# Sports Data Sheets **Badminton**

#### Introduction

The following sports data sheets are for use in conjunction with Sport England's 'Developing the Right Sports Hall' (DRSH) main document. They relate to Step 5 'Establishing the Project Brief' and identify the needs of the priority sport and the key secondary sports.

These sheets show the requirements for Badminton as the 'Priority Sport' at various levels of play and other 'Secondary Sports' that can fit into the same overall space. Layouts for 1, 2, 3, 4 and 5 courts have been included.

	Level of Play											
New Level of Play	International	Premier	Club	Community								
Category <sup>1</sup>	This category relates to the lowest level of International play <sup>2</sup>	This category relates a Premier / National League Club competing in regional or Inter county competitions	This category relates to a local club competing in District and County League competitions	This category relates to school and community use where there is no formal competitive structure / no specific need for space for officials or spectator accommodation								
Badminton equivalent <sup>3</sup>	International High Performance Centres	Inter-County Championships BADMINTON England Tournament Circuits Premier Club in a Performance Centre	Premier Club in a Community Badminton Network	Recreational Club								

#### Commentary

The sports data sheets use the NGB's requirements for the field of play. The additional space requirements for officials are indicated separately as 'optional'. Spectators zones for match play are not included and are assumed to be a site specific requirement. For further details of the requirements for badminton see the Badminton England (BE) website: <a href="http://www.badmintonengland.co.uk">http://www.badmintonengland.co.uk</a> and the Sport England design guidance note 'Badminton'. For further details of the requirements for 'secondary sports', see Appendix 8 of the main DRSH document for links to other NGB's websites.



#### **Key Issues**

- Space above court: No obstructions within a clear height zone above the principal playing area and extending 0.75 m beyond the side lines and 2.0 m beyond the back lines.
- Flooring: Vinyl point elastic over an area elastic base is the
  preferred playing surface (i.e. a combined-elastic floor). For
  alternative surfaces and performance criteria, see Table 4 of
  Sport England's design guidance note on 'Badminton'. Floor
  sockets to be flush with the floor surface.
- Walls / division curtains / blinds: Backgrounds to be a constant colour and have a light reflectance value (LRV) between 30 - 50%.
- Acoustics: Reverberation time to be 1.5 2.0 seconds at mid frequency.
- Lighting: No luminaires permitted above the court and a 2.0 m zone at the back of the court. Luminaires to be positioned centrally above the run offs between the courts. Any luminaires in the line of sight of players to be switched off. Windows to be screened off to avoid sun penetration and glare.
- Heating and ventilation: Temperature range 12 20°C (16°C preferred). Air velocities < 0.1 m/s or systems capable of being temporarily switched off by players.</li>

**Note:** For further details see Sport England's design guidance notes 'Badminton', 'Floors for Indoor Sports' and 'Artificial Sports Lighting'.

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<sup>&</sup>lt;sup>1</sup> New level of play categories for each sport as agreed by the NGBs and Sport England and applicable throughout this document.

<sup>&</sup>lt;sup>2</sup> For higher levels of international competition, such as major championships, the relevant NGB should be consulted at a very early stage as the requirements vary considerably.

<sup>&</sup>lt;sup>3</sup> For other sports, see Appendix 4 'Level of play categories for each sport' within main document

# Sports Data Sheets **Badminton**

<b>Badminton</b>	- Overview	Sou	ource of information: http://www.badmintonengland.co.uk http://www.sportengland.org/facilities_planning/design_and_cost_guid										nce.aspx
International	Premier		verall ace (m)										
10100	9100  N		cl. R/O	Principal playing area (m)			Run offs (m) R/O			Additional areas (m) T/O SS		Specif	ication
Line of division curtains  2000  Line of wall / 2000  adjacent court 2000  13400	Line of division curtains  1300  Line of division curtains  1300  1300  1500  1500  13400		L x W x H	Length	Width	Height	Ends	Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting
2000 2000 Cartains	1500 1500 and 1500 an	International	17.40 10.10 9.00	13.40	6.10	9.00	2.00	2.00	Sides: 2.00/3.00 Ends: - /4.00	Essential	Essential	Combined elastics	1000 lux 0.7 Emin / eav
9100 1500 1500	Community	Premier	17.40 9.10 9.00	13.40	6.10	9.00	2.00	1.50	Sides: 1.50/2.60 Ends: - /4.00	Optional	Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav
Line of division  1300  Line of wall / adjacent court 13400	Line of division 1200 Line of wall / adjacent court 13400	Club	17.40 9.10 7.50	13.40	6.10	7.50	2.00	1.50	Sides: 1.50/2.60 Ends: - /3.00	Optional	Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav
1500 1500 real rises	1500   1500   Curtains	Community	17.40 9.10 6.70	13.40	6.10	6.70	2.00	1.50	Sides: 1.50/2.40 Ends: - /3.00	Optional	Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav

