

CONFIDENTIAL

UK Skills Board
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Paper 1

Official report on the
34th International
Youth Skill Olympics

St Gallen, Switzerland
4-7 July 1997

Item 5.1 - Official report on the 34th International Youth Skill Olympics, St Gallen, Switzerland, 4-7 July 1997

- 1 The official report, attached at Annex A, covers all major aspects of the competition in Switzerland and the necessary preliminary activity associated with the selection and preparation of the UK team. It records a well-organised international competition, a committed and on the whole very professional UK team of competitors and experts and the excellent and much appreciated support given by the Official Delegate, the Technical Delegate, the two official observers and the team leaders. The report also identifies a number of lessons for the future that need to be addressed before the next international competition in 1999 at Montreal.
- 2 Preparations for the Skill Olympics cover a period of at least 18 months during which a very large number of organisations and individuals take part in a complex and demanding process aimed at raising the public profile of training and the importance of a highly skilled workforce. Industry's commitment to this work is evidenced by the £5 millions which was the total estimated cost incurred by industry in support of the regional and national competitions leading up to the Skill Olympics, together with the cost of providing additional preparatory training and releasing competitors and experts for the period of the international competition.
- 3 The overall average score of UK team in St Gallen equalled the international standard and all concerned deserve congratulations on their achievements. However, the performance of our team is still uneven. Although skills competition organisers were asked to nominate only those individuals whom they considered capable of reaching the international standard, a number failed to do so which meant that despite the achievements of the competitors who were awarded one gold, two silver and one bronze medals and eleven diplomas of excellence, the team's average score was lower than it might have been.
- 4 A comparison of the results gained since 1991, when UK SKILLS first entered a team for the Skill Olympics, shows that further improvement is needed before the UK moves significantly up the international league table.

Year	Place	Countries	Trades	UK Competitors	Average overall score	Position
1991	Amsterdam	24	36	29	497	12
1993	Taipei	24	38	31	496	13
1995	Lyon	28	37	25	501	12
1997	St Gallen	30	38	24	500	14

[Note: 500 points denote the minimum international standard. The average score of the top country, Liechtenstein (with 5 competitors) was 528]

- 5 The report makes clear the considerable improvement that has taken place in the vital areas of selection and preparation of the team (competitors and technical experts) but there is still more to be done, especially with regard to the training of experts, and this must remain a priority during the next two years. The publication of the code of practice in 1994, the introduction of the UK SKILLS' seal of approval, awarded to skills competitions meeting the code and the decision not to select competitors for the Skill Olympics unless they come through an approved national competition, has helped to ensure that competitors are chosen from a wider pool after proving their abilities under rigorous competitive conditions; this is particularly evident from the success of those competitors whose route to the national finals was through regional competitions.
- 6 Once a competitor has been selected there is still the need for additional preparatory training. Increased employer and industry sector commitment to skills competitions is vital to establish the required climate but the main burden of developing and monitoring special training programmes falls on the UK SKILLS' appointed technical experts. The two-day development conference for experts and the new training development group (TDG) played a major role in helping to prepare the experts for their duties, both before and during the Skill Olympics. The report identifies several areas in which further improvements are required, and these will be addressed during the coming months. The revised format for the team briefing weekend was also seen as an improvement and further changes will be made in the light of the comments received.
- 7 Whilst national coverage of the Skill Olympics and of the UK team remains too small, although the quality has improved significantly, it was encouraging to see the number of visitors from employers, colleges TECs, ITOs, training organisations, other industry bodies and the press who visited the competition and no doubt helped to generate the considerable level of publicity given to the UK team through local, regional and trade media. It was especially pleasing to welcome the Minister with responsibility for lifelong learning to St Gallen and to witness his undoubted enthusiasm for skills competitions as an aid to excellence in vocational skills.
- 8 The Board is invited to comment on the attached official report and to advise on further action to achieve greater success at future Skill Olympics.

The first part of the report deals with the general situation of the country and the progress of the work. It is followed by a detailed account of the work done during the year, and a summary of the results. The report is divided into two main parts, the first of which deals with the general situation of the country and the progress of the work, and the second with the detailed account of the work done during the year and the summary of the results.

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Item 5.1 - Official report on the 34th International Youth Skills Olympics, St Gallen, Switzerland, 4 - 7 July 1997

1. Introduction

- 1.1 The 34th International Youth Skill Olympics were held at the OLMA Exhibition Halls, St Gallen from 4 to 7 July 1997. A total of 516 competitors from 31 countries took part. The competition was organised by the Canton of St Gallen with the support of the City and with sponsorship and materials support by companies and organisations throughout Switzerland.
- 1.2 UK SKILLS entered a team of 24 competitors in 23 trades (Appendix 1). The UK team was the seventh largest to take part. The competitors were supported by 22 technical experts (one having to pull out at the last minute for personal reasons) and two team leaders. The Chairman of UK SKILLS and UK Official Delegate, Sir John Cassels CB, attended as well as the Technical Delegate, Mr Jim Hammer CB, and there were two UK official observers, Mr Mike Nixon, Chief Executive of the North London Training and Enterprise Council, and Miss Patricia Snell OBE, Chief Executive of UK SKILLS.
- 1.3 The UK team was awarded one gold medal (Bricklaying), two silver medals (Automotive Mechanics and Information Technology), and one bronze medal (Joinery). In addition, the team members were awarded eleven Diplomas of Excellence (awarded to non-medal winning competitors whose overall mark reaches the agreed international standard of 500 points). Whether they gained medals or not, the competitors gave their all and no more could have been expected of them, whether in terms of effort or determination particularly in the face of perhaps inevitable setbacks. In the seriousness with which they faced the competition and in their mature and self-disciplined behaviour, they were excellent ambassadors for the UK. Overall, the UK team was placed 14th in terms of average score per competitor; the British score was 500 (see Appendix 2 for overall results). Thirteen of the 24 competitors achieved the international diploma standard.
- 1.4 It is sad and embarrassing to record however that there was not a single UK competitor in any of the mainstream engineering trades, mainly because there is now no national engineering competition and for the first time possibly ever, there were no competitors in Men's or Ladies' hairdressing, in which the UK has consistently won medals, because of the failure of SkillHAIR to organise a competition, although it is the body which is authorised to do so by UK SKILLS.

