



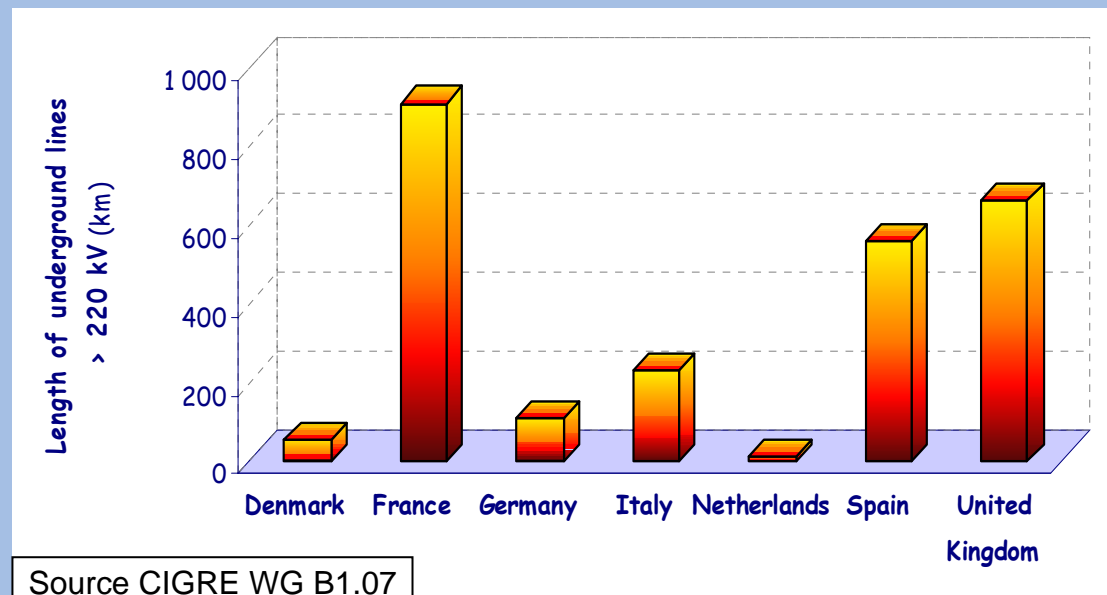
Gestionnaire
du Réseau de Transport d'Electricité

