

# Expert groep Dutch profile

5 dec 2017



Smart Mobility Community for Standards and Practices

## Presentielijst

Bijeenkomst: Dutch Profile expert sessie – Architectuur & Interoperabiliteit

Datum: 5 december

Tijdstip: 13.30 – 16.00 uur

Locatie: RWS, Westraven Utrecht

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Naam	Organisatie	Paraaf
Wim Broeders	MapTM	
Nuno Rodrigues	MapTM	
Edwin v.d. Walle	RWS	
Peter-Paul Schackmann	TNO	
Freek van der Valk	Swarco	
Axel Zandbergen	RWS	
Eddy Verhoeven	Siemens	
Joelle van der Broek	DITCM	
Igor Passchier	TASS International	

# Expert groep Dutch profile – 5 december

- Verzamelen deliverables en planning uit projecten
- Update en review Dutch profile
- Identificeren nieuwe input momenten vanuit NL community
- Afspraak proces review: heen en terug
- Afspraak beschikbaarheid en onderhoud Dutch profile

Uitgenodigden: project leiders en industrie vertegenwoordigers

# Dutch profile

- Promoten interoperabiliteit tussen projecten, systemen en diensten
- Bibliotheek met verzameling van documenten en afspraken uit projecten, zowel technisch en niet-technisch
  - Beschrijving & profile van C-ITS Services / Use Cases
  - Referentie architectuur(en)
  - Implementatie afspraken
  - C-ITS Standards: ETSI, CEN / ISO, IVERA, etc.
- Referentie voor nieuwe projecten, systemen of diensten

# C-ITS Day-1 services: huidige projecten

Day-1 Services (European C-ITS Platform)	C-Roads	InterCor	C-ITS Corridor	Talking Traffic
Emergency brake light (V2V)	✓	-	-	-
Emergency vehicle approaching (V2V)	-	-	-	-
Slow or stationary vehicle(s) (V2V)	-	-	-	-
Traffic jam ahead warning (V2V)	✓	-	-	-
Hazardous location notification	✓	-	-	-
Road works warning	✓	✓	✓	✓
Weather conditions	✓	-	-	✓
In-vehicle signage	✓	✓	-	✓
In-vehicle speed limits	✓	-	-	✓
Probe vehicle data: CAM aggregation	✓	✓	✓	-
Shockwave Damping	-	-	-	-
Green Light Optimal Speed Advisory (GLOSA)	✓	✓	-	✓
Signal violation / Intersection Safety	✓	-	-	✓
Traffic signal priority request by designated vehicles	-	-	-	✓

# C-ITS Day-1 services: nieuwe projecten

Day-1 Services (European C-ITS Platform)	C-Roads	InterCor	C-ITS Corridor	Talking Traffic	Mobility MoveZ	CONCORDA	SOCRATES	C-Mobile
Emergency brake light (V2V)	✓	-	-	-	?	?	-	?
Emergency vehicle approaching (V2V)	-	-	-	-	?	?	-	?
Slow or stationary vehicle(s) (V2V)	-	-	-	-	?	?	-	?
Traffic jam ahead warning (V2V)	✓	-	-	-	?	?	-	?
Hazardous location notification	✓	-	-	-	?	?	-	?
Road works warning	✓	✓	✓	-	?	?	✓	?
Weather conditions	✓	-	-	-	?	?	-	?
In-vehicle signage	✓	✓	-	-	?	?	✓	?
In-vehicle speed limits	✓	-	-	✓	?	?	-	?
Probe vehicle data: CAM aggregation	✓	✓	✓	-	?	?	✓	?
Shockwave Damping	-	-	-	-	?	?	-	?
Green Light Optimal Speed Advisory (GLOSA)	✓	✓	-	✓	?	?	-	?
Signal violation / Intersection Safety	✓	-	-	✓	?	?	-	?
Traffic signal priority request by designated vehicles	-	-	-	✓	?	?	-	?

# Dutch profile bibliotheek

- Lijst met publiek document
  - Per project
  - thema, title, date, versie
  - main editor
  - link naar locatie
- 1<sup>e</sup> versie excel bestand
- Dutch\_profile\_bibliotheek\_v1.0.xls

