EQUESTRIAN AUSTRALIA

GUIDE FOR CROSS COUNTRY COURSE DESIGNERS AND OFFICIALS

Prepared June 2017

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CROSS COUNTRY GUIDELINES FOR ALL EQUESTRIAN AUSTRALIA OFFICIALS

PREAMBLE

This Cross-country Design Guide is for all EA Eventing officials, not just course designers.

- It is a set of standards that the FEI and EA expects all officials to work and adhere to but not all eventualities are necessarily covered and it is up to the event officials to make decisions based on the fundamental principles of fairness to horse and rider alongside the overall aim of minimising risk. This Guide provides notes for guidance and do not represent a complete guide to course design.

- The guide seeks to help officials achieve the same standard of cross country course at each level of competition and seeks to improve standards of safety for horse and rider.

- Fences that may be designed that fall outside this guide must be fair, as safe as possible, and of the right standard for level of the competition.

- As a general comment, it is believed that the technicality of the modern courses has reached the point where we should not be more demanding in our expectations of what horses are being asked to do in terms of intensity and technicality

- This Guide is also intended to be an “open project” to reflect all new ideas, findings and lessons learned. This document will be constantly updated with all new findings and best practices based on experience at both international and national level.

- All CDs must be able to justify their work and if for any reason a fence or fences is/are produced that do not conform to this Guide the officials responsible at the event must be satisfied that the fence is appropriate

- These notes are based on experience in the use of certain types of obstacles at International and National level and are intended to constitute a guide as to how to design and construct fences to lower the risk for Horses and Athletes in the Cross-country test.

- This document should be read in conjunction with the EA Rules for Eventing

The following points have been taken from the FEI Rules for Eventing to assist with course designing:

Counting the efforts

The Rules include wordings such as:

- "significant jumping efforts"
- "average Horse"
- "expected to attempt to negotiate"

Inevitably such words require subjective judgments to be made, and no absolute, objective criteria can be laid down.

The TD is required to make these judgments, after discussion with the CD, and must rely on experience and training, bringing a spirit of common sense and above all fair play to his decisions.

For Guidance

"Significant jumping efforts" will include all artificial ditches, steps, banks, etc., and may include natural hazards. Steps under 0.60m high should not normally count as an effort.

"The average Horse" means the Horse(s) in the middle of the ability/experience range for the level of the Competition.

"Expected to attempt to negotiate" is a wording intended to allow the TD to ignore the unusual, unexpected route that could be taken by a small minority of competitors.

Obstacles with alternative elements or options

Where an obstacle may be jumped in one effort, but has options involving two or more efforts, each of these options must be lettered as an element.

All alternatives must be within the permitted dimensions for the relevant level. The “black flags” are of great help and should be used intelligently by CD and TD to create smooth lines and options.

In the case of multiple alternatives, the competitor is allowed to change from one line to another provided always that he jumps only one “A”, one “B” and one “C” in order, and without contravening the Rules.

It is strongly recommended that if it be decided to allow competitors in certain exceptional circumstances to circle between lettered elements without penalty, then a diagram should be published to show clearly what is permitted.

Dimensions of obstacles

It is essential that an obstacle be carefully measured.

For avoidance of doubt, this Rule does not mean that everything between the flags must always be within the height limits - simply that all the parts, which the CD and TD expect the average horse and rider to attempt must be.

Dimensions of obstacles involving water

At obstacles involving water crossings, the depth of the water may not exceed 35cm. (10 – 15cm depth is considered sufficient under normal circumstances for lower levels.)

This rule is intended to avoid the Horses from having an extra problem at the take-off and landing in the water. The depth of water should be proportional to the jumping effort into and out of the water. i.e. the bigger the effort required from the horse, the shallower the water. The minimum length of 9m before a fence or step out of the water is to assure that always the horse has at least two strides in the water.

Dimensions of obstacles

The word "excessive" in the Rules is important. The CD and TD should above all take account of the type of drop included in a proposed course and their relationship to the other obstacles and the course as a whole.

AIM AND PHILOSOPHY

FEI Eventing Rules

The Cross Country Test constitutes the most exciting and challenging all-round test of riding ability and Horsemanship where correct principles of training and riding are rewarded. This test focuses on the ability of Athletes and Horses to adapt to different and variable conditions of the Competition (weather, terrain, obstacles, footing, etc.) showing jumping skills, harmony, mutual confidence, and in general "good pictures".

The aim of the CD is to set the appropriate test for each level but also produce a good 'picture'. Therefore, the best Horses and Athlete should be able to make the course look easy.

It is the Course Designer's responsibility to design courses that help to produce better horses and athletes.

The CD should not design to "test the best" but rather be thinking about a fair course that is appropriate for the level that should give everyone the opportunity to complete without having to take a multitude of Black Flag alternatives.

At the lower levels the emphasis is very much on the education of horse and athlete; introducing both parties to a wide variety of fences and simple questions. As the levels progress so the degree of difficulty of the courses should suitably reflect the particular level.

As a general philosophy, the number of finishers is more important than the number of clear rounds. It has to be accepted that the quality of the field and the weather conditions can impact the statistics. The goal of seeing as many finishers as possible is desirable for all levels, but the appropriate degree of difficulty must not be compromised in order to achieve this, for example by the over-use of alternatives.

It is felt that one of the essential skills of riding cross-country is being lost with the advent of bigger timber and softer profiles. Athletes must be able to slow down and be able to jump, out of a rhythm, the occasional straightforward, more "upright" type of fence.

This applies to all levels of Competition. Any fence like this, if created, must be suitably positioned in the middle of a course off a turn and/or on slightly rising ground where Athletes will not be tempted to gallop fast at it and it must be built of 'Horse friendly' materials and not 'sawn timber'.

Special care must be taken, particularly at the lower levels, in how and where these fences are sited and constructed.