# Sports Data Sheets **Badminton**

Badm	inton -	1 Court	Source of info	ormation:					england.co.u nd.org/facilit		g/design_an	d_cost_guidan	ce.aspx				
Communit	ty			Overall space (m)	17.4	17.40 x 9.10 x 6.70											
	9100					l playing	area (m)	R	lun offs (ı R/O	m)	Additional T/O	areas (m) S/S	Specif	ication			
131500 6100 1500				L x W x H	Length	Width	Height	Ends	Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting			
				17.40 9.10 6.70	13.40	6.10	6.70	2.00	1.50	1.50/ N/A	N/A	N/A	Combined, area or mixed elastics	500 lux 0.7 Emin / eav			
Secondary	Sports																
Sport	Number	Compliance	Level														
Basketball	0 court format	×	-	32.10 19.10 7.00	28.00	15.00	7.00	2.05	2.05	-	-	-	Semi-sprung wooden or synthetic	Same (500 lux)			
Indoor Cricket	0 lanes	X	-	33.62 12.72 7.70	31.62	3.66	7.70	1.00	1.00	3.40 for basket - ball goal	-	-	Mats req/d (to ECB standards)	Higher (750 lux)			
Volleyball	0 court format (lengthways)	×	-	24.00 15.00 7.50	18.00	9.00	7.50	3.00	3.00	6.00 / 6.00	-	-	Area elastic	Same (500 lux)			
Volleyball Training	0 court format (transverse)	×	-	20.00 15.00 7.50	18.00	9.00	7.50	1.00	3.00	6.00 / 6.00	-	-	Area elastic	Same (500 lux)			
Basketball Training	Rings on side walls	<b>✓</b>	Training	- - -													

# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

## Badminton - 1 Court (cont/d)

Notes of key issues for community level badminton

· See 'Key Issues' on page 1 cover sheet

#### **Secondary Sports**

Layouts for other sports within a community badminton space of 17.40 x 9.10 x 6.7 m

Netball Basketball Indoor Cricket Volleyball

cannot be
 accommodated in a single
 court badminton space

**Volleyball Training** (transverse)

# Basketball Training

- can be
  accommodated in a
  single court
  badminton space
- number and location to project specific requirements

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# Sports Data Sheets **Badminton**

Badm	inton - 2	2 Court		Source of info	ormation:					england.co.u nd.org/faciliti		g/design_ar	ıd_cost_guidan	ce.aspx		
Communit	ty / Club			Overall space (m)	17.4	17.40 x 16.70 x 6.70 / 7.50										
	<b></b>		incl. R/O	Principal playing area (m)			Run offs (m)			Additiona T/O	l areas (m) S/S	Specification				
1500	L x W x H	Length	Width	Height	Ends	Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting					
16700			17.40 16.70 6.70/7.50	13.40	6.10	6.70 7.50	2.00	1.50	1.50/2.40 1.50/2.60	Optional	Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav			
Secondary	Sports															
Sport	Number	Compliance	Level													
Basketball	0 court format	×	-	32.10 19.10 7.00	28.00	15.00	7.00	2.05	2.05	-	-	-	Semi-sprung wooden or synthetic	Same (500 lux)		
Indoor Cricket	0 lanes	X	-	33.62 12.72 7.70	31.62	3.66	7.70	1.00	1.00	3.40 for basket - ball goal	-	-	Mats req/d (to ECB standards)	Higher (750 lux)		
Volleyball	0 court format (lengthways)	×	-	24.00 15.00 7.50	18.00	9.00	7.50	3.00	3.00	6.00 / 6.00	-	-	Area elastic	Same (500 lux)		
Volleyball Training	0 court format (transverse)	×	-	20.00 15.00 7.50	18.00	9.00	7.50	1.00	3.00	6.00 / 6.00	-	-	Area elastic	Same (500 lux)		
Basketball Training	Rings on side walls	<b>✓</b>	Training	- - -												

