RIO4 Commissioning, Some Hints.

1) Be very careful, when inserting and extracting the RIO4 into the first slot of a VME crate. Some parts may be scratched off!

2) Use only the lower of the two ethernet ports.

3) There is a direct VME page at address 0xf0000000 for 256MB implemented on the RIO4. It was not available on the RIO2/3 This address points to VME address 0x0 for single cycle access mode a32, address modifier 0x9. It provides the fastest single cycle access possible on this board. This address space can be used without mapping directly in the f_user.c, etc. It will produce no bus error in case you try to access addresses, where no hardware is found. In this case the processor will be simply stuck and has to be rebooted.

4) As on the RIO2/3, a direct memory page is mapped at offset 0xe0000000 with 256MB size. It points to the processor memory address 0x0. Since the LynxOS occupies the memory space from 0x0 for 0x8000000 bytes only the space beginning at 0xe8000000 can be used. This will be optimized and might change in the future. This address space can be used without mapping. It will produce no bus error in case you try to access addresses, where no hardware is found. In this case the processor will be simply stuck and has to be rebooted.

5) Don't forget to register your RIO4 in the data base at the IT helpdesk. If ethernet authentication will be introduced in your area, booting of the RIO4 will be no longer possible if you miss this step.