

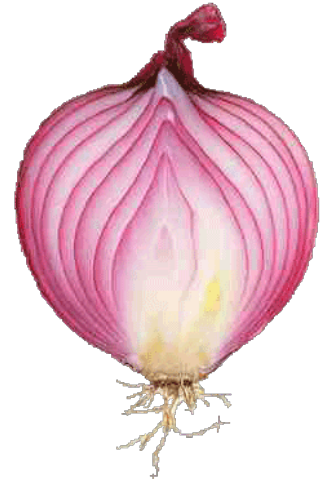
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# Smart City Infrastructure

What's needed? Who should build it?

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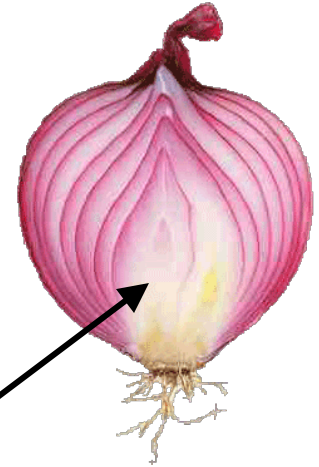
# What infrastructure ?



Who should build and own it ?

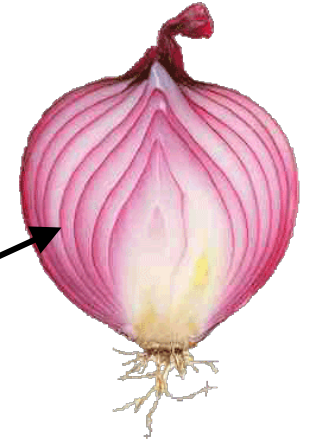
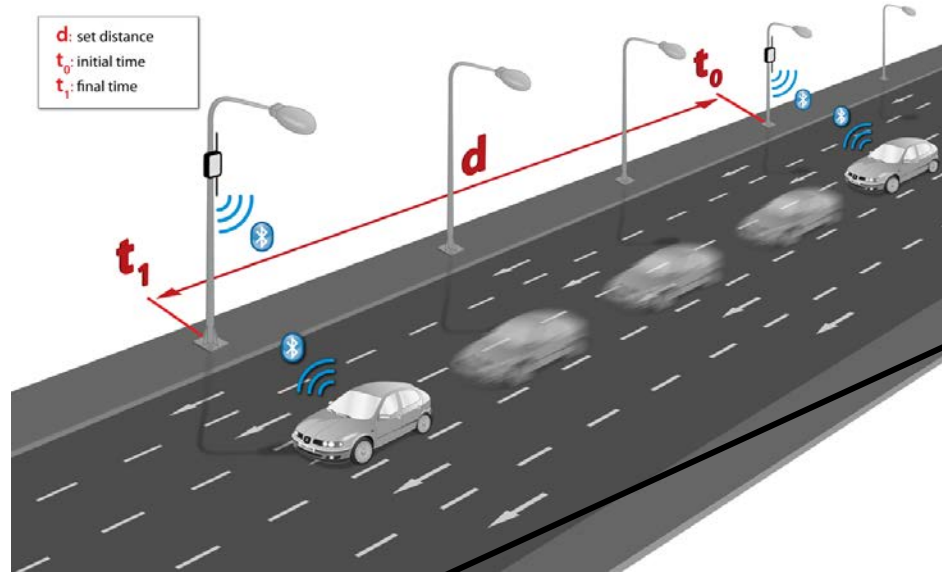
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# Core infrastructure



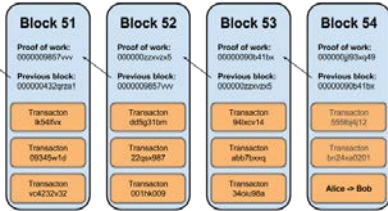
The Core: Fibre Optic network breakout points

# Sense & control infrastructure?

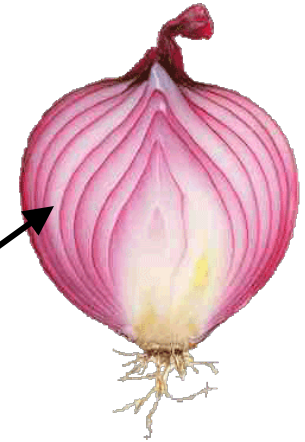
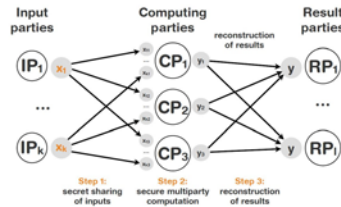


Layer 1: Sensors & Controllers

# Data infrastructure?



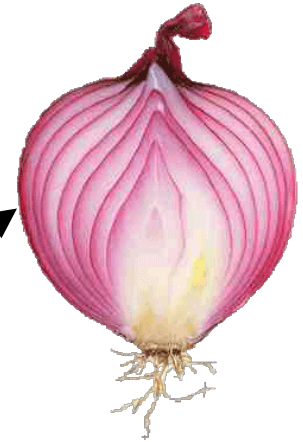
the sharemind model



Layer 2: Data & software infrastructure -

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# Application 'infrastructure'



Layer 3: The application & solution 'infrastructure' -

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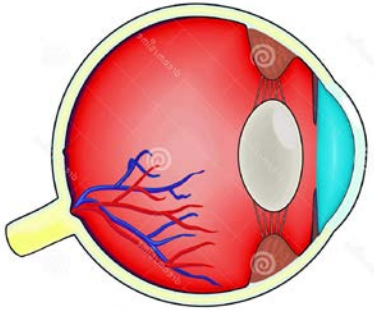
# A Nordic Lens : Ownership

Most of Norway's 47 major hydro electric plants are state owned - some by council, county or national corporations.

Norway's major energy sources are approx 50% state owned corporations.

Norway's largest Telco has a approx 54% state ownership.  
(active in 12 countries)

Norway's Q-Free traffic toll company has 0% state & 20% state fund ownership. Helps global cities with traffic flow.





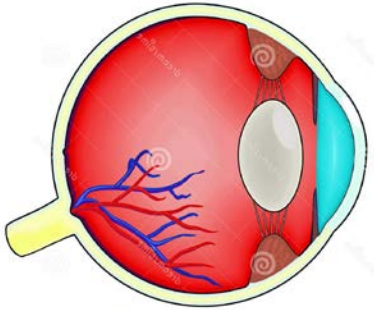
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# A Baltic lens - trusted protocols

**Estonia's Data exchange protocols** operates two way data security that binds govt and financial data. Allowing simplification of most transactions from payments to licences, voting and loans.

**Estonia's Data Protection Inspectorate** - protects an individual's rights to see their own data and who accessed that data for what reason. With a right of challenge.

Estonia is building an integrated application network for municipalities, individuals & business.





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# Smart City Infrastructure

Thank you