantee the successful completion for all required infrastructure projects.

# Finance, Continued

**PYEONGCHANG**

Whilst adopting the traditional OCOG and non-OCOG budget structure, PyeongChang 2018 is proposing a model through which much of the workforce required for the Games would be paid for by the public sector. The cost of these resources together with the Paralympic subsidy would make up 22.3% of the OCOG revenue budget. 77.7% of the OCOG budget would be financed by the private sector.

The national government would cover any potential shortfall in the OCOG budget.

PyeongChang 2018 also states that the national government would guarantee all necessary public services (such as security, medical, customs and immigration support) and construction costs for venues, access roads to venues and transport infrastructure (roads, airports and railroads).

The Gangwon Provincial Government would finance venue construction and the cost for access roads to venues.

The venue cities would guarantee construction costs for the ice event venues.

***Coface Country Risk Rating**

The Coface Country Risk Rating reflects the average level of short-term non-payment risk associated with companies in a particular country. It reflects the extent to which a country's economic, financial and political outlook influences companies' financial commitments. Coface ranks country ratings on seven risk levels (A1, A2, A3, A4, B, C and D) in the order of increasing risk.

Seven categories of risk are combined in order to determine an overall rating for each of the countries:

- Growth vulnerability
- Foreign currency liquidity crisis
- External over-indebtedness
- Sovereign financial vulnerability
- Banking sector's fragilities
- Geopolitical and governance vulnerabilities
- Companies' payment behaviour.

The respective Coface Country Risk Ratings are listed below in the order of drawing of lots:

| | |
|---|---|
| Germany (Munich) | A2 |
| France (Annecy) | A2 |
| Republic of Korea (PyeongChang) | A2 |

# **Finance,** Continued

**b) Feasibility of the revenue projections**

The feasibility of the revenue projections made by the Applicant Cities is graded as feasible or optimistic.

| Applicant City | Grade | Revenue Projection (in USD billion) |
|---|---|---|
| MUNICH | Feasible | 1.074 |
| ANNECY | Feasible | 1.13 |
| PYEONGCHANG | Feasible | 0.651* |

*This revenue projection seems feasible, but is on the low side to cover Olympic Games operating expenditure.

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**Summary table**

The following table lists the grades attributed to each Applicant City for the criterion "Finance":

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 6.7 | 8.6 |
| ANNECY | 6.9 | 8.5 |
| PYEONGCHANG | 6.9 | 8.3 |

# 11 → Overall concept

## Overall concept

**Introduction**

The Working Group concluded its assessment of the Applicant Cities with a general review of the concept proposed by each city for the organisation of the 2018 Olympic Winter Games.

This review took place after the assessment of all other criteria and the Working Group thus had the opportunity to confirm its general opinion of each city's overall Olympic concept.

A minimum and maximum grade was awarded to each city, as shown below:

| Applicant Cities | Minimum grade | Maximum grade |
|---|---|---|
| MUNICH | 8 | 9 |
| ANNECY | 4 | 7 |
| PYEONGCHANG | 8 | 9 |

# Conclusion

## Conclusion

The Olympic Movement is very pleased that Munich, Annecy and PyeongChang have applied to host the 2018 Olympic Winter Games. The Working Group recognises and appreciates the considerable effort made by these cities to prepare their responses to the IOC's Candidature Acceptance questionnaire.

In applying to host the 2018 Olympic Winter Games, these cities are seeking to host the largest and most complex winter sports event in the world as the Olympic Winter Games effectively constitute organising approximately 15 world championships simultaneously in multiple locations over 16 days.

The responsibility of the Working Group has been to provide a technical assessment and risk analysis regarding the potential of the 2018 Applicant Cities to host, organise and stage successful Olympic Winter Games in 2018 and, therefore, meet the qualification to be considered by the Executive Board as Candidate Cities.

In drawing its conclusions, the Working Group wishes to re-emphasize that its task is not to suggest any final judgement on which city should host the 2018 Olympic Winter Games.