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- 1.5 The following report based on observations, comments and suggestions from the Technical Delegate, the official observers, the technical experts, the team leaders and competitors themselves has been prepared for the confidential information of the Board.
- 1.6 In the interests of brevity, the trades are sometimes referred to by the international skill number, the key to which is given in Appendix 2.

SELECTION, PREPARATION AND ADMINISTRATIVE ARRANGEMENTS

2. Competitor selection

- 2.1 The basis for the selection of competitors has significantly improved in that UK SKILLS now only accepts as potential competitors those who emerge from competitions run by organisations who meet the standards of good practice laid down in the code of practice and hold a UK SKILLS national seal of approval.
- 2.2 Some of the competitions such as those for construction and electrical skills are long established with national competitions following regional heats and possibly some local pre-selection. The automobile trades were selected for the first time from a national competition which included the four international skills. Information Technology made massive strides with no fewer than 10 regional competitions leading to the final.
- 2.3 Nevertheless there is a very great deal of work still to be done. In one case, namely Mechatronics, it was only the determination and immense efforts of a few people which enabled a competition to be held and competitors to be selected and in the UK Fine Jewellery competition the national selection was made from only a handful of entrants.
- 2.4 **The most notable lesson, however, to emerge from this year's event was that all four medal winners came from competitions with regional heats as well as a national final, as also did one of those placed fourth, the stonemason.** This therefore further justifies UK SKILLS' policy of promoting such truly national competitions.
- 2.5 A UK SKILLS representative, usually one of the team leaders, again participated in the final selection procedure for every trade. His role was to assess competitors' broader suitability as a team member and, if possible, their ability to stand up to competitive pressure, as well as to assess employer and family support. The procedure was confirmed as being valuable and necessary, although the UK SKILLS representatives did not have occasion formally to raise serious objection to any selected finalist. Two competitions trained up their two leading finalists before selecting the one to compete internationally.

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- 2.6 As last time, the competition organisers were asked to certify that the competitor they had nominated was capable of achieving the international standard, and those whose competitors failed to reach the 500 level are being asked to comment on why this should have been.
- 2.7 Although the average team score reached the 500 international standard, with more than half the competitors awarded medals or diplomas, in two competitions the score was less than 450 which significantly depressed the UK's average, although in one case (4) there were significant equipment problems.
- 2.8 Reference has already been made to the absence of UK competitors in engineering and hairdressing, although it is to be hoped that this can be rectified in time for Montreal in 1999.

3. Competitors' qualifications

Every competitor held a relevant and recognised qualification. Nine of the team of 24 held an S/NVQ, seven of these at level 3 or above.

4. Technical experts' preparation

- 4.1 The benchmarking study, undertaken in 1994, highlighted the importance of technical experts being carefully selected and well prepared for their role. Of the 23 experts, nine were new to the task. To assist in their preparation a training development group (TDG) was established, initially consisting of Peter Neate, an independent consultant and former technical expert, Sefton Davies, an independent consultant specialising in personal and interpersonal skills, Laurie Croft, Director of Training at the JIB for Plumbing, and Dennis Knowles of Centrex and a former technical expert. One of the team leaders, Archie Sharkie, joined the group when its remit was broadened to include the preparation of competitors.
- 4.2 All experts were required, in conjunction with national competition organisers, to manage the training and preparation of their competitor from selection for the UK team until the international competition. In order to prepare them for this role, an experts' development conference took place over two days in July 1996 using the excellent facilities provided by Centrex near Telford. The TDG provided invaluable advice and assistance in the preparation and conduct of a completely new programme broken down into specific sessions where necessary for new or experienced experts. The programme allowed for much more interactive participation and, for the first time at this stage, advice in the use of personal and interpersonal skills, a logical requirement in this phase of the experts' preparation. The programme was also designed bearing in mind the requirements of the subsequent programme for the team briefing nine months later (see paragraph 6.6 below).

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- 4.3 To assist in monitoring training and the passage of information, experts were split into industry sectors, each with a sector representative (Vehicle Engineering, Engineering Services, Construction, Consumer Services and Electrical and Electronics). Most sectors met more than once during the period of preparation for the Skill Olympics and these meetings were used to discuss concerns and issues relating to preparation of competitors. Sector representatives kept in touch with their experts to varying degrees and although geographical factors were a limitation, contact was maintained by telephone and letter. This system has not worked entirely satisfactorily and is under review for future competitions.

5. Competitors' preparation and training

- 5.1 A draft document was prepared by the Training Development Group from which each expert produced a comprehensive preparation programme for competitors and for their employers, colleges and families. This document provided all necessary information and advice required in the preparation of the competitor. The standard of these programmes was generally satisfactory but it is intended to seek ways of ensuring a more uniform and better quality for the future.
- 5.2 Experts also produced a training timetable in co-operation with the competitor, his employer and relevant college authorities. The content and duration of these timetables varied and the time off the job ranged from a matter of days to several months. In general the standard of the programmes and the commitment of experts was high, use was made of outside agencies, other employers and local colleges for additional training, and efforts were made to ensure that competitors gained experience with relevant tools and materials.
- 5.3 A skills profiling pilot study, to consider how competitors manage the project and the pressures of national competitions was undertaken by four national competitions, the purpose being to provide a basis for training for the Skill Olympics. The project has received general support and the paperwork will be refined. Thereafter the study will be circulated to other national skills competitions who will be encouraged to take it on board. This should assist in making training more specific to the needs of the individual competitor.
- 5.4 The majority of employers are extremely supportive and generous in allowing time off for additional training and most of the team (80%) were highly satisfied. However, it has to be reported that one employer not only required recompense for the time lost by his competitors' participation, but demanded a 10% mark-up on top, payable in advance, before he would release the individual. He was one of three employers with whose support competitors did not appear satisfied.

