

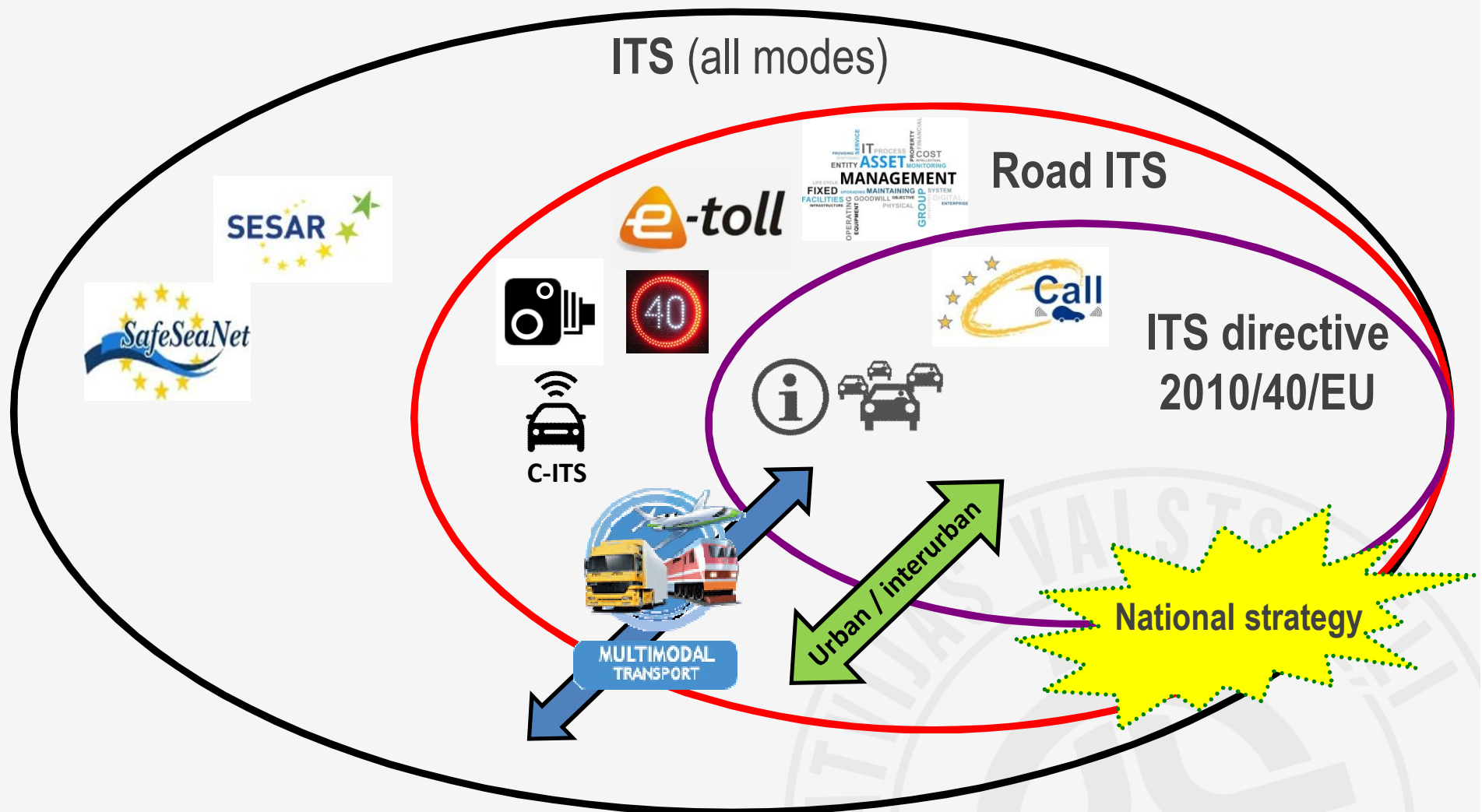


IMPLEMENTATION OF SMART E67 PROJECT

Boriss Jelisejevs
Head of TIC
SJSC "Latvian State Roads"