## **Sports Data Sheets Badminton**

### **Primary Sport / Secondary Sport Issues**

## Badminton - 2 Court (cont/d)

Notes of key issues for a two court community / club level badminton space

Basketball

See 'Key Issues' on page 1 cover sheet

#### **Secondary Sports**

Layouts for other sports within a two court badminton space of 17.40 x 16.70 x 6.70 / 7.50 m

Netball

- cannot be accommodated in a two court badminton space

**Indoor Cricket** 

**Volleyball Training** (transverse)

#### **Basketball Training**

- can be accommodated in a two court badminton space
- number and location to project specific requirements

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Volleyball

# Sports Data Sheets **Badminton**

Badm	inton -	3 Court	Source of info	ormation:					england.co.u nd.org/faciliti		g/design_ar	ıd_cost_guidan	ce.aspx		
Communit	Community / Club							x 6.70 / 7.50							
	1500 1500	incl. R/O	Principal playing area (m)			Run offs (m) R/O			Additiona T/O	l areas (m) S/S	Specification				
	17400		2000 13400	L x W x H	Length	Width	Height	Ends	Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting	
24300				24.30 17.40 6.70/7.50	13.40	6.10	6.70 7.50	2.00	1.50	1.50/2.40 1.50/2.60	Optional	Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav	
Secondary	Sports														
Sport	Number	Compliance	Level												
Basketball	0 court format	×	-	32.10 19.10 7.00	28.00	15.00	7.00	2.05	2.05	-	-	-	Semi-sprung wooden or synthetic	Same (500 lux)	
Indoor Cricket	0 lanes	×	-	33.62 12.72 7.70	31.62	3.66	7.70	1.00	1.00	3.40 for basket - ball goal	-	-	Mats req/d (to ECB standards)	Higher (750 lux)	
Volleyball	1 court format (lengthways)	<b>~</b>	Community / Club	24.0/24.0 15.0/17.0 7.50/7.50	18.00	9.00	7.50	3.00	3.00	6.00 / 6.00	2.00 (Club)	-	Area elastic	Same (500 lux)	
Volleyball Training	0 court format (transverse)	X	-	20.00 15.00 7.50	18.00	9.00	7.50	1.00	3.00	6.00 / 6.00	-	-	Area elastic	Same (500 lux)	
Basketball Training	Rings on side walls	<b>✓</b>	Training	- - -											

# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

### Badminton - 3 Court (cont/d)

Notes of key issues for a three court community / club level badminton space

- See 'Key Issues' on page 1 cover sheet.
- Hatched areas indicate space which is in excess to secondary sport requirements. In some cases, this can provide improved circulation and space for spectators and wheelchair users.
- Community level badminton height of 6.7 m can accommodate volleyball at community level (see below) but with restricted headroom (below 7.5 m required) subject to agreement / conditions of use.

Basketball

#### **Secondary Sports**

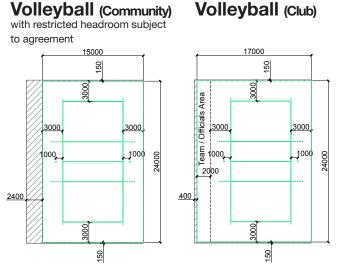
Netball

Layouts for other sports within a three court badminton space of 24.30 x 17.40 x 6.70 / 7.50 m

**Indoor Cricket** 

Layouts for other sports within a tiffee court bauminton space of 24.30 x 17.40 x 0.70 / 7.30 if

- cannot be accommodated in a three court badminton space



#### Volleyball Training (transverse)

- cannot be
accommodated in a
three court badminton
space unless it is made
wider and longer