Additionally, it is expected that national classes of each individual level should in principle be of the same standard

Where different levels are running on the same venue at all levels there should ideally not be more than two shared fences.

GENERAL GUIDELINES AND LEVELS

Some simple guidelines for all levels

- The aim of the designer is to provide a suitable test for the level of Competition without exposing Horses and Athletes to a higher risk than is strictly necessary to produce the right test for that level.
- Fences and questions should never be justified by the use of alternatives or options.
- Horses and Athletes should be encouraged and have their confidence built, not destroyed.
- It must be recognized that our sport is about achieving a standard, not about pushing the standard above what it should be. This includes measuring the length of the courses fairly and reasonably.
- Any/all questions must be fair. It is not acceptable and a CD should never try to catch Horses out using unfair distances or by trying to be too clever or over complicated.
- ‘Hidden’ fences which surprise horses are considered to be unfair and should not be used
- Horses must be given time (at least 2 or 3 strides) to understand clearly what they are being asked to jump.
- Course designers have to appreciate and take into consideration the part that inclement weather can play on the severity of a course. If or when conditions deteriorate officials must readily be prepared to reduce the jumping "effort" required by the Horse at all levels because of the energy sapping nature of the conditions.
- Course designers have to be their own biggest critics!

- Course designers must understand that courses must prepare Horses and Athletes for the next level of Competition and therefore need to be of the correct degree of difficulty.

- Course designers are encouraged to use occasional more vertical fences, open oxers and open corners at all levels where it is appropriate to site them in a user-friendly place (i.e. off a turn and/or slightly up hill). The reintroduction of such type of fences should anyway be done gradually and with great care.

- Any Horse should be able to jump a straightforward fence of maximum dimensions at any particular level – big does not necessarily equate to difficult!

- We should be looking to give Horses and Athletes the opportunity to show what they can do and are capable of rather than seeking to find out what they cannot do.

- All courses must "flow" and permit a good "rhythm". Tight turns should be avoided early in the course and especially late in the course. 'S' bends are not recommended unless there are four or more strides between elements. CD's should not attempt to slow horses down at the expense of 'flow'.

- Wherever possible it is better to have turns before fences and especially at combinations rather than after fences.

- All courses should offer a positive experience.

- Course Designers must recognise that too many 'gear changes' on a course will make it more physically and mentally tiring for horses

- Course Designers need to recognise the effect that their fences and the distances in combinations/related fences that they use will have on the shape of the horses and be mindful of what is good to see and what is not good to see

- Course Designers must be mindful not to overdo the use of brush fences on their courses or the test can change significantly. 15%-20% is seen as a recommended maximum.

- Too much distance between fences can also have a negative effect on a horse's performance, causing the horse to "switch off" Strong consideration should be given to at least a moderate bend approaching a fence after a long gallop.

Front Shoulder of Spread Fences

By January 1st 2019 all CDs should reshape any spread fences with upright fronts so that the top of the front, and the back edge, of fences with the maximum permitted top spread will slope at approximately 45 degrees to a point 25cms below the top of the leading and the back edges as shown in the drawing below. All newly built fences should comply with this henceforth. It is also a requirement that the front leading edge on fences with a square leading edge (except Gates) are adjusted so that there is a slope of approximately 45 degrees on the leading edge.

FLOW AND MEASUREMENT OF THE COURSE

Flow

In every course, there should be a beginning, middle and end.

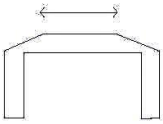
- **Beginning:** 3- 5 fences to get Horses and Athletes thinking forward with a good rhythm and jumping in a good shape. The lower the level the more fences you need.
- **Middle:** The meat of the course, where the main questions are asked. Don't start with the most difficult question (or combination) but rather let the difficulty progress and then ease off towards the end when Horses maybe getting tired. In principle after every question there should be an easier confidence boosting fence, particularly at the lower levels.
- **End:** 3 or 4 easier fences to produce a feel-good factor. At the end of the course these fences should if possible be off a turn to prevent a mad gallop to the finish.
- **Wherever possible try and avoid the possibility of Horses landing static after a fence particularly at combinations and where a turn is involved after the fence**

Don’t try to slow horses down at the expense of flow.Measurement

The course must be measured fairly and on a realistic riding line after the fences are in position. It is inappropriate if Athletes are measuring the course 50-100 metres longer then the officials. The measurement of the course should include the base spread of all fences.

