



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

EVENTING RISK MANAGEMENT SEMINAR
Brussels (BEL), 23-24 January 2016
(DRAFT) - REPORT

27 Eventing National Safety Officers (NSOs) and NF Representatives from 20 NFs (AUS, AUT, BEL, BRA, CAN, DEN, ESP, FIN, FRA, GER, GBR, HUN, IRL, JPN, NED, NOR, POL, POR, SWE, USA) – (*see participants list annex 1*) met in Brussels (BEL) for the 9th Annual Eventing Risk Management Seminar.

RECOMMENDATIONS & CONCLUSIONS of the 2016 Eventing Risk management Seminar

1. NSO Seminar: National Federations needed to be encouraged to participate in the yearly NSO Seminar. To allow more NFs to benefit from these Seminars it was important to have a web-based conference system/webinar

2. INTERNATIONAL STATISTICS CONCLUSIONS:

- The sport was growing: number of competitions increased from 369 (in 2005) to 684 in 2015 (85% increase); number of starters 11'650 (in 2004) to 20'351 in 2015 (62% increase)
- Attracting new nations to Eventing was important to enable the growth of the discipline
- The number of rotational falls had reduced from 0.45 % in 2005 to 0.19 % in 2015
- It was recommended to look at the injuries split by level of competition and type of fall to have a better understanding
- Horse falls and injuries were to be closely monitored

3. NATIONAL STATISTICS CONCLUSIONS:

- The collection of data by National Federations was very useful for each National Federation as well as for comparing the data between countries

4. FINAL REPORT ON EVENTING AUDIT BY CHARLES BARNETT

It was very important to disseminate the report's findings to all involved in the Sport

The key recommendations suggested:

- Restricting 4 Star competitions to non-categorized riders and possibly "D" categorized riders
- Standardized competition entry requirements
- Creating an additional category of riders to split the non-categorized category
- Implementing a riders license issued by the FEI
- Age of horses – review of the entry qualification for younger horses
- 2nd time fallers – to be monitored closely
- Collecting information on rider speed
- Fence factors to be studied by Course Designers
- New Fence Description form to obtain more information on ground lines and ground condition



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

- Headcams for fence judges to obtain footage of the fences and falls (it could also help for appeals and objections)
- 5. ENHANCEMENT AND DEVELOPMENT OF INTERNATIONAL STATISTICS AND DATA MINING**
- The data indicated that the reverse qualification system started to have an effect
- 6. EQUIRATINGS**
- The system was a tool to help National Federations, riders, trainers make better decisions
 - Raising the bar and putting responsibility back on the rider was paramount
 - The analysis of National data showed that the riders with low ratings were 3 times more likely to have a fall than riders with higher ratings
- 7. FRANGIBLE DEVICE MIM CLIP**
- For partial activation of MIM clips on table and wall type of fences, the device was considered to be activated and 11 penalties to be applied when the fence changed in such a way that it lowered the dimension of the fence

AGENDA – 2015 FEI EVENTING RISK MANAGEMENT SEMINAR

List of participants	Annex I
----------------------	---------

	UPDATE, FACT AND FIGURES	
1.	Statistics - Review of International Statistics – benchmarking	
2.	Statistics – Review of National Statistics – benchmarking	
3	Final Report on Eventing Audit by Charles Barnett	Annex II
4.	Enhancement & development to International Statistics and data mining	Annex III
5.	Equiratings – predictability system	Annex IV
6.	Veterinary – Global Injury Study	
7.	Miscellaneous	
8	Feedback from participants and recommendations for next seminar	
9.	2017 NSO Seminar	

	NATIONAL FEDERATIONS PRESENTATIONS		
10.	National Federations Presentations		
	10.1	• AUS presentation	
	10.2	• AUT presentation	Annex V
	10.3	• BEL presentation	Annex VI
	10.4	• BRA presentation	Annex VII
	10.5	• CAN presentation	Annex VIII
	10.6	• DEN presentation	Annex IX
	10.7	• ESP presentation	Annex X
	10.8	• FIN presentation	Annex XI
	10.9	• FRA presentation	Annex XII



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

10.10	• GER presentation	Annex XIII
10.11	• GBR presentation	Annex XIV
10.12	• HUN presentation	Annex XV
10.13	• IRL presentation	Annex XVI
10.14	• JPN presentation	Annex XVII
10.15	• NED presentation	Annex XVIII
10.16	• NOR presentation	Annex XIX
10.17	• POL presentation	Annex XX
10.18	• POR presentation	
10.19	• SWE presentation	Annex XXI
10.20	• USA presentation	Annex XXII

	WORKING GROUPS, PRESENTATIONS AND CONCLUSIONS		
11.	Working Groups – Conclusions		
	11.1	• Risk Perception – G.Wilde	
	11.2	• Education of National Officials	
	11.3	• Frangible device MIM Clip	

The Chair of the Eventing Committee opened the meeting and welcomed each participant, thanking them for attending this 9th edition.

The Belgian National Federation was specially thanked on behalf of the FEI for helping with the organisation of this Seminar.

The main aim of the Eventing Risk Management Seminar for NSOs was to allow exchange of National experiences.

Eventing Risk Management was based on the Eventing Risk Management Policy and Action Plan and it was important to acknowledge that it was currently what was wanted by the sport's stakeholders.

The audit on Eventing by Charles Barnett had debuted last year after the Eventing Risk Management Seminar in Madrid. The final report of the audit was on the agenda. Charles Barnett would share his findings and impressions on the sport. His suggestions included better collection of data by including video evidence at competitions.

1. REVIEW OF INTERNATIONAL STATISTICS - presentation G. Della Chiesa

Competition numbers: Eventing was growing, overall number of competitions had increased from 369 in 2005 to 684 in 2015 which was 85% increase. When divided by levels, the number of four star competitions were stable, the 3 other levels supported the increase over the years.

In 2015, out of 684 competitions, 16 were not processed due to lack of data received and therefore not included in the final report.

Number of Starters: The number of starters showed the same trend of increase, from 12'542 in 2005 to 20'351 in 2015 (62% increase). However, the average number of starters per competition was decreasing which had a direct impact on the organisers. In 2015, 47.5 % of starters were at One Star level, 81.7 % of starters were at One and Two Star level, 16,6 % of starters were at Three Star level. Only 1.7 % of starters were at 4 Star level. It was important to bear in mind that the pinnacle of the sport only represented 2 %.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

Attracting new nations to Eventing was important to enable the growth of the discipline, the support of National Federations, trainers, riders, etc. to integrate the risk part of the sport and the right level of expertise was needed.

Number of Falls: Falls were calculated as a percentage of starters to be more relevant. The average at all levels was at 5.60 %. One Star level was at 4.85 %, Two Star level at 5.75 %, Three Star at 6.96 % and Four Star level at 10.47 %. The total number falls were stable, slightly decreasing. The target had to be on the consequences of falls, in particular horse falls. 96 % of unseated riders had no injury.

The total horse falls average in 2015 was of 1.41 % of starters, the number of rotational horse falls had reduced from 0.45 % in 2005 to 0.19 % in 2015. Non rotational had gone from 1.55 % in 2005 to 1.22 % in 2015.

From the 1140 falls reported in 2015, 1068 falls were with no injuries, 40 with slight injuries and 32 with "serious/fatal injuries. The quality of data and way the injuries were recorded improved over the last years through the compulsory examination by the Chief Medical Officer of all athletes after a fall.

It was recommended to look at the injuries split by level of competition and by type of fall to have a better understanding.

The horse falls and related injuries were to be closely monitored.

Air Jackets: The number of starters wearing an air jacket were currently not collected. The data available only related to the number of fallers wearing or not an air jacket. Since 2013, the number of athletes wearing an air jacket was stable. The injuries were studied, falls with no injury represented 47 % without air jacket and 53 % with air jacket, falls with slight injury represented 45 % without air jacket versus 55 % with air jacket, serious injury represented 39 % without air jacket and 61 % with air jacket.

It was questioned whether the athletes wearing an air jacket hadn't been trained enough to fall and sustained more injuries, however this was difficult to evaluate.

The GBR NSO Jonathan Clissold mentioned that a study had been done by TRL (Transport Research Laboratory) to establish the force levels on the chest when a horse fell directly on the rider. It showed that wearing an air jacket on top of a body protector protected slightly better however, this would not prevent a life threatening injury.

