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Version:	1.0
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Original date:	15/05/2003
Last updated:	---

ACCNORD

Nordic Peripherality in Europe

Main results

The purpose of this note is to present in a very condensed format the main outcomes of the study 'Nordic Peripherality in Europe' in order to enable the members of the NERP-EU committee to use the material already before the final report of the project will be available.

The objective of the project was to assess the degree of peripherality of Nordic regions at NUTS-5 level within Europe and within the Nordic countries by using accessibility concepts.

Based on previous work and discussions with NERP-EU members a multimodal potential accessibility indicator with population as destination activity was used for the assessment of peripherality. Potential accessibility is based on the assumption that the attraction of a destination increases with size, and declines with distance, travel time or cost. Potential accessibility is founded on sound behavioural principles but contains parameters that need to be calibrated and their values cannot be expressed in familiar units. Multimodal potential accessibility has the additional advantage that road, rail and air transport are integrated and are expressed in a indicator single value for each region.

An appropriate accessibility model has been developed already in earlier studies but hat to be adjusted to the specific situation of the Nordic countries. In particular, the transfer to NUTS 5 regions and the check of network connectivity for the detailed regional system has been made. Indicator values were calculated for all Nordic municipalities (NUTS 5 and equivalent), in addition, indicator values have been calculated for all NUTS 3 regions of the European Union and the candidate countries to allow comparisons.

In this note, the results are presented in four maps and a summary table each indicating the degree of peripherality of the Nordic regions.

Figure 1 shows the degree of centrality or peripherality of the Nordic municipalities if only destinations within the Nordic countries are considered in the accessibility model. In this way, the map shows the relative location of a municipality if the four Nordic countries would be considered as an island without connections to other parts of Europe.

Figures 2, 3 and 4 display European accessibility of the Nordic municipalities. Now, all European destinations are included in the accessibility model. The absolute accessibility values are the same in each map, however, the difference is the way the values are standardised. Figure 2 uses the average accessibility of the four Nordic countries and expresses the indicator values relative to this average. Figure 3 uses the average of the current European Union, Figure 4 the average of the future European Union with 27 member states.

The degree of peripherality of the Nordic municipalities changes of course with the changing reference. Table 1 gives the accessibility averages of different spatial entities. Changing the context from a Nordic to a European one, more regions are classified as being peripheral and less as being central, because the Nordic average is lower than the European averages. There are several regions having extremely low levels of accessibility, i.e. a degree of peripherality which is less than 25 percent of the European average. Of particular importance is also the change when replacing the EU15 average by the EU27 average. The integration of the twelve accession countries leads to a reduction of the average accessibility in the European Union because of the low quality of the transport infrastructure. This leads to a slightly less peripheral classification of the municipalities of the four Nordic countries.

Table 1. Accessibility averages of different spatial entities.

Accessibility	**Nordic countries**	**EU 15**	**Accession countries**	**EU 27**
Absolute (million)	26.76	43.69	22.89	39.06
EU15 = 100	61.2	100.0	52.4	89.0

Table 2 summarises the degree of peripherality of the Nordic regions and relates it to European figures for the EU27 average.

Table 2. Degree of peripherality.

Area	**Calculated at spatial level**	**Population (in %) living in regions with accessibility below an index value of … of EU27 average**							
		< 100	**< 75**	**< 50**	**< 25**	**< 20**	**< 15**	**< 10**	**< 5**
Denmark	NUTS-5	65.2	26.2	0.7	0.0	0.0	0.0	0.0	0.0
Finland	NUTS-5	96.5	75.5	58.9	19.7	10.7	5.5	0.9	0.0
Norway	NUTS-5	100.0	85.2	61.7	26.7	16.3	5.0	0.4	0.0
Sweden	NUTS-5	76.9	57.0	27.5	3.9	1.2	0.4	0.1	0.0
Four Nordic countries	***NUTS-5***	***82.9***	***59.4***	***34.7***	***10.7***	***5.8***	***2.3***	***0.3***	***0.0***
Four Nordic countries	***NUTS-3***	***93.2***	***83.6***	***47.3***	***21.7***	***19.2***	***2.7***	***0.0***	***0.0***
EU 15	NUTS-3	40.8	21.6	8.3	0.8	0.2	0.1	0.0	0.0
Accession countries	NUTS-3	91.0	77.,5	47.0	6.0	2.2	0.1	0.0	0.0
EU 27	NUTS-3	***52.0***	***34.0***	***16.9***	***1.9***	***0.6***	***0.1***	***0.0***	***0.0***