Project	Thema/project	File name	Title	Version	Status	Date	Editor	link	GLOSA
C-Roads	ITS Station	Roadside ITS-G5 System Profile_D4-00-00.docx	Roadside ITS G5 System Profile	3.0	Final draft	09-06-2017	C-Roads WG2 TF3	www.c-roads.eu	
C-Roads	Message profiles	C-ITS Infrastructure FunctionsandSpecifications_04-00-00.pdf	C-ITS Infrastructure Functions and Specifications	3.0	Final	09-06-2017	C-Roads WG2 TF3	www.c-roads.eu	TRUE
Talking Traffic	SPAT	171102 SPAT Profile v1.8 [subWG Dutch Profile].pdf	Spat profile	1.8	Final	11-02-2017	Talking Traffic	www.dutchmobilityinnovations.com	TRUE
Talking Traffic	MAP	171102 MAP profile v1.8 [subWG NL profiel].docx	MapData (MAP) profile	1.8	Final	11-02-2017	Talking Traffic	www.dutchmobilityinnovations.com	TRUE
Talking Traffic	CAM	171102 CAM profile v1.8 [subWG NL profiel].docx	CAM profile	1.8	Final	02-11-2017	Talking Traffic	www.dutchmobilityinnovations.com	TRUE
Talking Traffic	MAP	171102 ITF profile v1.8 [subWG NL profiel].pdf	Intersection Topology Format (ITF) Profile	1.8	Final	20-10-2017	Talking Traffic	www.dutchmobilityinnovations.com	TRUE
Talking Traffic	SSM	170629 SSM Profile v1.2 [subWG NL profiel].docx	SSM Profile	1.2	Final	29-06-2017	Talking Traffic	www.dutchmobilityinnovations.com	
Talking Traffic	SRM	170629 SRM Profile v1.2 [subWG NL profiel].docx	SRM Profile	1.2	Final	29-06-2017	Talking Traffic	www.dutchmobilityinnovations.com	
InterCor	Message profiles	InterCor_M03-Upgraded-Specifications-ITS-G5_v1.1.pdf	Milestone 3 - Common set of upgraded specifications for ITS-G5	1.1	Final	20-10-2017	InterCor 2.1a	intercor-project.eu	TRUE
InterCor	Service descriptions				Draft		InterCor 2.1d	intercor-project.eu	TRUE
InterCor	Hybrid		Specifications for IF2 for hybrid communication v1.0		Draft		InterCor 2.1b	intercor-project.eu	TRUE
InterCor	PKI				Draft		InterCor 2.1c	intercor-project.eu	TRUE
IVRI	TLC	Deliverable-F-TLC-Architecture-v1.2.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable F: TLC Architecture	1.2	Final	27-01-2017	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
IVRI	TLC	Deliverable-E-Beschrijving-use-cases.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable E: Use Case beschrijvingen	v7	Final	05-12-2015	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
IVRI	TLC	Deliverable-G1-IRS-RIS-FI-v1.2.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable G1: IRS RIS-FI	1.2	Final	27-01-2016	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
IVRI	TLC	Deliverable-G2-IRS-TLC-FI-v1.2.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable G2: IRS TLC-FI	1.2	Final	27-01-2016	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
IVRI	TLC	Deliverable-G3-IRSIDD-TLC-Ivera4.00-v1.2.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable G3: IRSIDD IVERA4.00	1.2	Final	28-01-2016	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
IVRI	TLC	Deliverable-G4-IRSIDD-VLOG31.pdf	Intelligente Verkeers Regel Installatie (IVRI) - Fase 1 Deliverable G4: IRSIDD Interface VLOG	1.1	Final	29-01-2016	IVRI project	www.ivra.nl/downloads/beter-Senuten-ivri	TRUE
Round table	Deployment	Overview European Connection 2017V1.0.pdf	C-ITS DEPLOYMENT IN THE NETHERLANDS						
	Architectuur					07-07-2015	DITCM		

Beschikbaar vanaf 12/12/2017:

<http://www.smartmobilitycommunity.eu/architectuur-interoperabiliteit>

# Update Dutch profile: RWW

Project	Thema /project	File name	Title	Version	Status	Date	Editor	link
C-roads	ITS Station	Roadside ITS-G5 System Profile_04-00-00.docx	Roadside ITS G5 System Profile	3.0	Final draft	09/06/2017	C-Roads WG2 TF3	<a href="http://www.c-roads.eu">www.c-roads.eu</a>
C-roads	Message profiles	C-ITS Infrastructure FunctionsandSpecifications_04-00-00.pdf	C-ITS Infrastructure Functions and Specifications	3.0	Final	09/06/2017	C-Roads WG2 TF3	<a href="http://www.c-roads.eu">www.c-roads.eu</a>
Intercor	Message profiles	InterCor_M03-Upgraded-Specifications-ITS-G5_v1.1.pdf	Milestone 3 - Common set of upgraded specifications for ITS-G5	1.1	Final	20/10/2017	Intercor 2.1a	<a href="http://intercor-project.eu">intercor-project.eu</a>
Intercor	Service descriptions				Draft		Intercor 2.1d	<a href="http://intercor-project.eu">intercor-project.eu</a>
Intercor	Hybrid		Specifications for IF2 for hybrid communication v1.0		Draft		Intercor 2.1b	<a href="http://intercor-project.eu">intercor-project.eu</a>
Round table	Deployment	Overview European Connection 2017V1.0.pdf	C-ITS DEPLOYMENT IN THE NETHERLANDS					
DTICM	Architecture	DITCM architecture v1.0.pdf	DITCM architecture	1.0	Final	30/01/2014	DITCM	
ETSI	DENM		DENM	1.2.2	Final			ETSI EN 302 637-2
CEN/ISO	IVI		IVI					CEN TS 19321
CEN/ISO	LDM		LDM					ISO TS 18750
ETSI	LDM		LDM	1.0.0	Draft	09/01/2014		ETSI EN 302 895
ETSI	Architecture		ITS Communications Architecture	1.1.1	Final	09/01/2010		ETSI EN 302 665
ETSI	Network		ITS VC GN 4.1	1.2.1	Final	07/01/2014		ETSI EN 302 636-4-1
ETSI	Network		ITS VN GN 5.1 BTP	1.2.1	Final	08/01/2014		ETSI EN 302 636-5-1