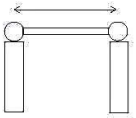
HOW TO MEASURE FENCES

TOP SPREAD



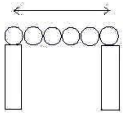
HIGHEST POINT TO HIGHEST POINT

TOP SPREAD



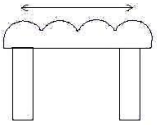
HIGHEST POINT TO HIGHEST POINT

TOP SPREAD



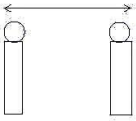
HIGHEST POINT TO HIGHEST POINT

TOP SPREAD



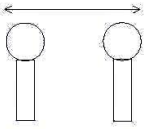
HIGHEST POINT TO HIGHEST POINT

TOP SPREAD



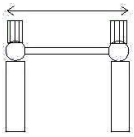
OUTSIDE TO OUTSIDE

TOP SPREAD



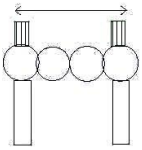
OUTSIDE TO OUTSIDE

TOP SPREAD WITH BRUSH



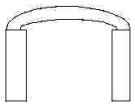
OUTSIDE TO OUTSIDE OF BRUSH

TOP SPREAD



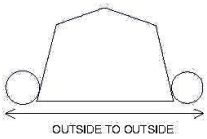
OUTSIDE TO OUTSIDE OF BRUSH

TOP SPREAD



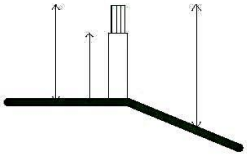
NO TOP SPREAD

BASE SPREAD

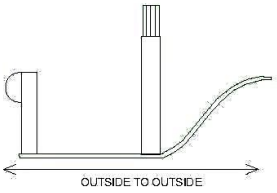


OUTSIDE TO OUTSIDE

THE BRUSH

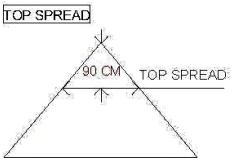


BASE SPREAD

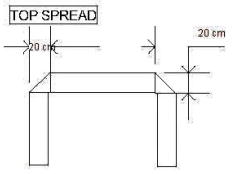


OUTSIDE TO OUTSIDE

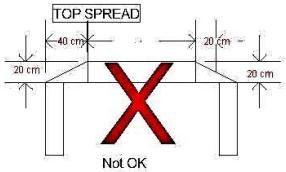
TOP SPREAD



TOP SPREAD



TOP SPREAD



Not OK

INTENSITY OF EFFORT

- When considering the "intensity of effort" officials should take into account both terrain and ground conditions and discuss with the Course Designer their thought process in courses that are outside these guidelines.
- Course Designers should understand the number of efforts they have on every minute of their course.
- The Course Designer should also understand the physical effort involved with every fence. For example, the straight forward galloping fence jumped out of rhythm actually gives a Horse a 'breather'. The fence where the Horse lands 'static' and has to accelerate away is very tiring.
- Important to remember also the mental effect that a course can have on Horses; courses can be mentally demanding. Every time a Horse or Athlete steps up a level it is like them going to their first 4 star.
- Intensity is a much debated subject and it is up to all officials to be mindful of this aspect to not overdo it. It is impossible to cover this subject in detail since each site is different.
- The window of distances and efforts is there to give designers flexibility but it is essential that courses must still flow and have a good feel and balance.
- If the Course Designer wishes to use the maximum number of permitted efforts in a Short Format Competition the course will inevitably be much more intense than if the maximum number of permitted efforts are used at a Long Format Competition, so Course Designers should always relate to the Guidelines below
- It is suggested that in Short Format Competition, recognizing the intensity is a possible issue, there will be one or two less "related" types of questions or combinations compared than would be expected in Long Format Competition.

GUIDELINES FOR 60cm CLASSES

Objective

This class is often the first opportunity where both horse and athlete are introduced to any cross-country experience. Many first timers may have never had the opportunity to canter around any cross-country course therefore undulating terrain and open ground could be very daunting to the first timer. It is imperative that this class give a very positive experience for all by allowing the horse and athlete to develop confidence throughout the course. The course and fences should be straight forward with little or no turns other than gentle curving lines which allow easy flow and rhythm between fences. These classes are usually made up of lots of logs but the use of other types of fences and materials are encouraged as long as they are inviting fences with a good profile and sited in places that encourage the horse to jump and have a good experience.

Design and Construction

At this grass roots level, the variety in the way that obstacles appear and their profile is very important. Obstacles that have a sympathetic and forgiving profile should be used wherever possible. All obstacles should have well defined ground lines and their jumpable width should generally be wide and inviting.
Courses should have a good balance of fences that should encourage horses to jump confidently and in a rhythm.

Combinations and Related Distances

A simple combination or related distance may be introduced, preferably in the later part of the course **(A Combination is defined as elements with two or less non-jumping strides in between. Related distances refer to distances above two non-jumping strides.)**

Combinations should be simple and straight forward consisting of not more than two elements.

Sympathetic fence profiles should be used. Avoid using fence types which can jump erratically and alter distances between elements e.g., brush fence as the first part of a combination.

Combinations and related distances should not be sited at the end of long galloping stretches, on a downhill slope or in an area with a confined access or exit. Avoid areas in shadow or with poor light. A slow measured approach should be the designer's aim.

Distances

Bounce distances, on fences with height, should **not** be used at this level.

Alternatives

Alternatives should not be necessary as the direct route should be suitable for the great majority of competitors.

Water Obstacles

In 60cm classes competitors should be expected to negotiate a simple 'dew pond' type complex, with a ramp into and out of water. **Competitors should not be expected to jump into water or out of water.**

Obstacles before water

Obstacles placed before a ramp into water should be on two non-jumping strides or more. Fence profiles should be sympathetic. Maximum height fences should be avoided.

Obstacles after water

Obstacles after a ramp out of water should be sited on two non-jumping strides or more.
Fence profiles should be sympathetic.

Steps out of water

Steps out of water are not recommended. The depth of water is not the test.

Narrow Fences

Generally narrow fences are not recommended at this standard

GUIDELINES EvA80 CLASSES

Objective

The EvA80 class is to encourage inexperienced riders and horses to compete in and experience EA events at an introductory level, with the benefit of the highest standards of course design and building.

Riders should be able to canter, around the course, in a good rhythm. They will be expected to be able to go up and down hills/slopes and to jump a variety of straight forward fences.

The cross-country course should be made up exclusively of EvA80 fences, where possible, and the course should be inviting, flowing and encouraging with the minimum amount of technicality involved. If fences have to be shared with EvA95 obstacles, they must be within EVA80 dimensions. Time is not expected to be a key element at this level.

It is intended that these guidelines be used to create a base standard for the EvA80 class. Advice from Accredited Course Designers is essential during the design, construction and alteration of courses.

Design and Construction

At this grass roots level, the variety in the way that obstacles appear and their profile is very important. Obstacles which have a sympathetic and more forgiving profile should be used wherever possible. All obstacles should have well defined ground lines and their jumpable width should generally be wide and inviting.
Courses should have a good balance of fences and the first six fences should encourage horses to jump confidently and in a rhythm.
The inclusion of more upright fences: post and rails, is appropriate and educational but care should be given in the correct positioning of upright fences.