Philine Ganders (GER NF) mentioned that in Germany a question had been added to the fall report asking whether it was felt the air jacket made the result of the fall worse or better. The report was filled in together by the Technical Delegate, the fence judge and the rider. Although it was subjective, out of 350 falls, 74 were wearing an air jacket, 22 were said to be better and only 1 worse.

Sam Watson from Equiratings felt that the attitude of the rider should be studied as it seemed to be linked to the use of air jackets. As an example, riders having already had a fall would be more likely to wear an air jacket.

2. REVIEW OF NATIONAL STATISTICS – BENCHMARKING - G. Della Chiesa

The data collected from National Federations had improved over the years, it was very useful for each National Federation and also to compare the data between National Federations.

The number of FEI competitions in 2015 was 684, in France 4'790 competitions were organized, 2'476 competitions were held in Great Britain and at total of 1080 competitions in USA, it appeared that the number of competitions were quite stable throughout the countries.

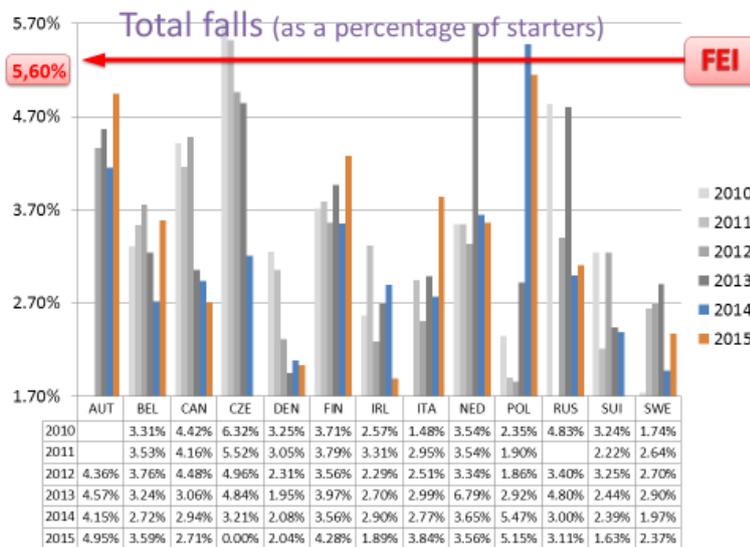
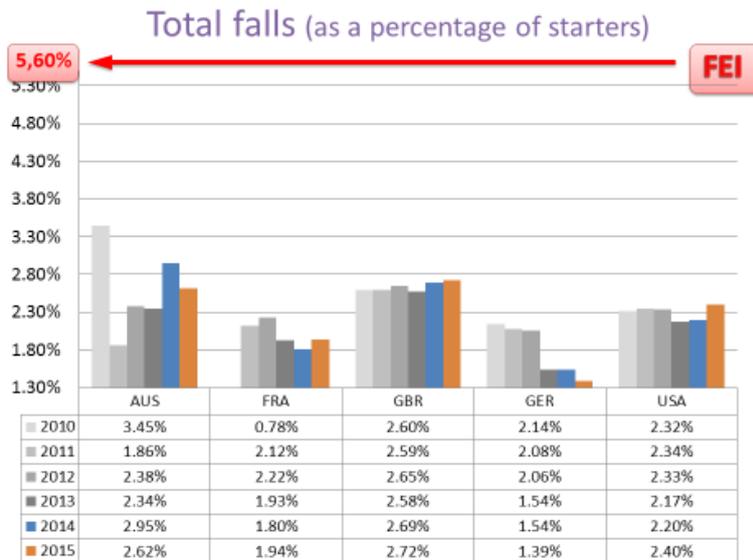
2016 FEI EVENTING RISK MANAGEMENT SEMINAR – BRUSSELS (BEL) (DRAFT) REPORT



Updated: 8-Mar-16

The number of starters at FEI competitions was 20'351, Great Britain had 70'210 starters and Portugal 594 starters in 2015 which showed the differences between the countries.

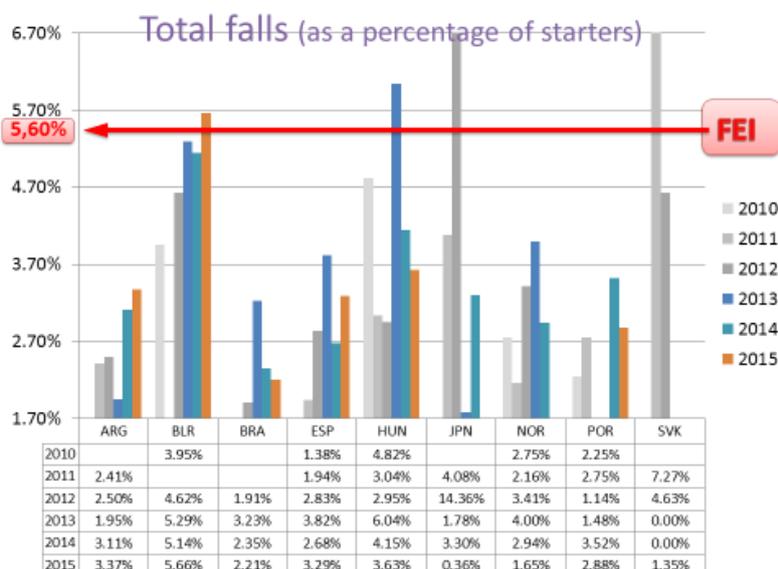
The average of falls as a percentage of starters at FEI competitions was 5.60 %. The average was a lot higher than at National level. In Germany, the percentage was 1.39 %, USA was 2.40 % and GBR 2.72 %.





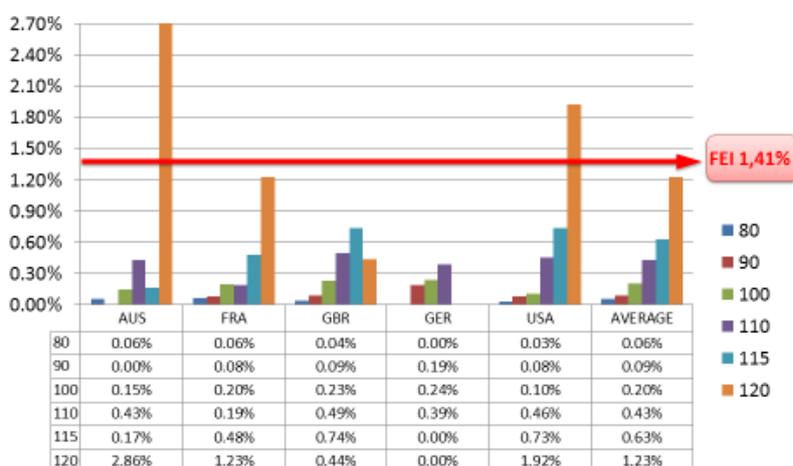
Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx



The number of horse falls as a percentage of starters was also much higher at International competitions than National competitions.

Horse Falls (per level as a percentage of starters)



This was also reflected when comparing the International level of competitions to the National level of competitions. The percentage of falls was always higher in International competitions.

3. FINAL REPORT ON EVENTING AUDIT BY CHARLES BARNETT **Annex II**

During the 2014 Eventing Risk Management Seminar it was agreed that an external audit should be done to move forward with the Risk Management of the Eventing sport and enable a different view on what was being done. The FEI mandated Charles Barnett to perform this audit.

In order to carry out this task it was necessary to immerse into this sport, which was done over a period of twelve months. Charles Barnett explained that he had very little knowledge on Eventing as his background was in horse racing, it was important for the FEI



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

to have someone who was independent of the FEI and could look at the sport without having been involved in the sport previously.

One of the important aspects in Eventing sport relied mostly on the work of volunteers, it was done through love of the sport and not for money. Although, 80 percent of the riders at the top level were professionals, only 6 made money out of the profession.

The majority of the work shown in this presentation related to safety and the data collected by the FEI.

Eventing was a risk sport (all horse sports were), accidents would never be eradicated, it was important to have a robust public relation plan to deal with accidents which explained to the public why the horses could be asked to take the risks they did in Eventing.

The data from 2010 to 2014 was studied and analyzed by the Bristol and Liverpool Universities.

The initial analysis started by horse falls, it showed a 1.5 chance of a horse fall against a start and a 0.5 chance against an individual jumping effort.

When looking at event levels, the majority of horse falls were at One, Two and Three star level of competition. At 4 star the percentage of falls was much higher than for the other levels.

Looking at the riders categories of the horse falls at Three and Four Star level events, it appeared that the "D" and "non-categorized" riders had a higher percentage. It was questioned whether non proficient enough riders were allowed to take part in these events.

