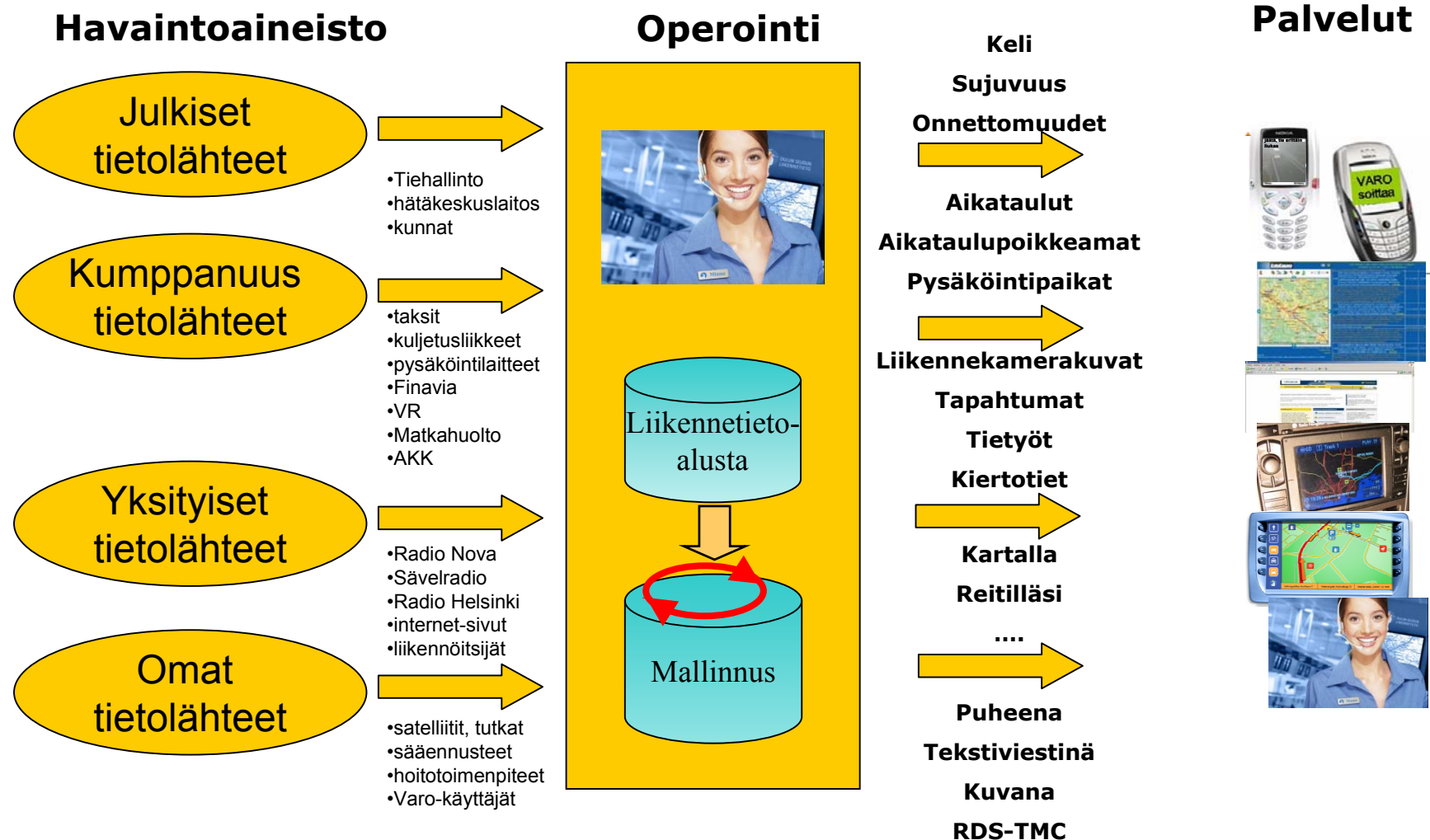


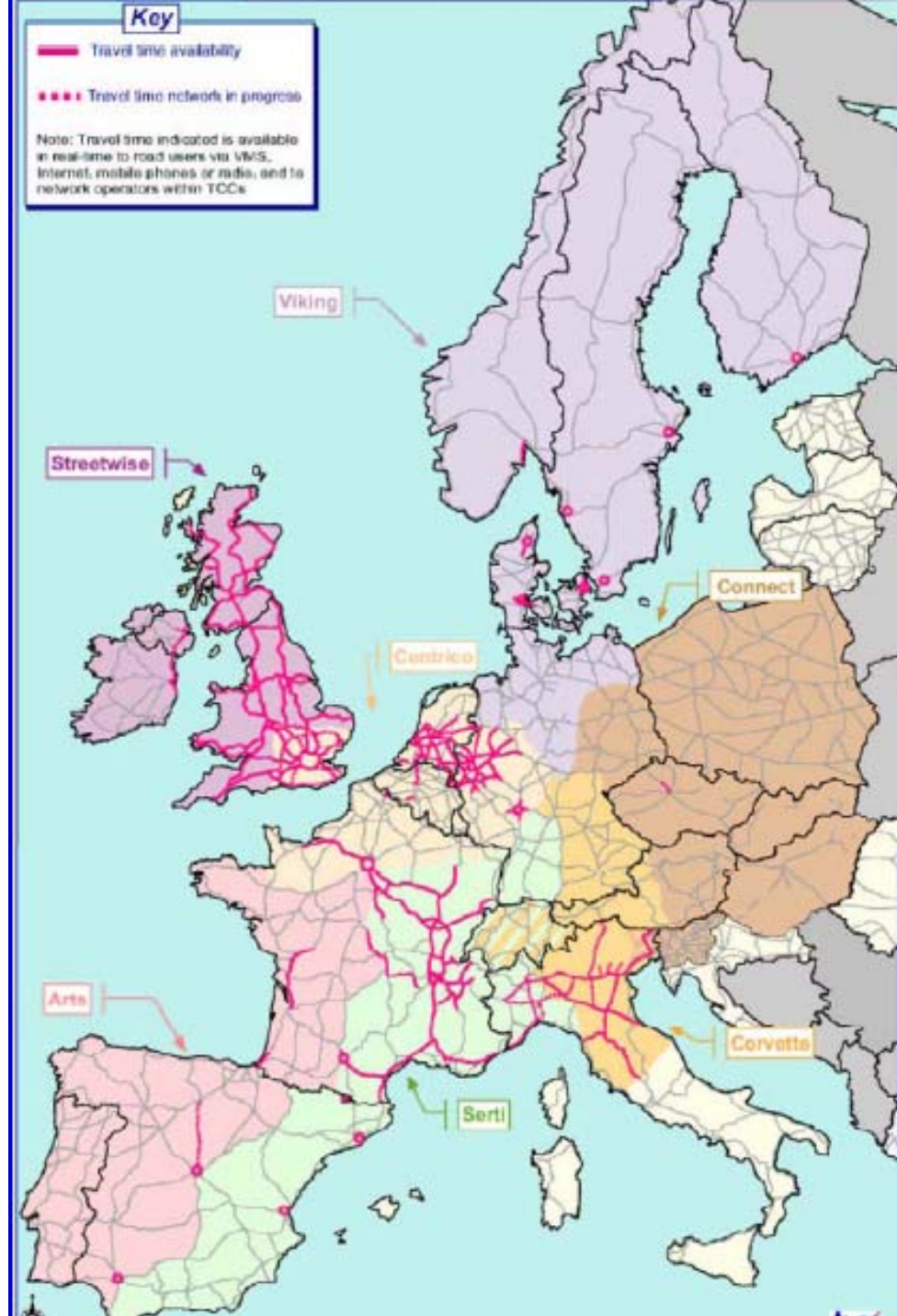
Älykäs infrastruktuuri

- **Liikenteen tietopalvelut / tiedonkeruu**
 - lam-pisteet, matka-ajan mittaus, tiesääasemat, liikenne- ja kelikamerat, digiroad...
- **Liikenteen ohjaus**
 - muuttuvat nopeusrajoitukset, tunneliohjaus, kaistaohjaus, sillat, raja-aset, valoetuudet...
- **Automaattinen nopeusvalvonta**