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- 5.5 Competitors were generally very happy with the assistance provided by their technical expert prior to the competition although two were unhappy with the advice provided on technical aspects. Of these two trades, Agricultural Mechanics and Car Painting, the latter was included as an official trade for the first time and this was the first UK entry. Nevertheless, both cases will be investigated. Competitors' satisfaction with the progress of their training was monitored by the team leaders both during the course of the team briefing in April 1997 and about a month before departure for the Skill Olympics.

6. Team briefing

- 6.1 Yet again we are extremely grateful to the Construction Industry Training Board (CITB) in providing us with the facilities of their Training Centre at Bircham Newton, giving us the opportunity to bring together the competitors and technical experts for an intensive training programme in early April. The programme retained many successful elements from previous events but the TDG were largely responsible for introducing some most successful new elements.
- 6.2 The competitors arrived 24 hours before the experts and, on the first evening, were immediately involved in an exercise designed by CITB which proved highly successful in team-building and highlighting the need for work process management. The following morning, a programme of activities took place, designed and supervised by CITB staff to develop team spirit and encourage physical stamina. Thereafter, subjects covered included developing learning skills, confidence building and stress management. A briefing was also held for the team leaders. On the evening of the arrival of the experts, a dinner was held for nearly 100 people including the Education and Employment Minister, James Paice, and other invited guests.
- 6.3 Considerable attention had been paid to developing the experts' programme to encourage more involvement by the experts themselves and to improve its relevance. This was helped by having covered subjects not directly related to the Skill Olympics at the development conference held the previous year. This certainly seemed to work well. More joint sessions took place, where competitors and experts were encouraged to work together, and the subject matter for discussions was made much more specific, from which both parties stated they gained a great deal. Ample time was also provided for experts and competitors to review training progress.

7. Travel arrangements

- 7.1 Thanks to sponsorship from Air UK, over half the complete team were able to fly to Zurich from Stansted at very competitive rates while the remainder travelled from Heathrow on a group booking made with British Airways. The experts' party departed on 27 June, the competitors on 30 June, both groups returning on 11 July.

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- 7.2 A reception was held in London on the evening before the departure of the competitors hosted by the Sheraton Park Tower, the employers of the competitor for Restaurant Service. Overnight accommodation was arranged in central London through a travel agent. The selected accommodation was not ideal and arrangements will be reviewed for future teams.
- 7.3 Travel within the UK was arranged by individuals apart from those travelling from Scotland and Northern Ireland for whom connecting flights were booked. It was considered impractical to book coaches to take competitors to two different airports, and this resulted in baggage having to be handled over unacceptable distances. Arrangements will be reviewed for the future.
- 7.4 Several items of luggage were delayed on outgoing flights and, on one of the return flights, 12 items of hold luggage followed on a subsequent flight which resulted in some competitors not receiving it until 48 hours later. Travel insurance by means of a block policy was satisfactorily arranged.

8. Accommodation

- 8.1 UK experts were accommodated in the Hotel Continental, situated about five minutes' journey from the centre of St Gallen, using the highly efficient, regular bus service which could be used free. Unfortunately, in spite of trying to avoid such a situation, technical delegates were all accommodated some distance away which complicated the arrangements to enable Jim Hammer to be available each evening for consultation with the experts. However, experts were very pleased with the hotel, its location, helpful staff and facilities which helped to develop a team spirit among the experts not achieved to such a degree before. The journey to the competition venue using the bus service took no more than 20 minutes.
- 8.2 UK competitors were accommodated at the Hotel Krone, in Gais, a village a short distance outside St Gallen. The team leaders and competitors had nothing but praise for this family-run hotel so much so that they were happy to remain in the hotel and the local village rather than spend evenings in St Gallen when the situation allowed.

9. Uniforms

- 9.1 Uniforms were provided for all competitors and first time experts. The type chosen was similar to that provided for the two previous competitions and thus allowed experienced experts to use that previously provided. Shoes were provided by Clarks International, and Marks & Spencer and Alexandra Workwear each agreed sponsorship to a fixed amount towards the purchase of blazers, shirts and trousers.

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- 9.2 Dealing with different partial sponsors and suppliers is a situation which is far from ideal. Efforts will continue to be made to seek a single sponsor to cover the complete costs of providing the whole team with uniforms. It is also for consideration that uniform workwear should be provided.

10. **Tool boxes**

- 10.1 Following Parcelforce's sponsorship two years ago, the company kindly agreed to transport all tool boxes from their Birmingham depot to and from St Gallen without charge to competition organisers. This saved a substantial expense. UK SKILLS briefed all experts on packing, labelling and paperwork, and arrangements generally worked well. Particular thanks go to the staff of Parcelforce's Birmingham depot, including the two driving teams involved.
- 10.2 Experts regarded the personal tools and equipment that competitors brought as satisfactory except 34, where the new expert will recommend more equipment in the future. One competitor did not bring the calculator he needed (37) and another failed to bring a spare drive belt which broke (12). In the absence of a UK expert, the other experts and the UK support team went to considerable efforts to rectify this, arranging for the loan of an equivalent Swiss machine. The checking of such matters is an essential responsibility of the expert.

11. **Funding**

- 11.1 Under the code of practice, skills competition organisers are responsible for meeting the full costs of sending their competitors and experts to the Skill Olympics. These costs include travel, accommodation, subsistence and insurance. The threat of withdrawal of the competitor in the event of non-payment made an impression and all costs were paid to UK SKILLS before the team went to St Gallen.
- 11.2 The costs for the UK team came to approximately £85,000, which has been recovered from skills competition organisers. UK SKILLS' costs (including staff time and contributions in kind) amounted to a further £85,000. Total expenditure directly attributable to the St Gallen Skill Olympics was therefore in the region of £170,000.
- 11.3 This sum, however, takes no account of the costs incurred by industry in the organisation of national skills competitions from which competitors were selected, carrying out the preliminary training programmes and the competitors'/experts' wages during their absence. This has been calculated at approximately £5 million and it is this figure that properly demonstrates industry's commitment to IYSO.