The individual factors which were found to affect the likelihood of a fall were examined. A multivariable analysis consisting in a vast statistical technic retained all the factors which had an independent effect, and the interaction between the various factors was studied. For example, there were more falls at CCIs than CICs, however, it was the level of competition rather than the type that affected the risk. It allowed to focus on the most influential factors to attempt to reduce horse falls.

Four star competitions had a higher percentage than other levels, in the multivariable model the riders were 3.5 more times likely to have a horse fall than at a One Star level competition. It was also demonstrated that there was twice as more chances of a horse fall at a Championship event.

The fences were also examined. It was important not be too focused on the type of fences as all factors needed to be considered.

The brush, the spread and the round had fewer horse falls than average, the corner and square spread were more likely to cause falls. If the corners or spreads were filled in, the probability of a fall increased.

An increased risk of a horse fall was noted at fences fitted with a frangible device. This was independent of all other factors (e.g. fence type, event, level).

The water fences also had a higher rate of falls, significantly more for the "into water". An increased risk of a horse fall was also demonstrated at downhill fences in opposition to level or uphill fences.

Some venues had a higher risk of horse falls than others, however there was not enough data to draw conclusions but this needed to be closely monitored.

The specific factors linked to rotational fall included, hitting the fence hard or on the way up. Could this be avoided by the judicious placing of a ground line for example? Younger horses were more likely to have a rotational falls.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

A higher risk of injury was noted in rotational falls. The other factors linked to injury included Championships competitions, horses aged 7 or below, going too fast, frangible device and going out of water.

The key recommendations suggested:

- Restricting 4 Star competitions to non-categorized riders and possibly "D" categorized riders
- Standardized competition entry requirements
- Creating an additional category of riders to split the non-categorized category
- Implementing a riders license issued by the FEI
- Age of horses – review of the entry qualification for younger horses
- 2nd time fallers – to be monitored closely
- Collecting information on rider speed
- Fence factors to be studied by Course Designers
- New Fence Description form to obtain more information on ground lines and ground condition
- Headcams for fence judges to obtain footage of the fences and falls (it could also help for appeals and objections)

It was very important to disseminate the report's findings to all involved in the sport (National Federations, Athletes, Officials, etc.)

It was felt that a better way of presenting the riders / horses on course to the public should be found, it could be done with the name of the rider on the front shirt and the name of the horse on the blanket.

Sam Watson (EquiRatings) mentioned that the young horses had to be studied as it was felt that they could fall more due to inexperience and going up the levels too quickly.

Philine Ganders (GER NF) asked whether the rotational falls were analyzed in regards to frangible fences as it was mentioned that there was not a higher risk than any other fence.

Lars Christensson (SWE NSO) recommended that further study be done on the frangible device findings in relation to injuries.

Dominique Maes (BEL NF) mentioned that the categorization and reverse qualification were implemented in 2013 and already seemed to have an impact on the performances of riders. In the data presented the non-categorized riders had more falls however, it was based on 2010-2014 data. It would be interesting to analyze the data from 2013 onwards to have a better understanding.

The Chair of the Eventing Committee mentioned that this audit was great opportunity to communicate and have an open discussion on the sport.

4. ENHANCEMENT AND DEVELOPMENT OF INTERNATIONAL STATISTICS AND DATA MINING – Dominique Maes	Annex III
--	------------------

Summary of the analysis of the International Eventing competition data of 2015:

The data of the Eventing results (20858 results) and the fall forms was analysed with the goal to extract information on factors (e.g. athlete and horse qualities a previous history) that on their own and as a combination were correlated with performance. A particular focus was put on unseated riders (746) and horse falls (223) related to fences. As in 2014, the highest percentage of falls occurred in championship irrespective of the level.

Analysis of the fall reports pointed to 3 types of falls:

- 1) Somersault, high injury level of horse and athlete, horse hit the fence hard, no refusal and horse tread on athlete;
- 2) Fence was a combination related to water, no portable and no 'terrain';



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

3) Inexperienced rider and too fast.

The latter was completely in line with the expected. Not surprisingly the use of the air jacket wasn't correlated with the above factors. Most falls occurred at round fences most of which related to water. A significantly higher percentage of horse falls, as compared to unseated riders, occurred at square spreads. Falls did occur all over the course. There was an indication that in 4 Star events most falls occurred in the second half of the XC.

From an analysis of the average percentage of result types (e.g. % clear, % retired, etc.) per competition format it was clear that the % of clear XC decreased with the star level. In a Three and Four Star competition a significantly higher percentage of combinations retired during or withdrew before XC; the percentage of falls was significantly higher and elimination due to refusals significantly lower.

On average the best Dressage and Show jumping results were obtained by combinations that were clear in Cross Country. In contrast a high amount of penalties in Dressage was obtained by those eliminated in Show Jumping. The combination having a lot of penalties in Show Jumping were more likely to withdraw before Cross Country. It was worthwhile to note that fallers, as well unseated riders as horse falls, weren't scoring significantly better or worse than the overall average in Dressage and Show jumping.

The average age of the horses was 10.2 years. The horses having 40 penalty points on fences in XC were significantly younger i.e. 9.6 years on average. The average age of horses eliminated in Show Jumping was significantly higher correlated with less experienced riders.

The data indicated that the reverse qualification system started to have an effect. This still was to be confirmed with an analysis incorporating the history of the combination and not only that of the athlete and the horse separately.

In 2015, 62 % of the starters were female athletes. The difference was most significant in one star events. Women were less competitive: the likelihood to end in the first 5 places was higher for men. Women had a slightly higher probability than men to be unseated; for horse falls, the opposite was also true.

5. EQUIRATINGS – PREDICTABILITY SYSTEM	Annex IV
---	-----------------

EquiRatings was a company created in 2014 by Sam Watson and Diarmuid Byrne specialised in statistical performance analysis of horses, riders and events.

Diarmuid Byrne worked in Commercial law for many years and Sam Watson was an International Eventing rider and a first class honors degree in Mathematics, Statistics and database building. Both had been working together on the EquiRatings project for the last 8 years.

In the last 8 months, the commercial enterprises in Ireland had taken interest into what was done by EquiRatings. Both had been invited by the Prime Minister and the Minister of employment in Ireland and were finalists at the "2015 Ireland's best young entrepreneur".

Focus was put on three areas, the data driven decision making, rider behavior and attitude and the understanding of risk. Data driven decision making was very important as it could bring great insight and ease the decision making process and help back up decisions constantly.

What was done on a day to day basis was fan engagement, performance analysis and private consultancy.

Fan engagement was something which could be seen on Facebook and Twitter working with Events by helping them promote their event, helping to promote Eventing in general. There was a need to package it correctly and get it to the right places.



Updated: 8-Mar-16

Performance analysis, was creating unique profiles for combinations using the data available.

Raising the bar and putting the responsibility back on the rider was paramount. The program used the data to establish the level at which each rider and horse were competent. Technically, it was a continuous process of analysis of the results (rider, horse and competition), which provided a numeric value. At the beginning the average value was 0.7, each start in a competition was taken into account and the rating went up or down according to the performance as well as the level of competition chosen by the rider.

As an example, a good rider with a good rating who chose to enter a One Star competition could have a rating of 0.9, if he chose a Two Star the rating could go down to 0.7, and 0.3 for Three Star. The rating followed the performances of the rider.

At 4 Star level, 3% of the combinations had a rating below 0.3 which was considered a low rating. It was very much the same throughout the other levels.

A three color system was used, red, amber and green, the table hereunder showed per level, the percentage of riders in each zone:

	4*	3*	2*	1*
Above 0.9	18%	11%	7%	4%
0.7 To 0.9	37%	39%	41%	39%
0.7 To 0.5	29%	30%	32%	41%
0.5 To 0.3	13%	16%	16%	13%
Below 0.3	3%	4%	4%	3%

Riders with low ratings were more likely of not completing a competition. For riders with a 0.1 rating or less, 38 % didn't finish the competition. For riders with a rating of 0.7 it was only 19 %. As the ratings got lower, their chances of not finishing the competition got higher.

When National data was analyzed, it was observed that the riders with low ratings were 3 times more likely to have a fall than riders with higher ratings.

This could be used as a tool to help the FEI adjust the rules and the Minimum Eligibility Requirements (MERs).