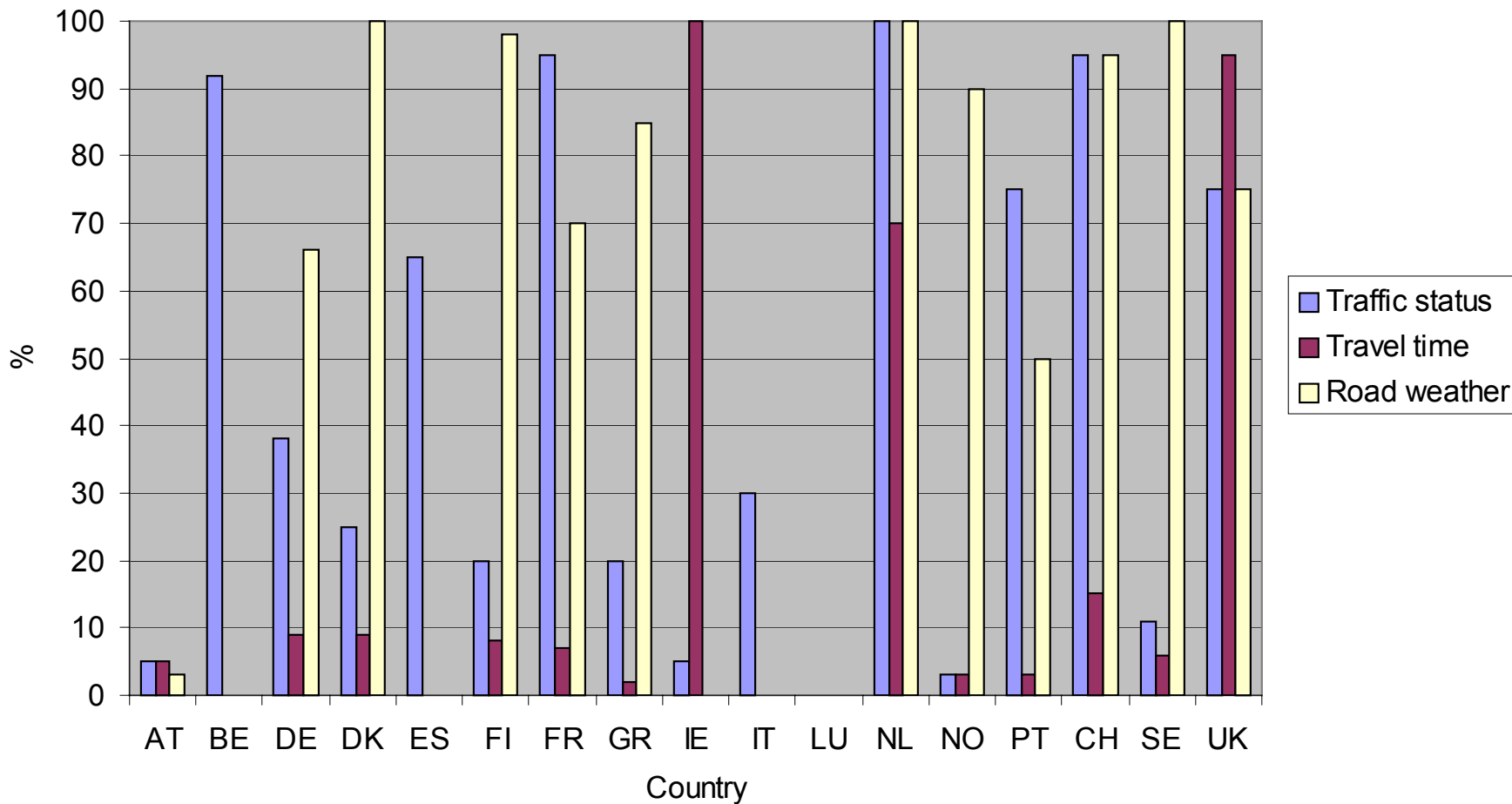
Liikenteen tietopalvelut toiminnan rakenne