The Paris area EHV grid

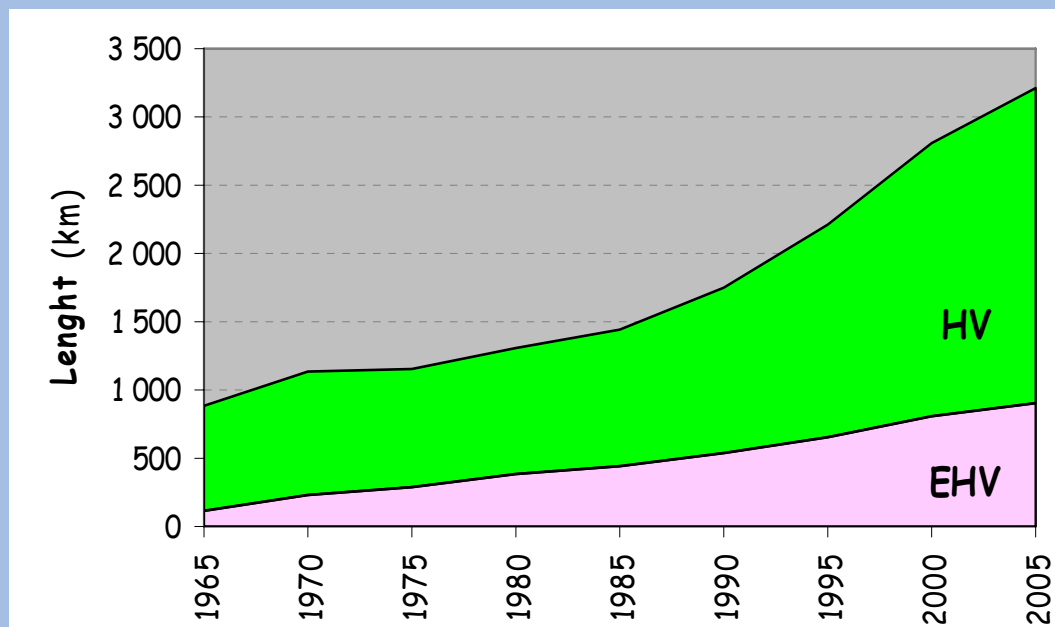


EHV underground network in France

- The UGC network (> 50 kV) represents 3260 km
- RTE EHV grid : 3rd in the world and 1st in Europe with 906 km
- All big cities are supplied with 225 kV