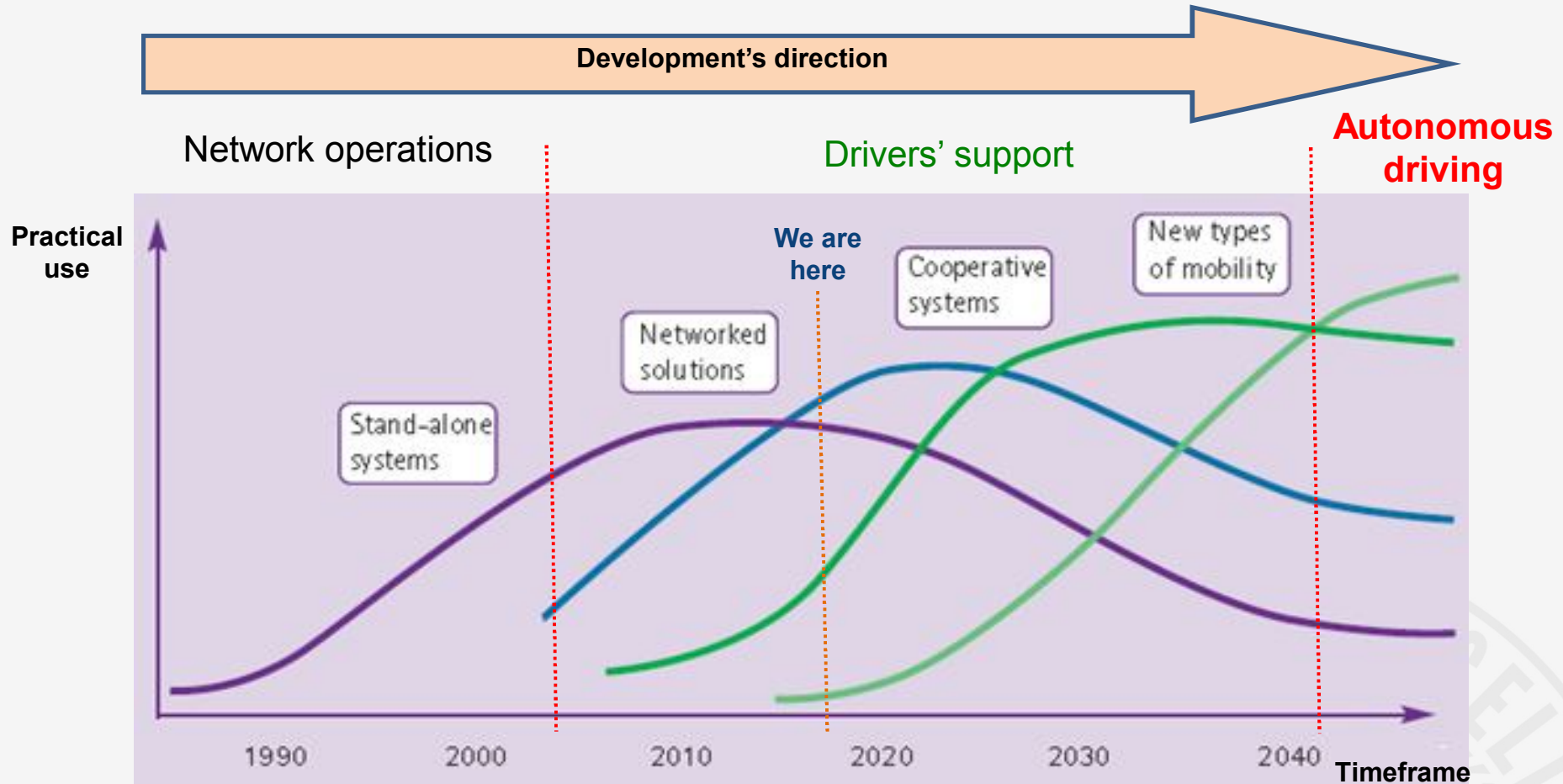


General ITS framework (European vision)



ITS mission: extensive use of transport data for mobility needs
(ICT driven, innovative approach, various services and business models, synergy etc.)

Global trends in road transport



The main facets of future mobility (horizon 2040.)