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THE COMPETITION

12. Jury panels

- 12.1 The jury panel for each trade comprises the experts, the chief expert and one of the technical delegates who acts as jury president. The fairness and efficiency with which an individual skill competition is managed depends very much on the quality and skill of the chief expert and jury president. On this occasion the IVTO adopted a much improved procedure for the appointment of chief experts, whereby all members were asked to nominate, together with a CV, those whom they regarded as suitable. The final decision was then taken by the whole international Technical Committee at the meeting in St Gallen five months before the competition on the basis of experience, known managerial effectiveness, age, willingness to innovate etc. Subsequently each technical delegate was sent a copy of the revised competition rules, a test paper which they were asked to ensure that each expert completed, and an answer sheet for the use of the jury president.
- 12.2 In addition, instead of just having a short briefing session for chief experts, on this occasion the Chairman of the Technical Committee held 1½ hour simultaneously translated briefing meetings for all 500 experts in three sessions which not only emphasised key points in the rules, and especially the changes, but also explained the simplified marking scheme and drew attention to the obligation on jury panels very carefully to review, amend and update the technical description before selecting those projects which had been brought for adding to the bank and use in Montreal in 1999. Unfortunately, not all experts were able to hear the briefing as not enough headsets were available.
- 12.3 Whilst some UK experts commented that their chief expert was even so unaware of the rules, the majority were satisfied with the quality and efficiency of both the chief experts and jury presidents. Several experts commented that they felt that the UK experts were the best briefed of any and this put them in a strong position to query incorrect decisions and have them put right. The six chief experts who were regarded as inadequate were criticised on the grounds of partiality, ignorance of the rules or lack of leadership skills.
- 12.4 Most experts were satisfied with their jury presidents but two were regarded as too weak and two as too authoritative and interfering. One did not apparently know the rules.
- 12.5 Once again UK experts have been required to note the names of those experts whom they regard as unsuitable ever to be chief expert and this will assist in the briefing of the Technical Delegate on nominations for Montreal.

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12.6 In the absence of any UK competitors on this occasion, the UK Technical Delegate volunteered to be Jury President for trades 29 and 30 (Ladies' and Men's Hairdressing) which in the past have been notoriously disputatious. There were strong Norwegian chief experts in each trade and three experts were excluded during the course of the competition for various offences. A signal has thus been sent to all concerned which augurs well for the fairness of the competition in Montreal when it is to be hoped that the UK will again be represented.

12.7 At the meeting of the Technical Committee in October 1996, the UK successfully argued that the previous rule allowing time extensions other than for equipment failures should be removed since it was incompatible with work process management (WPM). In St Gallen, this did not lead to any renewed pressure to reintroduce it, although, in spite of WPM, a number of UK competitors in fact failed to finish.

13. **Project selection for St. Gallen**

13.1 At the meeting in South Africa in 1996 the Technical Committee adopted a new procedure whereby the experts who came to St Gallen would bring and select projects for banking for the Montreal competition. The projects to be used at St Gallen would be developed by 'independent experts' on the basis of past projects or those already in the bank. Although many expressed reservations, the advantages were seen as enabling experts to arrive a shorter time ahead of the competition since the selection procedure would have been completed. Secondly, to enable the host country only to provide such materials as were actually necessary for the project to be done, rather than have to scurry round at the last moment, and thirdly, to encourage the production of more imaginative and challenging projects since the experts would not be judging them against the known strengths and weaknesses of their particular competitor on that occasion.

13.2 It was also seen as possible to instruct the 'independent expert' to exploit to the full the Technical Committee's injunction to ensure that projects were more innovative, included problem solving and thinking skills and fully reflected current technology and market requirements. Whilst the new procedures did not affect those trades such as 4, 9, 16, 17 and 33 which already have their own system for project preparation, experience in relation to other trades was mixed.

13.3 It was apparent that, in selecting 'independent experts', the Secretariat had, in practice, approached the relevant Swiss trade organisations with the request that suitable projects be prepared but that they be kept confidential and specifically not disclosed to experts or competitors involved in the international competition. It unfortunately became apparent that, not only in trades 29 and 30 (which resulted in disciplinary action) but in three or four other trades, prior knowledge of the Swiss expert and/or competitor was strongly suspected. Whilst the majority of UK experts were satisfied with the quality of the project and the range and

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relevance of skills tested, quite a number were severely criticised as being inadequate in that they lacked marking schemes or that they tested too narrow a range of skills, deficiencies which would not have occurred had the projects been prepared and chosen by experienced experts. Whilst all the projects prepared by special procedures were regarded as satisfactory, quite a number were criticised on grounds of actual or suspected prejudice through prior disclosure.

14. **Workshop conditions and equipment**

The Swiss organisers clearly had gone to immense pains to obtain the most generous sponsorship which enabled them to provide the most up to date brand new machines and equipment in every trade. The cost of this had amounted to some 30m Swiss Francs (some £10 million). Not surprisingly the vast majority of experts expressed extreme satisfaction with the excellence of the equipment provided. The only adverse comments related to poor lighting in one or two skills, and even here supplementary equipment was provided. The training robots used in the skill 9 were inadequate but this was not the responsibility of the Swiss. A small amount of wood had to be replaced and trade 35 would have liked a more restaurant-like decor.

15. **Technical assistance and shop masters**

This was regarded as universally first class with the shop masters more than willing to meet the few last minute requests.

16. **Safety**

16.1 The briefing sessions had emphasised the chief experts' responsibility for maintaining safe working and, generally speaking, the standards of protection were high. One UK competitor suffered a small chisel cut. The bricks used in trade 20 were so hard that they could not be cut by hand but travelling table band saws were provided. Some concern was expressed that their use would be unfamiliar to many competitors used to using hand tools or angle grinders, but in practice appropriate instruction was given and no adverse incidents occurred. An observation of a more general nature was that, in some cases, wires were simply taped to the floor.

16.2 It was also noted that some of the non UK competitors did not wear hearing protection for Stonemasonry, which should not be tolerated in the future. One non UK competitor in another trade was penalised for failing to wear eye protection.

