IN-PREP

Plan, Train, Collaborate

Integrated Tools for Dynamic Scenario Building,

Collaborative Response Planning & Training

International Workshop on Collaborative Practices and Technologies for Critical Infrastructure Resilience,

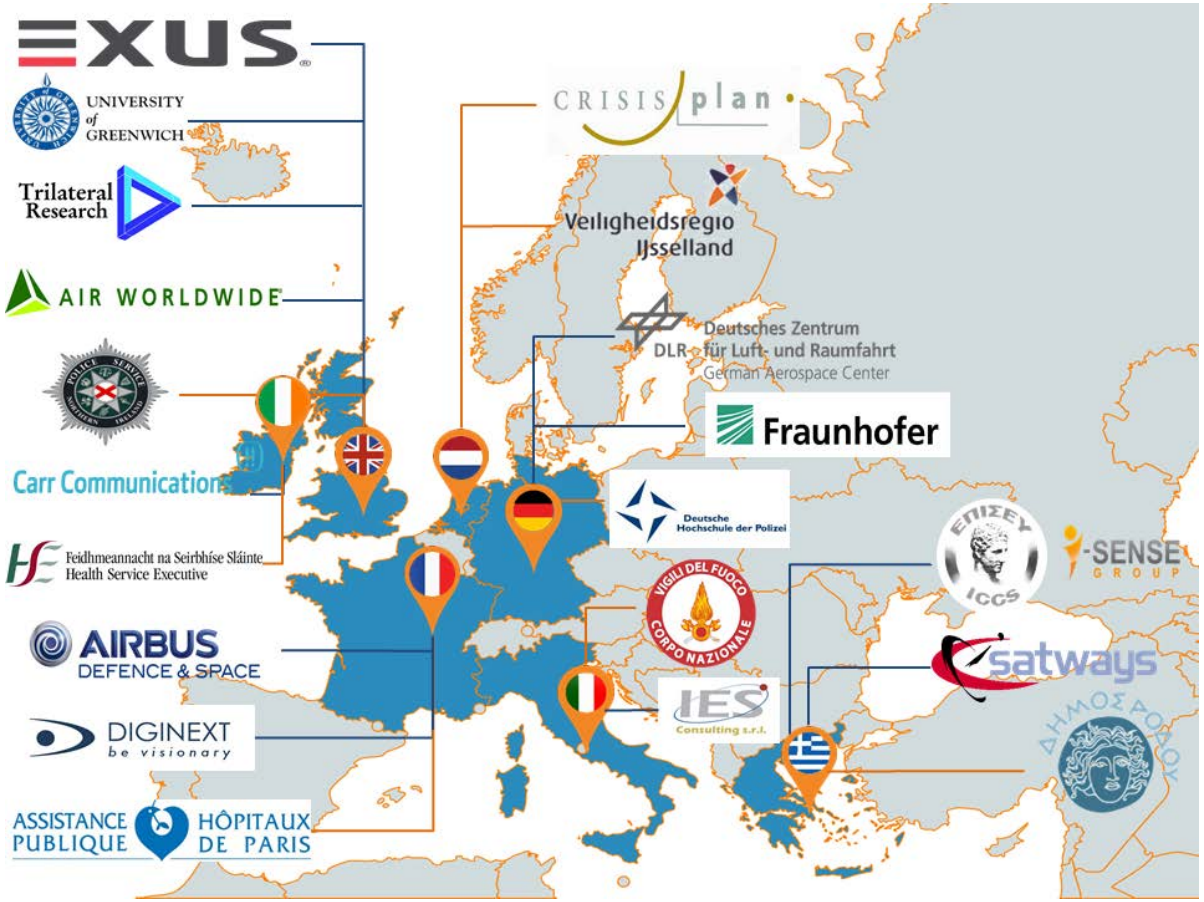
CIRINT.NET SICt Friday, 2 October 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 740627.