Combinations and Related Distances

There should be a **maximum of three combinations** within the course, excluding the water fence. They should appear in the last two thirds of the course, wherever possible, to allow sufficient time for competitors to have warmed up before any questions are asked. Combinations should not appear before fence 4. **(A Combination is defined as elements with two or less non-jumping strides in between. Related distances refer to distances above two non-jumping strides.)**

Combinations should be simple and straight forward consisting of not more than two elements.

Sympathetic fence profiles should be used. Avoid using fence types which can jump erratically and alter distances between elements e.g., brush fence as the first part of a combination.

Combinations and related distances should not be sited at the end of long galloping stretches, on a downhill slope or in an area with a confined access or exit. Avoid areas in shadow or with poor light. A slow measured approach should be the designer's aim.

Distances

Bounce distances, on fences with height, should **not** be used at this level. (A bounce distance between two steps is permitted but not out of water)

Alternatives

Alternatives should not be necessary as the direct route should be suitable for the majority of competitors. Where they are considered necessary, they should be asking the same type of question as the direct route e.g., accuracy, be the same in construction (where possible) and be easier and more time consuming to execute.

Water Obstacles

EvA80 competitors should be expected to negotiate a simple 'dew pond' type complex, with a ramp into and out of water. **Competitors should not be expected to jump into water.**

Obstacles before water

Obstacles placed before a ramp into water should be on two non-jumping strides or more. Fence profiles should be sympathetic. Maximum height fences should be avoided.

Obstacles after water

Obstacles after a ramp out of water should be sited on two non-jumping strides or more.
Fence profiles should be sympathetic.

Steps out of water

Steps out of water are acceptable, but not recommended, and must be well defined. Consider painting the top of the step out with a suitable defining colour. NO jumps in water. The depth of water is not the test.

Narrow Fences

Narrow fences should be introduced at EvA80 level. They should start to set the rider and horse a test of accuracy and honesty. **There should be a maximum of 3 minimum jumpable width fences.** (Jumpable width is defined as between the flags)

The minimum jumpable width should be **2.00m**. This should be made more inviting with the use of trees and dressing to create an impression of width and to help guide competitors in. In the case of brush fences, cutting in a 'scallop' shape creates such an impression.

Fences whose jumpable widths reduce from back to front i.e. arrow heads should have a front face jumpable width of a minimum of 50% of the back, e.g., a 2m wide arrow head at the back,

should taper to a minimum of 1m. Base spread should never be more than $^{2}/_{3}$ of the maximum allowed.

GUIDELINES EvA95 CLASSES

Objective

EvA95 is the natural progression for horse and rider to compete in and gain further education and development of cross country competitions at EA events.

The cross-country course should be made up of exclusively EvA95 fences. If fences have to be shared with EvA105 obstacles, they must be within EvA95 dimensions.

The course should be inviting and flowing with obstacles evenly spaced throughout, thereby reducing long galloping stretches. The course as a whole must be consistent and demanding enough that a successful competitor could progress to EvA105 with confidence, yet inviting enough to allow riders and horses, not yet ready for EvA105 to gain confidence. It needs to be recognised and understood that many riders do not have the ambition to progress above this level.

Competitors will be expected to jump the course in a rhythm over a variety of straightforward fences including going up and down slopes and undulations. At EvA95 time begins to become a factor in the context of the competition.

These guidelines are intended to create a base standard for the EvA95 class. Advice from Accredited Course Designer is essential during the design, construction and alteration of courses.

Design and Construction

The variety of fence design and materials used in construction plays a significant part in educating horses and riders in what they will face as they progress through the different classes.

Courses should have a good balance of fences and the first six fences should encourage horses to jump confidently and in a rhythm. All obstacles should have ground lines with their jumpable width as wide and inviting as possible. A number of fences with top spread (90cm or over) should be encouraged.

Fences that restore confidence should be used after combinations or more difficult questions.

Combinations and Related Distances

There should be up to **four combinations and related distances** within the course, excluding the water fence, and they should appear in the last two thirds of the course wherever possible, and not before fence 4.

Combinations and related distances should be straight forward and inviting and can consist of up to three elements. Elements may be partially offset, parallel, or placed on a gentle curve.

Combinations should not be sited at the end of long galloping stretches, on a downhill slope or in an area with a confined access or exit. Avoid areas in shadow or with poor light. A slow measured approach should be the designer's aim.

At EvA95 the design of combinations and related distances should start to incorporate a variety of different obstacle profiles.

In introducing slightly more technical combinations and related distances, kinder profile obstacles should be used e.g., logs, in order to give a more positive experience. Avoid using fence types which can jump erratically and alter distances between elements e.g. brush fence as the first part of a combination.

Separately numbering obstacles, rather than ABC lettering, is a useful design tool to help the inexperienced and is strongly recommended where appropriate.

Distances

Bounce distances, on fences with height, should only be used at this level in a step combination. A step up to a fence on a bounce distance is acceptable although not coming out of water (75% of max height), with an appropriate alternative.

Alternatives

Alternatives should only be used where necessary. Where they are considered necessary, they should be asking the same type of question, if possible, as the direct route e.g., accuracy, be the same in construction (where possible) and be easier and more time consuming to execute.

Water Obstacles

EvA95 competitors can be expected to negotiate a variety of options.

(i) Competitors can be expected to jump down into water off a step, but a suitable ramp alternative into water **should** be provided. Any jumping effort into water should have no significant height (below 30cm), i.e., Pole on top of step should be below 30cm in height.

(ii) A Step out of water is acceptable provided it is significant in height (0.75m). The placing of a pole at the base of the step and painting the top of the step a defining colour can prove to be helpful.

Obstacles before water

(i) Obstacles placed before a ramp into water, should be on one non-jumping strides or more. Fence profiles must be sympathetic. Maximum height fences should be avoided.

(ii) Obstacles placed before a step into water should be on at least 2 non-jumping strides from the edge of the step. Fence profiles must be sympathetic. Maximum height fences should be avoided.