The way the system could react after several (17) competitions was shown in the example hereunder:



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

Run 17		CIC1*	0.33	0
Run 17	CIC1*	0.33		0
Run 16	CCI4*	0.23		RET
Run 15	CIC3*	0.52		EL
Run 14	CIC3*	0.42		0
Run 13	CIC1*	0.32		0
Run 12	CIC3*	0.22		20
Run 11	CIC3*	0.05		0
Run 10	CCI4*	0.07		EL
Run 9	CIC3*	0.12		20
Run 8	CCI3*	0.17		RET
Run 7	CIC3*	0.06		0
Run 6	CCI4*	0.08		RET
Run 5	CIC3*	0.11		NS
Run 4	CCI3*	0.16		EL
Run 3	CIC3*	0.27		EL
Run 2	CCI4*	0.32		20
Run 1	CIC3*	0.57		20

The system reacted to what the rider was trying to do. When the rider had penalties or was eliminated and went down a level the rating fell less than if the rider remained at the same level. When the rider had no penalties or obtained a MER the rating went back up.

The system was a tool to help National Federations, riders, trainers make decisions adapted to the situation. It could be used like a watch list and it could be adapted to the needs.

Dominique Maes (BEL NF) mentioned that when the reasons for eliminations (rider fall, horse fall, technical elimination, etc.) were taken into consideration the accuracy of the data would increase. It was questioned whether the ratings were based on riders, combinations or horses' performances?

Sam Watson (EquiRatings) mentioned that the ratings were based on the horses' performances as the rider's category had a big influence on the ratings.

Jonathan Clissold (GBR NSO): on which database had this system been tested?

Sam Watson (EquiRatings): it had been tested on Eventing Ireland's database. The tests showed that by restricting 1% of the horses in the red zone, the falls would reduce by 3%.

Chair of Eventing Committee: it was interesting that this project was done by a rider, asking the riders to be more sensible with their riding. It was a completely different approach than looking at the outside factors such as the fences etc.

The Eventing Director mentioned that it was a great project and it would have to be studied as it would not have the same impact worldwide.

6. VETERINARY – GLOBAL INJURY STUDY

Göran Akerström explained that he had taken over the position as Director of the Veterinary Department 5 months ago.

It was necessary to define the needs of statistics on equine injuries in Eventing.

The following data was felt as important:

- injuries related to the contact phase with a fence together with the description of the injuries
- speed related to horse injuries, data on the intensity of the course, the type of course (hilly, turning) number of jumping efforts and ground conditions



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

- collecting data of horses injured during competition leaving the event (paused/retired horses) not being followed up, injuries were currently not recorded
- historical data on horse injuries

The welfare of the horse was paramount and the statistics had to increase the perception of what was being done.

Were injured horses having a greater risk of being injured again was a question which needed to be answered. It was important to have statistics to provide the public with a transparent view of the sport and consequences on horses.

It was difficult to monitor the injuries as the owners didn't want the information to be made available as they feared it could backfire when selling the horse.

The welfare of the horse was paramount, however it was difficult to know how many horses died further to injuries related to of a fall or competing related.

Turning courses seemed harder on horses. It was necessary to collect data to confirm the feeling.

It was also important to obtain acute information as it was essential to trust the data provided in the reports.

It was very important to study the ground conditions as it could have a great impact on the injuries.

Currently, the available information included the fall report, the fatality reports and the Veterinary Delegate Report. The Veterinary Reports were not always well filled in and reported back. It was difficult to have accurate statistics on the number and type of injuries sustained by the horses.

In Endurance a study was undergoing, it included data on the horse, the rider, the trainer, the ride date, the course, the Veterinary Gate data, Veterinary Delegate report, injuries and fatalities. The data was sent to Glasgow University to analyze and do logarithms.

The aim was to use the available data and define the needs and possibilities to improve the data available and the statistics.

Certain National Federations were doing studies on their horses and this information would be very useful for the development of this program. All NFs having such information were encouraged to contact the Veterinary Department.

7. MISCELLANEOUS

Somersault definition

A somersault definition needed to be found to allow a common understanding of what was a somersault fall. The dictionary definitions were "an acrobatic movement in which a person turned head over heels in the air on the ground and landed or finished on their feet", or "an acrobatic movement, either forward or backward, in which the body rolled end over end, making a complete revolution".

Jonathan Clissold suggested to add pictures to give clear examples of what was considered a somersault and what wasn't. He would propose pictures to be included in the "General Instructions for collecting statistics on falls" document posted on the FEI website.

Olympic Format

The agenda 2020 was the strategy roadmap for the future of the Olympic Movement. The key elements for agenda 2020 focused on four areas: maximizing engagement of the youth audience; achieving gender equality and promotion of women's sport; increasing universality; and increasing the popularity and value of the Olympic Games.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The IOC were reviewing the sport currently represented in the Olympic Games and were questioning whether these sports were to remain in the Olympic Games. All the sports were called to evaluate what could be done to reach the main objectives set in the agenda 2020 in regards to costs, audience, and participation as well as having enough TV viewers.

The main advantage of the Equestrian sports was the equality of genders as it was the only sport in which women and men competed in the same competitions.

The problems were due to the low number of TV viewers, the competitions were long, expensive and could be unexciting.

In Eventing, the Cross Country phase did not suffer from being boring, however the added problem of Eventing was the risk.

The FEI had worked with the disciplines to address the team and individual competitions issues, as the IOC was not happy with the mixing of team and individual competitions. Innovative ideas were being looked at to try to address this issue.

The initial proposal was for National Federation to decide which combinations were to go to the individual competition and which combinations were to enter the team competition. This suggestion was refused by the National Federations.

The compromise was through the additional Show Jumping round where the difference was made between the individual and the team competitions as currently done.

The FEI strategy was to look at the possibility to have more nations involved in the sport. Giving the hope to more nations to obtain a result at the Olympic Games. There was a need to have more nations qualified for the Olympic Games.

Team competition with a drop score was giving the possibility to the stronger athletes to be even stronger. The idea was to remove the drop score for all disciplines, going to three combinations per nation, opening the possibility for more nations to participate.

It was important to provide an easier description of the sport, a self-explanatory sport where the pictures sold the story.

For Team competitions, two ideas were being studied: the first idea, was for the combinations to bring the points obtained in the different phases to the total team score.

The second idea was to allow combinations eliminated to continue the competition, providing the horse passed the horse inspection. The pair would bring to the team penalty points for the test which was not ridden or completed (due to a fall for example).

Putting three combinations instead of four in the Team competition would allow more nations to take part in the competition.

It was felt that the Olympic format should not necessarily be the same as the World Championship, the difference could be made for Eventing as there was a reason for it.

The Sport Forum in April was focusing on this subject and the final decision was to be voted next year at the General Assembly.

8. FEEDBACK FROM PARTICIPANTS AND RECOMMENDATIONS FOR NEXT SEMINAR

The Director of the Eventing & Olympic Department thanked all the participants for their attendance and huge input in the seminar.

It was essential to get more National Federations participating in this Seminar as risk management was such an important topic. Setting up a webinar to allow a maximum of National Federations to benefit from these Seminars was paramount.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The exchange between the NSOs and NF Representatives was a very important part of these seminars, allowing enough time at coffee breaks was recommended.

Having new subjects to keep the participants thinking and bringing back information to their National Federation was the aim of each Seminar, and all subject propositions were welcomed.

9. 2016 NSO SEMINAR

The dates suggested were **21-22 January 2017**. Possible locations included Bromont (CAN), Birmingham (GBR) and Portugal. The National Federations would be asked if they would send their NSO/NF representative to Canada in 2017.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

10. NATIONAL FEDERATIONS PRESENTATIONS

10.1 AUS NSO – Bob Powles

The role of National Safety Officer had been advertised in Australia. Applicants were coming forward and the role had also been enhanced. The role included to act as communicator between the FEI and other National Federations NSOs, to provide the FEI with the basic structure of the National Safety program and maintain the medical reporting system within Australia. The increased responsibility included the appointment of Safety Coordinators at each event (National and International) to be responsible for the establishment and coordination of medical services including transportation of injured athletes. The Safety Coordinators should not have any other duties during the competition.

National statistics from Australia were presented. The figures were similar to the previous years.

One issue was the increased number of events running many different categories with low number of starters. The Eventing Director questioned whether the level of competition could be guaranteed according to the rules for all categories. It was felt difficult with the number of different courses organized to maintain the technical requirements.

The reporting had improved, the data was more accurate and it could be due to the reverse qualification which was implemented at all levels.

