

BUG FIX: VALIDFIELD-TRAVELP

Book: GeNoC-types

Version: 1.0

Function: *validfield-travelp*

The function *validfield-travelp* validates the fields of a travel. It checks among other things two properties: whether the origin of the travel is not equal to the destination and whether the current node of the routes is not equal to the destination. The original code was:

```
(defun validfield-travelp (tr nodeset)
  (and ...
    (not (equal (orgv tr) (car (last (car (routesv tr))))))
    (not (equal (caar (routesv tr)) (car (last (car (routesv tr))))))
    ...
  ))
```

This code checks the two properties only for the first route, but it should check them for all routes. In the new code the two checks are done in the function *validfield-route*, which is called by *validfield-travelp*. Two lemma's in **GeNoC-misc** should be updated, but have been removed because GeNoC and the Spidergon instantiation compiled without these lemma's:

```
(defthm checkroutes-caar
  (implies (and (checkroutes Routes TM NodeSet)
                (validfield-route Routes NodeSet)
                (consp routes))
           (member-equal (caar routes) NodeSet)))

(defthm checkroutes-car-last-car
  (implies (and (checkroutes Routes TM NodeSet)
                (validfield-route Routes nodeset)
                (consp routes))
           (member-equal (car (last (car routes))) NodeSet)))
```