5 Define User Needs and Resource Plan

Figure 5.1: Defining User Needs and Resource Plan within the STTRIDE Evaluation Process

STTRIDE	1 Evaluation in the context of STTRIDE
STTRIDE	2 Evaluating technology-based interventions to encourage mode shift
STTRIDE	3 Investigate potential technologies
STTRIDE	4 Analyse potential technologies
STTRIDE	5 Define user needs and resource plan
STTRIDE	6 Describe the intervention
STTRIDE	7 Describe the intervention logic
STTRIDE	8 Define evaluation objectives
STTRIDE	9 Frame the research questions
STTRIDE	10 Pre-assessment of outcomes and impacts
STTRIDE	11 Define assessment methods and write evaluation plan
STTRIDE	12 Data collection and analysis
STTRIDE	13 Report results

5.1   Define user needs for the results

User needs

A clear understanding of who will use the results of the evaluation and how they will use them is an important starting point for designing the evaluation approach. Each of these stakeholders will have their own objectives and priorities which will determine the types of results they need from the evaluation. Such objectives and priorities may also vary between stakeholders with the same role but in different countries.

The resources available for the evaluation from each stakeholder should be identified here.

User needs: Smart Infrastructure

The implementation of smart infrastructure will involve a considerable amount of cooperation between the infrastructure owners, service providers and transport operators. Each party has their own objectives, and these need to be discovered. In joint investments, who pays what also needs to be considered. Infrastructure owners, such as municipalities, are interested in safety or providing a better environment for their residents. Businesses will need a positive return on their investment even if their work on the smart infrastructure is technical.

User needs: Voice Recognition

Speech recognition promises easier user interaction in situations where complex choices are being made. It is especially helpful in opening up interactions with foreign users who do not know the local language well – they can speak in their native language, with real time translation into the local language.

For transport operators, better service for their customers should be a top priority.

User needs: V2X technologies

V2X communications technologies are already associated with defined lists of services that should be available at different stages ('Day One' and 'Day Two'). These objectives will be the starting point for road authorities and service providers, with specific objectives related to testing, verification, and upscaling possible additions.

User needs: Advanced Fare Management

Public transport operators see Advanced Fare Management Systems as a way of optimising occupancy, reducing boarding times and operating costs and increasing revenues.

Travellers see such systems as a way of making public transport more attractive and accessible, especially for those who are not used to travelling by public transport.

Table 5.1: Definition of user needs

Type of user/ stakeholder	User	Typical objectives	Areas of interest
National government	National transport authority	Improve road safety Reduce harmful emissions from transport Foster economic growth Improve health and well-being Improve accessibility Foster social inclusion	Contributing to national policy objectives
	National road authority	Reduce casualties Reduce congestion Improve journey reliability	Improving network performance
Local government	Local authority 1	Reduce vehicle emissions Reduce noise levels/ noise pollution	Improve quality of life for residents
	Local authority 2	Improve journey times for through traffic	Reduce delays
Transport operators	Road operator	Reduce casualties Reduce congestion Improve user satisfaction Reduce road maintenance requirements	Meeting performance targets
	Public transport operator 1	Maintain/ increase customer base Reduce operating costs Increase revenues Improve quality of service	Increasing profitability
	Public transport operator 2	Improve adherence to timetable Improve/ maintain accessibility	Increase customer base

Type of user/ stakeholder	User	Typical objectives	Areas of interest
	Freight	Improve rate of on-time delivery Reduce wasted driver hours	Improve profitability
Service providers	Technology infrastructure	Maintain or increase customer base Improve quality and range of services delivered	Improve profitability Extend market
	Communications	Maintain or increase customer base Improve quality and range of services delivered	Improve profitability Extend market
	Travel information & navigation	Maintain or increase customer base Improve quality and range of services delivered	Improve profitability Extend market
	Traffic management	Reduce congestion Improve journey reliability	Improve network performance
	Payment	Improve efficiency of payments Reduce fraud/ missing payments	Improve profitability Increase customer base
	Shared transport	Maintain or increase customer base Improve quality of service delivered	Improve profitability Extend market
	Emergency services	Meet service targets	Improve efficiency
	Infotainment	Maintain or increase customer base Improve quality of service delivered	Improve profitability Extend market

Type of user/ stakeholder	User	Typical objectives	Areas of interest
Travellers	Private motorists	Improve journey time reliability Improve ease/ comfort of journey	Journey quality
	Freight drivers	Improve journey time reliability Decrease vehicle-km per unit	Meet delivery and performance targets
	Pedestrians	Improved safety and efficiency of walk journeys	Improved quality of walking environment
	Cyclists	Improved safety and efficiency of walk journeys	Improved quality of cycling environment
	Public transport users	Improved connections and interchanges with other modes Improved journey information/ support Improved journey reliability Improve accessibility and attractiveness of service	Improved level of service Improved quality of service
Residents		Reduce adverse impacts of road traffic on the local area	Improved quality of life

A template for identifying user needs is available on the STTRIDE web site.

5.2   Define the resource plan

At this stage it is also useful to identify the financial and staff resources that are available for the evaluation and which stakeholders are providing them – for example as in the table below. This initial plan will need to be reviewed once the metrics and data needs are clear.

Table 5.2: Resource plan for evaluation

Role	Organisation	Year 1		Year 2		Year 3	
		Staff	**€**	**Staff**	**€**	**Staff**	**€**
Project management							
Evaluation planning							
Data collection							
Data analysis							
Report writing							
Data capture equipment							
Other							

A template for the resource plan is available on the STTRIDE web site.