Car sharing (MaaS)



Use of "Big data"



Electric drive



Driverless cars

PROJECT'S KEY DATA

SMART E67

Objective: SMART E67 aims to increase efficiency and safety of passenger and cargo mobility in the region by introducing ITS on Via Baltica (E67 route).

Total project budget: almost 2,5 milj.EUR of which 85% is EU co-financing (ERAF).



Interreg
Central Baltic



EUROPEAN UNION
European Regional Development Fund

Implemented in partnership:

Latvian State Roads (lead partner)

Estonian Road Administration (partner)

Finnish Transport Agency (associated partner)



MAANTEEMET

Liikennevirasto
Finnish Transport Agency

Key efficiency indicator is **a decrease of travel time of passengers and cargos by 0,57%** if compared to the current level in the treated E67 section.

Implementation period: 11.2015. – 11.2019. (0.-3. PP are completed).

PROJECT'S SCOPE

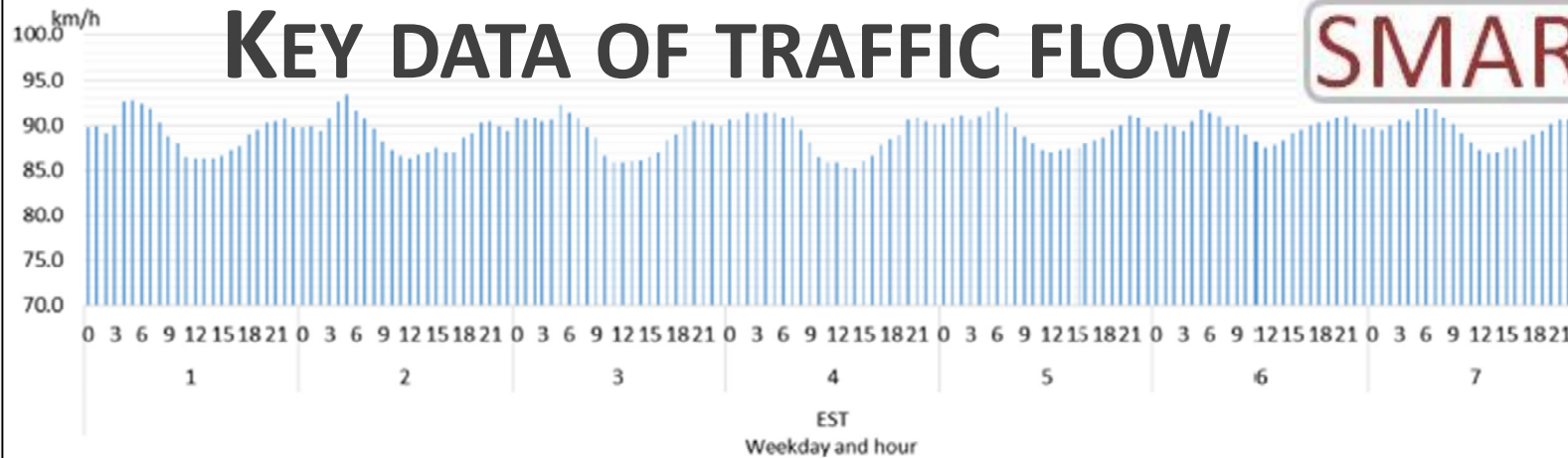
SMART E 67

The main lines are:

