

# Use cases

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- 20 aanwezigen
- Agendapunten:
  - CODECS, internationale aansluiting
  - Functie, belang en gebruik van use cases
  - Definities, werkwijze en use case tabel
  - Inventariseren issues/leervragen



# Use case label [1/2]

Class	Application	Use Case	Situation	EC	BBV	Corridor	InterCor	PPA	Smartwayz	
Road safety	Driving assistance (info) – In-vehicle signage	Static signage information (descriptive/prescriptive)	Merge or diverge	Day 1	1d3, 1d4	(x)	(x)			
			Change in carriageway configuration		1b5					
			Overtaking prohibition		1c1					
		Dynamic signage information (descriptive/prescriptive)	Status peak-hour lanes		1d1					
			Status tidal flow lanes		1d2					
			(Dynamic) legal speed limit		1a1					
	Driving assistance (awareness) - Road Hazard Signalling	Emergency vehicle warning			Day 1	2a6				
		Slow vehicle indication			Day 1					
		Stationary vehicle	Accident		Day 1	2a4, 2a8				
			Vehicle Problem			2a4, 2a8				
			Road Inspector			2a7				
		Emergency electronic brake lights			Day 1					
		Wrong way driving warning			Day 1.5					
		Adverse weather condition	Precipitations		Day 1	2a3				
			Road adhesion			2a3				
			Visibility			2a3				
			Wind			2a3				
		Hazardous location notification	Object on the road		Day 1	2a9				
			Spilled load			2a9				
			Pothole							
		Traffic condition warning	Traffic jam ahead warning / AID		Day 1	2a2				
	Road work warning	Short-term mobile		Day 1	2b1, 2b2	x	(x)			
		Short-term static			2b1, 2b2					
		Long-term road works			2b1, 2b2					
		Unplanned (ad-hoc) road works								
	VRU safety warning			Day 1.5						
	Collision avoidance (warning) - (Longitudinal) Collision Risk Warning	Forward collision warning		Day 1.5						
Lane change, merge and overtaking assistance				2a10	(x)					
Motorcycle approaching			Day 1.5							
Collision avoidance (warning) - Intersection Collision (Risk) Warning	Across traffic turn collision risk warning									
	Merging traffic turn collision risk warning									
	VRU crossing while turning									
	Signal violation warning		Day 1							
Automated driving	Driving assistance (automatic)	Cooperative Adaptive Cruise Control / Platooning							(Truck)	
Traffic efficiency	Speed management	Regulatory / contextual speed limits notification	Shockwave damping	Day 1	1b1, 1b2				x	
			Weather condition		1b3					
			Hazardous location		1b4					
			Emergency vehicle		1b6					
	Traffic light optimal speed advisory	Time-to-green information and speed advice	Day 1	4.1, 4.3		x		x		
		Time-to-red information and speed advice		4.2, 4.3						
Probe data		Basic probe vehicle data		Day 1		x	(x)	(x)		
		Extended probe vehicle data			(x)					

