

Appendix 4 - Minimal Impairment Criteria for Playing Standing Badminton with Impairment at the Upper Limb

Eligible Impairment Type	Examples of health conditions	Sport Class - SU5	
		Non-playing arm	Playing arm
Hypertonia	Cerebral palsy, stroke, acquired brain injury, multiple sclerosis	Spastic/ataxic/athetoid hemiplegia/ diplegia/ monoplegia with moderate involvement of upper limb but very mild involvement of lower limbs. Demonstrate a limitation in function based on spasticity, ataxia, athetosis or dystonic movements while performing during match or training.	If only playing arm impairment then same criteria as for non-playing arm.
Ataxia	Ataxia resulting from cerebral palsy, brain injury, Friedreich's ataxia, multiple sclerosis, spinocerebellar ataxia	Clear evidence must include spasticity grade 1-2 in the affected upper limb. A clear difference needs to be demonstrated between active ranges of motion vs. passive. In addition, a clear difference between fast PROM against slow PROM needs to be demonstrated.	
Athetosis	Cerebral palsy, stroke, traumatic brain injury	Plus Upper motor neuron reflex patter must be demonstrated: Clear unilateral clonus 4 beats or more	

Eligible Impairment Type	Examples of health conditions	Sport Class - SU5	
		Non-playing arm	Playing arm
		Noticeably brisk reflexes or clear difference in reflexes non-playing vs. playing arm Dysdiadokokinesis Dyssynergia and dysmetria In arm monoplegia the elbow must be involved with limitations in ROM. For ataxia and athetosis the Player must have clear signs of cerebellar dysfunction with incoordination of the upper limb.	
Limb deficiency	Amputation resulting from trauma or congenital limb deficiency (dysmelia)	To be eligible to compete in this class Players must have ONE of the following patterns of impairment: 1. Unilateral amputation, through or above wrist (i.e., no carpal bones present in affected limb). 2. Unilateral dysmelia in which the length of the affected arm measured from acromion to fingertip is equal in length or shorter than the combined length of the humerus and the radius of the unaffected arm.	To be eligible to compete in this class Players must have ONE of the following patterns of impairment: i) complete amputation of at least 3 digits excluding the thumb from at least the metacarpophalangeal joint, than no strapping of the racket to the hand allowed ii) complete amputation of at least 4 digits excluding the thumb from at least the metacarpophalangeal joint than strapping of the racket allowed

Eligible Impairment Type	Examples of health conditions	Sport Class - SU5	
		Non-playing arm	Playing arm
			iii) amputation of thumb and thenar eminence, iv) equivalent congenital deformity.
Impaired Passive Range of Movement (PROM)	Arthrogryposis, ankylosis, post burns joint contractures	A unilateral upper limb impairment of PROM that meets THREE (3) of the following criteria. i) shoulder abduction <60° available in the range ii) shoulder limitation of PROM in the plane of forward flexion (≤60°) iii) shoulder limitation of PROM in the plane of extension (≤20°) iv) elbow extension deficit of > 70° v) ankylosis of the elbow >80° flexion <i>Wrist arthrodesis or ankylosis is not eligible on the non-playing arm side.</i>	Meets ONE (1) of the criteria i) shoulder abduction < 90° ii) shoulder forward flexion of < 90° iii) shoulder horizontal extension of < 40° iv) shoulder external rotation (when arm abducted to 90°) achieving < 60° v) elbow extension deficit of ≥45° or ankylosis in any position vi) wrist ankylosed in ≥50° flexion or extension. vii) any four digits with ≤10° of flexion / extension at the metacarpophalangeal joint.

Eligible Impairment Type	Examples of health conditions	Sport Class - SU5	
		Non-playing arm	Playing arm
Impaired Muscle Power	Spinal cord injury, muscular dystrophy, brachial plexus injury, Erb palsy, polio, spina bifida.	A unilateral upper limb impairment of muscle power that meets THREE (3) of the following criteria: i) shoulder abduction loss of 3 muscle grade points (i.e., grade 2 shoulder abductors). ii) shoulder forward flexion loss of 3 muscle grade points (i.e., grade 2 shoulder forward flexion). iii) shoulder extension loss of 3 muscle grade points (i.e., grade 2 shoulder extension). iv) loss of 2 muscle grade points in elbow flexion AND extension (i.e., grade 3 elbow extensors and flexors).	Meets ONE (1) of the following criteria: i) shoulder abduction loss of 3 muscle grade points (i.e., grade 2 shoulder abductors). ii) shoulder forward flexion loss of 3 muscle grade points (i.e., muscle grade of two). iii) shoulder internal rotation loss of 3 muscle grade points (i.e., muscle grade of two). iv) shoulder external rotation loss of 3 muscle grade points (i.e., muscle grade of 2). v) elbow flexion loss of 3 muscle grade points (i.e., muscle grade of 2). vi) elbow extension loss of 3 muscle grade points (i.e., muscle grade of two).