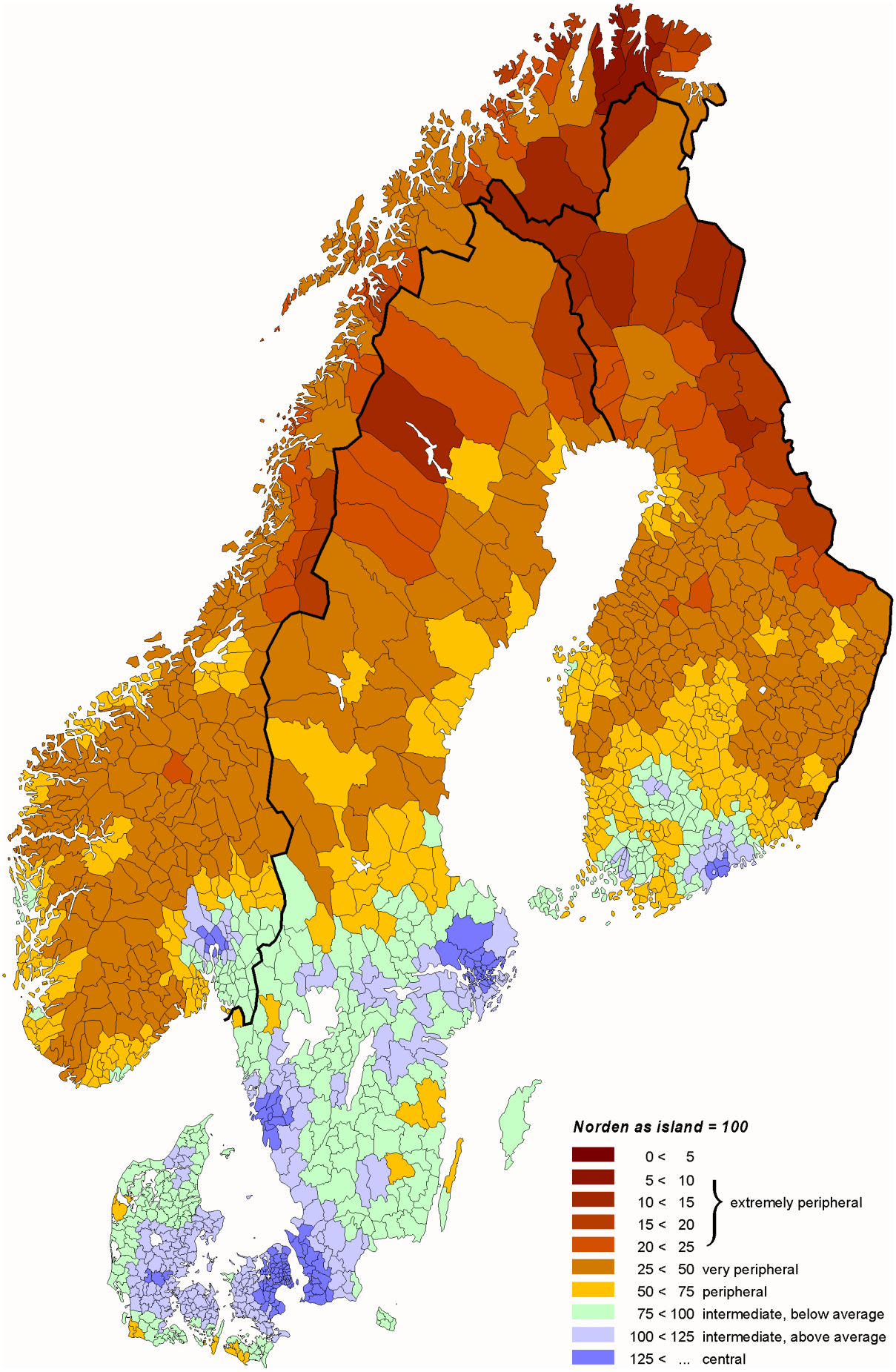

Figure 1. Nordic accessibility: only Nordic destinations.