Obstacles after water

Obstacles after a water complex can be placed after a ramp or step out. Obstacles should be on one non- jumping stride or more from the edge of the water.

NO jumps in water.

Narrow Fences

The education started at EvA80 should be built upon and we should be setting the horse and rider an increased test of accuracy and honesty, but still allowing for the inexperienced members of the partnership. **There should be a maximum of 3 minimum jumpable width fences.**

The minimum jumpable width should be **1.8m** wide. This can be made more inviting with the use of trees and dressing to create an impression of width. Some help can be given but learning to negotiate narrow fences is essential for progression.

Fences whose jumpable widths reduce from back to front i.e.: triple brushes, arrowheads should have a front face jumpable width of a minimum of 50% of the back. e.g., a 1.8m wide triple brush at the back, should taper to a minimum of 0.90m. Base spread should not exceed $^{2}/_{3}$ of the maximum allowed.

GUIDELINES EvA105 CLASS

Objective

The EvA105 class is a step towards CNC1*, aimed at those aspiring to CNC1* or as a valid achievement in its own right.

If fences have to be shared with another class, they must be within EvA105 dimensions.

The course should be inviting, flowing, well balanced and make use of the natural terrain as much as possible. The use of the terrain and positioning of obstacles should require competitors to think more about the judgement of speed and approach.

Advice from Accredited Course Designers should be sought during the design, construction and alteration of courses.

Design and Construction

The variety of fence design and materials used in construction plays a significant part in educating horses and riders in what they will face as they progress through to the CNC2* class.

Courses should have a good balance of fences and the first few fences should encourage horses to jump confidently and in a rhythm and reflect the task ahead. Straight forward fences should be up to maximum dimensions, and where design is not an issue should be as wide and inviting as possible. A number of fences with significant top spread (over 1.00m) should be encouraged.

Increased technicality should play an important part in the design process at this level. Fences that restore confidence should be used after combinations or more difficult questions.

Combinations & Related Distances

There should be a minimum of four combinations and related distances within the course, excluding the water fence, and they should appear in the last three quarters of the course wherever possible, and not before fence 4.

Combinations should consist of numerous elements. Elements may be partially offset, parallel, or placed on a curve.

When bending EvA105 horses and riders from one jumping effort to another, the following guideline is appropriate;

Bend through 45˚ – Minimum of 4 non-jumping strides.

Bend through 60˚ – Minimum of 5 non-jumping strides.

Bend through 90˚ – Minimum of 6 non-jumping strides.

Distances

(i) **A bounce** (2 similar fences on reasonably flat ground) can be used but is not compulsory. Differentiating both elements of the bounce is strongly advised. Fences with Top Spreads over 30cm **must not** be used within a bounce. At this level, there must always be an alternative to a bounce.

(ii) The makeup of combinations and related distances should be varied in technicality and the questions that are asked. Full use should be made of natural terrain and features to test competitors' ability to judge speed and approach and accuracy. However, care should be used to avoid areas which could be confusing for the horse or have shadow and poor light.

(iii) Incorporating different fence profiles into combinations and related distances is essential in testing ability and educating CNC1* competitors. Avoid using fence types, which can jump erratically and alter distances between elements, e.g., Brush Fence as the first part of a combination.

Alternatives

Alternatives should be used where necessary. Where they are deemed to be necessary, they should be asking the same question as the direct route i.e.: accuracy, be the same in construction (where possible) and take longer to execute.

A bounce combination must have a suitable alternative, accessible without having to negotiate the bounce.

Water Obstacles

Competitors should be expected to negotiate a variety of options.

Water

(i) Competitors can be expected to jump down into water off a step and/or over an obstacle with height. Jumps landing into water with a maximum height of 080m should have no significant top spread.

(ii) Steps out of water are acceptable provided they are significant in height (up to 0.80cm). The placing of a pole at the base of the step and painting the top of the step a defining colour can prove to be helpful.

(iii) The depth of water is not the test.

Obstacles before water

(i) Obstacles can be placed before water, using the whole spectrum of distances, except a bounce distance.

(ii) Consideration needs to be given to the profiles of obstacles before water. Sympathetic profiles i.e., Log, would be more suitable on distances closer to the water with stronger profile fences i.e., post and rails being used with greater distance between the obstacle and the water.

Obstacles in water

(i) Obstacles in water are acceptable at EvA105 level.

(ii) If jumps in water are to be used there should be only one other effort associated with the water, e.g. jump into water followed by an obstacle in water and a slope/ramp out. Care should be taken when using an obstacle in the water at this level so that the horse can clearly understand the question and with more than two non-jumping strides recommended before and after such a fence if using a combination or related distance.

Obstacles after water

*Obstacles can be placed after water, using the whole spectrum of distances, except a **bounce** distance.*

Narrow Fences

At EvA105 level, we should be asking the horse and rider an increased test of accuracy and honesty, but still allowing for the less experienced members of the partnership. The minimum jumpable width should be **1.60m** wide. **There should be a maximum of 4 minimum jumpable width fences.**

This can be made more inviting with the use of trees and dressing to create an impression of width. The use of narrow fences should be encouraged at this level and included into combinations as well as water complexes.

Fences whose jumpable widths reduce from back to front i.e. triple brushes, arrowheads should have a front face jumpable width of a minimum of 50% of the back, e.g., a 1.8m wide triple brush at the back, should taper to a minimum of 0.90m. Base spread should not exceed $^{2}/_{3}$ of the maximum allowed.

Breakable Devices

Breakable devices may be used on all fences which meet the current criteria.

GUIDELINES FOR ONE STAR AND HIGHER COURSES

Please refer to the FEI XC Course Design Guide For all FEI Officials, updated 18 April 2017

ANCHORING, OR SECURING, OF PORTABLE FENCES

The importance of this cannot be overemphasised and it is not acceptable to assume that, because a fence is heavy, it will not move if hit at speed by a horse. Course designers, builders and TD's must make every effort to ensure that each and every portable fence is 'anchored' in a way that will prevent movement as fences that do move, through energy & momentum, significantly increase the chance of a fall.

