

Scottish Swimming

National Squad Programme:

Criteria for Selection

Introduction

The Scottish Swimming Performance Plan was rolled out in 2005, including the selection policies for the National Squad Programme, where swimmers were selected for the appropriate squad via the Gold, Silver and Bronze selection process. Through the implementation of the policy, and the flexibility that was allowed during this process at the start of the 2005/06 season, a number of problems were identified, thus highlighting a need for a review of the system of criteria.

In addition, there was significant pressure in terms of timescales for the review to be undertaken, with any necessary amendments made and published prior to the commencement of the Scottish National Age Group Championships on 30th March 2006.

Background

Many of the country's leading coaches had observed that the current system of selection demonstrated a lack of equality between gender and ages as well as no easily identifiable underlying philosophy or explanation of what the current system was based on.

This was proven in numerous ways throughout the selected squads for the 2005-06 season, including:

- Twelve [12] girls and no [0] boys selected for the Scottish Youth Squad despite several high quality talented boys achieving well in the relevant age groups.
- A general bias towards girls throughout the structure, i.e. the girls times are significantly easier than boys times, particularly in the 11-15 age groups.
- A number of the country's highest achieving elite (international) senior level swimmers only achieving the 'Silver' level criteria.
- More swimmers achieved the 'Silver' / Area Institute selection criteria than the available funded places for that programme.
- The 'Bronze' level criteria did not deliver as many swimmers as anticipated in order to put in place an effective 'District Regional Programme'.
- The lack of enough swimmers achieving the 'Bronze' standard led to each of the four Districts applying criteria in four separate ways when the intention was to have one system across the country.

The Need

Based on the above information, it was clear that the selection criteria for Scottish Swimming's national squad programmes needed:

- To be clear and transparent;
- To be easily understood by swimmers, coaches, parents and administrators;
- To utilise objective criteria throughout but retain some subjective assessment where obvious anomalies occur;
- Be based on real, accurate, justifiable and explainable statistical data;
- This data to be based on actual rates of progression of age group and senior swimmers;

The Philosophy

Scottish Swimming is part of British Swimming and many of the principle targets used by Scottish Swimming are aligned with wider issues falling under the auspices of swimming in Great Britain, e.g. achievement at British Championships, selection for European Junior Championships, and selection for the Olympic Games.

It is, therefore, entirely sensible that the philosophy behind the proposed new set of times be based on achievement at British level and the historical data of swimming results in Great Britain.

For this reason, an analysis of the data in the British swimming all-time ranking lists was carried out. The authors tracked the performances for all ages (from 11 to 18, plus Open age) across all competition events (long course).

Performances ranked tenth [10th] and one hundredth [100th] in the all-time lists were used as the guidelines. Tenth was used as a guide to very high level achievement within each age but without being affected by any 'freak' or 'extraordinary' talented performers or performances that may sit within the top few rankings. One hundredth place was used as a good measure of high level depth within each age band.

This data was then examined to determine the relative standards of Scottish swimmers, at what level Scotland should pitch its various squads, and the rate of progression of swimmers between age groups.

As the data used is based on literally millions of swims from all ages of swimmers across all events over an extended period of time (year range 1995 – 2005) it can be relied upon to give accurate information on the standards of British

swimmers, and consequently, the relative strengths and weaknesses of Scottish swimmers within that.

Selection Criteria

The principles of the previous system whereby swimmers achieve at three different levels (Gold-Silver-Bronze) and have to achieve varying numbers of events at each age and level to be selected is retained. Furthermore, through the use of the Gold, Silver & Bronze system, swimmers not attaining the very highest standard at any given stage, will be picked up within one of the other categories, thus allowing swimmer development to take place at an individual rate. In addition, the philosophy of the selection policy promotes an inclusive approach to swimmer development rather than exclusive.

Numbers Required

The target number of swimmers for each of the levels is identified within the Scottish Swimming Performance Plan, and therefore the following targets were used:

Level	Target Numbers	Squad
Gold: 17-20+ yrs	*20	Senior / **SIS
Gold: 14-16 yrs	*20	Youth / **AIS
Silver: 17-20 yrs	*20	Youth / **AIS
Silver: 13-16 yrs Bronze: 17-20 yrs	*80	Youth Development
Bronze: 11-16 yrs	*600-800	District Regional

* The numbers identified are guidelines and not absolutes. If, however, the number of swimmers achieving selection standards is not sustainable, Scottish Swimming reserves the right to limit numbers

**Subject to discussion and agreement with Scottish Institute and Area Institute.

It is important that all swimmers receive the support that they require and therefore In the case of exceptional circumstances -eg top level performances, injury or illness – the Performance Director, on discussion and agreement with the National Coach, can place a swimmer within the appropriate level within the National Programme.

At this point it is critical to highlight that the numbers of swimmers that will reach each level of the programme is entirely controlled by a combination of where the

qualifying times are set, and the criteria requirements within each age band / level (i.e. how many, and which times are needed).