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17. Security

- 17.1 All chief experts and indeed all experts and competitors were provided with lockable cabinets or lockers. The main problem was how effectively to prevent illegal communication between compatriot experts and competitors. Although separate dining areas were provided, the problem was particularly difficult on this occasion since the competitors unexpectedly arrived half a day early and wandered all over the competition area, admitted by the Secretariat to be an unforeseen error on their part.
- 17.2 Although the use of mobile phones by experts and competitors was banned during the hours of the competition, their existence as well as the dispersed layout of the halls made it exceedingly difficult effectively to police the 'no communication' rule. This in turn is a factor which will have to be taken into consideration in the review of whether projects should continue to be secret or whether such secrecy is necessary in all trades.
- 17.3 A perennial difficulty is how to prevent interpreters giving advice, since many are skilled in the trades for which they interpret. In some cases UK experts commented that the layout of the stand made it impossible for chief experts to prevent unauthorised communication.
- 17.4 In one trade, two experts were given specific warning by the Dutch chief expert and in trade 25 a competitor was penalised for having in his tool box jigs and clamps which were appropriate to the project, a penalty which cost him a bronze medal. One competitor was excluded from the competition for illegally starting work three quarters of an hour early (trade 6) and reference has already been made to the exclusion of three experts from the juries of the two hairdressing trades.
- 17.5 It appeared that the UK competitor's computer in trade 9 had been sabotaged (but rectified without penalty) although the Secretariat suggested that the deficiency might have been associated with major failure of the Teletext system throughout Switzerland which had taken place a few days earlier.
- 17.6 Nevertheless, the majority of experts were satisfied with the fairness and the care with which the competitions were run and reference is only made to these incidents in order to indicate the increasingly vigorous action which competent chief experts, jury presidents, the Chairman of the Technical Committee and the Committee itself are prepared to take to enforce the rules and maintain the credibility of the organisation and its competition.

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18. Marking and judging

- 18.1 The new competition rules adopted in 1996 provide that genuinely individual elements or sections of the competition should be marked by small teams normally of three experts. This guarantees that no one expert is able consistently to adversely affect the fairness of the marking and, in addition, makes it practicable to use what may amount to up to 18 experts in a more efficient fashion. Chief experts are generally encouraged not themselves to undertake judging but to manage the competition and certainly all the UK chief experts adopted this policy. In trade 29 there were 17 experts. Five chose simply to manage the competition and to assist the chief expert while the other 12 undertook all the marking.
- 18.2 Whilst a number of individual UK experts commented either that one of the groups was regularly inconsistent or that there was mistrust in a couple of trades (15 and 22), the majority believed the system to be fair and workable although one commented that it was certainly faster but not necessarily fairer. The fact is that fairness and effectiveness of the marking process depends very much upon the quality of the chief expert and jury president and the alertness of other experts in ensuring that the procedures are properly followed. Whilst in two or three trades there was an atmosphere of mistrust or suspicion of prejudice, the majority of experts were satisfied with the process, even if in one or two cases their objections had been outvoted.

19. UK competitors

- 19.1 The majority of experts commended the dedication and tenacity of their competitors, whether they did well or badly and in particular their ability to recover from mistakes. One expert (21) commented that it was just as well that his employer did not see the competitor's work or he would expect that quality on a daily basis. However on the adverse side, one commented 'stuck to the job but never ran and was thrown by early mistakes' (15) and another that 'the competitor lacked speed' (27), or 'came to a halt on the fourth day' (38). Most serious were those who commented that the competitor 'lacked tenacity/competitiveness' (36) or 'lacked drive' (37).
- 19.2 For their part, just two competitors (36 and 37) mentioned in the previous paragraph were unhappy with the technical advice given to them by their experts. UK SKILLS will look into how this mis-match of perceptions and expectations arose in order better to identify such problems early in the future. By contrast, a bronze medallist (25) commented 'the training given by Martin Burdfield was brilliant'.
- 19.3 The two Mechatronics competitors were seriously affected emotionally by an equipment failure, which the international experts initially refused to acknowledge, blaming the two competitors. By the time they had proved their point, they were totally disheartened but recovered to complete the competition. They also felt that the UK expert had abandoned them, sticking too rigidly to his international role and failing to give them the necessary support in arguing their case. The judgement in such matters is not easy, but it is clearly a matter to be covered more carefully and in greater depth at future experts' briefing.

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- 19.4 During the competition, two members of the team suffered from a virus infection (Cabinet Making and Restaurant Service) which did affect their performance and the cabinet maker also sustained a foot injury.
- 19.5 Team members were serious, balanced and skilled competitors whose use of work process management and reaction to stress is dealt with in later paragraphs. In a number of cases (eg trades 38 and 15) outside observers commented on the high quality of work being done but both failed to finish and did not even reach the diploma standard. Once more, lack of good timing in doing what were, in some cases, regarded as being extremely large jobs for the time allowed, led to poor marks.
- 19.6 In spite of the foregoing problems, from which it is important to learn, the majority of competitors considered they were well supported by their employers, well trained by experts and well prepared for what was to come. Six competitors (12, 15, 20, 23, 25 and 34) gave ratings of 4 or 5 throughout the competitor questionnaire.
- 19.7 The team leaders commented 'without a shadow of doubt, this is the best team that we have been involved with. The team spirit was almost unreal and their determination not to let anyone down in any way was very moving. Two members of the team suffered from dyslexia, and when it is considered one gained a gold medal and the other a diploma, it shows their great determination to overcome such a handicap'. The team leaders also commended the commitment of the competitor in Wall and Floor Tiling, who, without an expert in attendance, and problems with his equipment, again showed the determination of team members to do well, particularly as he was awarded a diploma.

20. UK experts

- 20.1 A confidential report has been prepared on the performance of individual experts and this will be discussed with others on a 'need to know' basis, as well as being used in the appointment and reappointment of experts for the future. In the 23 trades, there were four UK chief experts, nine who had been to at least one previous competition, eight first time experts, one temporary appointee and one competitor without an expert. It should not be forgotten that experts are volunteers whose dedication and commitment over and above their normal jobs is much appreciated.
- 20.2 Although three of the four medal winners had been mentored by experienced experts, four out of the five at the bottom of the UK table of results were also mentored by those with experience of at least one previous competition. On the other hand, the wall and floor tiler in fourth place, who missed a bronze medal by 12 points, had no expert present because his replacement expert had in turn to pull out at the last moment for serious personal reasons. The stonemason who missed a medal by only one point was mentored by a newly appointed expert. On the evidence therefore there is no direct correlation between the presence of an experienced expert and success. Nevertheless it is clear anecdotally that previous experience must inevitably make it easier for an expert to make a point with conviction and a higher likelihood of success.