There are various recognised ways of securing portables, with the most traditional being the use of posts and, more recently, the Spirafix Ground Anchor system which is both popular and efficient (see below for more information). There are other methods and, as long as the principle is adhered to, they can also be accepted.

In certain situations, like lined water jumps or all weather arenas, it is not possible to use anything that can pierce the lining/membrane in which case great care must be taken to ensure the fences are secured in another way e.g., long backed with sufficient base spread heavily weighted 'feet'.

Spirafix System 50mm "C" type Ground Anchors

This is a very efficient & reliable system but some things should be considered:

- The anchors must be at the front of the fence rather than at the back, or at the front AND back. At least two must be used.
- Where fences with small base spreads are being fixed, extra anchors may be required at the front of the fence.
- There are two lengths of anchors available – 460mm and 620mm – and the correct ones must be used depending on the ground conditions. i.e. the longer ones in sandy soil.
- The anchor brackets must be securely fixed to the frame of the fence so that the fence cannot break away from the brackets.

Posts

- These must be substantial and dug (or knocked) deep enough into the ground. A minimum depth of 0.75m is required but in certain conditions this might need to be increased.
- Posts should be at the back of the fence and, if set below the highest part of the fence, should be put at the front as well to stop the front lifting on impact.
- Try not to use posts with lots of knots as this can weaken the post.
- Using a combination of posts and anchors can work very well.
- Posts must be secured to the fence using rope or wire.

Frangible deformable devices

"2017 Eventing Rules – Article 547.2.4 Frangible/Deformable Obstacles:

Obstacles can be provided with frangible/deformable technology only if such technology has been approved by the FEI according to the FEI Standard for the minimum strength of frangible/deformable cross country fences. A list of approved technologies is published on the FEI website."

All frangible/deformable devices used in FEI competitions have to be approved by the FEI according to a specified standard.

A fence must never be designed or built with a frangible device if the CD would not normally build it as a fixed obstacle. Frangible devices are designed to reduce the possibility of a serious fall NOT compensate for a wrongly or poorly designed or sited fence.

In order to have devices approved to be used in FEI competitions the manufacturers are called to comply with this standard and apply for the registration of their product on the FEI list of approved frangible/deformable devices to be used in FEI competitions.

The device can and will be approved by the FEI after passing all the tests and requirements (fitting instructions, etc.) as detailed in the standard.

Standard for the minimum strength of frangible/deformable Cross Country fences

- For the purposes of this standard, TRL (Transport Research Laboratory (GBR)) has been appointed so far as the FEI approved inspection authority.
- If needed, the FEI will examine requests to approve additional institutes to act as FEI approved inspection authority for the purposes of this standard. (04.06.2012)
- **Register of Products** having met the Standard for the minimum strength of frangible / deformable cross country fences http://fei.org/fei/disc/eventing/risk-management
- A frangible device must only be used after the specifications, appropriate sitting and materials of a normal fixed obstacle have been established, whereby the use of such a device will only enhance the safety of the fence.
- The design and construction of a traditional fixed fence must never be compromised by the use of a frangible device.

FENCES DIFFICULTY AND RISK LEVEL

Vision statement for Eventing Risk Management Policy

Eventing constitutes an exciting and challenging all-round test of riding ability and horsemanship within an accepted and acceptable level of risk. Every effort must be taken by all involved in order to ensure that, at each level, responsible athletes are participating with progressively trained horses in order not to be exposed to a higher risk than is strictly inherent to the nature of the competition and generally acceptable to stakeholders.

The safety of Horse and Athlete has an ever-increasingly high profile in the image, evolution and financial well-being of our sport and cannot be overemphasized.

The task of a Course Designer is to produce a Cross Country Test of the level required without exposing Horses and Athletes to a higher risk than is strictly necessary to produce the right test for that level.

Questions can be difficult, but should not be "risky" and the Course Designer must always visualize what can be the consequences of an error from the less experienced Horses and/or Athletes.

Course Designers must consider the possible consequences of a fall at any fence, e.g., hazards after a fence.

CRITERIA FOR EVALUATING DIFFICULTY AND RISK LEVEL

Approach

- Uphill – easier
- Downhill – more difficult
- Straight – more difficult
- Off a turn - easier

Footing

- Good footing – easier
- Deep or loose footing – more difficult

Materials

- Brush – easiest and most forgiving
- Roof/sloping leading edge – forgiving
- Log – still forgiving
- Rails/rounded leading edge – less forgiving
- Sawn Timber/90-degree leading edge – unforgiving
- Stone – unforgiving

Profile

- Vertical with uphill approach – acceptable

- Vertical with downhill approach – unacceptable
- Vertical with flat approach – 3* and 4* only

Ground lines

- Ground lines should be used to improve the profile of fences where felt essential.
- It is appropriate for there to be a discussion with the Course Designer as to the need or not of a ground lines. (Roof shaped tops of fences and large logs don't need ground lines unless on the down slope)
- Ground lines are generally appropriate at all levels on a downhill approach.
- Ground lines can be appropriate on steps out of water.

It is essential that every effort is made not to have an unforgiving leading edge on any fence. Research has shown that the more a Horse's mass can be deflected and the less it is stopped at impact the more forgiving the fence and the less the chance of a rotation. In the same vein a smooth surface is more forgiving than rough bark.

Dimensions

- Apart from the first fence all straight forward fences should be built to the height of the level being jumped. It does nobody any favours to get a 1.15 qualification over a 1.10 track.
- As a guideline fences on the down slope, before a step, ditch or other unexpected situation should be at 5cm below maximum height.
- All spread fences should have the back edge not less than 2 centimetres higher than the front edge.