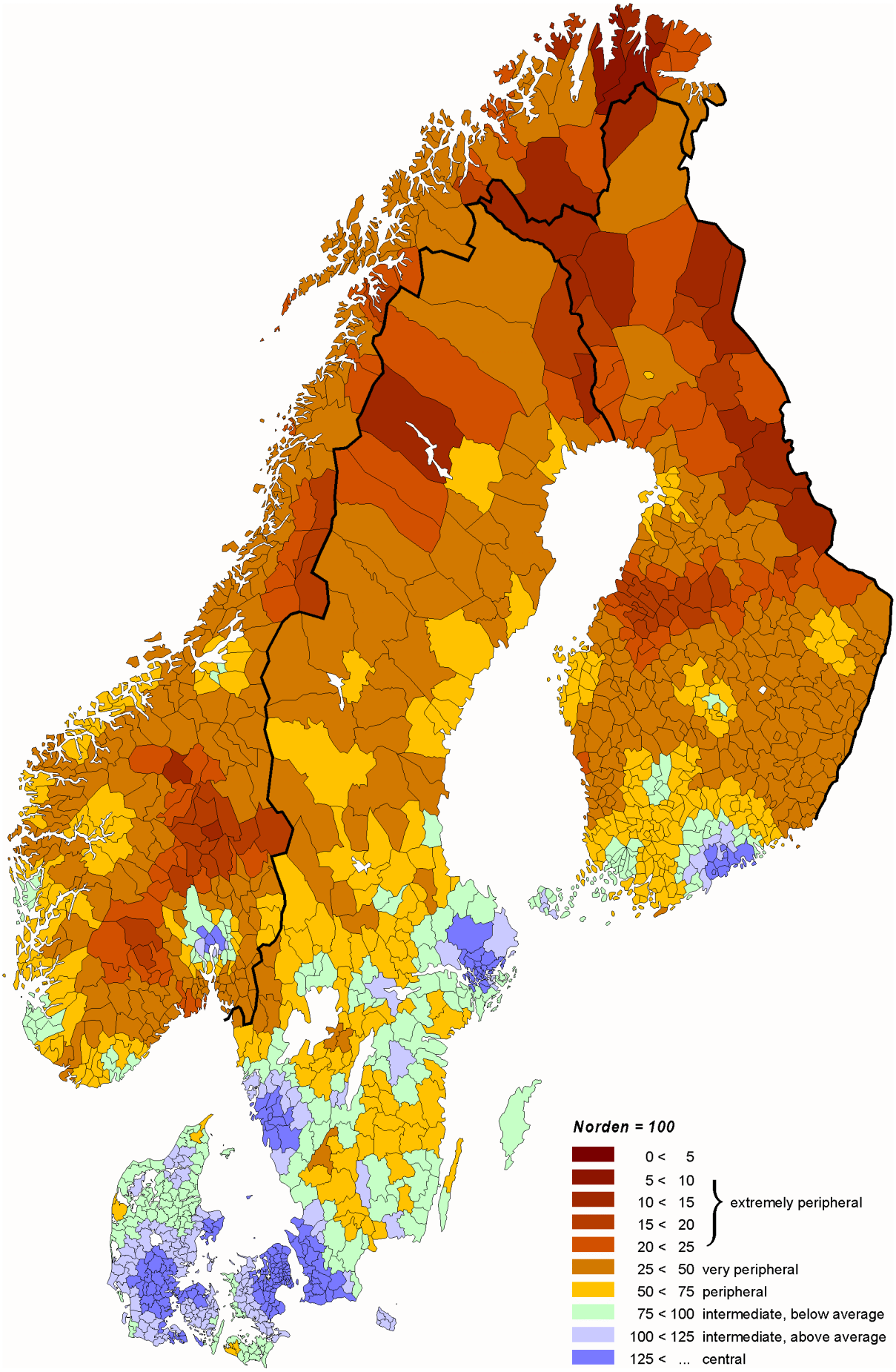

Figure 2. Nordic accessibility in Europe standardised to Nordic average.