10.2 AUT NSO – Katrin Eichinger Kniely

Annex V

Every year a Seminar for National Judges, Trainers and Course Designers was organised in Austria. The National and International statistics were presented and discussed with regards to useful outcomes and possible improvements.

The National rules were adapted to the FEI rules in particular for the Dressage test and the check of rider and horse falls by the Chief Medical Officer and Veterinary Delegate. A reverse qualification system was implemented. The National fall report was replaced by the FEI format fall report.

The 2015 National Statistics showed that the number of starters had reduced from 1974 in 2014 to 1860 in 2015 for 142 competitions. 86 rider falls and 6 horse falls occurred in 2015. The rider falls and horse falls were above the average of the other nations' National statistics. 2 slight injuries were recorded, one arm and one ankle fracture.

The Chairman of the National Eventing Committee was replaced by Wolfgang G. Mueller, responsible for nominations, qualifications, and abroad entries.

10.3 BEL NF Representative – Matthias Wenten

Annex VI

Matthias Wenten Chairman of the Belgian Eventing Committee was appointed two years ago after Dominique Maes resigned for professional reasons.

The structure of the Belgian Equestrian Federation was presented. It was divided in two leagues, the Flemish (dutch) and the Waloon (french). The Belgian Equestrian Federation was responsible for the relationship with the FEI, national selection and rules. The leagues were responsible for daily business, contacts with the organisers, the riders, the officials in regards to competitions, education etc.

The Committee was composed of 4 representatives from the French part and 4 representatives from the Flemish part.

The statistics were similar to what had been reported by the other countries. The safety program included sending an Assistant TD for big competitions and Championships, it was



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

an additional help for the organisers. Limitation was put on the number of starters at Competitions. Expert riders gave course walking sessions especially at the low level competitions to provide advice on how to jump the fences. The courses given were open to a maximum of persons. Visits to new shows were organised 6 months before the competition to help with the organisation and the course building. After the event, the feedback was given by a member of the Committee visiting the Organiser to discuss the positive and negative sides of the event, this in person contact was appreciated.

For 2016, a cooperation with the Dressage Committee had been agreed to, the Dressage Judges would officiate at Eventing competitions to have new eyes on the sport.

The 2016 rules included dropping the long format competitions at national level as well as the implementation of the reverse qualification system. The speed was also controlled by giving penalties for more than 20 seconds below the optimum time.

The Eventing Committee appointed the President of the Ground Jury and Technical Delegates for all competitions in Belgium, in addition, for Championships the Ground Jury to ensure that the right people are chosen.

The Eventing Director asked how many events were organised. A total of 30 competitions were organised.

10.4	BRA NSO – Delano Miranda	Annex VII
-------------	---------------------------------	------------------

The collection of data started in Brazil 5 years ago. The number of starters had increased from 366 starters in 2011 to 497 in 2015. Most of the starters were at 1m and 1m10. The number of falls had increased with the number of starters, however percentages were stable, 2.01 % of starters in 2015.

It was important to share the knowledge acquired during the Eventing Risk Management Seminars with the National Officials, instructors and riders to allow the spreading of the information to all involved in the sport. The report of the Eventing Risk Management Seminars were also sent to Latin America countries.

A new training program for the Young Riders and Juniors had been put in place with trainers Mark Todd and Anna Ross-Davies.

10.5	CAN NSO – Rob Stevenson	Annex VIII
-------------	--------------------------------	-------------------

Rob Stevenson reiterated the invitation to hold the 2017 NSO Seminar in Bromont and meet Fleur Tipton, National Eventing Manager who was involved in the National Federation since the late 1980's and was the Eventing Equine Canada Representative for the WEGs.

A total of 54 competitions with 6275 starters were organized in Canada during 2015. 287 fall reports were submitted. Based on the figures, the average fall ratio was 1 fall for every 19 starters; there were 29 more falls and 79 more starters reported in 2015.

The rider injuries were examined, for the 271 unseated riders, 92 % had no injury, 4% slight injury and 1% serious injury, 3 % unknown. For the 16 horse and rider falls, 87 % had no injury, 0 % slight injury and 13 % serious injury.

The horse injuries were also looked at. 95.5 % of the time, there were no injuries. 274 horses had no injuries, 3 had slight injuries, 1 had serious injuries, 4 unknown and 1 horse fatality was reported in 2015.

The air vest figures were studied, 55 falls (33 %) were recorded where rider was wearing an air vest. The air vest activated 87 % of the time. The numbers were small and it was difficult to predict whether an air vest would save a serious injury.

2 FEI competitions were no longer organized in 2016, Chase Creek and Dream Crest which left only Bromont as International competition.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The style riding competitions were a concept which was being tested in certain provinces to allow the riders travelling big distances to compete and gain more experience at competitions.

The indoor Cross Country guidelines were handed over to the organizers of the Royal Winter Fair Horse show competition. The guidelines were followed and the number of rotational falls reduced from 3 to only 1, which was an improvement.

The Eventing Director mentioned that the next step was to make the guidelines compulsory as from 1st January 2017. A working group had made proposals / options to be included. The document was to be circulated in time for the Sports Forum.

10.6 DEN NF Representative – Kerstin Dallman	Annex IX
---	-----------------

This presentation was used to ask the question “was it necessary to register the classes below 90 cm” in the statistics?

In Denmark Eventing had developed well the past year, all levels had gained starters.

In 2015, a total of 42 falls occurred, 37 unseated riders and 5 horse falls. In classes up to 80 cm 24 unseated riders (67.87 % of total) and 0 horse falls.

In “up to 80 cm” classes the riders were less experienced and less likely to sustain serious injuries. The reasons were the low speed, increased number of falls on the flat, less likely to push a horse in dangerous situations, fewer horse falls occurred, lower fences were more forgiving by nature. However, unexperienced riders had a significant higher rate of falls as they unbalanced easier.

It was questioned whether it was necessary to include the “up to 80 cm” category in the statistics. Were these statistics necessary to help make a better sport?

The information collected in the “up to 80 cm” was not felt as useful in making a safer sport. At higher level the statistics were necessary to build safer courses and reduce the serious injuries. To reduce the falls at lower levels if was necessary to set up requirements for the general skills of the riders and horses, this could lead to fewer entries.

The competitions at lower level needed to be used to educate the riders and make sure they got the necessary experience to compete safely on a higher level, later on in the career.

The statistics “up to 80 cm” were in our opinion of no use in the format presented it was only more work. However it was important to share experiences.

The Chair of Eventing Committee mentioned that it was important to focus on horse falls, however keeping records of the statistics was also useful for PR exercises. The figures were always there to show the outside world that Eventing was also about falling and most of the time without injuries.

Jonathan Clissold (GBR NSO): in case of a problem it was useful to keep those statistics to look back at them. It was totally different to study the statistics at 80, 90 and 100 cm from those at FEI levels.

Philine Ganders (GER NF): falls “up to 80 cm” were not recorded in Germany as only 4-5 fences were jumped and it would not make sense.

Teun Platenkamp (NED NSO): for the NSO Seminar it should not be a focus

10.7 ESP NSO – Felicísimo Aguado Arroyo	Annex X
--	----------------

During the CIC2* Sevilla (ESP) in February 2015 a rider fatal accident occurred, my function at the event was member of the Ground Jury and would like to share my experience.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The technical aspects related to the accident (dimension of the fence, distances, efforts, etc.) were in accordance to the FEI rules and regulations. The medical services were outstanding with a team immediately on the accident site and a medical helicopter less than 45 minutes after the accident.

After the accident, a meeting was organised with all the Officials and the Organising Committee to collect and put in common all the information and data. The press release was issued with the help of the FEI Eventing Director and a press conference was organised. This meeting was very important to give all Officials and OC the necessary information to deal with riders, public and press.

Many newspapers and magazines wrote articles on safety in Eventing following the accident and quoted the press release issued.

The day after the accident, a local radio who had an equestrian program every Sunday which never covered Eventing, requested my presence for a live interview on the subject. The journalist asked questions related to the accident as well as questioned what was being done by the National Federation and FEI to have a safe discipline. Thanks to my participation in several NSO Seminars I was prepared to answer and provide information in regards to collection of data, statistics, rules, medical and veterinary matters, Eventing Risk Management Action Plan and developments of the sport. This interview was later published by an Eventing web page.

This experience showed how important it was to be prepared to manage these kind of situations. All the information given during these interviews was learnt at the NSO Seminars. These Seminars were very important to be up to date with all the matters relating to Eventing.