Regardless of the standards within the country, by adjusting these factors accordingly, virtually any number of swimmers could be attained at each level. However, setting the times and criteria to achieve a specific target is not easy, and requires careful consideration of many different issues. These include:

- Current standards of swimmers within the country
- The numbers and distribution of gender and ages within the country
- The available competitions that can be used for qualifying and the events they contain for each age group

These issues must then be considered and balanced in conjunction with a desire to fulfil the key principles of long term athlete development.

Level and Ages

Taking into account the different maturation rates between males and females, and a philosophy of not exposing high achieving age group swimmers to too much support too early, it is recommended that swimmers are able to attain the three different levels (Gold-Silver-Bronze) of achievement at the following ages:

Boys	Girls
Gold @ 15 yrs+	Gold @ 14 yrs+
Silver @ 14 yrs+	Silver @ 13 yrs+
Bronze @ 11 yrs+	Bronze @ 11 yrs+

Number of Times Required

It is widely recognised in long term athlete development planning that successful senior swimmers invariably underwent a good background of multi-event aerobic training in their formative years. In order to promote this practice among Scottish swimmers and coaches it is recommended that swimmers are required to achieve selection times in one or more 200 metre or longer events from ages 11 through to 15. From 16 years onwards, swimmers are able to achieve the selection times in any event distance. Please note also that swimmers will only be able to achieve times in 50m events from age 16 upwards.

Age	Gold	Silver	Bronze
20	1	1	2
19	1	1	2
18	1	2	3
17	1	2	3
16	2	2	3
For 11-15 years selection events must include 1 swim from 2 of the following 3 categories: Freestyle, Form, I.M.			
15	3 (min 2 @ 200+)	3 (min 2 @ 200+)	3 (min 2 @ 200+)
14	Girls: 4 (min 1 @ 200 and 1 @ 400+) Boys: N/A	4 (min 1 @ 200 and 1 @ 400+)	4 (min 1 @ 200 and 1 @ 400+)
13	N/A	Girls: 4 @ 200+ (min 1 @ 400+) Boys: N/A	4 @ 200+ (min 1 @ 400+)
12	N/A	N/A	3 @ 200+ (min 1 @ 400+)
11	N/A	N/A	2 @ 200+

Selection Competitions

In order to be successful at International level, swimmers must be able to achieve their best performance in a single swim on a given day. This is promoted by limiting the selection opportunities the further up the programme the swimmer achieves. However, the philosophy of the 'Bronze' level is to attain high numbers of swimmers to take part in the District Regional Programme and thus, no restriction on meets is put in place for this level.

Age	Meets where you can achieve criteria
11-16 Bronze	Any accredited meet (Short Course or Long Course)
13-16 Silver 17-20 Bronze	District Championships, Scottish & British National Championships, other meets agreed in advance with Director of Performance (Short Course or Long Course)
14-20 Gold 17-20 Silver	Scottish & British National Championships, International events, other meets agreed in advance with Director of Performance (Long Course ONLY)

The selection process would be managed by Scottish Swimming through the use of the Hy-Tek system. It is anticipated that all clubs will progress towards using the mentioned system and to this end, Scottish Swimming has implemented an

incentive scheme over the past nine months to encourage clubs to do so. Swims from the following events (where Hy-Tek is in use) would automatically be entered in to the system:

- District Championships (where Hy-Tek is in use)
- Scottish National & Age Championships
- Scottish Short Course Championships
- British National Age/Youth Championships & Trials
- National Squad International meets
- Major Championships – Olympics, World, European/Junior Championships, Commonwealth Games

All other selection times would be sent to Scottish Swimming through the swimmers club by an identified date. Submissions would preferably be in the Hy-Tek format, and those clubs with the Hy-Tek system will be sent the selection times in this format. A short course version of the selection times will also be produced.

The Times

World Top 15 Standards and the Ages of Swimmers at that Level

One of Scottish Swimming's key performance targets is to achieve at least 8 swimmers who are ranked in the top 15 in the World Long Course rankings (2 per nation).

Thus, the current world top 15 time was examined for years 2004 and 2005 and an average determined. The average age of swimmers ranked in this world top 15 was also calculated in order to provide a guide to how long it should take to develop a swimmer to that level.

Scottish Swimming has set the upper age band of qualifying for its national squad programme as '20 years and over'. One of the primary objectives of the programme is therefore to have swimmers reach the top 15 in the world standard at some point when aged 20 or older.

It was therefore important to set the fastest time in the squad structure (20+ Gold time) slightly below, but still within striking distance of the world top 15 standard. It is reasonable to expect senior athletes to be aiming to achieve 1% improvement in performance in a season and therefore 1% below the top 15 time was used as the baseline for the 20+ Gold standard.

However, the average age of swimmers attaining the top 15 standard was then analysed and factored into the equation for determining the actual 20+ Gold time.

In events where the average age of the world top 15 was 20 years or below, the 20+ Gold time has been set at 1% lower than the world top 15 time. This ensures that Scottish swimmers who are becoming close to world elite level in their 20's are picked up by the highest level of the programme in order to help them make the next step up to top 15 achievement.

In events where the average age of the world top 15 was 21 or older, an additional 0.25% has been added for every year that the average age is above 20. For example, if the average age is 22 the 20+ Gold time required is 1.5% below the world top 15 level ($1 + 0.25 + 0.25 = 1.5\%$).