Agenda of the Telco

1. IN-PREP Facts & Figures and Challenges/Motivation
2. IN-PREP Objectives
3. IN-PREP Outcomes (Technology and Policy)
4. IN-PREP Implementation

IN-PREP Fact & Figures



SEC-01-DRS-2016: *INTEGRATED TOOLS FOR RESPONSE PLANNING AND SCENARIO BUILDING (IA)*

TOTAL FUNDING: *€ 9,580,781.25*

EC REQUESTED FUNDING: *€ 7,999,556.25*

TRAINING PROGRAMME:

3 TTXS & 3 FSXS

CONSORTIUM: *20 PARTNERS FROM 7 MS (7 END USERS, 6 SMES AND 3INDUSTRIES, 3RTOS AND 1 UNI)*

IN-PREP

IN-PREP Impacts

- With IN-PREP, **losses** from natural, accidental and man-made disasters are reduced through better societal resilience and improved disaster risk management
  - improving the perception of disaster-related risks (*all-hazard approach*)
  - strengthening integrated disaster risk reduction approaches (*transboundary concept: cross-sector, cross-border, cross-agency, cross-hierarchy*)
  - technological tools and solutions to support practitioners in all operational phases (*prevention-preparedness-response-recovery*)

IN-PREP Solution

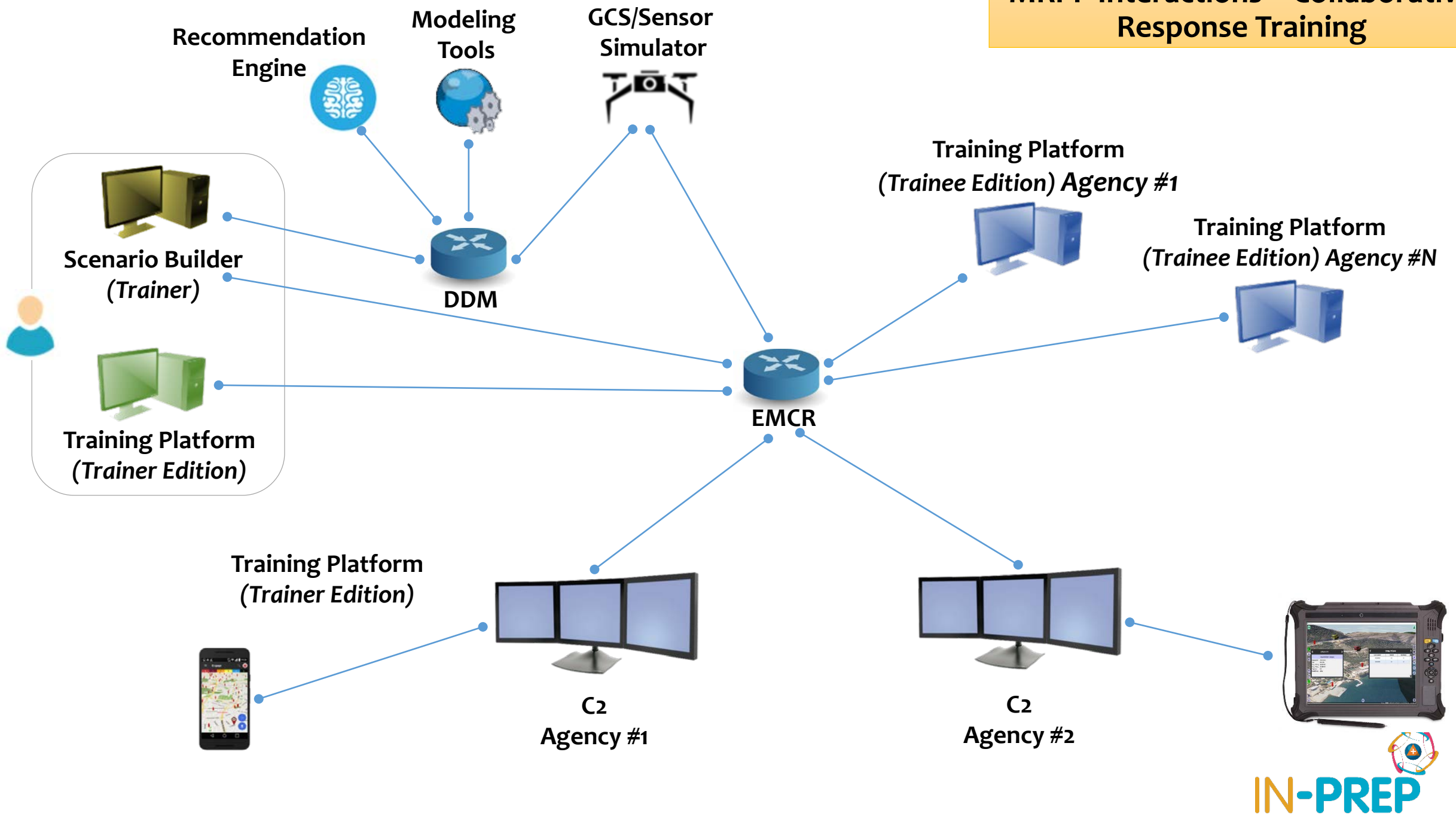
Overarching Goal: “is to upgrade collaborative response planning and training for transboundary disasters and causes of crises.”