Catrin Norinder, FEI Eventing Director mentioned that the press release was done by the FEI in a very close relation with the Organiser and the Technical Delegate, it was very important to issue a press release containing all the necessary information.

10.8 FIN NF Representative – Kalle Nykänen**Annex XI**

Finland was a small country with only a few Eventing International riders. We were hoping to have one rider in the Olympic Games.

The economic situation in Finland was difficult and the number of national competitions had reduced these last years.

A total of 61 national competitions with 1215 starters were organised in 2015. 48 falls were recorded and 1 rider with slight injuries, no serious injuries.

No international competitions were organised in 2015.

Two new level 1 Stewards have been appointed for Eventing.

Anna Hassö had been appointed as new coach for Eventing. Lars Christensson was expected to give a Seminar for Course Designers and Technical Delegates.

10.9 FRA NF Representative – Pierre Michelet**Annex XII**

In France, the statistics collected included the “under 80 cm” therefore it was difficult to compare the figures with the FEI statistics.

It was explained that the number of starters had increased at 1m20 from 343 in 2014 to 489 in 2015. As a consequence, the falls had also increased from 10 in 2014 to 20 in 2015, however the number of horse falls had gone from 7 in 2014 to 6 in 2015.

The safety program in France was split in two categories for the Amateur riders and the Professional riders. The Amateur riders needed to finish one course without falls before going up one level. For the Professional riders the access to go up the levels was easier.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

For the lower level competitions, in case of a refusal it was compulsory to use the alternative routes when available, 10 penalty points were given for non-complying with the rule.

For horse falls related to a fence, it was compulsory to go back down to a lower level.

Less than 45 % score in Dressage test led to elimination of the rider.

When the Show Jumping was before the Cross Country, the riders with scores above 16 points (4 fences down), were eliminated.

At lower level, more than 15 seconds inside the time, 1 penalty point was given by second and after a refusal being inside the time, 10 penalty points were given.

The MIM system was used in 2015 in France, at 5 competitions where 147 riders participated. A total of 5 devices were broken. However, the riders weren't happy with the 11 penalty points given for breaking the devices.

10.11 GER NF Representative – Philine Ganders

Annex XIII

The Eventing Task Force had a fresh start in 2013 following the serious horse falls and fatalities which occurred in Germany.

Working groups were created and many projects were planned. The different working groups covered, Rules and Education, Cross Country Course Design, Medical and Protectors, Veterinary Research, Fitness and Fall training and Guidelines for Organizers/Incident Management.

Thankfully, an enormous financial support was given by the "Stiftung Deutscher Spitzenpferdesport" and the "Benjamin Winter Fund" which allowed the development of these projects.

1. Rules and Education measures:

- Development and construction of a mechanic horse "Bartle's Rock-on-Ruby" used for schooling balance, improving of seat of the rider and fall training
- More demanding qualification criteria for CIC1* as well as special criteria for CIC3*/CCI4* Luhmühlen for C&D categories riders
- Compulsory debriefing after Cross Country
- Watch list (not public) for riders not performing well and needing to be spoken to by the TD or Judge. The recommendations could include training, competing at lower level, changing of bit, etc. To be removed from the list the rider must have a good round at a competition.
- Official course walk for 0,90 m and 1,00 m classes
- Special Judges / TDs / CDs scouting for former riders and trainers
- Dangerous riding rule included 3 options: elimination, 25 penalties or 10 penalties
- No penalties for breaking frangible devices to allow the development of new devices
- List of experienced XC coaches
- Recommendation to have an experienced rider walk the XC course looking at "safety" aspects either before or during the TDs course walk (preferably a rider not competing in that class)
- Fall report form: rider to analyses his fall together with the TD (fence judge fills the form together with the rider) whenever possible



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

- Production of a DVD on safer Cross Country riding by Chris Bartle (should be ready by July 2016)
- Education programs for XC Controllers and Technical Delegates

2. Cross Country Course Design:

- New technology for table fences and solid corners (Workshop took place in Aachen with University technicians in July 2014)
- Different type of frangible devices were being tested with log tied with a rope, "frangible" hinges or shock absorbers
- OCs were encouraged to use as many frangible devices as possible/sensible at main XC training centers, 3*/4* competitions, German National Championship
- The MIM system was offered to all interested Organizers

3. Medical & Protectors:

- Production of an educational DVD for Doctors and Red Cross personnel on Eventing risks, protectors, radio control, etc.
- Financial support for smaller organizers with less starters to afford full emergency services
- Analysis of video material to improve airbag protectors and to study comfort in rolling
- Recommendation for the correct fitting of helmets, body protectors, air vests, bib numbers, etc.
- Development of a handout for riders on mental training and nutrition

4. Veterinary:

- Research to identify regular health tests for sport horses to prevent heart attacks in competition
- Rule about post mortem for all horses dying at events (all disciplines)
- Voluntary heart checks of all horses at major events

5. Rider's fitness and tuck and roll:

- Research to identify regular health tests for sport
- Clinics organized (for all disciplines)
- Guidelines for Organizers / incident management

In April 2015 a press conference was organized to present the German Eventing Safety program. The ideas and efforts were welcomed and positive feedback was received.

For 2016 and 2017 organizers packages will be distributed systematically to all OCs. They included information for riders, deformable fences, Red Cross personnel, etc.

"Safety days" were to be organized to present to all involved in the sport, the efforts done to improve the safety in Eventing.

Another project was the innovation prize "improvement of the XC day" for the organizers having done the biggest improvement (Red Cross personnel, emergency services, etc.)

Dominique Maes (BEL NF) asked whether these documents would be available to other National Federations.

Philine Ganders (GER NF) answered that these could be made available upon request.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

10.10 GBR NSO – Jonathan Clissold

Annex XIV

In 2015, 68'000 starters were recorded, more than half of the starts were at 90 and 100 cm. In 2016, British Eventing was to pilot approximately half a dozen of 105 cm classes as it was felt that the step up to the 110 cm was too much.

A total of 560 courses were built in Great Britain with approximately 14'651 Cross Country elements, representing 1.6 million fences jumped every year.

The spread of fences showed that 26 % of fences on all courses were round fences, 16 % were ascending spread, 14 % square spread, 14 % brush, etc.

On these courses, 1'828 falls occurred of which 1'728 were at Cross Country fences, the others happened on the flat or elsewhere. Out of the 1'459 unseated riders reported, there were 20 serious injuries, for the 233 non somersault falls, 19 serious injuries were reported and for the 45 somersault falls a total of 8 serious injuries. Fewer than 3 % of the fallers were seriously injured.

The definition used for injuries in the UK was in line with UK road traffic casualties:

Slight injury included: whiplash or neck pain, shallow cuts or lacerations, sprains and strains, bruising, slight shock.

Serious injury included: broken neck or back, head injury, concussion, severe internal injury, loss of leg or arm (or part), chest injury, fracture, deep cuts or lacerations, crushing burns, severe shock, detention in hospital as in patient.

However, the FEI definitions were temporary and permanently injured which meant that many injuries which were classified as serious in the UK would only be temporary disability for the FEI. It might be worth looking at these definitions to try to bring all the data in line.

The European Commission were trying to harmonize the different data coming from sports through a system called MAIS (Maximum Abbreviated Injury Score) which was a globally accepted trauma scale used by medical professionals worldwide. The scores went from 1 to 6 with levels 3 to 6 considered as serious. It might be a project to follow.

The majority of serious injuries were head injuries, new work was done by Dr Michael Turner looking at the effects of concussion on the long term. Several jockeys and sports people which had been concussed were examined to determine the effects.

A massive European project was being done currently of which the Dublin University were part of, it was looking at the helmets in skiing, equestrian sport and cycling to develop the next generation of helmets to offer a better protection.

Heather Cameron Whytock who gave a presentation at last year's NSO seminar had obtained her PhD and was doing more work on the psychological effect of knowing the placing before going Cross Country. She would welcome ideas in relation to this project.

Many different projects were ongoing with students in different Universities. At Nottingham they were using profiling, putting marks on horses and loose jumping them on Cross Country fences with the rider and without to evaluate how the rider influenced the horse.

Two surveys were done on head cams, one in Alberta Canada who were looking at cycling helmets and slow speed falls wearing a head cam (bigger type of head cams such as GoPro) as well as road cycling going fast. The slow falls with head cams didn't represent a higher risk, however, for higher speed falls, the risk of the camera hitting the ground and stopping the sliding on the ground massively increased the risk of injury.

