Structure of data sd_partition

Summary:

This structure of data is related to the parallelism of elementary calculations and the assemblies. It is attached to one model and allows to know which processor must calculate (and to assemble) which finite element.

Remarks :

- *For a sequential version of the code, this structure of data does not exist.*
- *If PARALLELISME=' CENTRALISE' , this structure of data does not exist.*
- *The finite elements "late" (those of the dualized loads or the loads of contact for the method "CONTINUES") all are treated by processor 0 except if PARALLELISME=' GROUP_ELEM'.*

Contents

1 Tree structure

```
sd_partition    (K8)   :: =record
(O)  '.PRTK'           :     OJB  S  V  K24   length = 2
(O)  '.PRTI'           :     OJB  S  V  I     length = 1
(F)  '.NUPROC.MAILLE'  :     OJB  S  V  I  length = nb_mailles (grid) + 1
```

2 Contents of objects JEVEUX

2.1 '.PRTI': S V I length = 1

V (1)	nbproc : many processors MPI available at the time of the creation of sd_partition

2.2 '.PRTK': S V long K24 = 2

V (1)	Type of parallelism requested by the user: / 'GROUP_ELEM' / 'SOUS_DOMAINE' / 'MAIL_CONTIGU' / 'MAIL_DISPERSE'
V (2)	Name of sd_partit if v (1) = ' SOUS_DOMAINE'

2.3 '.NUPROC.MAILLE': S V I

This object is length nb_ma + 1, with nb_ma : many meshs of the grid subjacent with ligrel.

It informs about the distribution of the finite elements carried by the meshs of the grid.

V (nb_ma + 1)	nbproc : many processors MPI available (identical to PRTI (1))

for ima of 1, nb_ma :

V (ima)	number of the processor (of 0 with nbproc - 1) who must treat the finite element carried by the mesh ima

If V (ima) =-999 : the mesh ima do not carry a finite element in ligrel