# Update Dutch profile: IVS

Project	Thema /project	File name	Title	Version	Status	Date	Editor	link
C-roads	ITS Station	Roadside ITS-G5 System Profile_04-00-00.docx	Roadside ITS G5 System Profile	3.0	Final draft	09/06/2017	C-Roads WG2 TF3	<a href="http://www.c-roads.eu">www.c-roads.eu</a>
C-roads	Message profiles	C-ITS Infrastructure FunctionsandSpecifications_04-00-00.pdf	C-ITS Infrastructure Functions and Specifications	3.0	Final	09/06/2017	C-Roads WG2 TF3	<a href="http://www.c-roads.eu">www.c-roads.eu</a>
Intercor	Message profiles	InterCor_M03-Upgraded-Specifications-ITS-G5_v1.1.pdf	Milestone 3 - Common set of upgraded specifications for ITS-G5	1.1	Final	20/10/2017	Intercor 2.1a	<a href="http://intercor-project.eu">intercor-project.eu</a>
Intercor	Service descriptions				Draft		Intercor 2.1d	<a href="http://intercor-project.eu">intercor-project.eu</a>
Intercor	Hybrid		Specifications for IF2 for hybrid communication v1.0		Draft		Intercor 2.1b	<a href="http://intercor-project.eu">intercor-project.eu</a>
Round table	Deployment	Overview European Connection 2017V1.0.pdf	C-ITS DEPLOYMENT IN THE NETHERLANDS					
DTICM	Architecture	DITCM architecture v1.0.pdf	DITCM architecture	1.0	Final	30/01/2014	DITCM	
CEN/ISO	IVI		IVI					CEN TS 19321
CEN/ISO	LDM		LDM					ISO TS 18750
ETSI	LDM		LDM	1.0.0	Draft	09/01/2014		ETSI EN 302 895
ETSI	Architecture		ITS Communications Architecture	1.1.1	Final	09/01/2010		ETSI EN 302 665
ETSI	Network		ITS VC GN 4.1	1.2.1	Final	07/01/2014		ETSI EN 302 636-4-1
ETSI	Network		ITS VN GN 5.1 BTP	1.2.1	Final	08/01/2014		ETSI EN 302 636-5-1