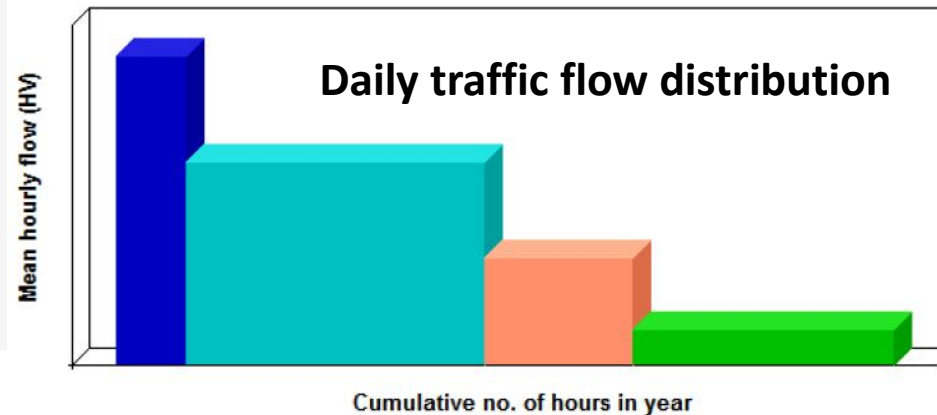
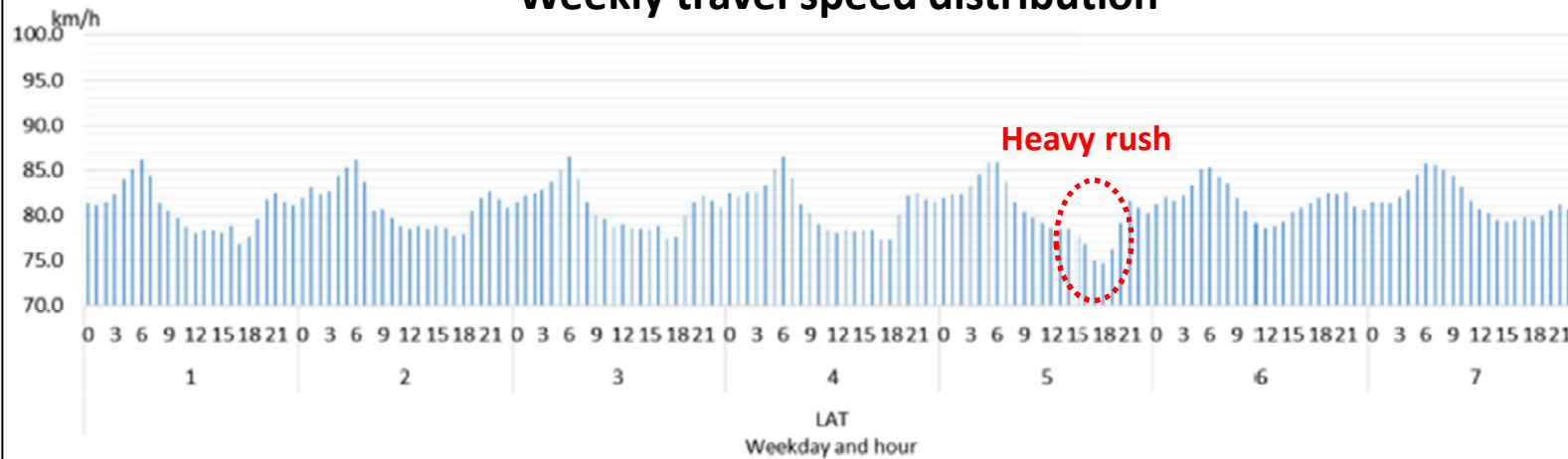
- consultation services (feasibility study, ex-ante/ex-post analysis, technical design);
- deployment of road ITS installations (inc. preparatory works);
- TIC adaptation (complex software, staff training);
- communication to the target groups (inc. info campaign);
- project's management (supportive measures, provided by the partners).

NB: the first one extensive deployment of variable message signs (VMS) in Latvia and Estonia is planned.