# Basketball Training

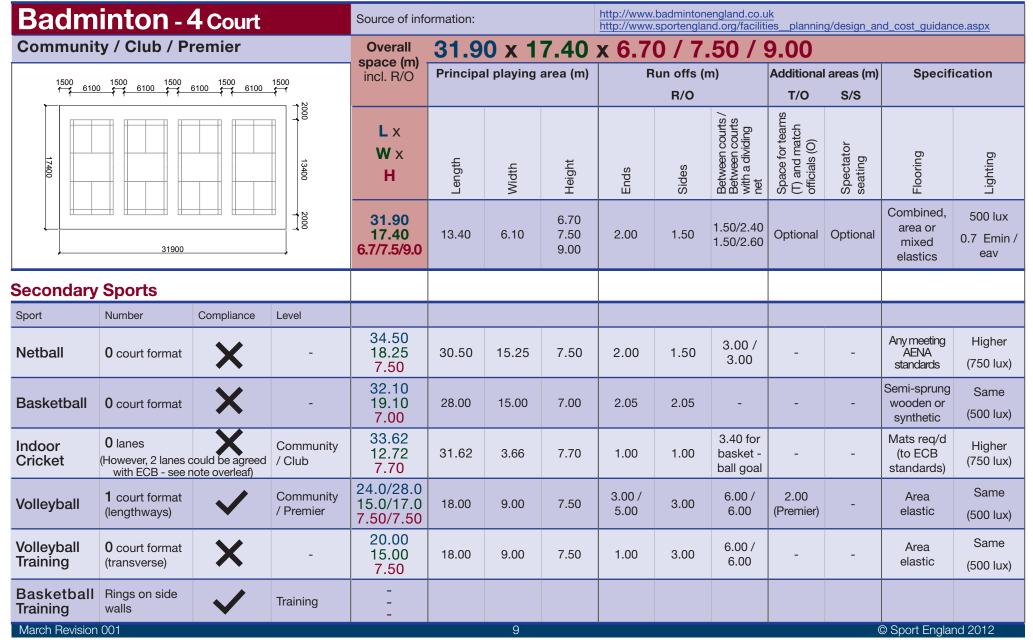
- can be accommodated in a three court

badminton space

 number and location to project specific requirements

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# Sports Data Sheets **Badminton**



# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

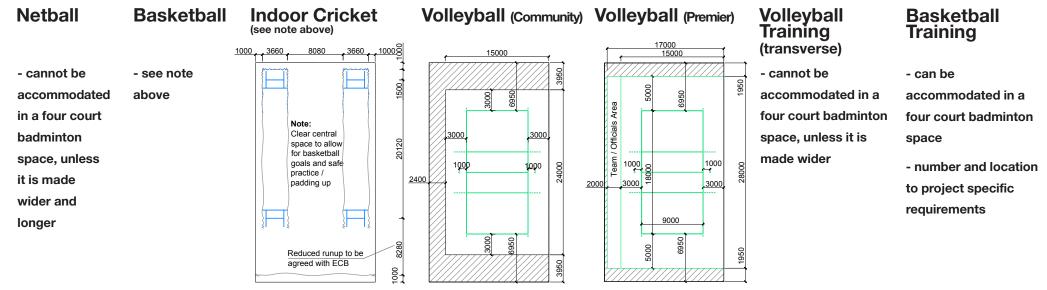
### Badminton - 4 Court (cont/d)