The capability of a city to host successful Olympic Winter Games principally results from:

- its basic capacity to implement such a large and complex project in terms of infrastructure and resources;
- the concept which the city proposes for the Olympic Winter Games and the existence of a viable overall plan to implement the concept. Whilst the overall concept encompasses all aspects of Games planning and organisation the physical concept is key to determining the degree of risk involved and thus, the overall potential to host successful Games;
- the support which the project has from the general public, the public authorities and key stakeholders;
- the ability to deliver results in terms of organisation, planning and operational performance;
- the ability to achieve a high-quality outcome in relation to such factors as service standards, Olympic values and legacy; and
- the overall Olympic experience for all client groups but, in particular, the most important client of the Games, the athletes.

# **Conclusion,** Continued

The Working Group has reached the following conclusion which reflects the overall assessment of each city in relation to the 11 technical criteria discussed in this report.

In each case, the Applicant Cities are listed in the order of drawing of lots established by the IOC Executive Board on 10 December 2009.

The Working Group's task is to study a given project, to analyse the risks presented by this project and, finally, to determine whether the project, as presented, will result in successful Olympic Winter Games in 2018.

The Working Group believes that Munich and PyeongChang have the potential to host successful Olympic Winter Games in 2018.

With regard to Annecy, the Working Group is of the unanimous opinion that France and the Rhône Alpes Region have the potential to organise successful Olympic Winter Games. The project submitted to the IOC however presents a number of significant challenges and a higher degree of risk.

Annecy's proposal presents a very dispersed Olympic Games concept with 10 stand-alone venues and multiple athlete accommodation centres. This concept would result in a complex set of organisational, logistical and financial challenges for all client groups. The Working Group was particularly concerned regarding the "Olympic experience" for all client groups, especially the athletes.

Clearly, each of the cities that the Executive Board selects as a Candidate City will need to elaborate and refine its proposals in anticipation of the more detailed and comprehensive evaluation that will take place during the candidature phase.