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- 20.3 A turnover of experts is inevitable and indeed important to bring in new blood with new ideas but perhaps the most positive observation is that all first time experts realised how much more they had learned and the majority showed both enthusiasm and much promise for the future. The strength and commitment of the new experts was praised by the experienced members of the team. A number of experts commented that they were more of a 'team' than ever before with an excellent support network, particularly for less experienced members.
- 20.4 The UK experts generally did a very professional job, knew the rules and their rights and, although some were regarded by other international experts as pushy, they were doing no more, in a diplomatic fashion, than what they had been encouraged to do. The team leaders commented that the commitment of the experts both before and during the competition was also the best that they had experienced, in particular the new experts. They did suggest a few exceptions which will be discussed with the Technical Delegate and fed into the assessment process.
- 20.5 Reference has already been made to the need to review the briefing given to experts in reconciling their international and national responsibilities during the competition. *+ selection - but linked.*

21. UK team leaders

- 21.1 The team leaders Archie Sharkie MBE and Martin Jones, once again managed a lively but responsible team, with a combination of firmness, sympathy and skill, a task made a little easier in some ways by the exceeding hospitality and friendliness of the owners of the family hotel where the team was lodged, providing no incentive for the team to return to St Gallen in the evenings.
- 21.2 Communication was much improved by their being provided with mobile phones which enabled them to respond quickly to problems and requests for help.
- 21.3 Throughout the competition they handled issues which arose with experience, skill and sympathy, which was deeply appreciated by the team. They decided to nominate Andrew Marriot and David Roberts, the Mechatronics competitors, for the Fred Hill Award, which recognises the greatest contribution in terms of morale. These competitors survived the traumatic experience summarised in paragraph 19.3 above.

22. Overall arrangements

- 22.1 The overall arrangements were excellent in every respect with extremely sympathetic and comfortable hotels, dedicated transport from those outside St Gallen and free passes on the highly efficient public transport system. The food and refreshments provided for experts and competitors during the competition was varied, plentiful and delicious.

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- 22.2 The opening and closing ceremonies were unobtrusively yet extremely efficiently organised with the presentation of the teams at the opening and the presentation of medals at the close artfully interwoven with a variety of first class entertainment which included traditional music and jazz, dance, singing, athleticism and humour, culminating in a dramatic firework display, within the hall. The actual presentation of the medals was marred by excessive celebratory noise from some teams which made the announcers' task virtually impossible.
- 22.3 A variety of visits and excursions was arranged for visitors, experts and competitors when not otherwise engaged. Many of the trade associations or individual Swiss experts offered hospitality and the Bürgerratspräsident of St. Gallen not only provided the venue for but also generously underwrote the UK reception for officials, experts, international officials, visitors and UK experts.
- 22.4 Thanks to sponsorship provided by City & Guilds and the Training and Employment Agency, UK SKILLS was able to hire a stand in the international village arranged by the Swiss organisers. This provided the UK team with a base, office and meeting point. The integral telephone gave the team a centre for a system of communications, which had proved such a problem in the past. Hiring three mobile telephones meant that team leaders, officials and UK SKILLS staff were always contactable. Without this assistance, the dispersed layout of the competition would have resulted in unacceptable delay when problems were encountered.

23. Use of work process management (WPM)

- 23.1 Twelve of the experts reported that their competitors clearly planned and used WPM throughout the competition. Five (11, 15, 27, 37 and 38) commented that their competitors fell down on time management and two (18 and 23) that it became forgotten under pressure. In one case (4) a serious equipment failure led to WPM 'going out of the window' and one expert (36) said he saw no evidence that it had been used at all.
- 23.2 The principle of WPM is now generally accepted by the experts and central to the preparation of competitors. However, concern has been expressed that the current format is over-complicated and off-putting to competitors and will be reviewed in time for the preparation of competitors for Montreal.

24. Dealing with stress

- 24.1 Nine experts commented that their competitors either dealt extremely well or competently with stress and three thought that they had done it quite well. One commented that 'xxx uses worry as a motivator' and another that 'after a lapse, he switched well to another section, allowing time to evaluate'.

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- 24.2 On the negative side, a number were put off their stride either by equipment faults (4), getting into a tangle which they could not get out of (16), having an objection to the way in which the competition was presented overruled on the first day (35) and by probably having his skills affected by the stress (15). Three experts commented that they felt that competitors did not cope at all well with stress (18, 23 and 27).
- 24.3 Eighty eight per cent of the competitors thought that they had been well or very well prepared to cope with the mental pressure, 8% had mixed feelings and 4% felt poorly prepared.

25. **Lessons from other countries**

- 25.1 The experts' comments focused almost entirely on training, the Mechatronics expert commenting that competitors needed 'muscle memory training' (like violin players), 'ten months of four hours training per day' (cf. Korean team) and 'more time management training'. Many commented that we needed longer, more intensive, off-the-job training, particularly in the final stages of the preparation along the lines of that practised by Switzerland, Canada, France and Taiwan, for example.
- 25.2 In trade 26 at least France picked three contenders for intensive training and only selected the actual competitor just before the Skill Olympics.
- 25.3 Competitors also need to work 'in a more focused manner' as did the Taiwanese, Koreans and Japanese.
- 25.4 At a more general level, one expert suggested that we needed to review our vocational training, especially by comparison with the Swiss system (37), and the same expert commented that we needed to look critically at NVQs where level 2 was too low and level 3 went off in the wrong direction (towards supervision and management) rather than achieving higher levels of skill. Another reported that, in discussion, the NVQ system was 'viewed in a dim light' by other countries (33).

26. **Visitors**

- 26.1 Over 140 visitors from the UK attended the competition including representatives of employers, colleges, TECs, ITOs, trade unions, FEFC and other industry bodies and members of the UK press. A focal point for visitors was provided by the UK SKILLS stand which proved a popular meeting point.
- 26.2 Particularly pleasing was a visit from Education and Employment Minister, Dr Kim Howells, who spent several hours at the competition talking to competitors, experts and members of the supporting party as well as attending and speaking at the UK SKILLS reception.