Matka- aikatiedon keruu 1.1.2007

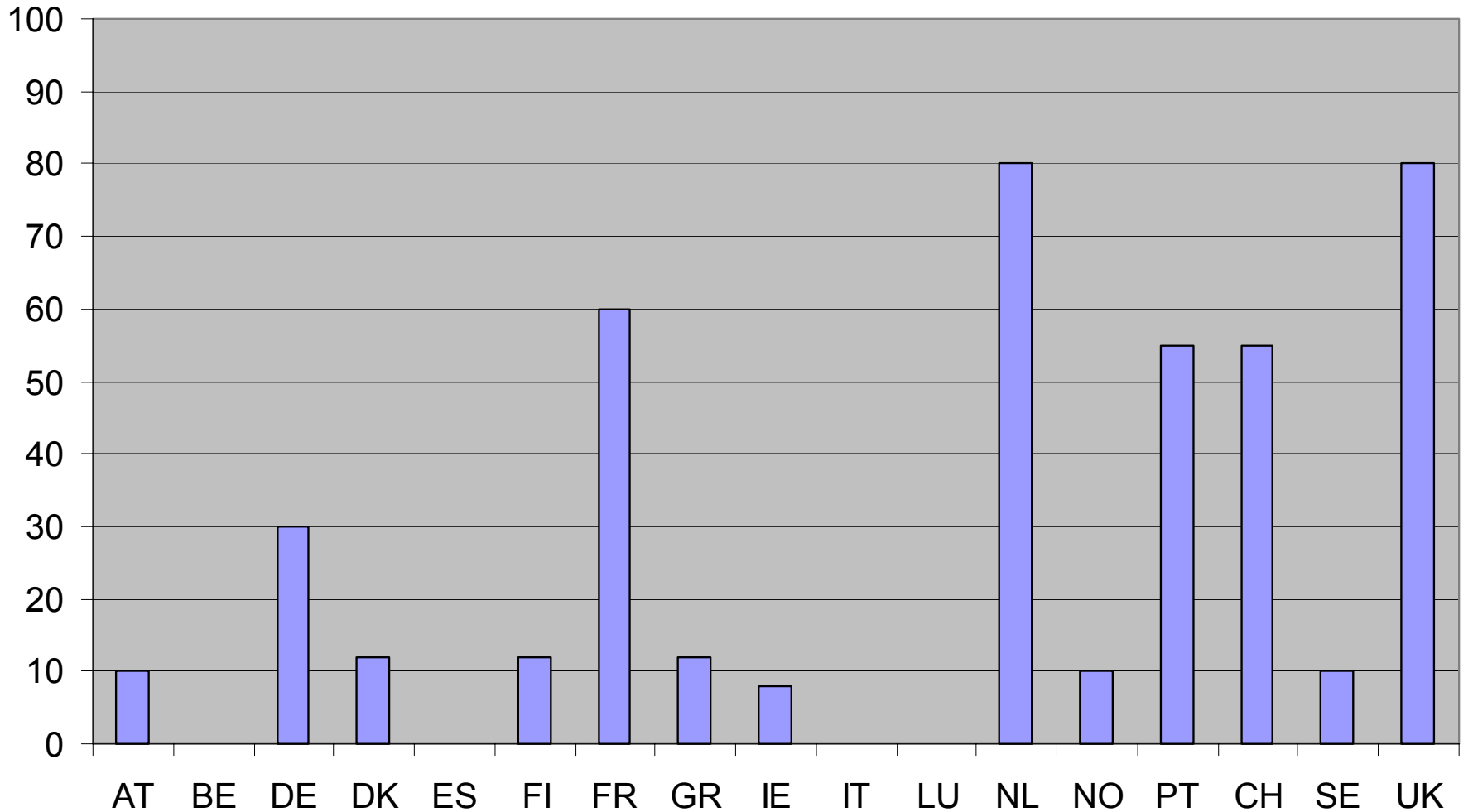


Still large differences between countries



Muuttuva liikenteen ohjaus

% TERN/motorway length covered with dynamic traffic management in 2006



Monitoring trends

- **Emphasis is moving**
 - from fixed to mobile stations
 - from own monitoring services to purchasing monitoring information
 - from dedicated to multipurpose monitoring systems
 - from using data from one source to fusing data from multiple sources
- **New technology solutions emerge**
 - most cost-efficient solutions will utilise different technologies



Conclusions: TEMPO

- **Monitoring a cornerstone of ITS services**
- **Provides main service content**
- **User benefits only arise when the quality of the services is high enough**
- **Existence of high-quality and consistent monitoring information is essential to European travellers and hauliers**
- **Cost-efficient deployment requires continuous evaluation activities and sharing good and bad practice**