This ensures that the programme recognises that it takes longer to reach the top in some events over others by factoring in the uppermost standard being set further away from the world top 15 time.

For interest, the oldest average age was obtained in the men's 100 freestyle at 25.13 years and the youngest was the women's 400 IM at 18.67 years. Thus, in general terms, coaches and swimmers who want to reach the world top 15 need take into account that (on average) it may take 6.5 years longer to do so in the men's 100 freestyle than the women's 400 IM.

By taking this into account in the uppermost times and maintaining the principle throughout all the times for all levels, Scottish Swimming ensures that its programme is reflective of actual progression and standards for every event at world level.

Rates of Progression Between Ages

Using the data collected from the All-Time British Swimming Ranking Lists, the actual rates of progression of swimmers between all age groups for all events were calculated.

As anticipated these showed that progression is quicker the younger the age, slowing down as swimmers get older, and that the rate of progression for females is lower than that for males (for all age groups). In fact, in some female events, at older age groups, the standards actually regressed slightly between years. It was hypothesised that this is due to less total swimmers taking part the older the age, and thus less depth in the historical standards.

It would not be useful for Scottish Swimming to reflect these rates of progressions exactly, particularly as the aim is to keep swimmers advancing at a faster rate than the British average. However, the identified progression rates were used as a guideline for this programme but were amended to maintain progression between all age groups but with this rate gradually reducing the older the age band, and with male rates progressing faster than those for females.

Differences Between Gold, Silver & Bronze Standards

Determining the differences between the times at each of the three identified levels (Gold, Silver, Bronze) is a matter of taking into account the target numbers set by the Governing Body.

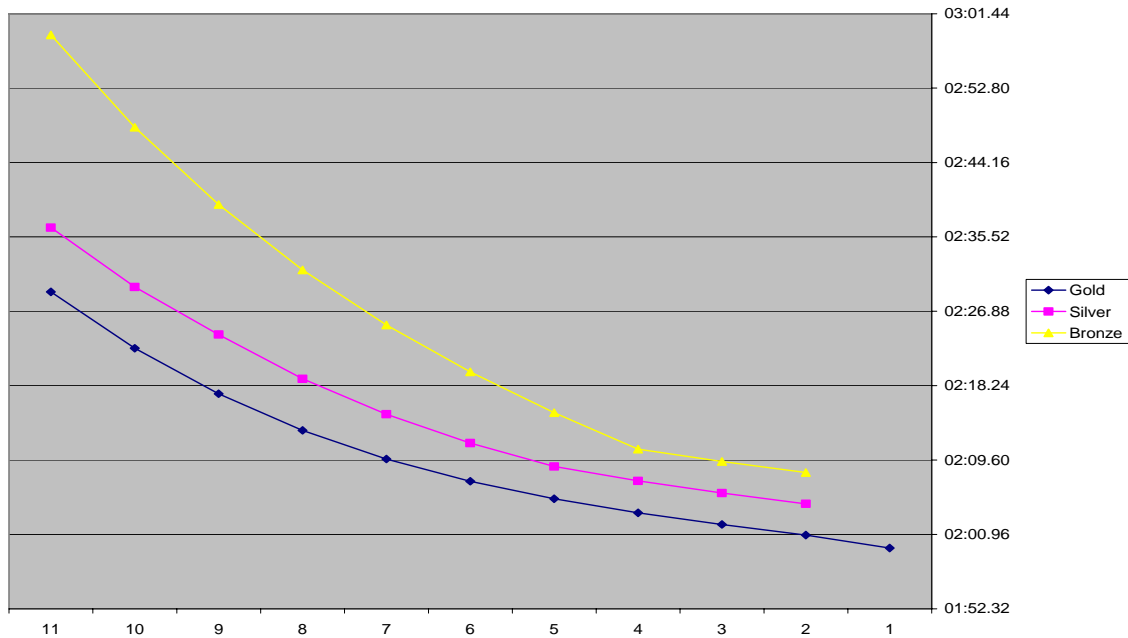
Gold to Silver

After considering the current standards of swimmers in Scotland it was determined that for the most part the Silver standard should be set 3% slower than the Gold time. However, in order to promote the development of aerobic training for the 200 metre and longer events, at the younger age groups the standard has been set slightly lower than 3%.

Gold to Bronze

It is essential that there are high levels of numbers achieving the (11-16 years) Bronze standards (600-800 total). This equates to approximately 50-60 boys and 50-60 girls from each single year age band. In order to achieve this sort of number, taking into account the events required for achievement (largely 200's and longer events), the numbers of swimmers currently swimming those events, and the availability to swim those events at meets across the country, it was necessary to set the initial Bronze times a long way outside the Gold standard

and thus on first appearance to coaches and swimmers, they may appear quite easy. However, as the age increases, the difference between Gold and Bronze is gradually reduced until it reaches 6% at the older ages. An example of this can be seen in the graph below:



The graph shows the progression rates for the female 200m freestyle where the points on the x axis represent the various age bands (11 = 11 years, 2 = 20+ years, 1 = World Top 15 time).