Combinations and related distances

- Course Designers must not try to trick Horses or Athletes and Horses should have 2 or 3 strides to be able to understand the question.
- Anything 4 strides (18 metres) or less must be on a true distance.
- All Officials should be clear that the more steps/strides there are between fences the easier the question because the Athlete has more time to make adjustments. The exceptions are the distances where the Course Designer has used a fence as a set up for an exercise.

LESSONS LEARNED

A Clear Question

- First and foremost, the question that the Horse has to answer must be a clear one, which should not be misunderstood by the Horse. All horses must be able to clearly understand what they are being asked to jump.

Hazards

Unnatural hazards should not be placed behind a fence in a way that may distract a Horse at on approach or at take-off, particularly if they resemble a human being.

Colour of Rails

It is believed that horses see fences in contrast and dichromatically therefore if a CD wishes to use different colour rails as the top rails of an open oxer the front rail should be the lighter colour one.

Light to dark/shadows/the sun

- CD's should understand that horses see in contrast not colour therefore the contrast between the top of the fence and the background is of the utmost importance.
- At all levels, Course Designers, must recognise the effect of shadow and light to dark.
- When going from light to dark horses should be given time to adjust to new circumstances, the suggestion being that they should have at least 2 full strides.
- Course Designers must recognise and take into account when designing and siting fences the effect of shadows/the sun particularly early and late in the day and the time of year of the competition.
- It is essential to not present a silhouette to horses.

Table Fences

All tables should either be filled in with a sloping front face, with such face sloping away from the horse on the take-off side of the fence (this would be appropriate for the traditional sleeper tables or churn stands) or, in the case of picnic tables, that the top line should have a vertical face of at least 0.25m and that a seat should be in front of the table, also having a vertical face of at least 0.25m

Seats must not be placed on the landing side of a table, as this may present a false ground line.

Verticals

- True vertical fences should not be used.
- The precise degree of slope for such fences cannot be specified – this must depend on the particular site and fence, the level of difficulty of the course and the experience of the Athletes

Spread Fences

Fences with a top spread close to the maximum permitted for the level of Competition should not be sited in close proximity to hazards. Consideration should always be given in these circumstances to filling-in such spreads. It is essential to ensure that the Horse can see the back of the fence, using different materials, colours, flowers, etc. Special care must be taken when using spread fences as last element of a combination as they could be very punishing for a Horse in trouble in the combination.

Triple Bars & Ditches with walls/palisades and/or brush

- A maximum of three-quarters of permitted base spread for each star level should be used for triple bars or ditches with a wooden wall at the back as opposed to a wall with Brush.
- In general, where the maximum base spread is to be used, the highest point of the fence should be at a point between half and three-quarters of the spread except where there is a ditch in front of a Brush/palisade & brush and the brush is at maximum permitted height.
- If using a ditch in front of palisade with brush or with a timber frame with brush it is strongly recommended to have the solid part of the fence at least 10cms below the max permitted height.

Ditches

- A significant ditch should not normally be used in front of an obstacle forming the second or subsequent part of a combination, if the distance between the 1st and 2nd part (or 2nd / 3rd as relevant) is less than three strides.
- It is very important that the sides (back face) and bottom of the ditch can be clearly distinguished from the surrounding ground - the colour of the ground / surface should be different – even spraying ground with a coloured paint has been tried with some success
- Consideration must be given to the depth of ditches: a very shallow ditch is not impressive enough for the Horse, whilst if a ditch is more than 60 cm deep arrangements must be made such that a Horse can be extracted if it becomes blocked in it.
- All ditches should be arranged with a ramp (slope) so that a Horse can be walked out of the ditch readily

Brush Fences

- Where there is both a solid or fixed part and a soft "brush" part (for Horses to brush through it without causing injury to the Horse) to an obstacle, the fence will jump better if there is 25 cm or 30 cm of brush above the solid part.
- As the Rules specify the maximum height for the brush, then the solid part of the obstacle should be lower than the maximum permitted.
- Brush fences must allow horses to pass readily through the brush and not present a ‘solid’ element to the fence.
- The material used must be such that the risk of injury to horses is a small as possible. Thick stems and sharp ends after trimming/cutting must be avoided

- Brush ‘shoulders’ – care must be taken that athletes do not try to jump the shoulder itself or the high brush and so it may be necessary to flag the parts of the brush that the Course Designer wants to be jumped.

Double and Triple Brushes

- It is essential that double and triple brushes are "filled in" between the rows of brush, so that a Horse can put a foot down with safety.
- In the case of double brushes, it is essential to "fill in" between the two rows of hedge and to have a ¼ or ½ round in front of the second brush on top of the ‘fill’.
- Triple Brushes – the maximum permitted base spread must never be more than 2/3rds of the maximum permitted base spread. The key to the success of these fences is to ensure that they are in proportion with not too much base spread

Unjumpable parts of fences

- Unjumpable parts of a fence or combination of fences must be truly "unjumpable". This means that the Course Designer and Technical Delegate must be sure they close the places where they do not want the Athletes to jump in a way that for the Horse it is clearly a barrier and is impossible to try to jump.

Alternative obstacles

- Alternative obstacles, if possible, should be designed as the same type as the direct route, and not interfering with it.
- An alternative obstacle must not be sited in such a way as to encourage a quick jump following a refusal. For example, it is not permitted to have an "elbow" attached to an obstacle on the front side as an alternative.
- Where possible, alternatives should be sited only behind the direct route, and on the landing side of obstacles. If this is not practicable (where ground slopes away or water involved) the alternative obstacle must be some distance away ensuring sufficient space to recover the impulsion is taken to jump it (at least three strides).
- For this purpose, the black flag methodology is often very helpful for the Course Designer.