KEY DATA OF TRAFFIC FLOW

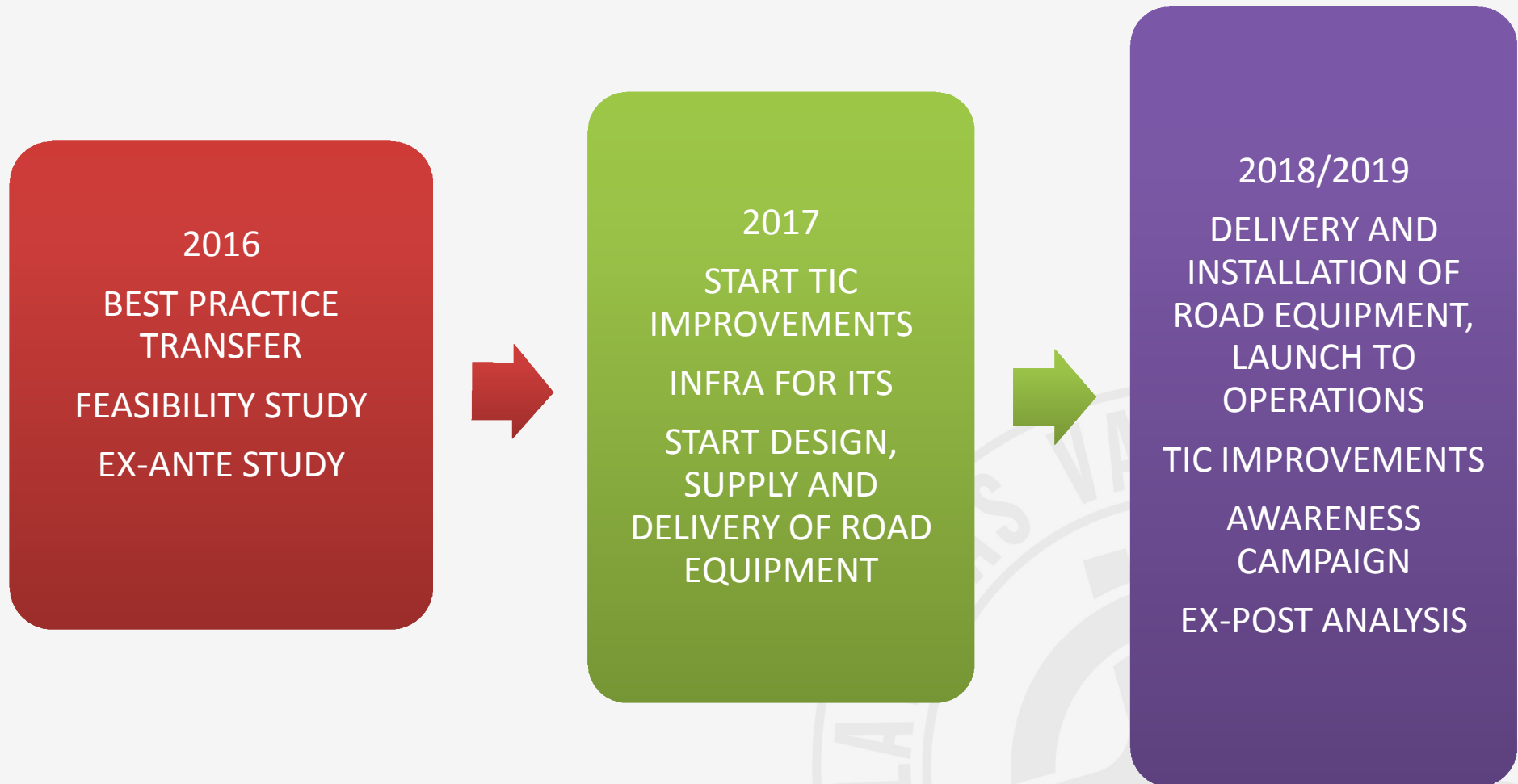


Weekly travel speed distribution



PROJECT'S TIMELINE

SMART E 67



PROJECT'S PR MATERIALS

SMART E 67

2018. gadā uz Via Baltica
uzstādīs elektroniskās ceļa
zīmes, adaptīvos luksoforus
un citu aprīkojumu

Finansējuma avots:

INTERREG Centrālās Baltijas jūras reģiona pārrobežu sadarbības
programmas 2014.-2020.gadam 3.prioritātes „Labi savienots Centrālās
Baltijas reģions”/Specifiskā atbalsta līnija 3.1. „Uzlabota transporta pilsma
kravu un pasažieru transportam” (www.centralbaltic.eu)

Budžets:



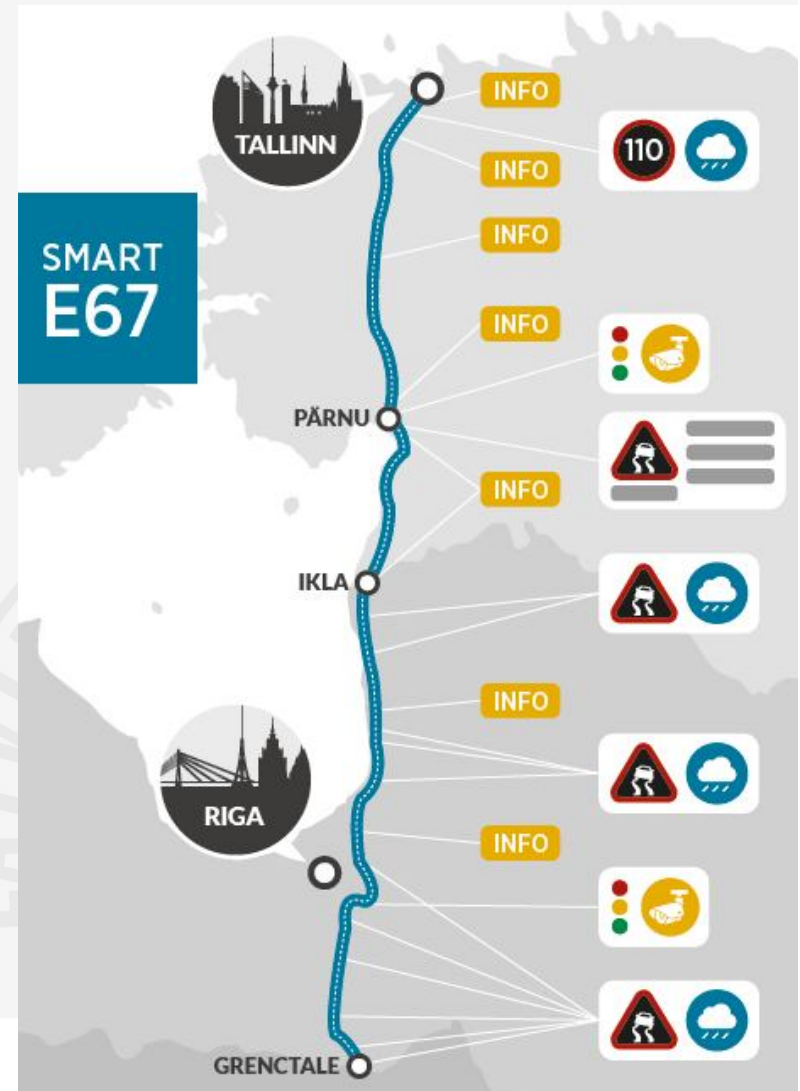
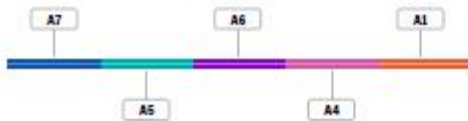
Projekta mērķis:

Uzlabot pasažieru transporta pilsma un kravu pārvadājumu
efektivitāti un drošību, kā arī samazināt CO2 izmešu daudzumu
autoceļā E67 Tallina-Rīga-Bauska-Lietuvas robeža, ieviešot
inteligentā transporta sistēmas/Intelligent Transport Systems
(ITS)

Projekta ietvaros paredzēts
piegādāt un uzstādīt:

- 2 elektroniskās maksimālās ātruma ierobežojuma ceļa zīmes
- 13 elektroniskās brīdinājuma un informācijas ceļa zīmes
pie ceļu meteoroloģiskajām stacijām
- 10 esošo luksoforu modernizācija un pielāgošana adaptīvam
darba režīmam/ luksoforu savstarpēja sinhronizācija
- 5 jaunu meteoroloģisko staciju ieviešana un 8 esošo
meteoroloģisko staciju modernizācija
- 2 krustojumu aprīkošana ar novērošanas un automātiskajām
satiksmes negadījumu identificēšanas sistēmām

E67 ceļa posmi:



PROJECT'S DATA (ROAD PART)