# Update Dutch profile: GLOSA

Project	Thema /project	File name	Title	Version	Status	Date	Editor	link
C-roads	Message profiles	C-ITS Infrastructure FunctionsandSpecifications_04-00-00.pdf	C-ITS Infrastructure Functions and Specifications	3.0	Final	09-06-2017	C-Roads WG2 TF3	www.c-roads.eu
Talking Traffic	SPAT	171102 SPAT Profile v1.8 [subWG Dutch Profile].pdf	Spat profile	1.8	Final	11-02-2017	Talking Traffic	www.dutchmobilityinnovations.com
Talking Traffic	MAP	171102 MAP profile v1.8 [subWG NL profiel].docx	MapData (MAP) profile	1.8	Final	11-02-2017	Talking Traffic	www.dutchmobilityinnovations.com
Talking Traffic	MAP	171102 ITF profile v1.8 [subWG NL profiel].pdf	Intersection Topology Format (ITF) Profile	1.8	Final	20-10-2017	Talking Traffic	www.dutchmobilityinnovations.com
Intercor	Message profiles	InterCor_M03-Upgraded-Specifications-ITS-G5_v1.1.1.pdf	Milestone 3 - Common set of upgraded specifications for ITS-G5	1.1	Final	20-10-2017	Intercor 2.1a	intercor-project.eu
Intercor	Service descriptions				Draft		Intercor 2.1d	intercor-project.eu
Intercor	Hybrid		Specifications for IF2 for hybrid communication v1.0		Draft		Intercor 2.1b	intercor-project.eu
iVRI	TLC	Deliverable-F-iTLC-Architecture-v1.2.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable F: iTLC Architecture	1.2	Final	27-01-2017	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
iVRI	TLC	Deliverable-E-Beschrijving-use-cases.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable E: Use Case beschrijvingen	v7	Final	05-12-2015	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
iVRI	TLC	Deliverable-G1-IRS-RIS-FI-v1.2.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable G1: IRS RIS-FI	1.2	Final	27-01-2016	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
iVRI	TLC	Deliverable-G2-IRS-TLC-FI-v1.2.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable G2: IRS TLC-FI	1.2	Final	27-01-2016	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
iVRI	TLC	Deliverable-G3-IRSIDD-iTLC-Ivera4.00-v1.2.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable G3: IRSIDD IVERA4.00	1.2	Final	28-01-2016	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
iVRI	TLC	Deliverable-G4-IRSIDD-VLOG31.pdf	Intelligente Verkeers Regel Installatie (iVRI) – Fase 1 Deliverable G4: IRSIDD Interface VLOG	1.1	Final	29-01-2016	iVRI project	<a href="http://www.ivera.nl/downloads/#beter-Benutten-ivri">www.ivera.nl/downloads/#beter-Benutten-ivri</a>
DITCM	Architecture	DITCM architecture v1.0.pdf	DITCM architecture	1.0	Final	30-01-2014	DITCM	
ETSI	CAM		CAM	1.3.2	Final			ETSI EN 302 637-1
SAE	MAP, SPAT		MAP and SPAT	MAR2016	Final	03-01-2016		SAE J2735
CEN/ISO	LDM		LDM					ISO TS 18750
ETSI	LDM		LDM	1.0.0	Draft	09-01-2014		ETSI EN 302 895
ETSI	Architecture		ITS Communications Architecture	1.1.1	Final	09-01-2010		ETSI EN 302 665
ETSI	Network		ITS VC GN 4.1	1.2.1	Final	07-01-2014		ETSI EN 302 636-4-1
ETSI	Network		ITS VN GN 5.1 BTP	1.2.1	Final	08-01-2014		ETSI EN 302 636-5-1

# RWW: DENM & IVI

Arrows indicate input provided. If the arrow attaches to the start, the input has been used as starting point. If an arrow attaches at the middle, it indicates that no change was required to be in line with the input.  
The versions start when the document is ready, not when the work on the document is started. For simplicity, they stop when a new version becomes ready.