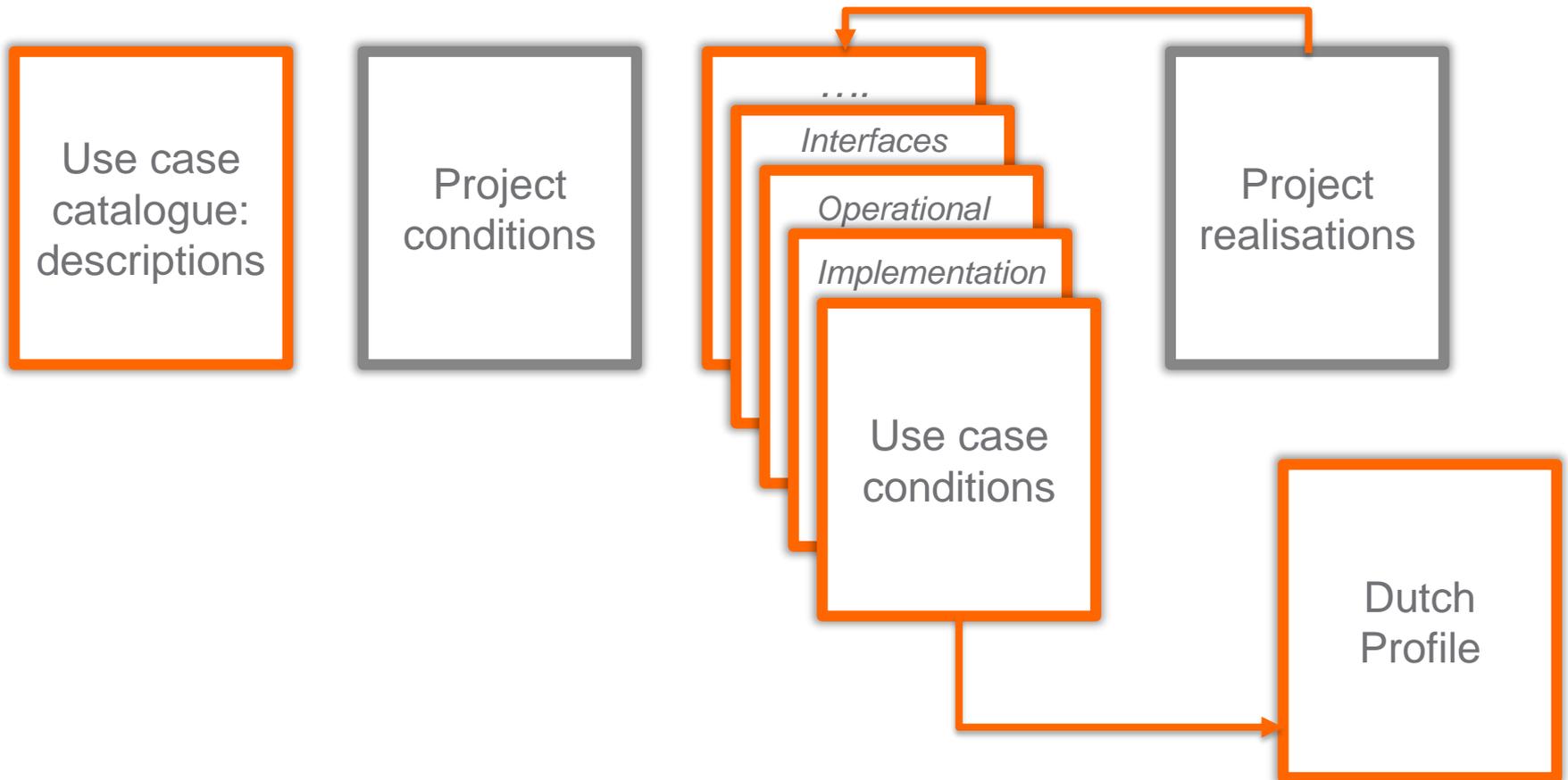
# Use case table [2/2]

Class	Application	Use Case	Situation	EC	BBV	Corridor	InterCor	PPA	Smartwayz
Smart mobility	Traffic management	Flexible lane allocation							
		Traffic signal priority request	Priority public transport	Day 1	3a1				x
			Priority trucks		3a2				
			Priority vehicle platoon		3a3				
			Priority group of cyclists		3a4				
			Preemption for emergency vehicle		3b1				
	Zone access control for urban areas	Day 1.5							
	Traffic signal optimisation	Traffic lights		5.1, 5.2			x		
		Ramp metering					x		
	Cooperative navigation	Traffic information and route guidance	Bridge open	Day 1.5	2a1			(x)	
			Reduced speed due to event		2a5				
			Parking routes		6.3				
			Eco-routes						
			Limited access						
			Tunnel information				x		
Parking management		Off street parking information	Day 1.5	6.1, 6.2					
		On street parking information	Day 1.5	6.1, 6.2					
		Parking facilities at events		6.4			x		
		Bicycle parking facilities		6.5					
	Truck parking					x			
Smart mobility	Location based services	Point of interest notification							
		Automatic access control and parking access	Day 1.5						
		ITS local electronic commerce							
		Media downloading							
	Urban mobility	Multimodality support	Day 1.5						
	Communities services	Insurance and financial services							
		Fleet management (goods delivery)					x		
Loading zone management (goods delivery)		Day 1.5				x			
	Information on AFV fuelling & charging stat.	Day 1.5							
Operational management	ITS station life cycle management	Vehicle software / data provisioning and update							
		Vehicle and RSU data calibration							