- Dynamic Scenario Building
- Collaborative Response Training
- Collaborative Response Planning

MRPP Interactions

Collaborative Response Training Mode

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

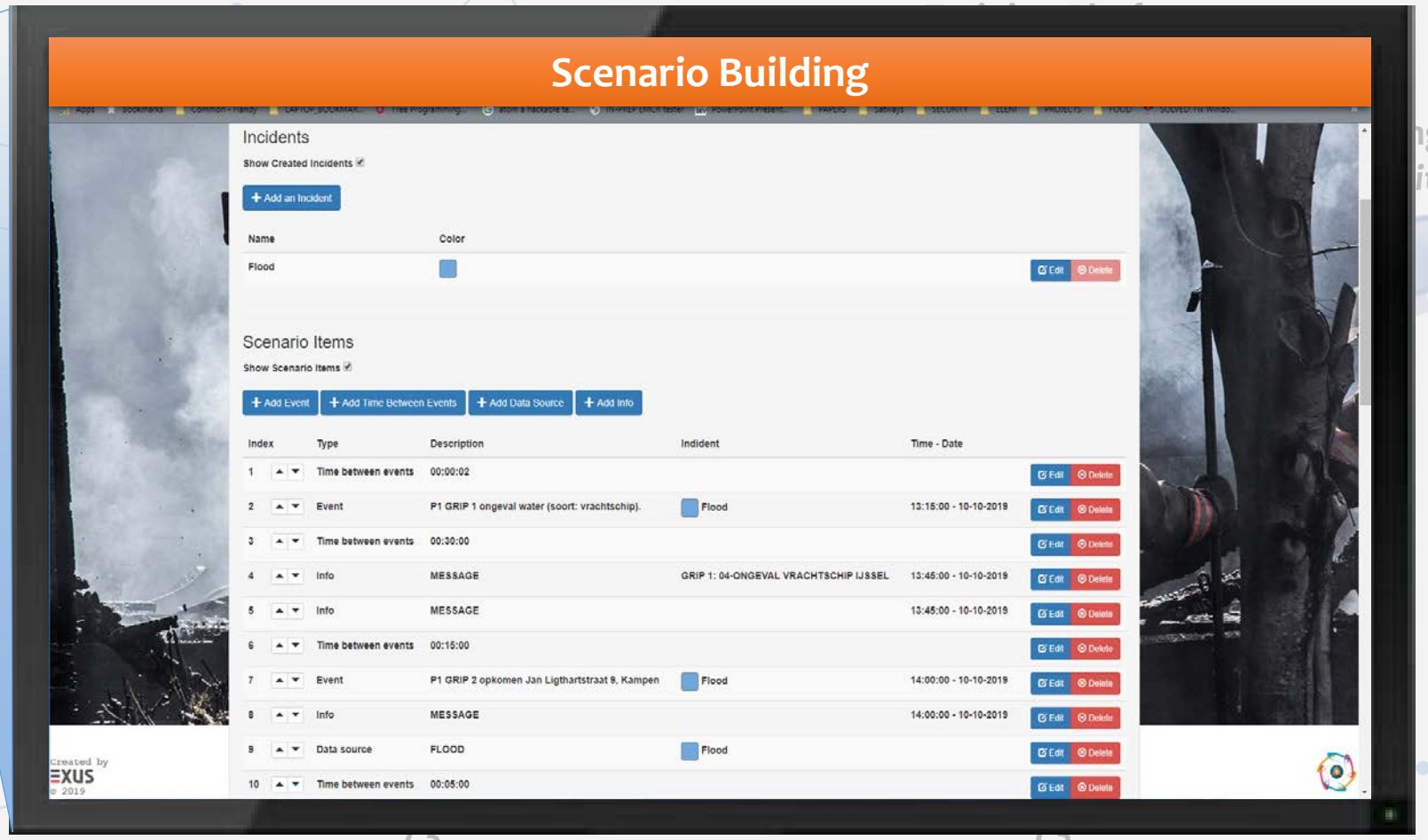
Modeling Tools

GCS/Sensor Simulator

Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Building



C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training

Recommendation Engine

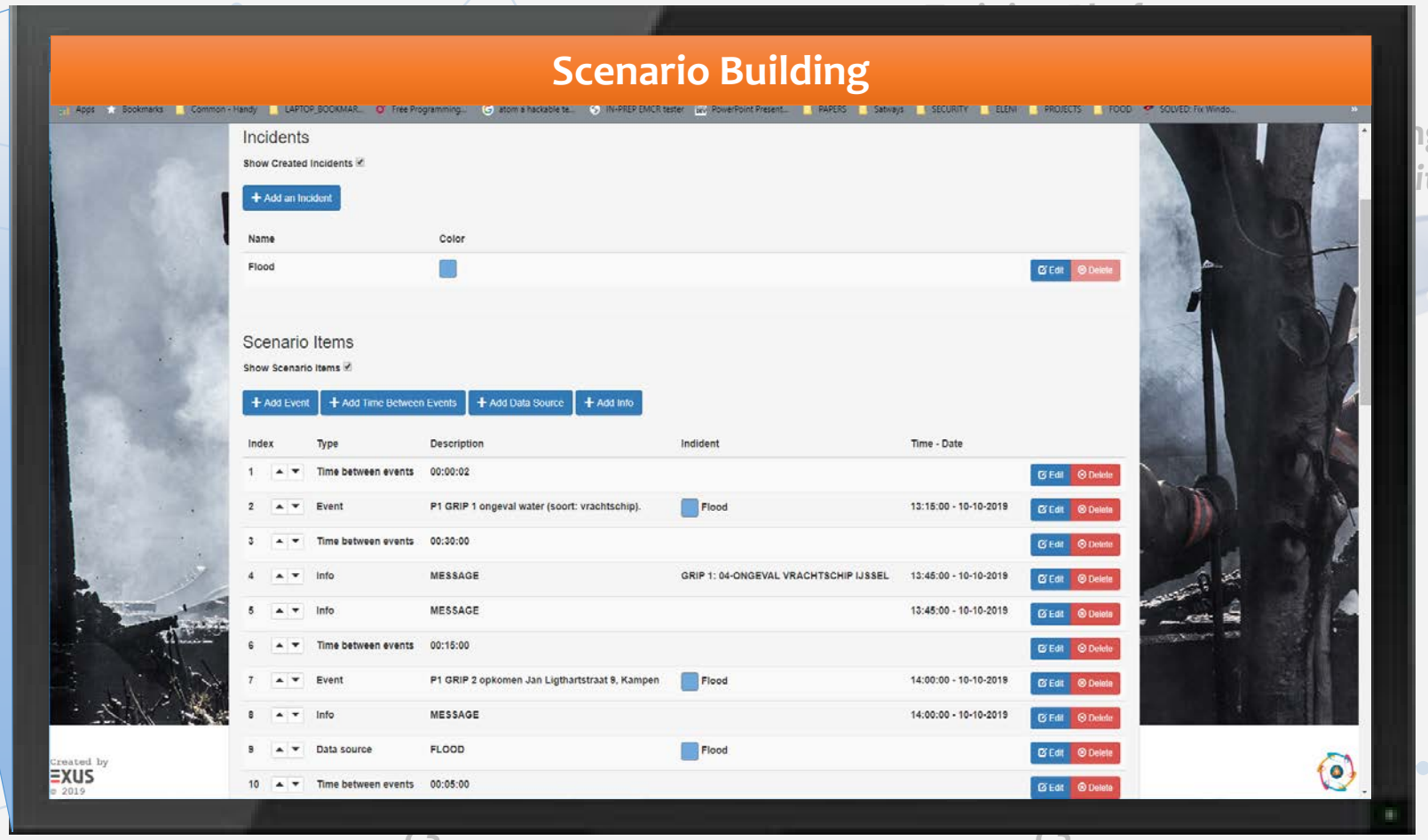