Sept 2017      ~Jan 2018

Dutch profile



C-Roads



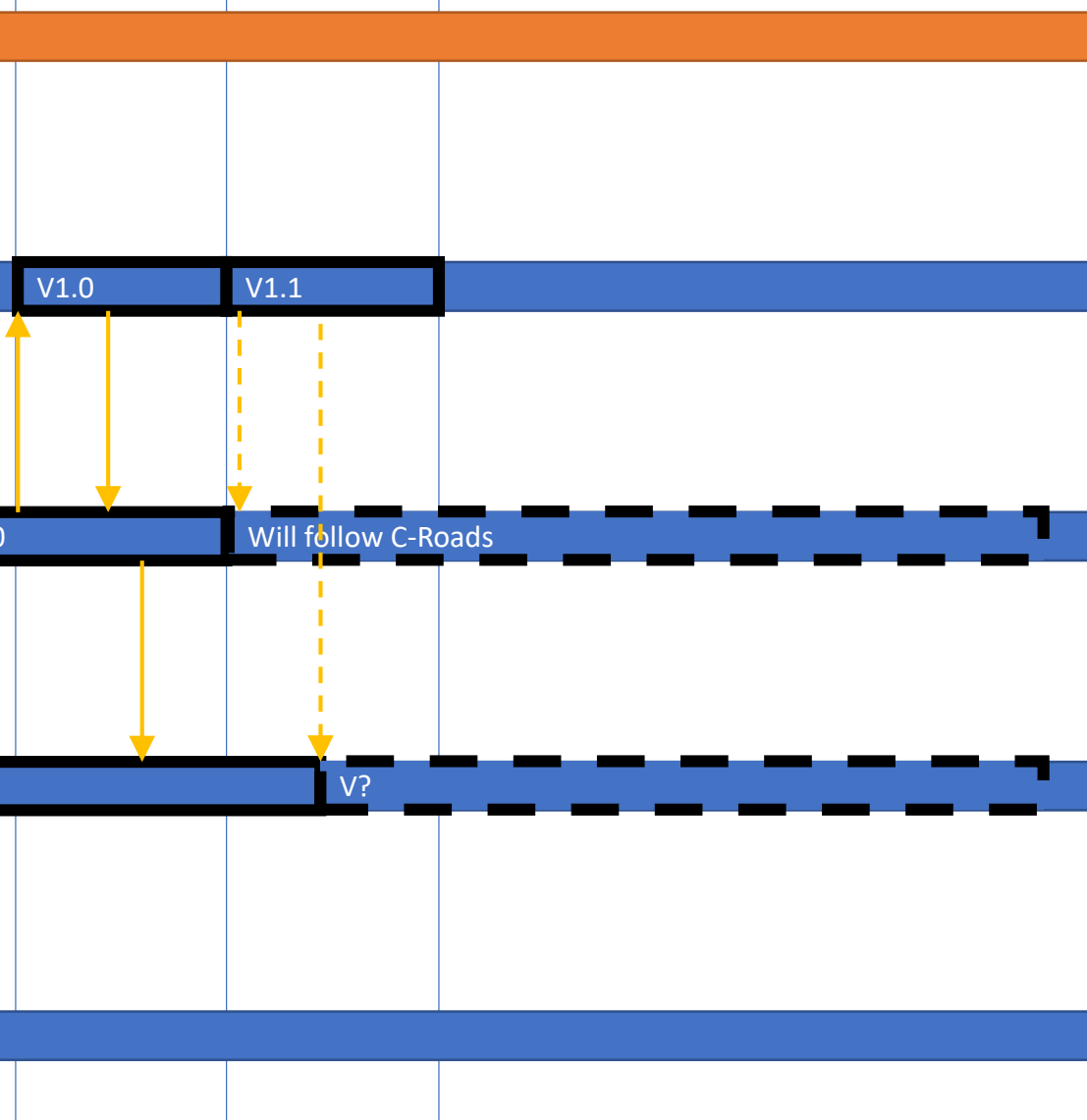
Intercor



NL ITS Corridor

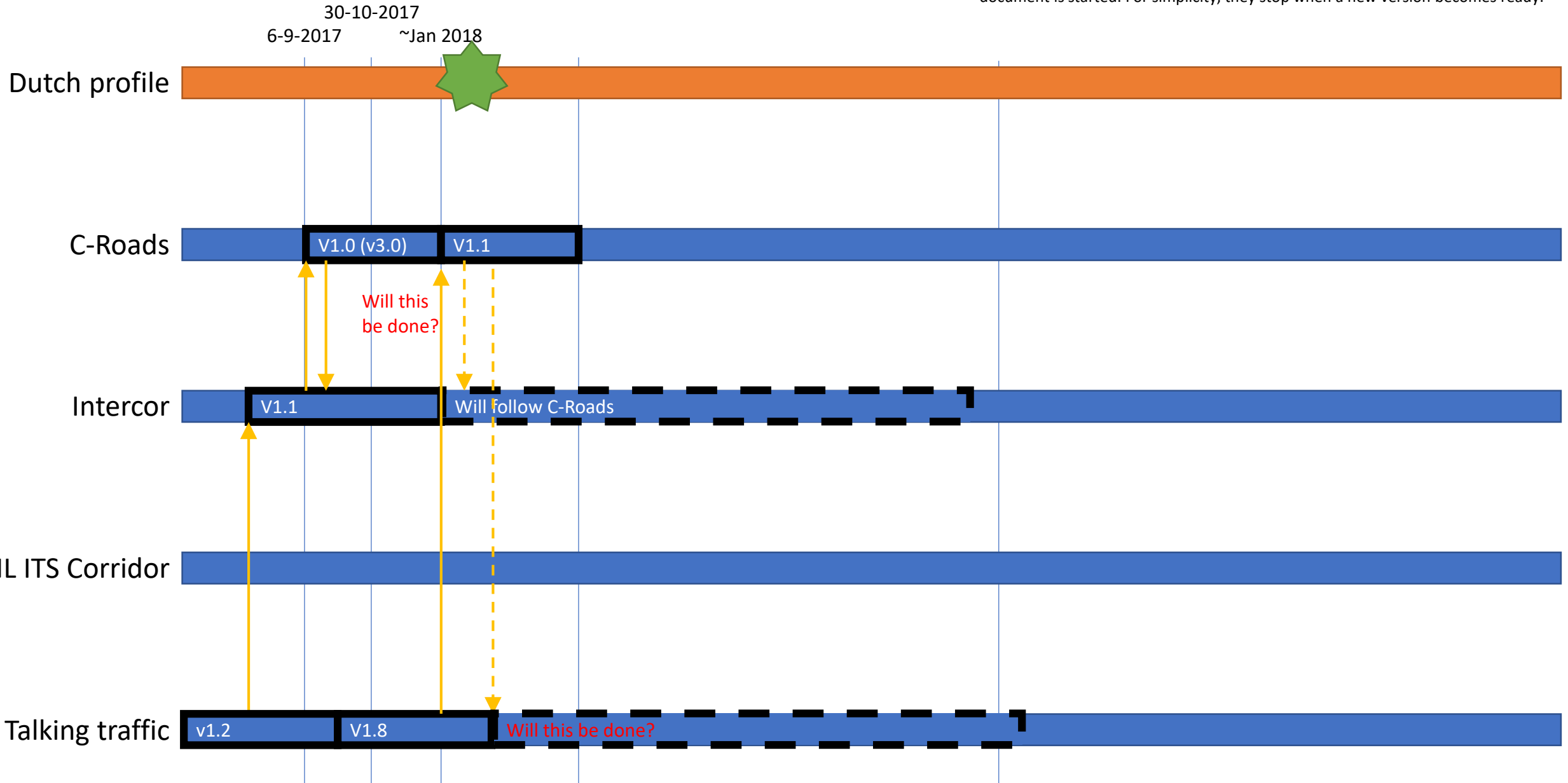


Talking traffic



# GLOSA: MAP & SPAT

Arrows indicate input provided. If the arrow attaches to the start, the input has been used as starting point. If an arrow attaches at the middle, it indicates that no change was required to be in line with the input.  
The versions start when the document is ready, not when the work on the document is started. For simplicity, they stop when a new version becomes ready.



# Hybrid

Arrows indicate input provided. If the arrow attaches to the start, the input has been used as starting point. If an arrow attaches at the middle, it indicates that no change was required to be in line with the input.  
The versions start when the document is ready, not when the work on the document is started. For simplicity, they stop when a new version becomes ready.