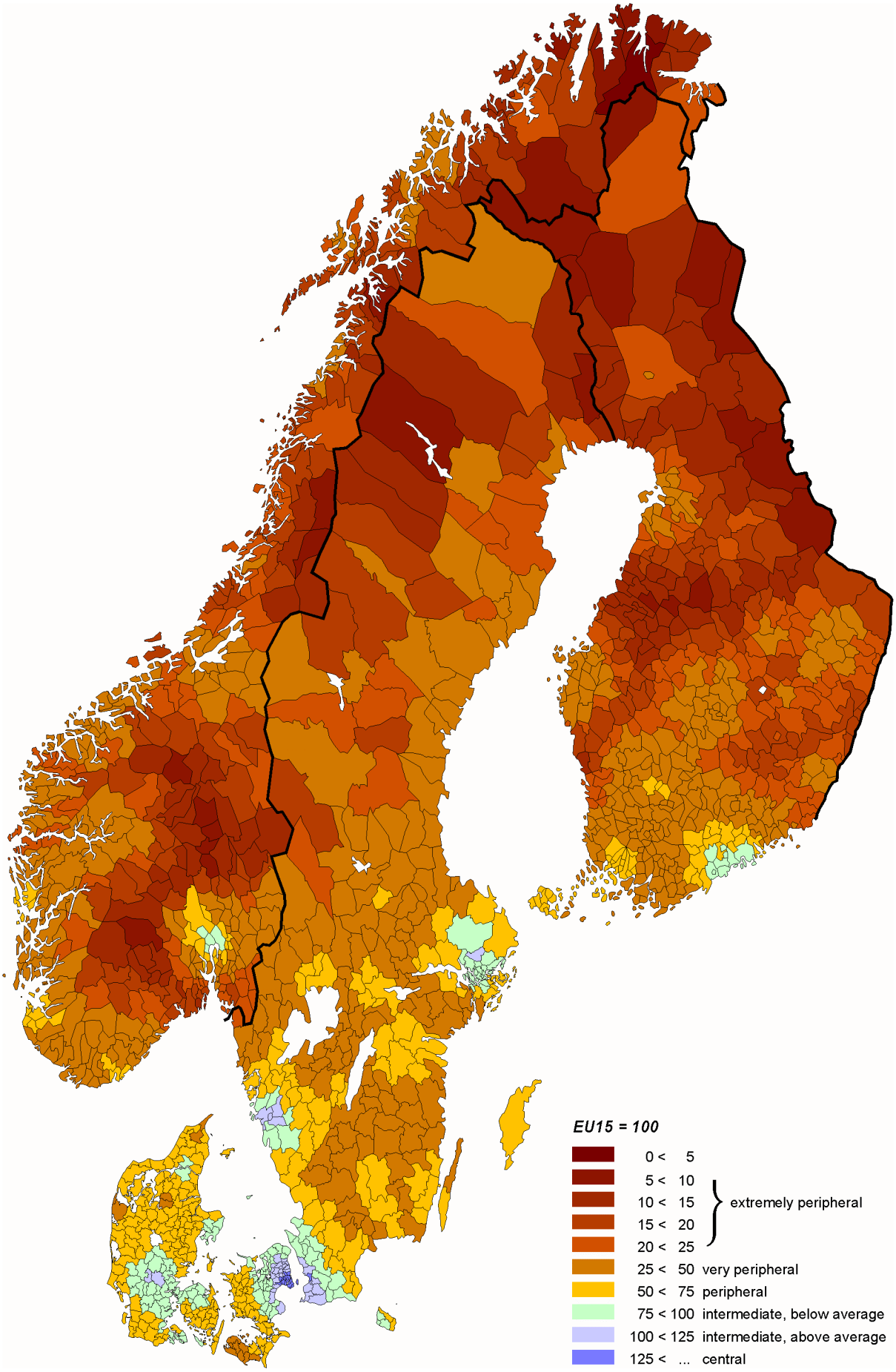

Figure 3. Nordic accessibility in Europe standardised to EU15 average.