SMART E 67

Project's deliverables	LSR data	ERA data	Cummul. data
Length of road section, km	202	192	394
Traffic flow (min/max) in 2015, vehicles per day	4399/22370	3220/31345	4399/31345
Number of route's spots (stretches) covered by ITS elements	26(3)	16(6)	42(9)
Overall number of road ITS installations	55	62	117
Number of new RWS	5	2	7
Number of modernized RWS	8	1	9
Number of IMS spots	2	-	2
Number of traffic lights adjusted to adaptive regime	10	9	19
Number of warning VMS	26	12	38
Number of speed limit VMS	2	30	32
Number of freely programmable VMS	2	-	2
Number of combined VMS (pictogram plus text)	-	8	8

THE MAIN DIFFERENCIES BETWEEN THE PARTNERS

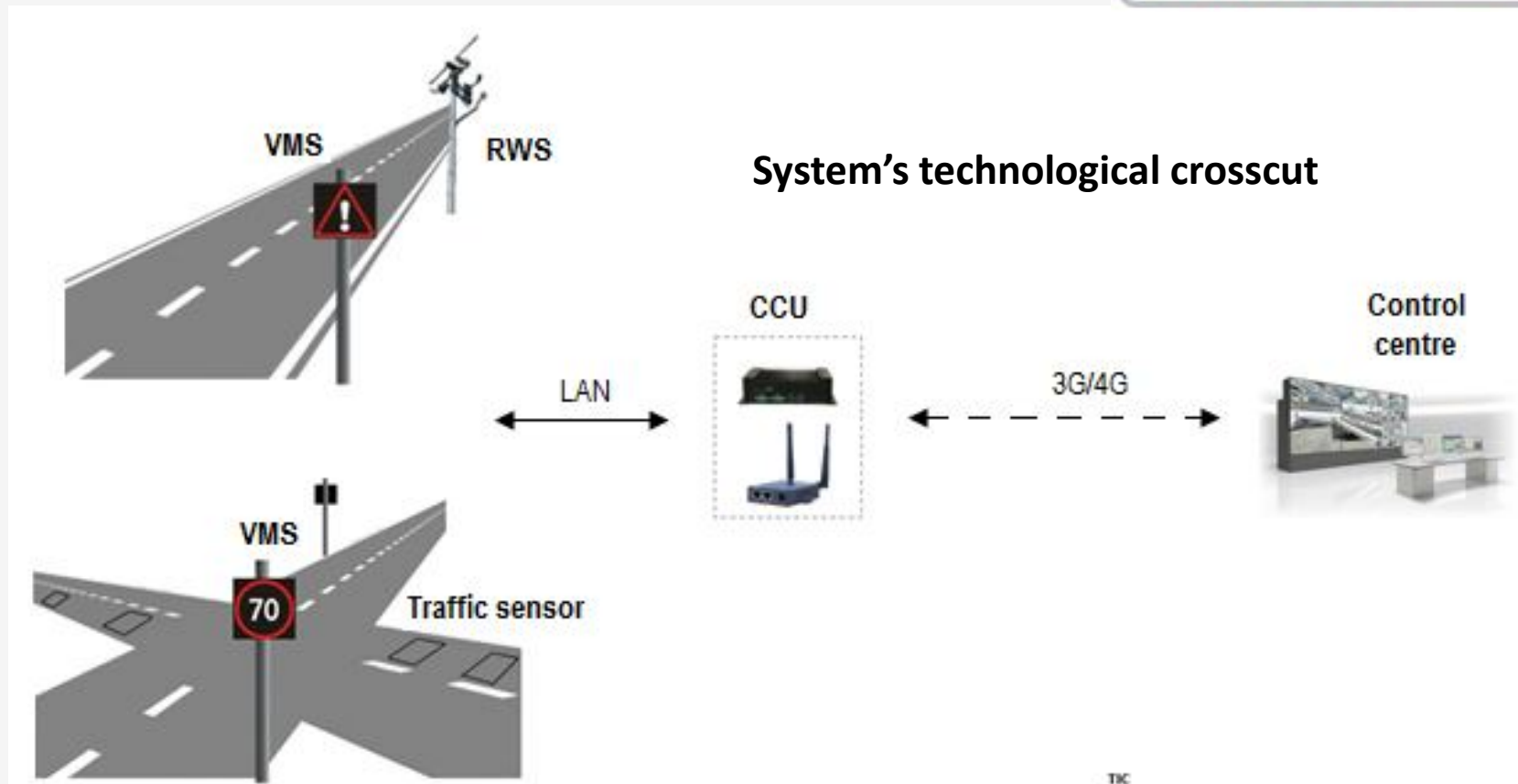
LSR:

