## Connection between sets of modules for Eurotrack exhibitions (or others using FFMF modules).

For many years, Eurotrack, organizes exhibitions where members clubs, brings module or set of modules, end-to-end assembled for large network presentation. Mechanical as electrical junctions lead to some issues. Good problems determination and practical solutions are this notice purpose.

## Mécanichal issues :

FFMF standard, forecast an accurate tracks positioning from the edge of module and hole position in regard to these tracks. Using short track part (2" or 5cm long) allow a small distance recovering, the better is strict standard observation. Hungarian friends have made and supply templates.



Figure 1 Mechanical FFMF standards

Important notice : from public side, track 1 is inside (behind), track 2 outside (in front of public).

Using short track or not, it is to be hoped using fishplate for track junction. These can be conductive or insulating (see electricals issues), regarding rigidity conductive are more convenient.

## **Electrical issues :**

Usually, each club, so each set of modules have their own powers supplies. The easier solution, consist in setting insulating fishplates joining sets of differents owners. Consequently each club supply itself its own modules. See solution 1 below. The falling of this case lies in using fragile insulating joiners, see upper.



Following FFMF advices gives another way. These forecast junction of short track here and there junctions between modules, one is able to supply the other (see solution 2). So, conductive fishplates can be used to achieve this junction, or, better, do this junction using electric wires. In this case it's obvious to agree, who supplies who. Is the upstream set supplies a short section downstream or the opposite ?



Wiring FFMF principles lead the choice through downstream short section supply by upstream module, doing so, telephon male plug "pick the power" on the female socket as for an electrical power supply. This new section made of downstream short section and upstream module section could be used as a "stop section" in order to comply, manually or automatically with the order given by downstream part of network through the "Eurotrack block". But we can also have the entire stop section inside «A» set, and so have the scheme below. The best is probably to have a switch which can provide the first solution or the second one !



FFMF modules are linked together meaning plugs (or caps) and French telephon sockets. Direction is displayed fig 2)





So, for each interface between sets of modules, and for each track (1 or 2), the downstream male plug « pick the power » on the upstream female socket.

For more details about plugs and sockets wiring, see appropriate technical document.