#### Notes of key issues for a four court badminton space

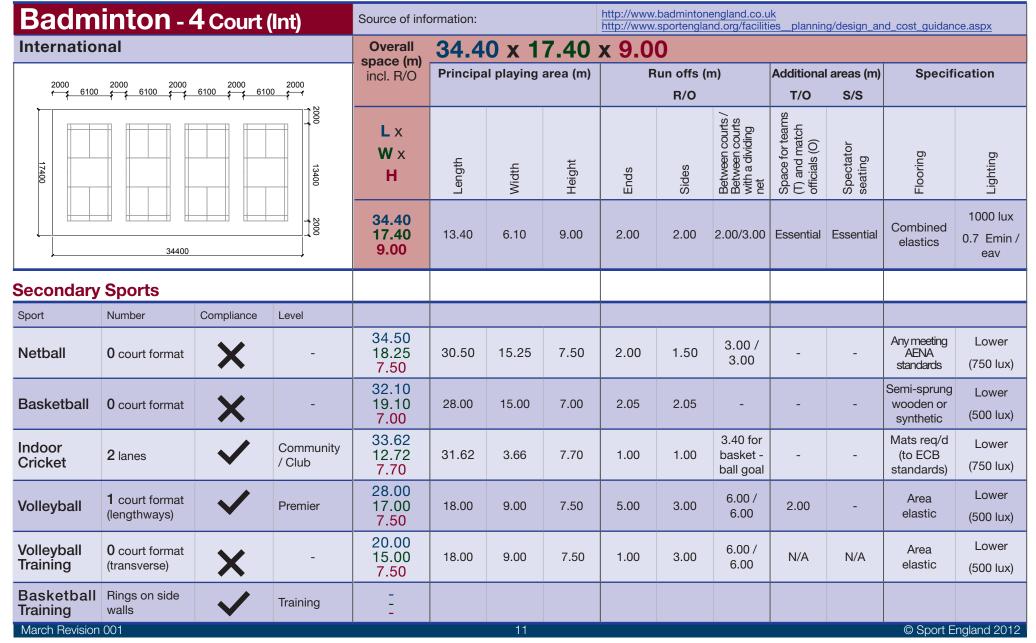
- See 'Key Issues' on page 1 cover sheet
- Hatched areas indicate space which is in excess to secondary sport requirements. In some cases, this can provide improved circulation and space for spectators and wheelchair users.
- The space cannot accommodate a full size 28.0 x 15.0 m basketball court and run off's. However, the rules can allow reduced court and run off sizes - see England Basketball rules.
- Community level badminton height of 6.7 m can accommodate Volleyball at community level (see below) but with restricted headroom (below 7.5 m required) subject to agreement / conditions of use.
- Indoor cricket: A reduced runup length (as indicated below) could be agreed with the ECB on a project by project basis (see ECB TS3 guidance note). However, lighting requirements for indoor cricket exceed those of badminton at community, club and premier levels of play, as indicated. Court space around the nets is
- also an important consideration. For instance, 2 lanes with adequate space around for additional safe practice / padding up can be preferable to 4 lanes with insufficient space for safe padding up and other practice.
- The minimum safety margins indicated between the cricket practice nets and walls should be increased if basketball training rings are fitted to the side walls see the ECB TS3 document for further advice on recommended clearances.

#### **Secondary Sports**

Layouts for other sports within a four court badminton space of 31.90 x 17.40 x 6.70 / 7.50 / 9.00 m



# Sports Data Sheets **Badminton**



# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

### Badminton - 4 Court International (cont/d)

Notes of key issues for a four court international badminton space

- See 'Key Issues' on page 1 cover sheet.
- Hatched areas indicate space which is in excess to secondary sport requirements. In some cases, this can provide improved circulation and space for spectators and wheelchair users.
- For competition play, no allowance has been made for any officials beyond the end run off zones.
- The space cannot accommodate a full size 28.0 x 15.0 m basketball court and run off's. However, the

- rules can allow reduced court and run off sizes see England Basketball rules.
- The 17.4 m width accommodates two indoor cricket lanes with a clear central zone for potential basketball goals. (See ECB TS3 document pages 6 and 7 for criteria). Court space around the nets is also an important consideration. For instance, 2 lanes with adequate space around for additional safe practice / padding up can be preferable to 4 lanes with insufficient space for safe padding up and other practice.
- The minimum safety margins indicated between the cricket practice nets and walls should be increased if basketball training rings are fitted to the side walls see the ECB TS3 document for further advice on recommended clearances.

#### **Secondary Sports**

Layouts for other sports within a four court international badminton space of 34.40 x 17.40 x 9.00 m

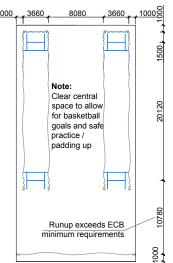
#### Netball

#### **Basketball**

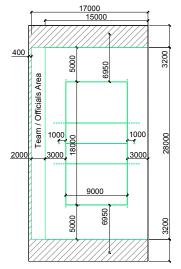
- see note above

- cannot be
accommodated in
a four court
international
badminton space,
unless it is made
wider and longer

### **Indoor Cricket**



#### Volleyball (Premier)



#### Volleyball Training (transverse)

- cannot be
accommodated in a
four court
international
badminton space,
unless it is made
wider