Modeling Tools

GCS/Sensor Simulator

Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Building



C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training

Recommendation Engine

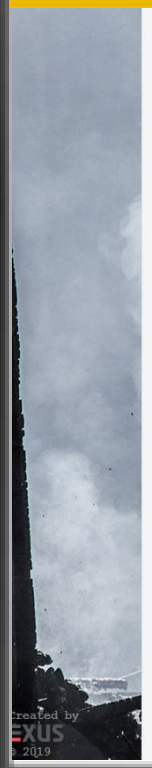
Modeling Tools

GCS/Sensor Simulator

Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Execution



Scenario Execution in progress

#1 TIME-BETWEEN-EVENTS

#2 Febbre Emorragica
→Coast Guard,Police,CC - Carabinieri,VF-SV - Vigili del Fuoco Savona,VF-Liguria,VVF-CON (virtuale)
→Italy
00:00:02

#3 TIME-BETWEEN-EVENTS

#4 Info - MASS_MEDIA

#5 TIME-BETWEEN-EVENTS

#6 Info - SOCIAL_MEDIA

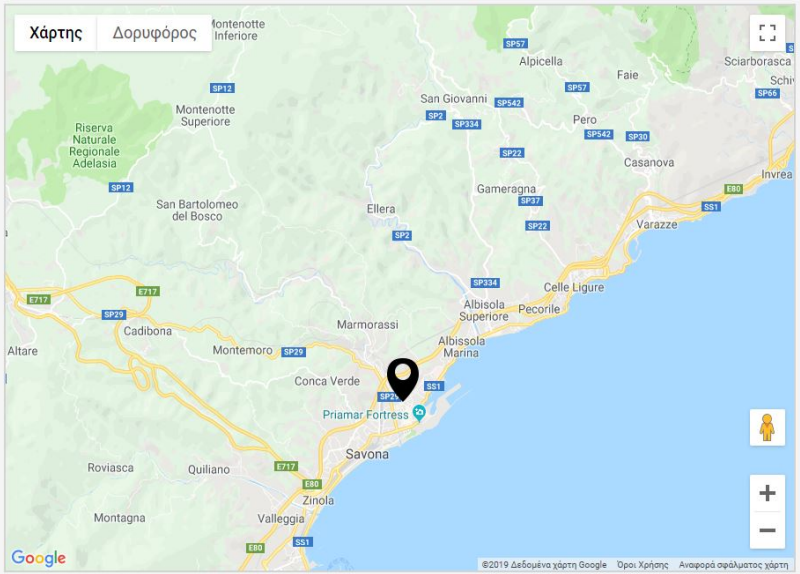
#7 TIME-BETWEEN-EVENTS

#8 Info - HOSPITALISATION

Started	May 10, 2019 11:30:01 AM
Scenario	MM1
Trainer	Gordon James
Trainees	Todd Jason

Inject Event

Terminate



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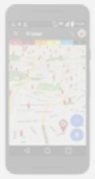

