SWOT analysis of Intelligent Speed Adaptation (ISA)

| Strengths | Weaknesses |
|---|--|
| Can operate autonomously with fixed and onboard stored speed limits Reduces excessive speeds and speed violations, therefore the likelihood of being caught by a speed enforcement camera Reduces speed variation Homogenises traffic Increases safety Reduces congestion and resulting negative environmental effects when allowed to impose dynamic speed limits | True positive effects on traffic flow efficiency come from mandatory system types imposing dynamic speed limits under sufficiently high penetration rates Can be frustrating at low penetration rates Can lead to a potential decrease of average speeds and, consequently, to an increase of travel times |
| Opportunities | Threats |
| Technology maturity may reduce system cost Enables novel motorway traffic management applications (e.g. mainstream metering) | User acceptance in terms of both purchase intention and frequent activation after purchase Cost Motorway traffic management delayed adaptation |