Bounce fences

- The elements of a bounce fence should not consist of true verticals – the face of the elements should be sloping. The use of contrasting colours for each element is highly recommended.
- A bounce having jumped down a step is unacceptable

Hole fences

- At all EA levels the height of the hole above the highest part of the obstacle must not be less than 2.10m and the width not less than 2m
- Any surface that can be touched by the Horse must always be soft (not susceptible to hurt the Horse or the Athlete).

- Keyholes must not have a spread of more than 45cms and the bottom of the keyhole must be brush (see below) When using these fences, it is essential that there is absolutely minimal chance of an Athlete hitting the brush at top of the fence even if this means that the size of the 'hole' exceeds the minimum permitted.
- The bottom of the hole must be soft i.e., brush or similar
- This type of fence must only be built in such a way that the question for the horse is very clear and this applies to any fence that may follow it; if a Course Designer wishes to use this sort of fence it will be necessary to ensure that the 'hole' is big enough for horses to understand the question in full
- There must be no chance of an athlete or a horse hitting the frame of the keyhole

Fences with roof

- The lowest part of any roof structure must not be lower than 3.50m above the ground.
- It is not recommended to use roofs at water complexes where the Horse has to jump into the roofed area (e.g. where there is a roofed bank in the water).
- Course Designers must ensure that the shadow from a roof will not impact on the way the fence jumps

Water fences

- Using different shades of colours or clearly differentiated colours is recommended. This makes the Horse quickly understand what he has to jump. Avoid optical illusions and also avoid reflective materials / gloss paint/ shiny varnishes. The top line of bank or step out of water must be very visible in all conditions especially when wet after a few Horses have passed.
- Step out of water, a ground line is recommended and the previous fence should be not less than 13.7m before the step.
- While a slight slope on the ground where Horses land in water is recommended there must not be more than a 20cm change in the depth of water in the first two strides after landing.
- Water to water with a drop is not considered to be an appropriate question at any level.
- The use of 'white' coloured fences is strongly not recommended when jumping into water.
- Rippling the surface of the water has proved to be useful to help horses 'read' the water.
- Any fence in water where a horse is being asked to run in to the water rather than jump in should be not less than 5m from the beginning of the water.

Corners

- Open Corners are recommended at all levels where horses have time to understand the question.

- Closed in 'solid top' corners are recommended where there is limited re-action time, i.e. after a step or ditch or shortly after crest of hill.

Leading Edges

It is essential that every effort is made not to have an unforgiving leading edge on any fence. Research has shown that the more a Horse's mass can be deflected and the less it is stopped at impact the more forgiving the fence and the less the chance of a rotation. In the same vein a smooth surface is more forgiving than rough bark.

It is strongly recommended that the front leading edge of spread fences are built at approximately 45 degrees to a point 25cms below the highest point

Profiles of Fences/Lower Rails

Where there is a fence with a top rail and a lower rail on the front face (e.g. an oxer or an upright post & rails) the lower rail needs to be not less than half way up the fence, and that in these situations there should be some sort of ground line also.

Alternatively, if a top rail and a ground line are used there needs to be some dressing (e.g. a shrub/tree/bush) to ensure that there is a good profile to the front of the fence and not just a gap between the top rail and the ground line.

Dimensions

- Apart from the first fence all straightforward fences should be built to the height of the level being jumped. If a fence on flat ground cannot be built to maximum dimensions it is probably the wrong fence in the wrong place. It does nobody any favours to get a 1.15 qualification over a 1.10 track.
- As a guideline fences on the down slope, before a step, ditch or other unexpected situation should be at 5cm below maximum height.
- All spread fences should have the back edge not less than 5 cm higher than the front

Combinations and Related distances

- Course Designers must not try to trick Horses or Athletes and where possible Horses should have 2 or 3 strides to be able to understand the question.
- Any combination on 4 strides or less must be on a true distance.
- All Officials should be clear that the more steps/strides there are between fences the easier the question because the Athlete has more time to make adjustments. The exceptions are the distances where the Course Designer has used a fence as a set up for an exercise.

Footing

The importance of the best possible footing cannot be underestimated and Course Designers must factor this in to their designing.

Good footing gives horses confidence and security. Poor footing makes horses suspicious and can lead to a lack or loss of confidence.

When designing a track, Course Designers have to recognise that their courses must remain fair and, as far as is possible, the same, for all horses regardless of the weather conditions. Inevitably when the footing is perfect it is reasonable to expect more combinations to achieve the Time Allowed.

Managing hard ground is much easier than managing wet ground and there is a lot of machinery available nowadays to make hard ground acceptable. Local knowledge of ground conditions and how best to deal with the challenges that Course Designers face is worth finding out about.

A HORSE'S PERSPECTIVE

- **Uphill approach** – easier as long as there is the opportunity to keep the revs up.
- **Downhill approach** – more difficult because the Horse needs more help from the Athlete to maintain balance.
- **Approach off a turn** – easier because the turn helps with the balance.
- **Light into Dark** – difficult because it takes time for the Horse to establish where he is going/landing. Must use appropriate timber to facilitate contrast and ensure as good visibility for the horse as possible
- **Towards daylight** – much easier for it is easier for the Horse to understand where it is going but be very mindful and guard against jumping a silhouette as this is potentially unsafe.
- **Straight-line combinations** – easier for the Horse as it has the most time to understand and assess the "question".
- **Bending line combination** – can be more difficult as the Athlete has to take a decision and the Horse has less time to understand what is being asked
- **Blind turns** – difficult and not appropriate at 1* and 2* levels because the Horse has little time to assess to question.
- **Vision** – a Horse is a 'prey animal' and can see forwards and backwards so cannot focus like a 'predator.' Therefore, at narrow questions and corners it sees the fence out of one eye and a wide-open space with the other.
- **Colour** – all two legged creatures see in colour, all four legged animals including Horses see in contrast. Therefore, officials must be cognisant of contrast (e.g., a dark coloured rail in shadow is not a good idea).
- **Tiredness** – Remember a Horse can get mentally tired as well as physically.