# Inventarisatie issues/leervragen

- Veel aandacht (zorg) met betrekking tot human behaviour (gebruiker) en effecten van systemen (voor gebruiker en maatschappij). Andere aspecten staan wellicht zelfs ten dienst van deze twee aspecten.
- Wat is precies de onderlinge afhankelijkheid van aspecten, zijn die als causale relaties te beschrijven? Feedback loops kunnen dienen om andere aspecten verder te verfijnen.
- Let ook op tegengestelde belangen. Bijvoorbeeld sturing versus commercieel (consument) belang. Daar moet over gesproken worden.
- Interoperabiliteit is belangrijk maar personaliseren is belangrijker.

# Ronde Tafel producten vs. Projecten



# Use case beschrijving vs uitwerking

## Use case beschrijving

- Introduction use case
  - Use case ID
  - Background
  - Objective (function)
  - Desired behaviour (system & actors)
  - References
- Use case description
  - Situation(s)
  - System boundaries
  - Actors, relations and roles
  - Scenario(s);
    - Use case flow (incl. pre-, interim-, post- and termination conditions)
    - Use case illustration & interaction diagram
  - Link to other use cases
- Functional requirements by aspects

## Use case uitwerking (condities)

- Implementation (technical)
- Operational (deployment)
- Interfaces (standards)
- Security
- Legal
- Privacy
- Human behaviour
- Effects & impact
- Testing and validation
- Life cycle

# Geselecteerde use cases

- Static signage information
- Dynamic signage information
- Stationary vehicle
- Adverse weather condition
- Hazardous location notification
- Traffic condition warning
- Road works warning
- Lane change, merge and overtaking assistance
- Regulatory / contextual speed limits notification
- Traffic light optimal speed advisory
- Basic probe vehicle data
- Extended probe vehicle data
- Traffic signal priority request
- Traffic signal optimisation
- Traffic information and route guidance
- Parking management
- Fleet management (goods delivery)
- Loading zone management (goods delivery)

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**Projecten**

**Kernteam A&I**

# Structuur Dutch Profile

1. Introduction (objective, scope, structure, etc.)
2. References
3. Terms and abbreviations
4. System description
5. Base requirements ITS Stations
6. Profiling of base standards ITS Stations
7. Use case XX\*
  - a) Implementation (technical)
  - b) Operational (deployment)
  - c) Interfaces (standards)
  - d) Etc.
8. Use case YY\*

*\* Meerdere realisatievarianten van een use case kunnen naast elkaar bestaan. Indien gewenst kunnen deze worden geharmoniseerd.*

- Een template voor use case uitwerkingen volgt, maar projecten kunnen ook in eigen format aanleveren, mits alle content beschikbaar is.
- Minimale requirements, daar waar we het over eens zijn, worden vastgelegd in de DP.

# Vervolg

- Resultaten expertsessie inbrengen bij CODECS workshop (26/9)
  - *Discussies lopen nog*
- Use case catalogue maken, laten reviewen en publiceren
  - *Lopend*
- Inventarisatie issues uitwerken, terugkoppelen aan aanwezigen, aanbieden aan tafels
  - *In notulen en aangeboden aan tafelvoorzitters*
- Opzet maken voor documenteren van condities (template CODECS)
  - *Zie PvA Dutch Profile*
- Goed voorbeeld van een use case beschrijving en een uitwerking van condities beschikbaar stellen.
  - *Volgt*