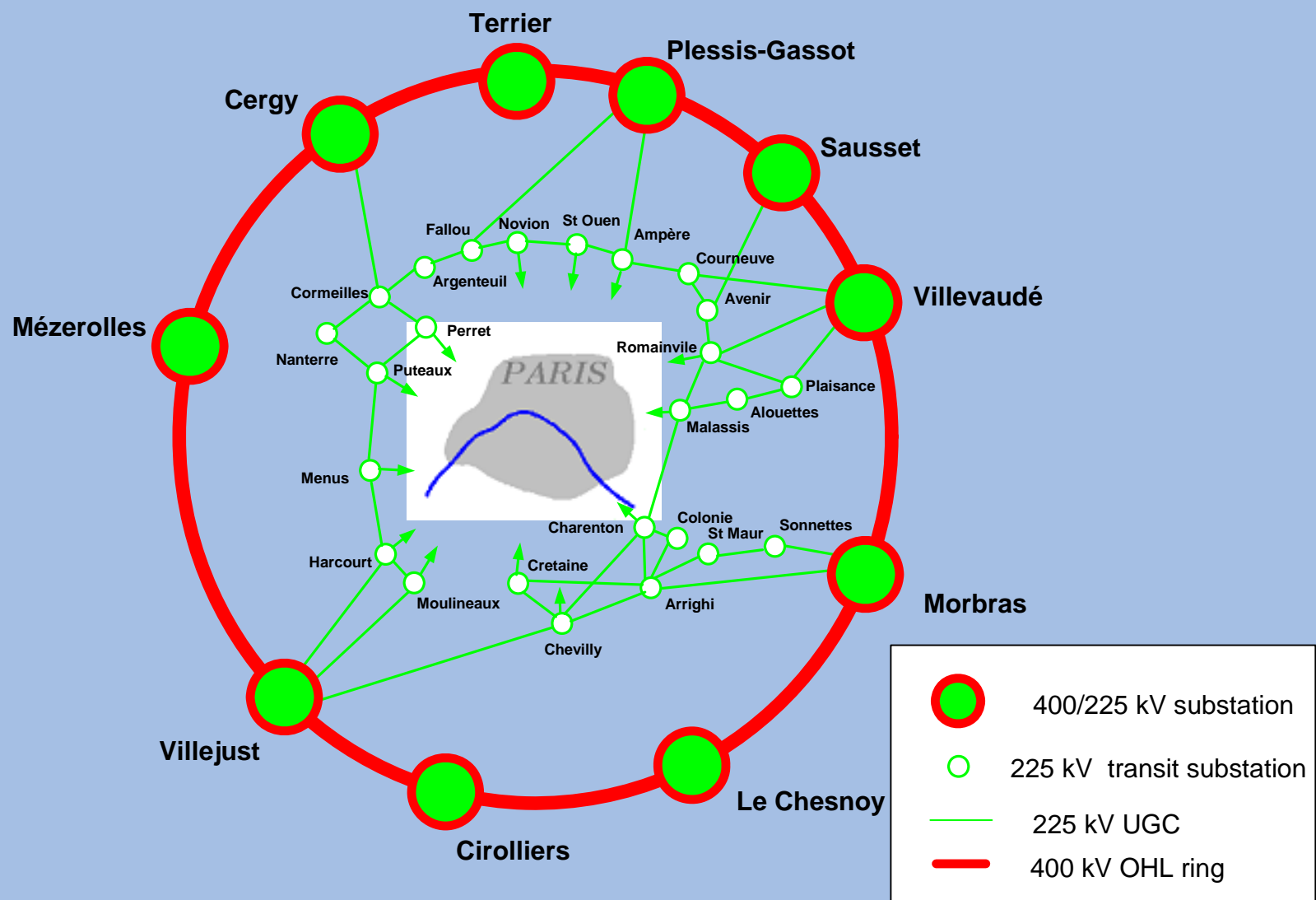


Evolution of RTE's UGC length

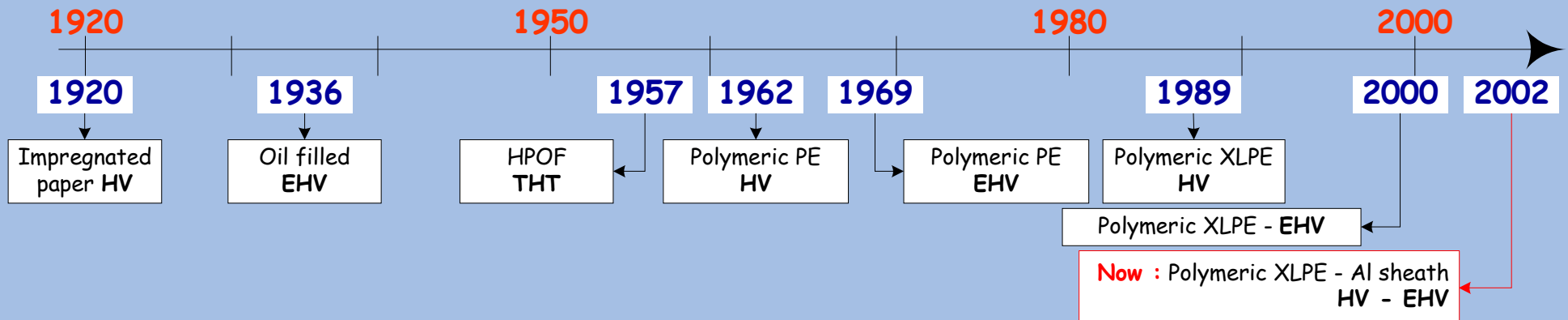


YEAR	EHV (km)	HV (km)	TOTAL (km)
1969	233	910	1 143
1979	380	937	1 317
1995	661	1 549	2 210
2007	906	2 354	3 260