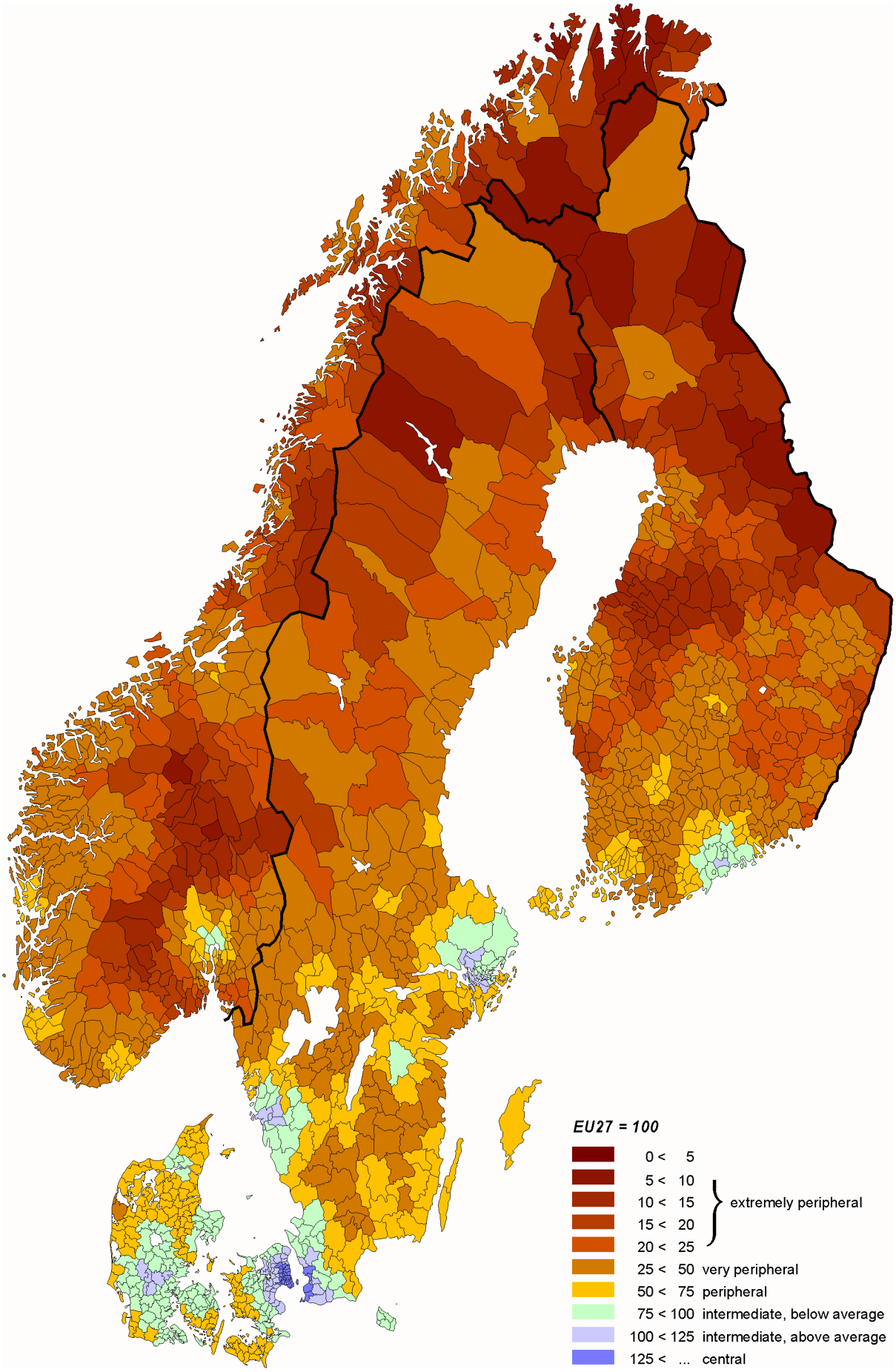

Figure 4. Nordic accessibility in Europe standardised to EU27 average.