For the second survey, BBC commissioned TRL (Transport Research Laboratory) to do work on the cameramen filming for BBC with cameras on their helmets. It showed that the camera didn't produce any higher risk, however all were slow falls, no high speed falls were studied.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

Currently no head cams were allowed in GBR however, very small cameras were being tested in racing fixed with Velcro and it didn't seem to increase the risk in case of a fall.

Regarding hat standards, the EN1384 or BS1384 was no longer an accepted standard. Manufacturers were no longer permitted to use the standard to test the hats and needed to use the SNELL, ASTM or PASO15 standard.

The Eventing Director mentioned that the Eventing Rules stated that "*Protective headgear must comply with any of the European (EN), British (PAS), North American (ASTM), Australian/New Zealand tested standards*".

Peter Whitehead encouraged all NSOs to check the FEI medical webpages for information on concussion and share with all involved in the sport.

Dominique Maes (BEL NF) asked whether any fracture was considered as serious.

Jonathan Clissold (GBR NSO) mentioned that it depended if the treatment was done in hospital or not.

Teun Platenkamp (NED NSO) questioned whether the percentage of falls and injuries were acceptable in Great Britain.

Jonathan Clissold (GBR NSO) answered that the Risk Management program in place aimed to reduce the horse falls and more particularly the somersaults. It was well accepted that it was a risk sport. The riders' registrations were going up each year.

The Chair of Eventing Committee pointed out that there was a level at which it would no longer be possible to reduce the number of falls and injuries.

Fritz Otto-Erley (GER NSO): In Germany, there were many carriage driving accidents, however no statistics were done as the number of accidents were not felt big enough despite fatal accidents happening.

10.12 HUN NSO – George Bazár

Annex XV

In the 1930's in Hungary the training and education was very good. The preparation for the cavalry and for the Berlin Olympic Games was excellent. In the 1990's Hungary still competed in the Olympic Games however, it was getting very difficult for the sport.

In 2000's the International competitions were only organised to allow the rider to go abroad, the qualification system of the FEI had an impact on the riders as they had to obtain qualifications before going to Championships which was not always understood.

As from 2007 the sport improved with the help of foreign officials including Charly Boess, Peter Wagner, Karl Paar, Francesco Finochiarro and Giulio Pocci who helped with the upgrade of Cross Country design, Event management and the quality of Judging. The National Federation and Organising Committees had to learn how to deal with serious accidents.

In 2009, the CIC2* European rural Championships were organised and it was a great achievement.

In 2011, the NF joined the FEI development program. Ronald Alexander, Andrew Griffiths and Andrew Fell helped with the Course Design to build a CCI3 Star level course. The Course Designer team had been educated and could design which was a big improvement.

An Equestrian sport educative event will take place as part of the FEI Development Stage 2 program, focus will be put not only on the organisation of an event but also helping the riders, training for Judges, CDs and TDs.

Officials had also been involved in the Global Education program, which was very beneficial for our Officials.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

10.13 IRL NSO – Alison Packman

Annex XVI

The total number of starters in 2015 was 8878. The number of unseated riders was 132 and horse falls 36. The rider falls decreased by 26 in 2015 however horse falls increased by 15 which was quite worrying. One horse fatality was recorded, the horse failed to take off and fell in a ditch.

Out of all the falls, 89% of fallers had competed at less than 10 events as a combination, out of those, 21% fell at their first event as a combination. The gender and age was not a factor. 75% of fallers were female but 75% of riders were female.

In 2016, Eventing Ireland was taking additional measures to promote rider safety. Eventing Ireland teamed up with EquiRatings (the Advanced Equine Analytics company). Five years of national results were analysed to produce an EquiRatings Quality Index (ERQI) base level for each class. This data worked in tandem with the safety measures already employed by Eventing Ireland (MER's, stewards, frangible pins, rider training etc).

Athletes will be shown a traffic light system (Green, Amber, Red) based on the ERQI base line when they went to enter an event. Red showed there had been issues (falls, stops etc) and the rider will be prevented from entering that horse at its current level and will be advised to move down a level first. The manual process of checking results every week was now automated.

Eventing Ireland and EquiRatings will be closely monitoring the data for 2016 and with new data being analysed every week, could improve and continue to promote rider safety (moving the base rating higher or lower depending on the results)

Eventing Ireland and EquiRatings were to review and analyse the results at the end of the 2016 season to evaluate if there had been a drop in falls.

10.14 JPN NSO –Dr Tomohiko Amaya

Annex XVII

In Japan, a total of 4 One Star competitions and 2 Two Star competitions were organised in 2015. There were no higher level competitions as top riders trained in Europe to gain qualifications for the Olympic Games.

Two years ago, the Asian Games were organised in Incheon (KOR), four Japanese riders travelled and participated in the Games, the team finished at the second place.

In 2015, there were 550 starters, 2 unseated riders and no horse falls, no horse or rider serious injuries were recorded and only one rider slight injury.

Two seminars were organised for the training of riders, the spring seminar was for top riders and the summer seminar for university student riders which was given by a top Australian rider.

For the last ten years, Mr Barry Roycroft has given courses for Officials and riders.

At each competition, a Doctor is appointed as well as three Veterinarians.

All riders are provided an air vest as it is felt that it helps to reduce the serious injuries.

The weather conditions in Japan were very hot and humid from June to September in the East and West regions, therefore, the riders and horses trained in the North.

10.15 NED NF Representative – Gert Naber

Annex XVIII

The NED NF organisational structure was presented. In 2002, a fusion between 17 small federations (Driving, Eventing Show jumping, etc.) took place, it grouped in one National Centre based in the centre of Holland where the Equestrian Federation, KWPN Studbooks, Pony studbooks, Stallion test and Federation of the riding schools were based. This allowed a good cooperation between all the different stakeholders.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The question was how to listen to the riders in all the processes. An Eventing forum was organised to allow each of the eleven regions to be represented by one person, the Eventing Federation specialist (Gert Naber) and an Independent Chairman also took part. The aim was to discuss the rules and regulations, championships for all levels, educational programs for Officials and trainers and Eventing training facilities in the different regions, safety aspects, support and advise the local organisers and riding schools, policy framework for the future.

The goal was to improve the training and competitive facilities at local and regional level (better riders = more safety). A technical Eventing Committee was set up, it included three National Coaches for Seniors, Young Riders, Juniors and Ponies, the Sports Director and an Independent Chairman (Teun Platenkamp).

The subjects discussed included the International affairs (Olympic format), rules and regulations (related to the international sport) policy framework (team program and selection).

These programs achieved positive outcome in various areas including good safety program with the Dutch pole, MIM clip, good procedures when accidents occur, rider friendly procedure to compete at National level in Belgium and Germany, programs for Eventing Coaches and Trainers, championships for Eventing horses, local training facilities for inexperienced Eventing riders. For International sport, taking advantage of the strong other disciplines by using the team coaches of Show jumping and Dressage to train the Eventing riders to make them stronger. In 2016, 8 new FEI Eventing Officials were on the lists. International competitions have gone from 5 in 2012 to 9 in 2016. The main goal was to improve the International results.

Dominique Maes (BEL NF) asked how the Course builders were trained. It was explained that it was a difficult process as the course builders didn't do many courses, the NF tried to stimulate them to attend big events such as Boekelo to see how the fences were built and walk the course.

10.16 NOR NSO – Anton Granhus**Annex XIX**

In Norway, the National Statistics showed that the number of starters were growing from 781 starters in 2014 to 849 in 2015, however the number of falls was decreasing from 22 in 2014 to 14 in 2015. No rider or horse injuries were recorded.

Norway was a small country, it was easier to keep some control on the riders, horses and competitions as everyone knows everyone in the sport.

A licensing system was in place, a green card was necessary before obtaining the license, it was also compulsory to be member of a club. An Eventing card was necessary to start competitions at 80 cm which needed to be renewed to start CNC1* competitions. A strict qualification system was used from 90 cm and upwards.

A good education system for trainers and officials was in place and it focused on Safety. At every course for TDs and CDs the NSO gave a presentation on Safety, TDs and CDs needed a license, they needed to follow a course every two years to maintain their license.

A database and program called HorsePro owned by the National Federation was used in Norway. All organisers needed to use the system. All licensed riders were registered in the database, which kept record of all the results of horses and riders. The yellow cards will be added to the system as soon as possible.

