

## **DOGA Modules - What's it all about ?**

As far as we know the idea of modules originated in the United States. Certainly it forms a very important part of the hobby over there and Module Meets and Conventions are possibly the most common forms of public model railway display that you will see. Modules also exist on mainland Europe, although not to the same extent as in the US. There are module systems in this country (the EM Gauge Society have one for example). The interest that has been shown in modules makes us think that this is an idea whose "time has come".

The big thing about modules is that anyone who does not have the time, skill, space or finance to build their own layout, or anyone who is unable to join a club, can at least build a 4' x 2' module which they can bring along to a convention. Here it can form part of a much bigger system and allow them to show off what they have achieved. In the future DOGA are planning to hold Modular Meetings around the country and we hope that as many people as possible will join in with us in this fascinating branch of the hobby.

### **How did 00 Modules start in the UK?**

The Fareham & District MRC started to build a new layout. They wanted to build it so that it offered as much flexibility as possible and allowed a number of different arrangements of the layout, they also wanted to be able to include layouts belonging to members into the scheme. One of their number had just returned from a long sojourn in the US and said "I've seen this neat idea called modules, why don't we use that as our basis?" Soon other clubs saw their idea and said: "That's neat, can we have the details so that we can join in too?" Now for this to work properly, and for the interoperability to be maintained between different modules, there needs to be a STANDARD set so that anyone building a module has guidelines about what they need to do for their piece of the jigsaw to work with everyone else's pieces. With the best will in the world, the F&DMRC were not best placed to set a national standard for modular models so their Chairman set out on a quest to find a champion for the much needed standard and found himself as the first DOGA Modules Officer; and that's where we are today: DOGA are currently in the process of defining how 00 Gauge modules should work by setting a Modules Standard.

### **What is the standard?**

The critical features of a modular system are the height of the top of the rails from floor, and the length of the modules. There are other important features such as the radius of curves and how you join the boards together, but the height and the length are the critical ones.

There are already two other standards in existence for modules with 16.5mm gauge track (albeit HO) and it would be silly of us to ignore these standards. The existing standards are the American NMRA standard and the European NEM standard. These are very similar; they both work on a unit length of 2 feet, but specify different heights for their track. The NMRA specify 40", the NEM specify 1 m. However, both standards suggest that the legs of a module should be adjustable by  $\pm 1$ " , which effectively makes them compatible anyway.

Here is the proposed DOGA standard blow by blow:

- Length of Module: The length of any module must be a multiple of 2'. The normal length of module will be 4', 6', or 8'. It is possible to make a 6' long module out of 2 x 3' boards which are probably the most easily carried combination.
- Width of Module: The normal width of a module will be 2'; however widths of 1' (the smallest practical width) or 3' (probably the widest practical) are allowed.
- At the end of a standard 2' wide module the tracks must be offset towards the normal viewing side (front) of the board. The centre line of the first track should be 5" in from the edge; the centre line of the second track should be 7" in from the edge (this gives a de-facto track spacing of 2"; the centre line of the 6' way should be 6" in from the edge). Note: this refers to the ends of a module only, what happens in the middle is a matter for the scenic taste for the builder!

- Modules must be built square, the outermost ends must be parallel and an exact multiple of 2' apart.
- All modules must be self supporting (i.e. own legs).
- Rail Height: The height from the floor on which the module stands, to the top of the rail should be one metre. To allow for irregularities in the floor it must be possible to adjust this height by  $\pm 1$ ".
- Gradients: It is not envisaged that gradients will normally be found on a module. Where a gradient is employed it should be no steeper than 1:48.
- Corners: Where a corner is placed in a module the aim should be to maintain a radius of 4' along the centre line of the 6' way. This will make the length of a corner unit 4' 6" in each direction.
- As far as is practical the first 6" of track on a module should be straight and free from any permanent way features such as turnouts and crossings.
- All track on a module must either conform to the DOGA commercial track standard or must allow stock to run that conforms to the DOGA Commercial wheel standard.
- Bridging the gap between Modules: The DOGA solution to this problem is a Track Adjuster which can be seen on the DOGA Stand. The use of this device allows modules of differing track standards (e.g. Code 100 Peco Streamline and hand built Code 75 C&L Finescale) to be on used on adjacent modules.
- Electrics: It will be necessary to provide electrical connections between modules but at the time of preparing these notes no firm decision has been taken about how this will be done.
- Within a module the method of aligning boards and holding them together is a matter for personal taste. When fixing adjacent modules together this will be effected by the use of a C or G clamp. Ideally the clamp should have a minimum reach of 2".
- The depth of a module baseboard should be between 8" and 9". The thickness and strength of the end of the module should be sufficient to allow the use of a clamp to secure it to the adjacent module. Construction is a matter of personal taste, but open top construction methods lend themselves well to this sort of project. Special cases are possible - Fareham have plans to build a module with a viaduct on it and this will require a very non-standard board indeed.

### **Where to next ?**

When we set out to devise this standard we asked anybody who was interested to contact us. The result so far has been encouraging in that lots of people are interested but very few seem to have already started down this road. Our next step will be to formalise what has been done so far into a workable and understandable document that we can publish.

At the moment the intention is to make this an open standard - that means that you do not have to be a member of DOGA to be a part of it, but of course you are likely to have more fun if you are, because once there are enough modules to make it worthwhile, we hope to be organising large scale module conventions where we will be able to connect a number of large modules together into a gigantic layout that we can operate as a single system.

To keep abreast of progress and developments visit the DOGA website at [www.doublogauge.com](http://www.doublogauge.com) or the Fareham website at [www.hants.org.uk/fadmrc](http://www.hants.org.uk/fadmrc) and follow the link to the modules page.