#### Basketball Training

- can be
accommodated in a
four court
international
badminton space

 number and location to project specific requirements

# Sports Data Sheets **Badminton**

<b>Badm</b>	inton -	5 Court		Source of info	ormation:			http://www.badmintonengland.co.uk http://www.sportengland.org/facilitiesplanning/design_and_cost_guidance.aspx							
Communit	ty / Club / P	remier	Overall space (m)	39.5	0 x 1	7.40	x 6.7	0 / 7	.50 / 9	9.00					
1500 150 6100 to	1500 1500 1500 1500 1500 1500 1500 1500					Principal playing area (m)			Run offs (m)			Additional areas (m)		ication	
17400	L x W x H	Length	Width	Height	Ends	R/O Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting				
39500				39.50 17.40 6.7/7.5/9.0	13.40	6.10	6.70 7.50 9.00	2.00	1.50	1.50/2.40 1.50/2.60		Optional	Combined, area or mixed elastics	500 lux 0.7 Emin / eav	
Secondary	Sports														
Sport	Number	Compliance	Level												
Netball	0 court format	×	-	34.50 18.25 7.50	30.50	15.25	7.50	2.00	1.50	3.00 / 3.00	-	-	Any meeting AENA standards	Higher (750 lux)	
Basketball	0 court format	×	-	32.10 19.10 7.00	28.00	15.00	7.00	2.05	2.05	-	-	-	Semi-sprung wooden or synthetic	Same (500 lux)	
Indoor Cricket	2 lanes	<b>~</b>	Community / Club	33.62 12.72 7.70	31.62	3.66	7.70	1.00	1.00	3.40 for basket - ball goal	-	-	Mats req/d (to ECB standards)	Higher (750 lux)	
Volleyball	1 court format (lengthways)	<b>~</b>	Community / Premier	24.0/28.0 15.0/17.0 7.50/7.50	18.00	9.00	7.50	3.00 / 5.00	3.00	6.00 / 6.00	2.00 (Club)	-	Area elastic	Same (500 lux)	
Volleyball Training	0 court format (transverse)	×	-	20.00 15.00 7.50	18.00	9.00	7.50	1.00	3.00	6.00 / 6.00	N/A	N/A	Area elastic	Same (500 lux)	
Basketball Training	Rings on side walls	<b>/</b>	Training	- -											
March Revision	001				1	13		•			1		© Sport E	ngland 2012	

# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

### Badminton - 5 Court (cont/d)

Notes of key issues for a five court badminton space

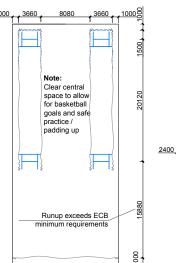
- See 'Key Issues' on page 1 cover sheet
- Hatched areas indicate space which is in excess to secondary sport requirements. In some cases, this can provide improved circulation and space for spectators and wheelchair users.
- The space cannot accommodate a full size 28.0 x 15.0 m basketball court and run off's. However, the rules can allow reduced court and run off sizes - see England Basketball rules.
- Community level badminton height of 6.7 m can accommodate volleyball at community level (see below) but with restricted headroom (below 7.0 m required) subject to agreement / conditions of use.
- The 17.4 m width accommodates two indoor cricket lanes with a clear central zone for potential basketball goals. (See ECB TS3 document pages 6 and 7 for criteria). However, lighting requirements for indoor cricket exceed those of badminton at community, club and premier levels of play, as indicated. Court space
- around the nets is also an important consideration. For instance, 2 lanes with adequate space around for additional safe practice / padding up can be preferable to 4 lanes with insufficient space for safe padding up and other practice.
- The minimum safety margins indicated between the cricket practice nets and walls should be increased if basketball training rings are fitted to the side walls see the ECB TS3 document for further advice on recommended clearances.

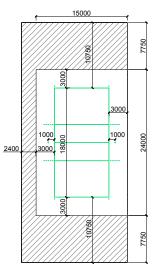
#### **Secondary Sports**

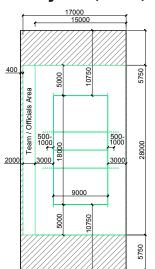
Layouts for other sports within a five court badminton space of 39.50 x 17.40 x 6.70 / 7.50 / 9.00 m

# Netball Basketball Indoor Cricket Volleyball (Community) Volleyball (Premier)

- cannot be accommodated in a five court badminton space, unless it is made wider - see note above







#### Volleyball Training (transverse)

- cannot be
accommodated in a
five court badminton
space, unless it is
made wider