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27. Publicity, public relations and video

See Appendix 3.

28. Work of the international Technical Committee

28.1 This is the first competition during which Franz Schropp (DE) has acted as Chairman of the international Technical Committee and he did this with considerable skill and effectiveness. Whilst determined to carry through the trial use of the new system for project selection, he was also determined to ensure compliance with the revised and toughened competition rules. Certainly the briefing of all 500 experts had a positive impact since all knew what they had to do (even if they didn't always do it). The meetings of the Committee proceeded in a disciplined and purposeful manner, aided by the use of simultaneous translation which had not always been the case in the past for the daily review meetings.

28.2 He was particularly effective in responding immediately to allegations of irregularities and holding immediate enquiries and bringing the results for comment and authorization immediately to the Technical Committee which supported the ejection of three experts from the juries of 29 and 30 and expelled one competitor from trade 6. If the organisation is to continue to eliminate irregularities, it will depend much on the determination of experts, chief experts and jury presidents to grasp the nettle rather than shelter behind 'lack of evidence' or the wish to avoid embarrassments.

28.3 In particular Herr Schropp has agreed a fundamental review of the project selection procedure and the arguments for and against confidentiality of projects to be debated on prepared papers at the São Paulo meeting of the Technical Committee in 1998. He is certainly not complacent, repeatedly saying that 'nothing is so good that it cannot be improved'. One idea which he floated at the last meeting was a yellow card and red card system, as in football, in order to accelerate disciplinary action. He also emphasised the importance of juries carefully examining tool boxes for specialised and therefore illegal tools, jigs, gauges and fixtures which should be confiscated before the competition starts. All this augurs well for still better competition in two years' time.

29. Revision of technical descriptions

29.1 On the basis of a UK paper, the committee decided at its meeting in October 1996 that technical descriptions should wherever possible be modified and updated to include creative and innovative elements, fault finding and rectification, analytical and problem solving skills and criteria of marketability, including completion within time, rather than retaining criteria of unrealistic and inappropriate dimensional accuracy or the quality of subsequently invisible work. At briefing meetings for experts they were asked to keep this decision in mind when revising the technical descriptions.

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29.2 A further innovation was that, instead of simply allowing revision to be a matter of inclination, no jury's work was regarded as complete unless revised (or unaltered) technical descriptions signed by every expert had been submitted to the Secretariat in the three official languages.

29.3 Among improvements noted by UK experts in a number of trades was a further reduction in the amount of subjective marking, making a high proportion of the points as possible objective. Trade 9 reported the inclusion of more complex and advanced features as well as a problem solving element. In trade 26 the skills and work tested had been considerably widened with much less geometry. Trade 37 is to adopt trade 33's system of project selection which now works well. It appears likely therefore that there has been some improvement, although this will be impossible to judge until clean copies of the revised technical descriptions are received and evaluated.

30. **Selection of projects for Montreal and the bank**

30.1 Since under the new procedure the projects for St Gallen had been pre-selected, the job of the experts was, after revising the technical description, to select those suitable for use in Montreal or for putting into the bank. At the February meeting in St Gallen, for each trade, a number of countries were asked to volunteer to bring projects in the three official languages. All other countries were however free to bring their own project in just one of the languages. As noted above, one of the effects of this was to make the process of project selection less confrontational although there was also the risk that with less hanging on the immediate outcome and time pressure to complete the process, the examination of the projects might have been less rigorous than in the past. Only time will tell.

30.2 At least 14 of the UK experts were satisfied with the revised procedure and some 11 UK projects were agreed for submission for Montreal. On the negative side, in spite of the instructions from Schropp that fair copies should be destroyed, there is a risk that copies distributed for discussion might in some cases have been retained by experts. Others objected that those with good memories could in fact retain a good idea of what the bank's projects contain. This whole problem will however have to be reviewed at the São Paulo meeting. One expert commented that the process was a shambles with no real discussion (18) and others that some of the projects banked were incomplete or did not test all the skills of the trade or that only the best should have been submitted. There is also a real difficulty where developments of the trade happen very rapidly (9).

31. **New trades and demonstration trades**

31.1 For the first time Floristry was an official competition which apparently went off very successfully using 'blind marking' and the jury was anxious that the UK should participate in future. This matter is being pursued.

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- 31.2 Tinsmith, involving traditionally the cladding of roofs but now extending to various techniques of curtain wall sheeting was an official trade for the first time, although it has not attracted interest in the UK.
- 31.3 The Swiss organisers demonstrated Landscape Gardening and Road Construction and were clearly anxious to attract support, particularly for Road Construction as an official trade. A technical description has been provided for Landscape Gardening and one will be sought for Road Construction.
- 31.4 At the meeting of the Technical Committee in February 1997, sufficient international support was expressed for both Butchery and Heavy Automotive Mechanics to justify their being official trades. There were no demonstrations in St Gallen and it was not appropriate to take any further initiative on these two trades at this stage. Continuing support will however have to be confirmed at the São Paulo meeting.
- 31.5 At the final meeting of the Technical Committee in St Gallen, it was agreed that, at its next meeting in September 1998, decisions would be taken on including IT PC and Network Support, Graphic Design and Pastry Cooking as demonstration trades in 1998. Considerable interest was expressed in the joint Australian/UK initiative for IT PC and Network Support. A draft technical description is still awaited for Pastry Chef.