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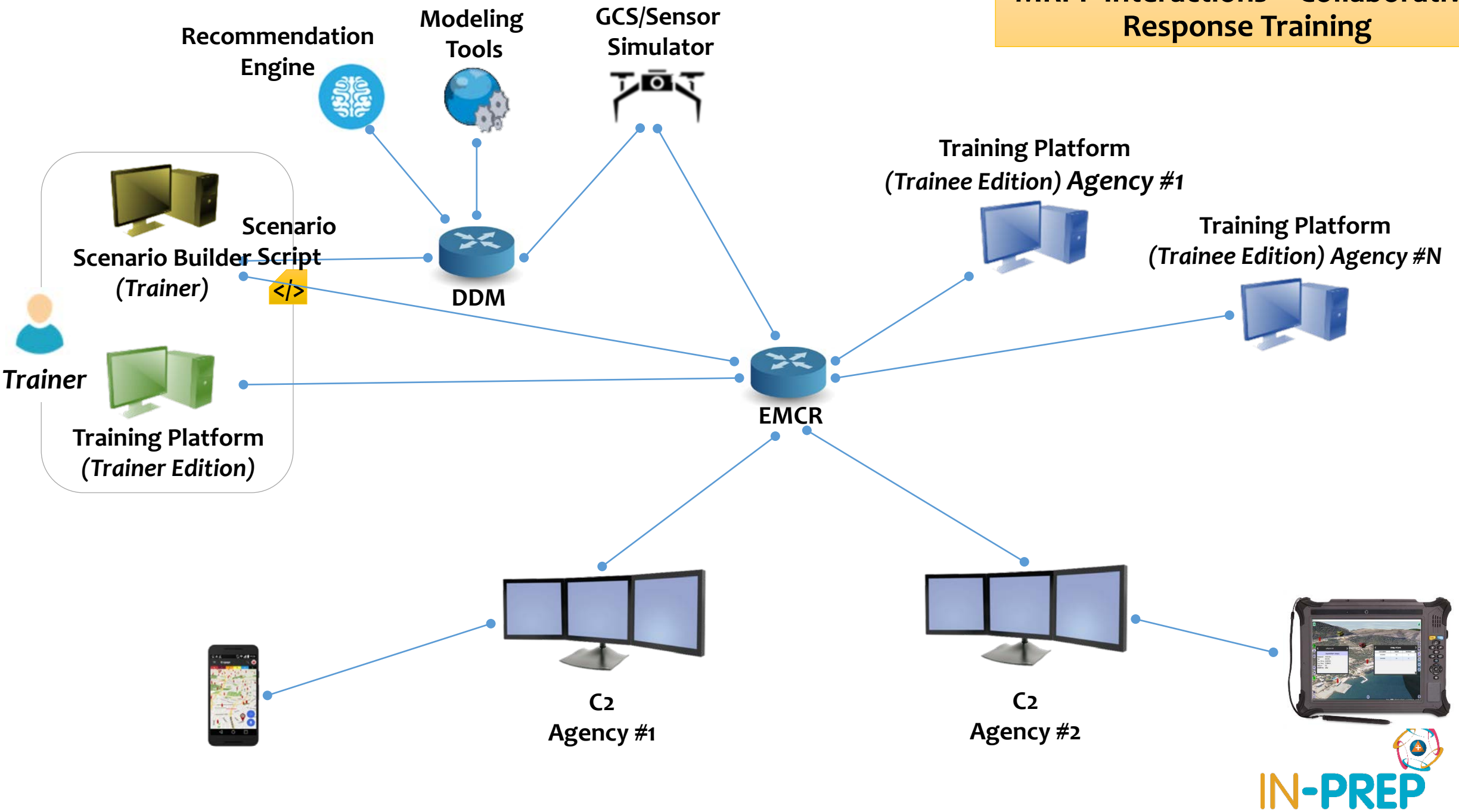
IN-PREP