- various scattered traffic control spots along the route;
- IMS pilot deployment (2 locations);
- in-depth RWS/VMS(warning type) integration on-site.

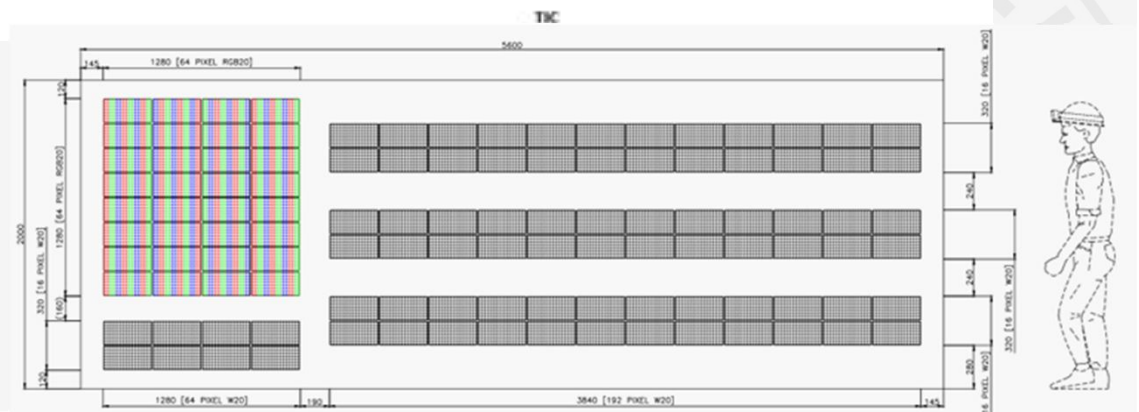
ERA:

- sections' approach to traffic control (2 main stretches);
- emphasize on VMS deployment (more units and types).

DEPLOYMENT OF VMS



Operational scenarios (example)



Highway-type VMS board (traffic sign plus text)

PROJECT'S SERVICE CONCEPT



Key points: harmonization between the partners; compliance to the EIP; cohesion to the existing systems; further scalability to the road network.

PROJECT'S RELATED EXTERNAL ACTIVITIES (LV, 2017.)

- WORKING ON VMS NATIONAL GUIDLINES.
- NATIONAL ITS STUDY (FS → STRATEGY → 5Y ACTION PLAN).
- WORKING ON UNIFIED TRAFFIC INFO MANAGEMENT TOOL FOR TIC.
- STUDY ON LSR TIC/TMC DEVELOPMENT CONCEPT.
- ANALISYS OF PRIVACY ISSUES FOR REAL-TIME TRAFFIC MONITORING.

CONCLUSIONS

- ITS sector need to be continuously improved by legislative and organisational level in Latvia and Estonia.
- EU funds now support investments in innovations, when proposals on ITS projects might be highly feasible.
- LSR and ERA planned actions within SmartE67 are quite ambitious, pointing out new complex approach for corridor based adaptive traffic management.
- Some changes are planed in the project's initial application form due to the complexity of tasks and findings from the preliminary studies.
- Harmonized ITS services doesn't mean deployment fully the same equipment, which is to be made on very complex site-specific considerations.
- Investments in ITS road equipment, let to reach not only certain target goals, but also bring new functionality and coverage of the existing services.
- VMS case reflects very broad involvement of public and the key stakeholders, to be calibrated in practice (operational scenarios, road users' tolerance, enforcement etc.).
- General approach to SmartE67 and parallel activities build up the framework for expertise and technology transfer to the rest of the road network.

THANK YOU FOR ATTENTION !