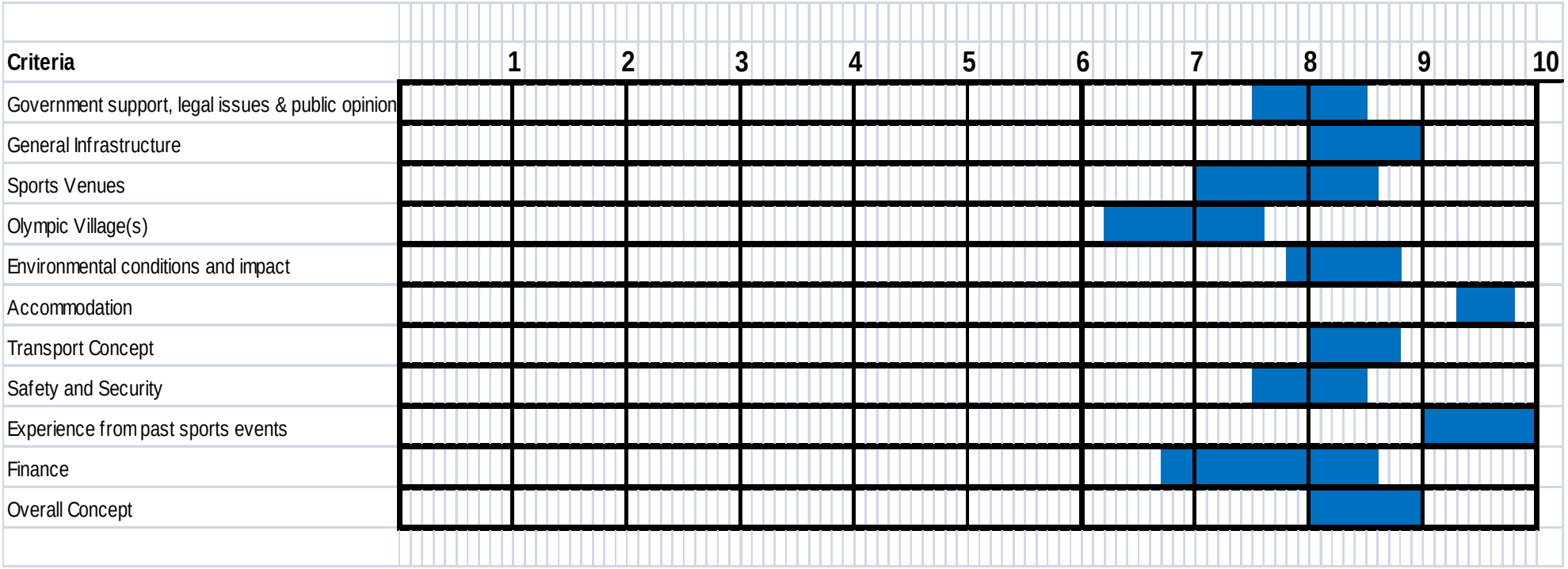
# Charts

## Charts


| Chart | | Page |
|---|---|---|
| 1. | Munich | 64 |
| 2. | Annecy | 65 |
| 3. | PyeongChang | 66 |

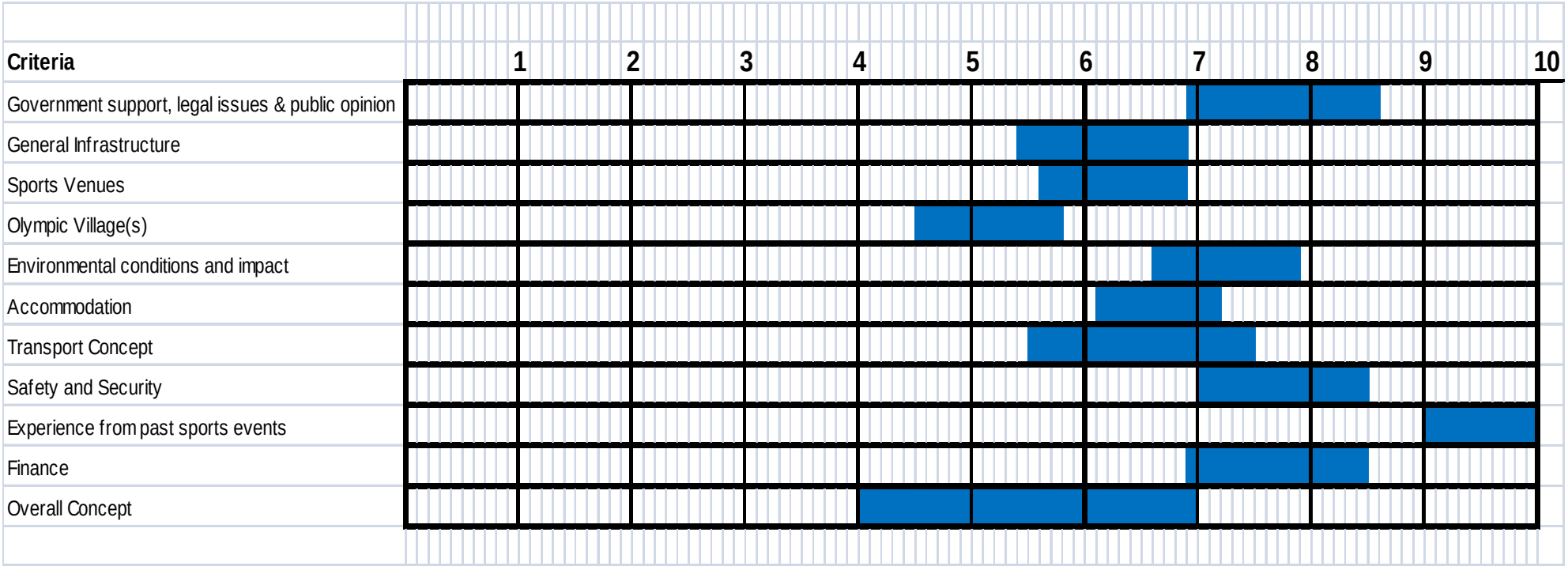
# Charts, Continued

## Munich



# Charts, Continued

## Annecy



# Charts, Continued

## PyeongChang