MRPP Interactions – Collaborative Response Training



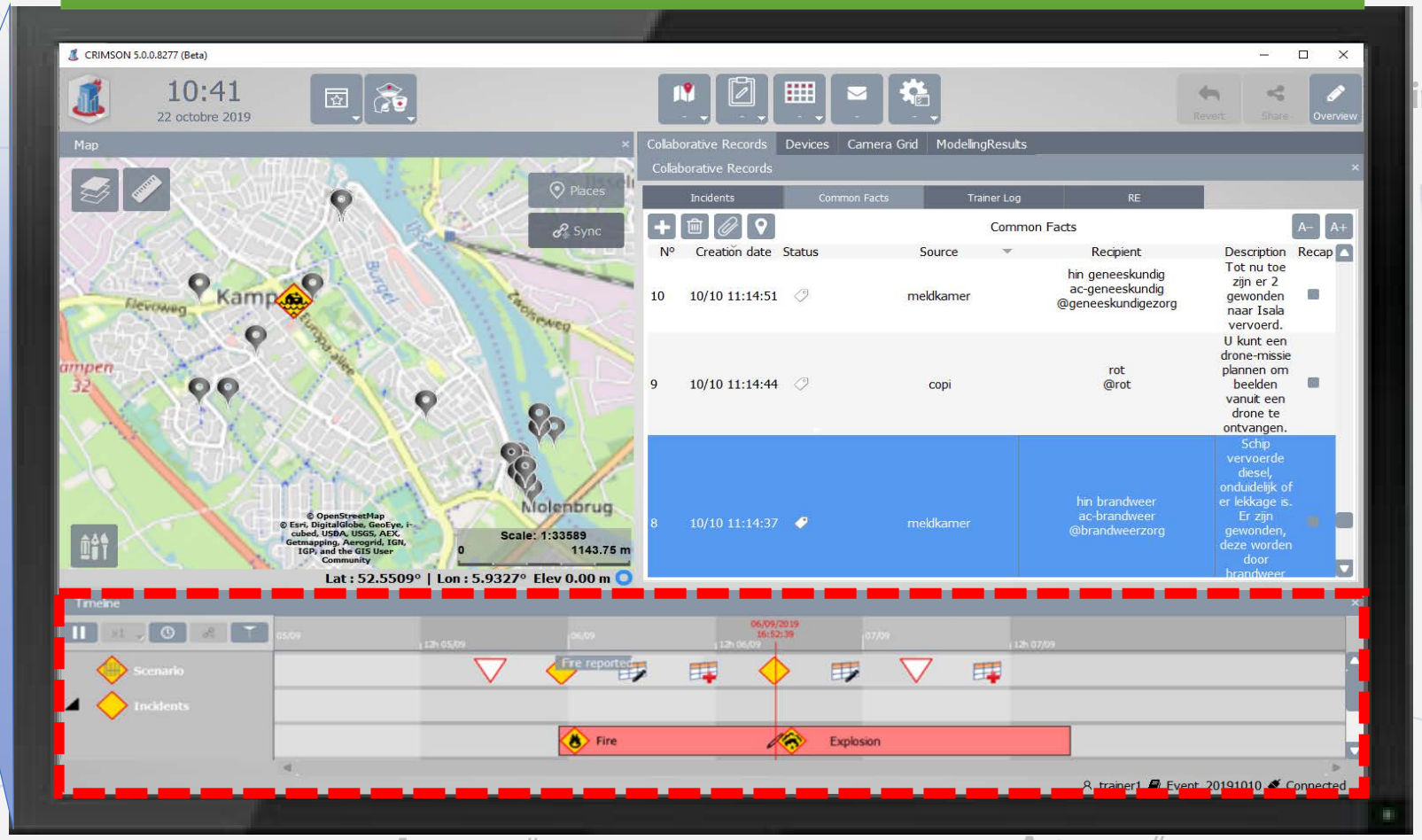
MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

Training Platform – Trainer Edition



Scenario Builder (Trainer)

Training Platform (Trainer Edition)

Training Platform (Trainer Edition) Agency #N

Agency #1

Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Execution

Scenario Execution in progress

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#5 TIME-BETWEEN-EVENTS
#6 Info - SOCIAL_MEDIA
#7 TIME-BETWEEN-EVENTS
#8 Info - HOSPITALISATION

Scenario Steps

Χάρτης Δορυφόρος

Savona, Albissola Marina, Albisola Superiore, Celle Ligure, Varazze, Cadibona, Montemoro, Conca Verde, Priamar Fortress, Roviasca, Quiliano, Zinola, Montagna, Valleggia, Altare, Marmorassi, Pecorile, Alpicella, Faie, Sciarborasca, Montenotte Superiore, Riserva Naturale Regionale Adelasia, San Giovanni, Pero, Casanova, Invrea, Gameragna, San Bartolomeo del Bosco, Ellera