#### Basketball Training

- can be

accommodated in a five court badminton

space

 number and location to project specific requirements

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# Sports Data Sheets **Badminton**

<b>Badm</b>	inton -	5 Court	(Int)	Source of info	http://www.badmintonengland.co.uk http://www.sportengland.org/facilitiesplanning/design_and_cost_guidance.a										
Internation	nal		Overall space (m)	42.50 x 17.40 x 9.00											
				incl. R/O	Principa	l playing	area (m)	Run offs (m)			Additiona	l areas (m)	Specification		
2000 6100 20	00 2000 6100	2000 200	6100					R/O			T/O S/S				
17400	L x W x H	Length	Width	Height	Ends	Sides	Between courts / Between courts with a dividing net	Space for teams (T) and match officials (O)	Spectator seating	Flooring	Lighting				
42500				42.50 17.40 9.00	13.40	6.10	9.00	2.00	2.00	2.00/3.00		Essential	Combined elastics	1000 lux 0.7 Emin / eav	
Secondary	Sports														
Sport	Number	Compliance	Level												
Netball	0 court format	×	-	34.50 18.25 7.50	30.50	15.25	7.50	2.00	1.50	3.00 / 3.00	-	-	Any meeting AENA standards	Lower (750 lux)	
Basketball	0 court format	×	-	32.10 19.10 7.00	28.00	15.00	7.00	2.05	2.05	-	-	-	Semi-sprung wooden or synthetic	Lower (500 lux)	
Indoor Cricket	2 lanes	<b>~</b>	Community / Club	33.62 12.72 7.70	31.62	3.66	7.70	1.00	1.00	3.40 for basket - ball goal	-	-	Mats req/d (to ECB standards)	Lower (750 lux)	
Volleyball	1 court format (lengthways)	<b>~</b>	Premier	28.00 17.00 7.50	18.00	9.00	7.50	5.00	3.00	6.00 / 6.00	2.00	-	Area elastic	Lower (500 lux)	
Volleyball Training	0 court format (transverse)	×	-	20.00 15.00 7.50	18.00	9.00	7.50	1.00	3.00	6.00 / 6.00	N/A	N/A	Area elastic	Lower (500 lux)	
Basketball Training	Rings on side walls	<b>✓</b>	Training	=											
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# Sports Data Sheets **Badminton**

### **Primary Sport / Secondary Sport Issues**

## Badminton - 5 Court International (cont/d)

Notes of key issues for a five court international badminton space

- See 'Key Issues' on page 1 cover sheet.
- Hatched areas indicate space which is excess to secondary sport requirements. In some cases, this can provide improved circulation and space for spectators and wheelchair users.
- For competition play, no allowance has been made for any officials beyond the end run off zones.
- The space cannot accommodate a full size 28.0 x
   15.0 m basketball court and run off's. However the

- rules can allow reduced court and run off sizes see England Basketball rules.
- The 17.4 m width accommodates two indoor cricket lanes with a clear central zone for potential basketball goals. (See ECB TS3 document pages 6 and 7 for criteria). Court space around the nets is also an important consideration. For instance, 2 lanes with adequate space around for additional safe practice / padding up can be preferable to 4 lanes with insufficient space for safe padding up and other practice.
- The minimum safety margins indicated between the cricket practice nets and walls should be increased if basketball training rings are fitted to the side walls see the ECB TS3 document for further advice on recommended clearances.

#### **Secondary Sports**

Layouts for other sports within a five court international badminton space of 42.50 x 17.40 x 9.00 m

#### Netball

in a five court

international

space, unless it

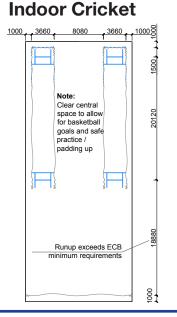
is made wider

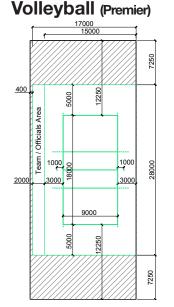
badminton

#### **Basketball**

- cannot be - see note a accommodated

#### - see note above





#### Volleyball Training (transverse)

- cannot be
accommodated in a
five court
international
badminton space,
unless it is made
wider

#### Basketball Training

- can be
accommodated in a
five court
international

badminton space

 number and location to project specific requirements

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