Paris area grid in 2007



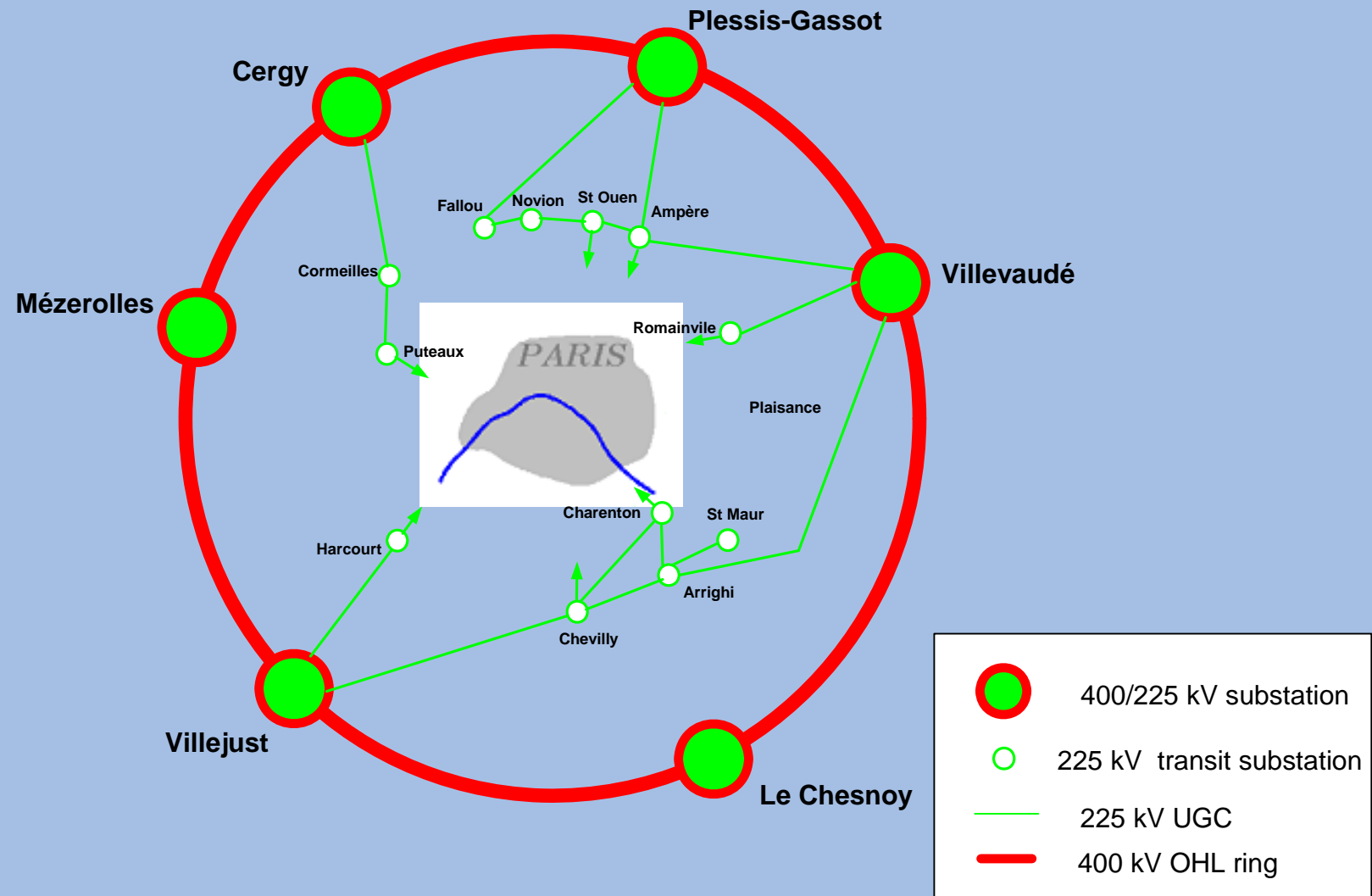
Paris area Data



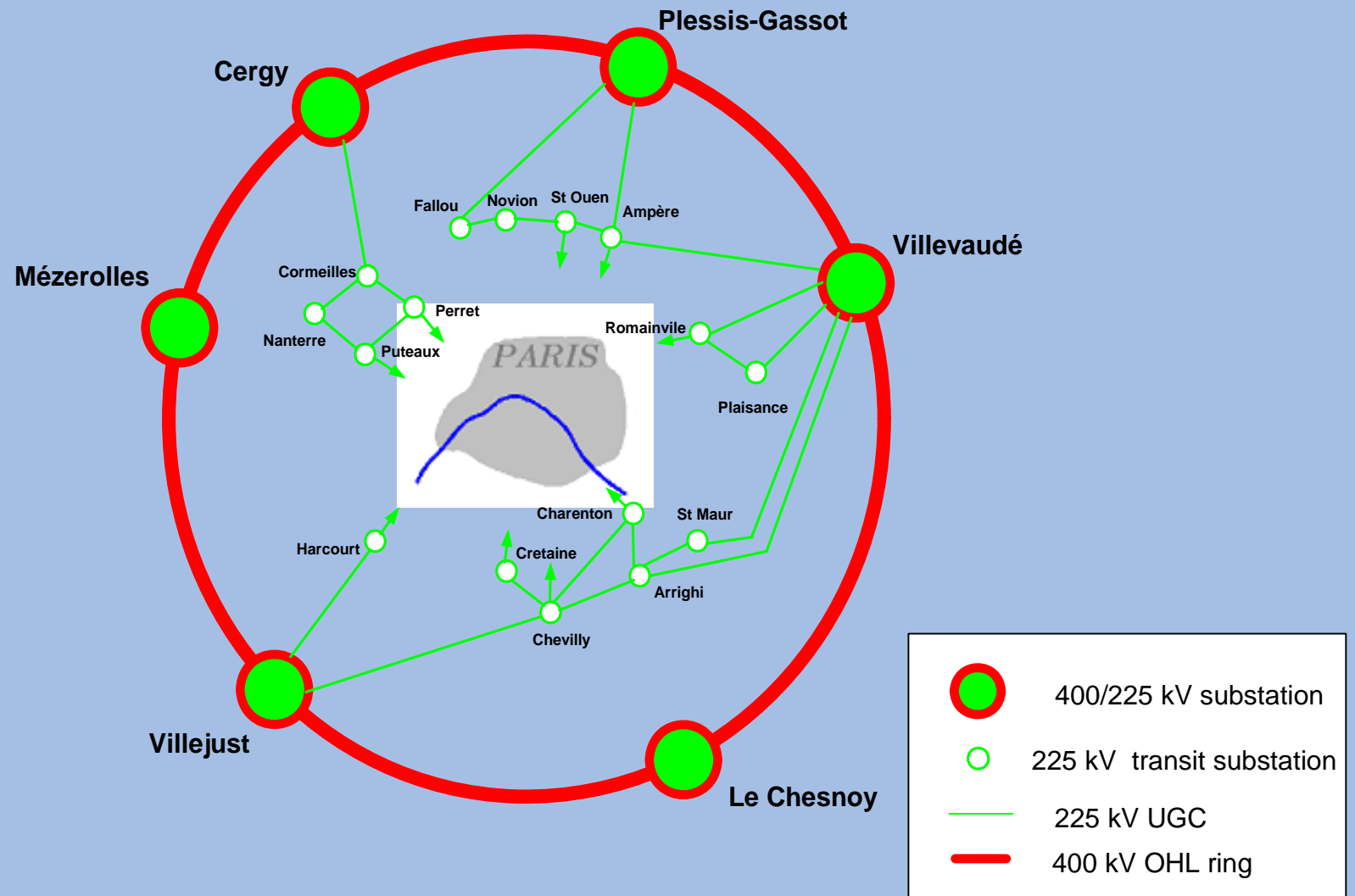
	Oil filled cables	Synthetic cables	Total
225 kV UGC length (km)	195,8	442,2	638

- First 225 kV cable in 1936, and some parts still in use
- Average age of the grid : 20 years