THE FUTURE

32. Effectiveness of new IVTO project selection procedure

- 32.1 The revised interim procedure described above (paragraphs 13 and 17) provoked widespread dissatisfaction because of the failure in a number of trades of the Swiss trade associations who had been asked to draft the projects to maintain confidentiality. The whole procedure will be subject to fundamental review at the next meeting of the Technical Committee and General Assembly to be held in September 1998 in São Paulo. This is to be based upon proposals prepared by the IVTO Executive Board at their meeting in February 1998 which in turn will be based upon reports which have been submitted by all chief experts and which have been asked for from jury presidents and others.
- 32.2 The proposals will not only cover the matter of project selection but the extent to which projects should be 'open' or confidential - the latter being a particularly difficult matter to control if they are already banked and are made available to the host country to facilitate the most economic provision of new materials. Whilst some trades change little in essence and projects could possibly be disclosed three months in advance (e.g. trades 29 and 30), fault finding clearly has to remain confidential. In many trades it would be possible for juries on arrival to insert
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surprise elements without affecting the requirements for plant or materials. The key point is that each trade must be considered separately in each respect for many have very different characteristics. The UK has pressed for the circulation of proposals as soon as possible after the Executive Board meeting to facilitate consultation and the submission of considered comments and counter proposals as necessary.

32.3 For the reasons given in paragraph 30 the projects banked may not in all cases have been as rigorously examined as in the past. There is also the point that, if the international Technical Committee is really determined to include more problem solving, innovation, creativity and fault finding, it may be appropriate for it unilaterally to modify technical descriptions to incorporate such desirable features, as indeed it did at the South African meeting in October 1996, imposing 'blind marking' as adopted by Men's Hairdressing on the ladies competition. Equally it would be seen necessary to review the projects banked for Montreal to ensure that, where the revised description allows for such elements, these are indeed incorporated in the projects to be used.

32.4 All this suggests that all UK experts should be asked critically to review the new technical descriptions when received with a view to considering whether any substantive 'policy' amendments should be proposed. Secondly, it is almost certainly desirable that the projects to be used in Montreal are not simply drawn at random from the bank but critically reviewed. Here the International Technical Committee will have to be properly reassured as to who is to be used for this purpose and under what conditions of confidentiality. Thirdly, it would seem entirely possible to inform the Montreal organisers of the materials required without disclosing the content of the whole project.

33. **Lessons for the future - IVTO**

33.1 **Project selection**

To improve the system of the selection of projects.

33.2 **Chief experts**

To further encourage chief experts not to mark but simply to manage.

33.3 **Management of the competition**

33.3.1 To put more emphasis on the examination of tool boxes to remove all templates, jigs and non standard tools or equipment before the start of the competition.

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33.3.2 To emphasise the responsibility of chief experts and jury presidents competently and quickly to investigate allegations of irregularities and to bring their conclusions immediately to the Chairman of the Technical Committee so that he can report his own conclusions and recommendations to the full Committee.

33.3.3 To enable chief experts and jury presidents to take a harder line with infringements, in particular to consider the introduction of a yellow card and red card system for the warning and disqualification both of experts and competitors, subject to appeal.

33.3.4 To review the practice whereby all the tasks for the four half-day competitions are disclosed immediately on the first day, eg trades 29, 30, 35.

33.4 **Marking**

To retain the prohibition on non-compatriot marking.

34. **Lessons for the Future - UK SKILLS**

34.1 **Competitor selection**

34.1.1 Vigorously to pursue existing policy of encouraging national, regional and local competitions to ensure that competitors are drawn from as large a pool of talent as possible.

34.1.2 Improve the assessment at the selection stage of the motivation and tenacity of those who are technically the best and feed this into the selection of the international competitor.

34.2 **Expert preparation**

34.2.1 Review the usefulness of sector meetings, which many found impractical or unhelpful, and devote those resources to more meetings of all experts, perhaps at six monthly intervals.

34.2.2 Both by briefing and by the use of a check list encourage experts to press chief experts to take effective action to investigate alleged irregularities and if necessary to take the matter to the Technical Committee, as well as informing the Technical Delegate so that he can take effective action on the jury president/technical delegate network.

34.2.3 Review guidance to experts on balancing their national and international responsibilities during a competition.

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- 34.2.4 Consider provision for experts and particularly chief experts of proformas to help them run the competition.

34.3 **Competitor preparation**

- 34.3.1 Retain and further tighten control over the preparation and monitoring of training programmes by experts, particularly where these are undertaken at a distance by college or employer: 'he didn't know basic things, I assumed he did. Next time I will go back to basics'. (13). 'All competitors are individuals with individual strengths and weaknesses and the individual's training programme must be created to deal with those' (several experts).
- 34.3.2 Encourage experts to make competitors work at speed, if possible under simulated competition conditions over as long a time as possible with distractions. Place more emphasis on the completion of tasks at all costs, even at the expense of aspects of the project which are known to attract lower marks and concentrate on high marked elements which may well include function and completion.
- 34.3.3 Continue to emphasise the importance of WPM but give it a more attractive image, such as WOW (ways of winning) (25).

34.4 **Additional trades**

- 34.4.1 Review the scope for the UK realistically entering competitors in the trades, such as floristry, and investigate interest in the demonstration trades.
- 34.4.2 Encourage the development of engineering competitions enabling the UK to enter engineering trades in Montreal.
- 34.4.3 Make every effort to ensure UK competitors can take part in the hairdressing competitions in Montreal.

34.5 **General**

- 34.5.1 Encourage improved communications in Montreal by ensuring a UK SKILLS stand and the provision of mobile phones for the entire duration of the competition.
- 34.5.2 Improve team image by providing track suits and workwear with UK SKILLS logo.

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Conclusions

- 35.1 Much effort went into improving the selection and preparation of UK experts and this was reflected in the quality of the new experts, the cohesive feel to the experts' 'team' and the impression that they were generally better prepared than their international colleagues. This will be built on for the future.
- 35.2 Significant improvements were also made in the national competitions from which competitors were selected and in the subsequent preparations of those competitors. Again, lessons learnt will be translated in to future developments.
- 35.3 All in all, it was an extremely well organised and exceptionally well equipped competition marred only by the apparent leakage of certain projects from the 'independent experts'. Although there were as always a number of allegations and problems, these were dealt with by the international organisation in a much more decisive and effective manner than hitherto.
- 35.4 Internationally therefore it was a positive experience even if the performance of the UK team, in spite of all their efforts and those of their experts and the support team, was disappointing in not maintaining the dramatic improvement in medal numbers or an improvement in the average score achieved at Lyon.

Appendices:

1. List of skills, competitors and experts.
2. Results.
3. Publicity, public relations and video.