10.17 POL NSO – Tomasz Mossakowski**Annex XX**

A schema of the Safety at events was presented it was explained that when looking for the weakest link it appeared that it was "people", Course Designer, Technical Delegate, Ground Jury.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The next step was to look at the requirements set in the Eventing rules to become a TD, CD or Judge. It included to have some experience, however it was subjective. Regular practice was needed as National Course Designer before applying to become FEI Course Designer, again it was questioned what was considered to be “regular practice” as it could be interpreted differently.

Could the requirements be more precise like in Show Jumping.

The FEI Global Education Program had good requirements and could be used in the FEI Rules.

The Eventing Director stated that the rules had to work in all countries and the number of Officials in a country had to align with the number of events organised.

The Chair of the Eventing Committee mentioned that the Cross Country Guidelines were an important document which should be diffused as much as possible by National Federations to all the Officials.

10.18 POR NSO – Anibal Marianito

Last year, the rider Francisco Seabra suffered a fatal accident at CIC2* Sevilla (ESP). The rider’s family asked the Seabra riders to stop riding Eventing. Many other riders especially the younger had, as a result left the sport.

The National Federation’s Technical Committee had changed and their aim was to improve the number of riders.

Only one International competition remained in Portugal at Barroca d’Alva, after the owner of the Vale Sabroso competition decided to stop organising it.

20 national competitions were organised in 2015, at pre-novice, novice and 2 star level, Regarding the falls no horse falls had been recorded for the last 4 years and no serious injuries.

There were only 4 FEI Officials in Portugal, 1 Technical Delegate, 1 Course Designer and 2 Judges. The National Federation was trying to increase the number of Officials but it was not an easy task.

In 2015, a National Championship was organised at 3 Star level, 8 riders participated. They qualified through 1 and 2 Star competitions.

10.19 SWE NSO – Lars Christensson

Annex XXI

Sweden was a small country, in 2015 4900 starters, 117 falls, 14 horse falls and no rotational falls. No serious injuries, 17 slight riders injuries and 7 horse slight injuries.

The National Federation concentrated on the promotion of Cross Country schooling, training, developing the facilities, upgrading the standard of the fences.

The Sugar cup for the ponies was developing well. The M65 rule (2 results with less than 65 penalty points to compete abroad) had brought a lot of debate especially from the riders who don’t have very good results. It was implemented to make sure that the riders going abroad, representing the country were competent. It was also for safety reasons.

Work was done together with Technical Delegates and Course Designers developing and updating the courses around the country. In addition, yearly seminars were organized together with workshops.

During the courses and workshops the MIM concept was presented, the research, facts and presentations were used to educate the Course Designers and Technical Delegates. The frangible devices were part of the education and it was important to discuss not only the devices but also how to use them in the best possible way.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

The new gate system and table were tested across the country to gain experience in the practical part.

In May 2016, a clinic will be organized for Course Designers, Technical Delegates, coaches and riders to study the influence of fences (shape, design, position, etc.) on horses and how riders react to it. The aim is to build a good dialogue.

It was important to use the frangible devices and Course Designers should not compromise.

10.20 USA NF Representative – Jonathan Holling **Annex XXII**

In USA, Eventing were held on 6 different levels. Competitions at 80, 90 and 100 cm were the training levels and many riders competed at that level. The sport was mainly driven by those lower levels which was similar to other countries.

Only a few riders could make a living out of riding, it was necessary to train horses for other riders, coach riders at competitions and teach lots of lessons; that was how the sport was financed.

As in Great Britain, a 1m05 level class had been introduced to be used as an option, it was still possible to go from 1m to 1m10 if desired.

One important thing for our sport was the public Fans of major sports were generally practicing that same sport. It was important to remember that ninety percent of the fans in Eventing were Eventing riders. The FEI should be looking into targeting that group to bring those people in.

The USEA put together a safety task force. All the accidents in the US were examined by the safety task force and feedback was given to the board on the conclusions and advice if something needed to be done. It was found that in most cases, many contributing factors were in cause and it was not just one thing.

At this year's USEA annual meeting, a presentation was given on the work done up until now on frangible and deformable fences and the projects being developed, it was an ongoing program and it was important to keep developing new devices.

The type of fences and shapes should also be studied and it was important that Course Designers had a written document to use the appropriate type of fence in the right location.

The Course Designers were doing a great course however, some course builders were not building to the expectations. It was necessary to implement a certification process to ensure that course builders were up to the standard.

Teun Platenkamp (NED NSO) asked for an update on the Prolog.

Jonathan Holling (USA NF) explained that these devices were no longer used as the developers hadn't got much time to work on the project and the logs were quite expensive (300 U\$ 500 U\$)



11. WORKING GROUPS

11.1 Risk Perception – G. Wilde - Rob Stevenson

Professor Gerald J.S. Wilde was a Canadian Psychology Professor from Queen's University in Ontario who wrote a book on risk perception.

The perception of risk in sport had to be accepted as no risk equaled no sport. The more a person was healthy the more it exercised on the long term, the less likely it was to die, however each time the person exercised the risk increased. No risk equaled no sport but no sport equaled no life.

Homeostasis could be defined as a property of an organism or system that helped it maintain its parameters within a normal range of values. Risk homeostasis was this idea of compensation, a thermostat in our heads which would take us back to an acceptable level of risk.

An example was given: water flowing down a river came to a delta, as human beings we assumed that by blocking one of the three main affluents, it would somehow stop the water from that river going to the ocean. That was where the risk migration explained by G. Wilde came in, it was explained that the water would still go to the ocean but by another route.

G. Wilde explained that removing the risk by using airbags, seat belts, speed limits and safer highways, the people still died on the roads, just in different ways. That applied also to Eventing sport.

The concept of perceived risk and actual risk was a difficult notion for the brain to conceptualize. Looking at young riders going around a course on their ponies was sometimes of concern as it was recognized that the actual risk was higher than the perceived risk, however for the young rider it was normal as it always did it.

The perceived risk was maybe less than the actual risk, as it adapted with the experiences we had through the measure of outcomes and feedbacks given by other persons.

The benefit of more risk in sport was that potentially the person would win, the cost was losing or injury.

The cost of caution was being unsuccessful, the benefit of caution could be an increase frequency of obtaining MERs.

It was necessary for riders to adjust the risk thermostat to have the perceived risk more in line with the actual risk. This would probably allow an increased number of MERs to be obtained and success over a longer period of time. MERs should be considered as an award as much as winning.

Finally, the following quote illustrated well the subject:

There was a very cautious man, who never laughed or played, he never risked, he never tried, he never sang or prayed. And when he on day passed away, his insurance was denied, for since he never really lived, they claimed he never really died.

11.2 Education of National Officials – Dominique Maes

Small countries faced similar problems regarding the education of their officials, such as small number of officials in competitions and family related in certain cases.

For Eventing, the expertise of Show Jumping or Dressage could not be used as it was very specific officials which were needed for Eventing.



Updated: 8-Mar-16

J:\TDE\TDE\Safety Program\2016\2016ERMSeminar Report-Draft.docx

It was difficult to set up a National education system as well as an assessment system.

The proposed solution was to look over the borders and set up a mentoring system. Every Official would get a National assistant to allow an exchange of expertise and the Official would get help. To achieve this program, a network needed to be in place to facilitate the exchange of information between the National Federations.

A syllabus would be needed as well as an assessment tool.

There was a real need of exchange of information between countries, for organisers, National officials and National Federations.

It could be done through a platform put in place by the FEI to facilitate the exchange.

Catrin Norinder mentioned that during the Sports Forum in April, one of the topic was online education it included the education from National level to International level.

Pierre Michelet explained that in France, a mentoring program existed for Course Designers. A visit was done by an experienced Course Designer to the National Course Designer to discuss the course and the placing of the fences, elements, distances, etc.

11.3 Frangible device MIM Clip – Lars Christensson

The aim of using the frangible devices was to prevent horse falls, more specifically, rotational falls.

The use of the MIM Clip was discussed, it was very important to use the right material in the right way and the Course Designer and Course builder needed to be familiar with the components.

At FEI competitions, 11 penalties were applied for breaking a frangible device, there were divided opinions on the use of the penalties and certain countries did not give penalties.

The wall and table kit developed by MIM were developed in such a way that when the fence was hit, one or both the clips could break. The fence could still be standing if only one of the two clips broke.

The question was to define if the penalties should be given for breaking only one clip.

It was felt that the penalties should apply and the fence be considered as activated when it changed dimensions (shape and / or height) in a significant way.

The article in the Eventing Rules needed to be modified to read “each athlete activating a frangible device in such a way that it lowers the dimensions of the fence will be given 11 penalties whenever the activation occurs as expected”.