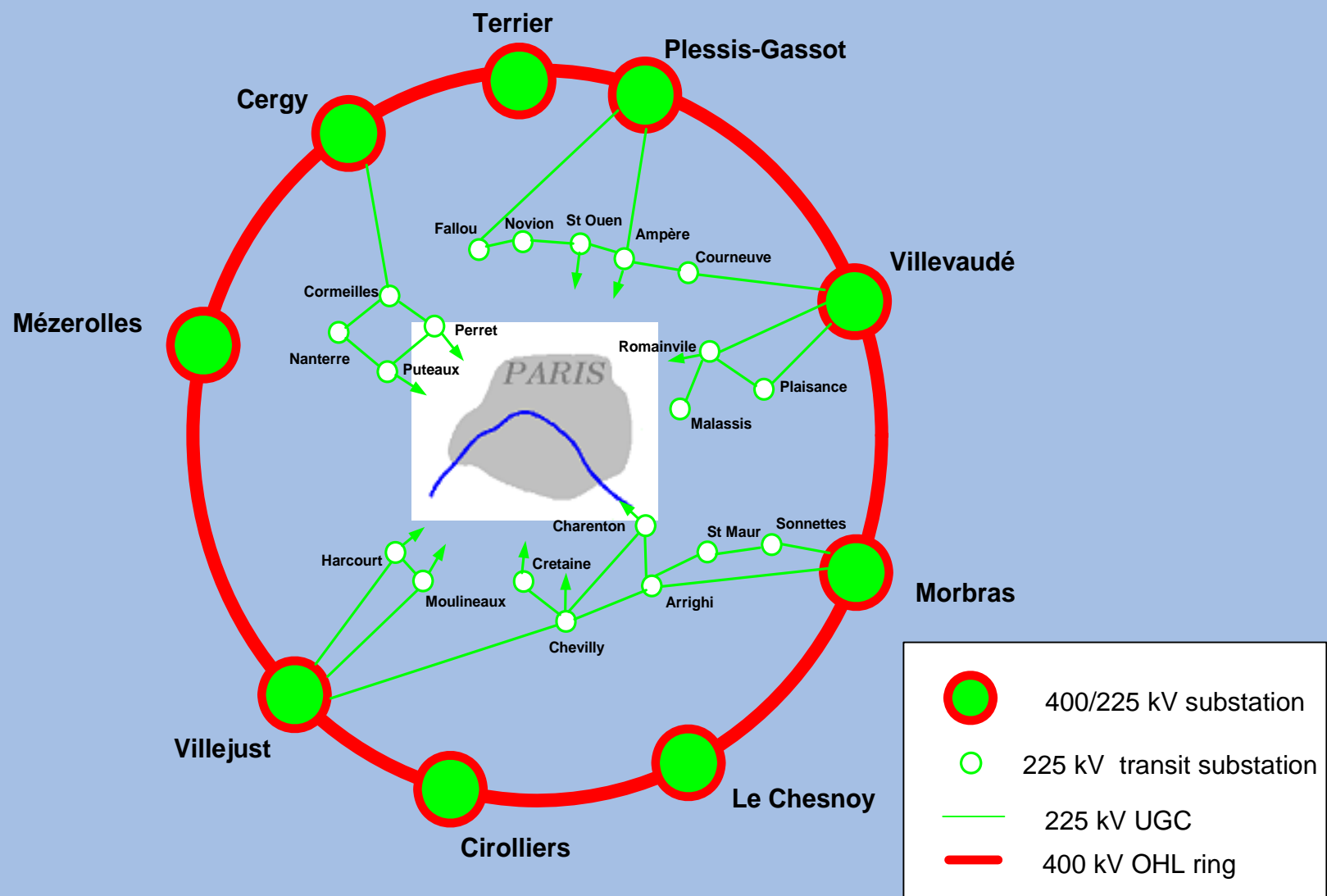
Paris area grid in 1969



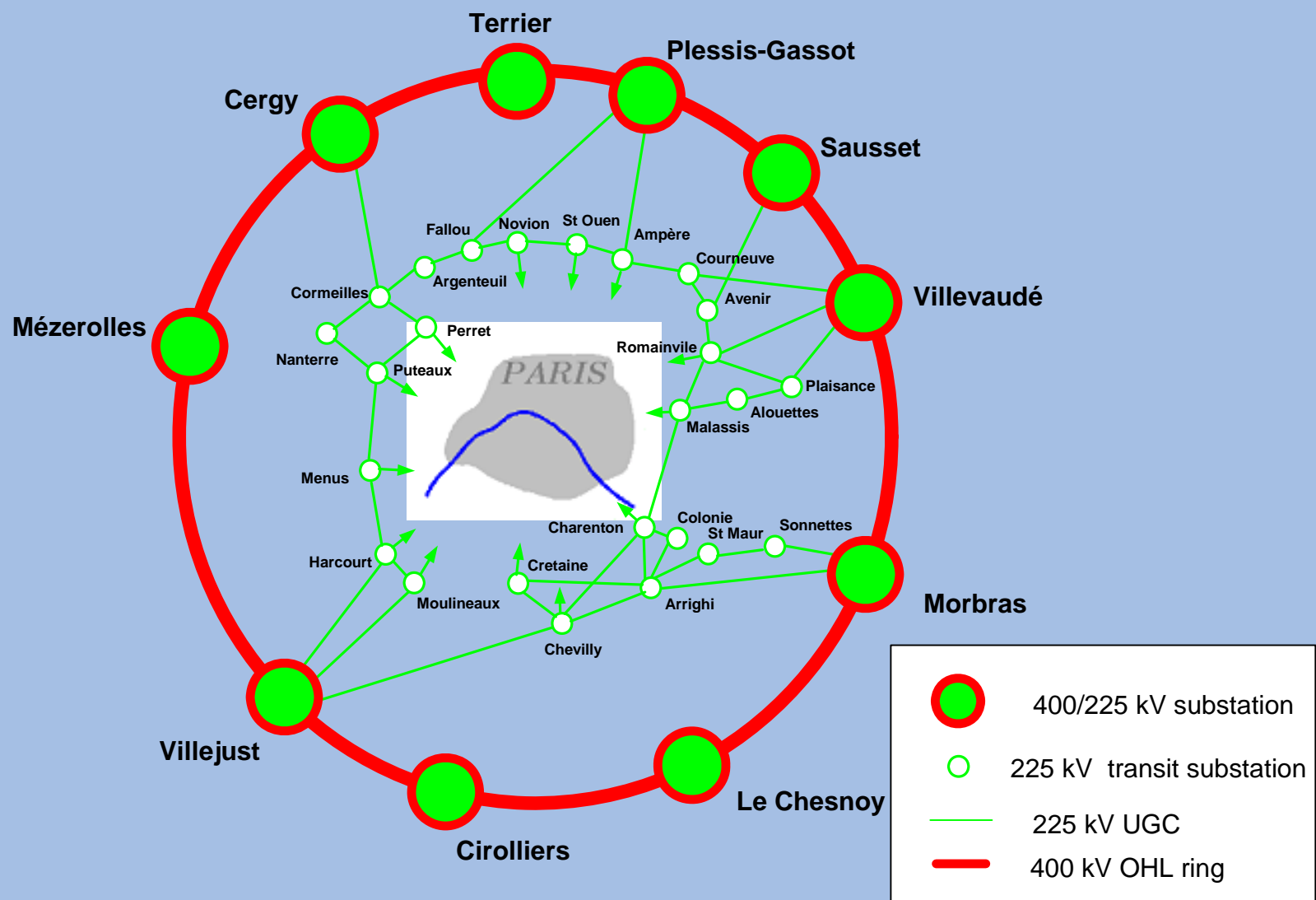
Paris area grid in 1979



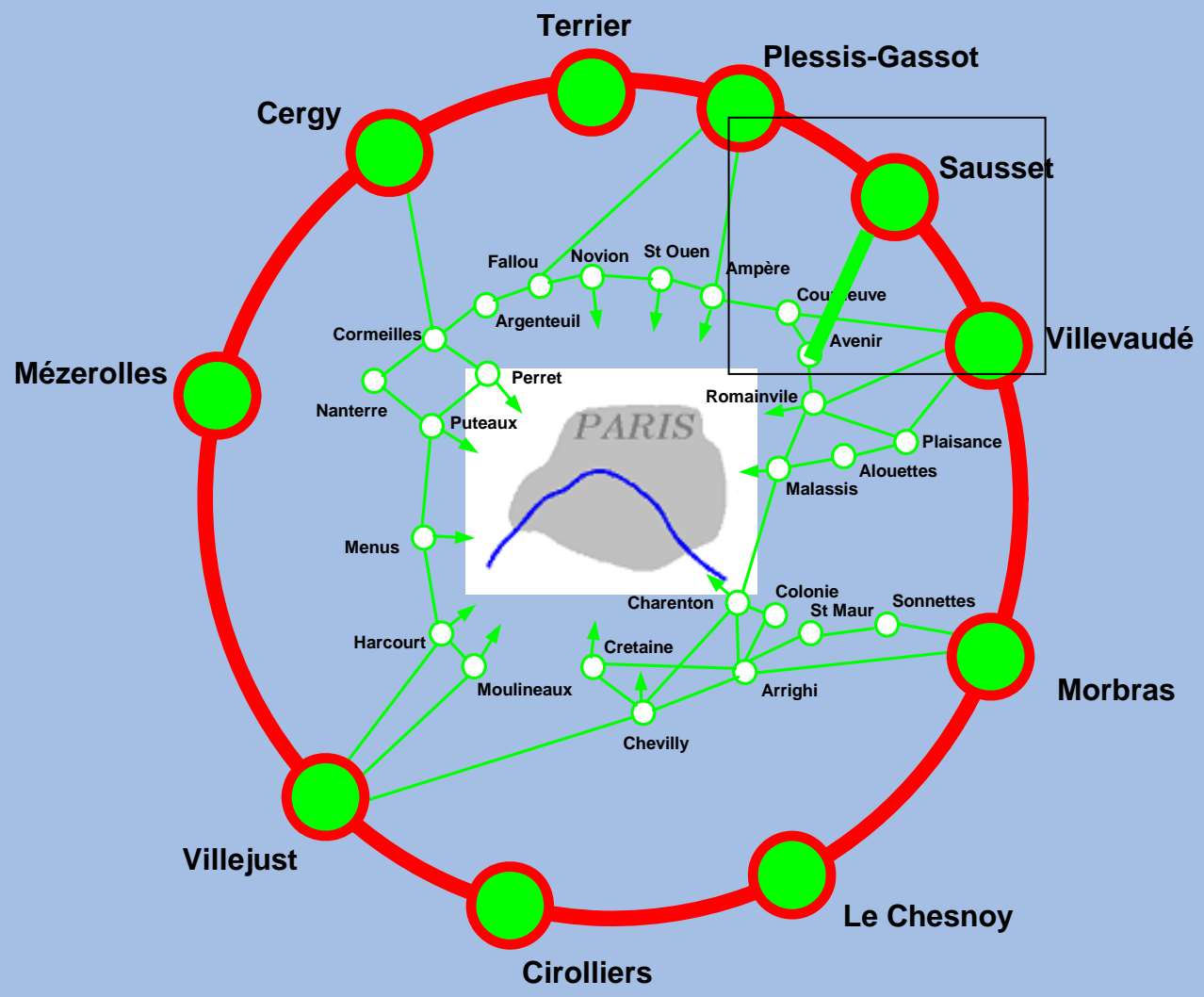
Paris area grid in 1995



Paris area grid in 2007



AVENIR - SAUSSET 225 kV



Characteristics of one recent line Avenir - Sausset 225 kV

- 18 km
- 1 200 mm² Cu, XLPE
- Commissioning in august 2002
- Laying techniques : PVC ducts in concrete
- 3 great depth drilling installations
 - 2 steered drillings 75 and 85 m
 - 1 micro-tunnel 135 m
- Cost : 22 M€

AVENIR - SAUSSET 225 kV



Perspectives of development

- Operating policy
- R&D actions : transition joints, optimisation of laying methods, lifespan of cables on the network
- Grid modifications for new clients connections and consumption increase