6-9-2017

Jan 2018

Sep 2018

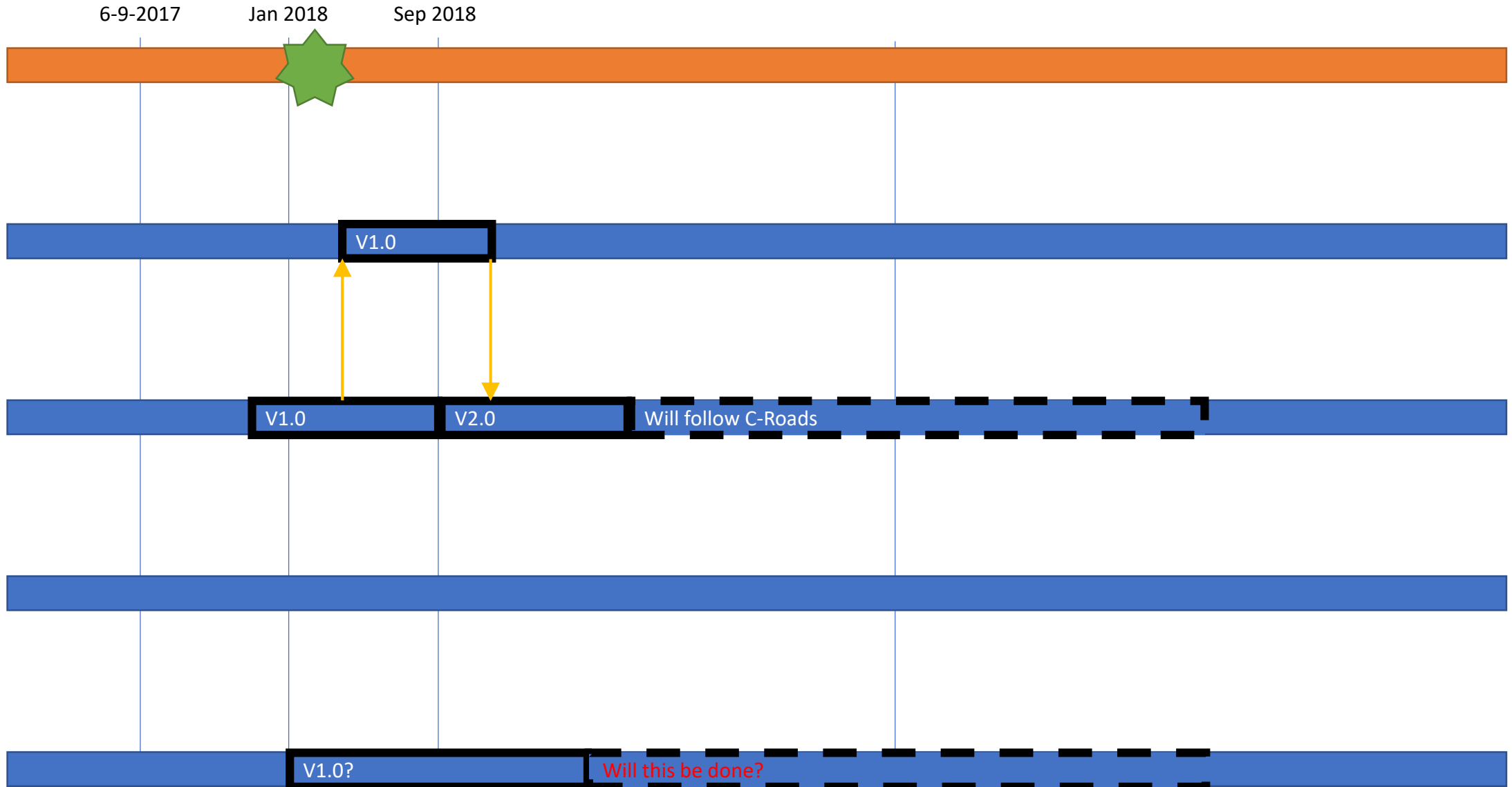
Dutch profile

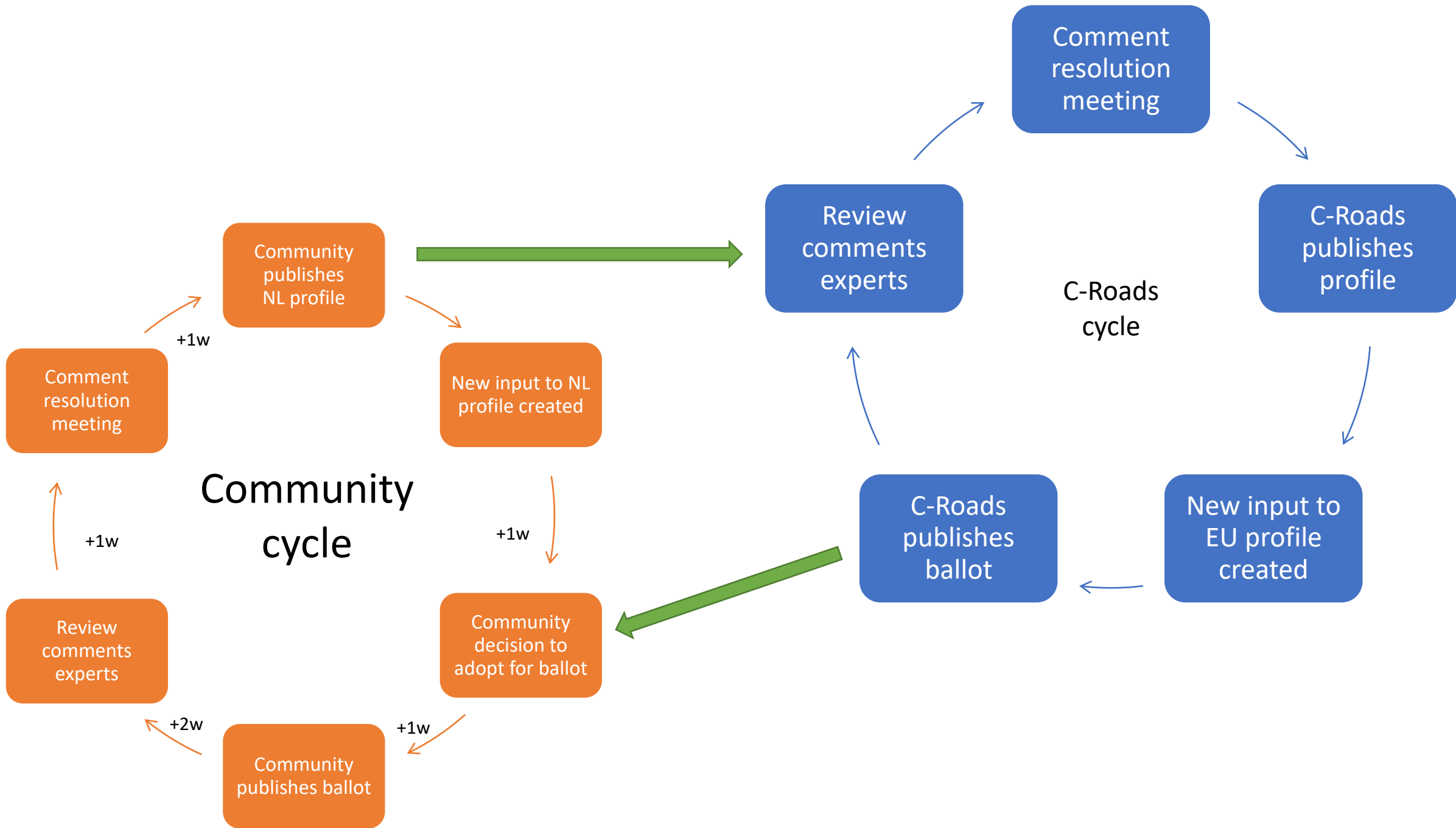
C-Roads

Intercor

NL ITS Corridor

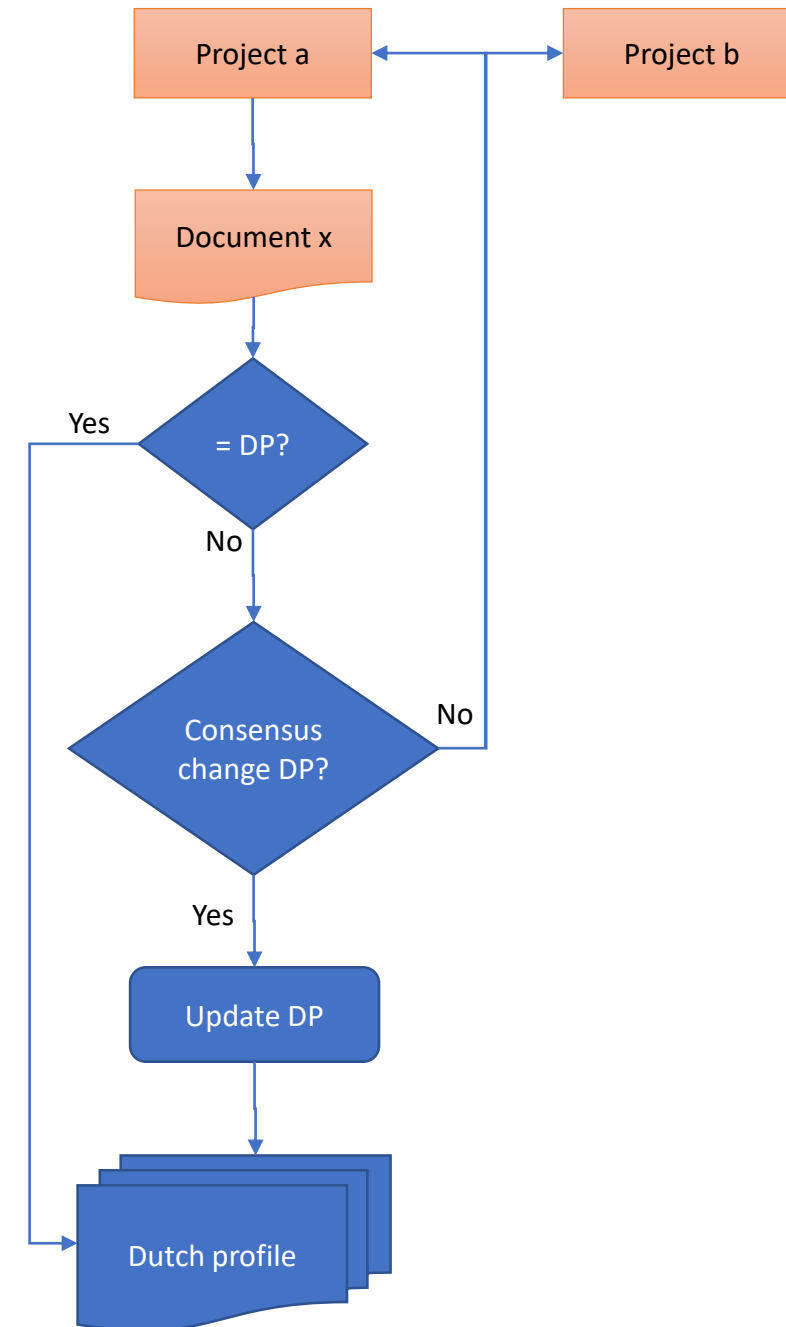
Talking traffic





# Update Dutch profile proces

1. Nieuwe inzichten/resultaten vanuit projecten of industrie
  - Gepresenteerd aan “Expert groep” door project vertegenwoordig
  - Overlapt met huidige Dutch profile? -> “Issue” melding
2. “Issues tracking”: inconsistenties, witte vlekken, etc.
  - Ingevuld door “Expert groep”
  - Bijgehouden door AenI trekker
3. “Consensus proces”
  - Per issue met betrokken projecten experts
  - Geïnitieerd door projecten of AenI trekker
  - “Consensus” gepresenteerd aan “Expert group” ter review
  - Geen “consensus” = escalatie projecten management
4. Update van Dutch profile
  - Door AenI trekker



# Expert groepen vervolg overleggen

- Week 3: GLOSA expert groep
  - C-Roads 1.1
  - Talking Traffic 2.0
  - InterCor / C-ITS Corridor TestFest ?
- Week 5: Hybrid expert groep
  - InterCor 1.0 -> half dec
  - C-Roads 1.0 -> medio 2018
  - Talking Traffic ?
- RWW?