Google

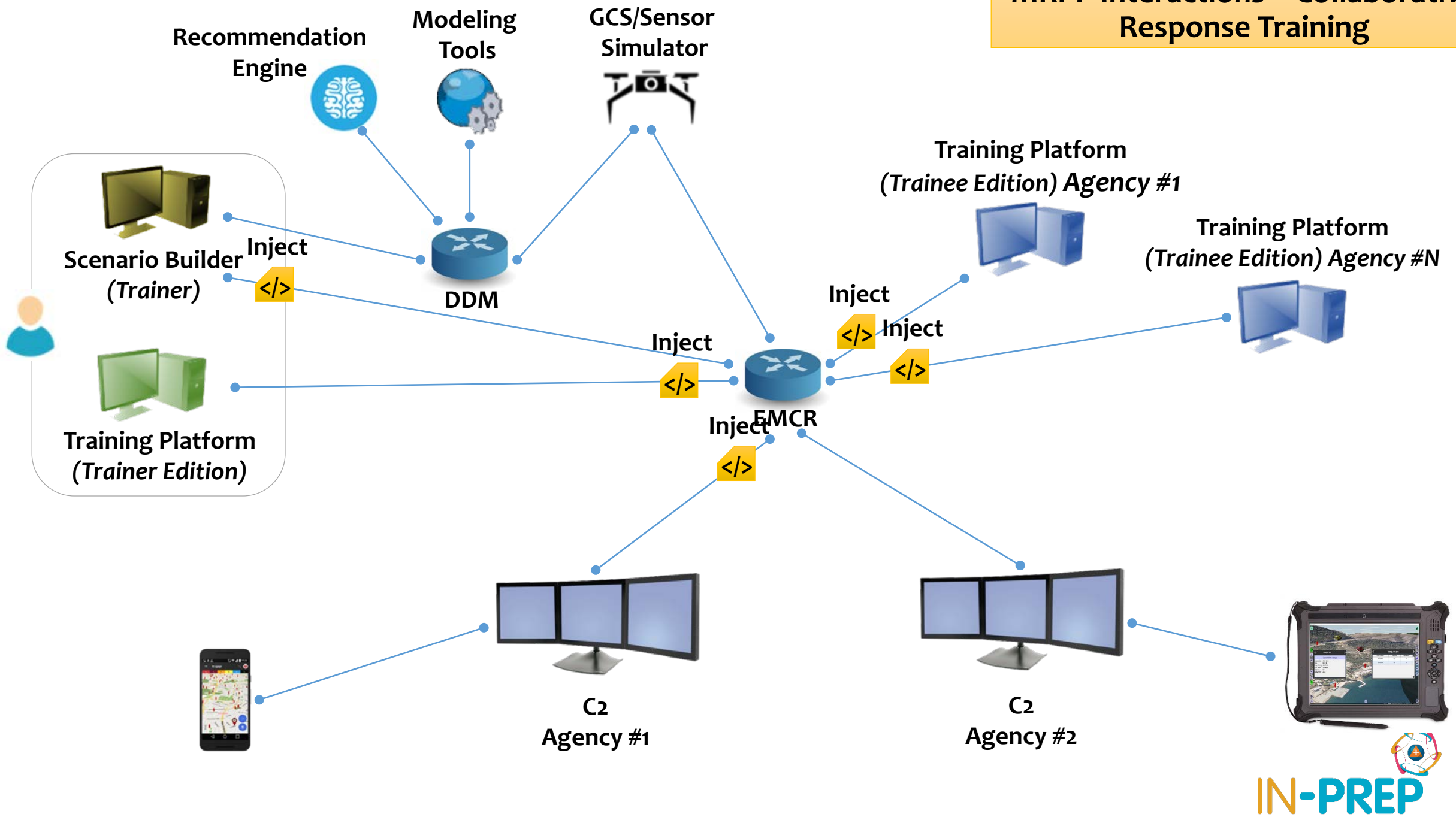
Training Platform (*Trainer Edition*) Agency #N

C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

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Training Platform (Trainee Edition) Agency #N

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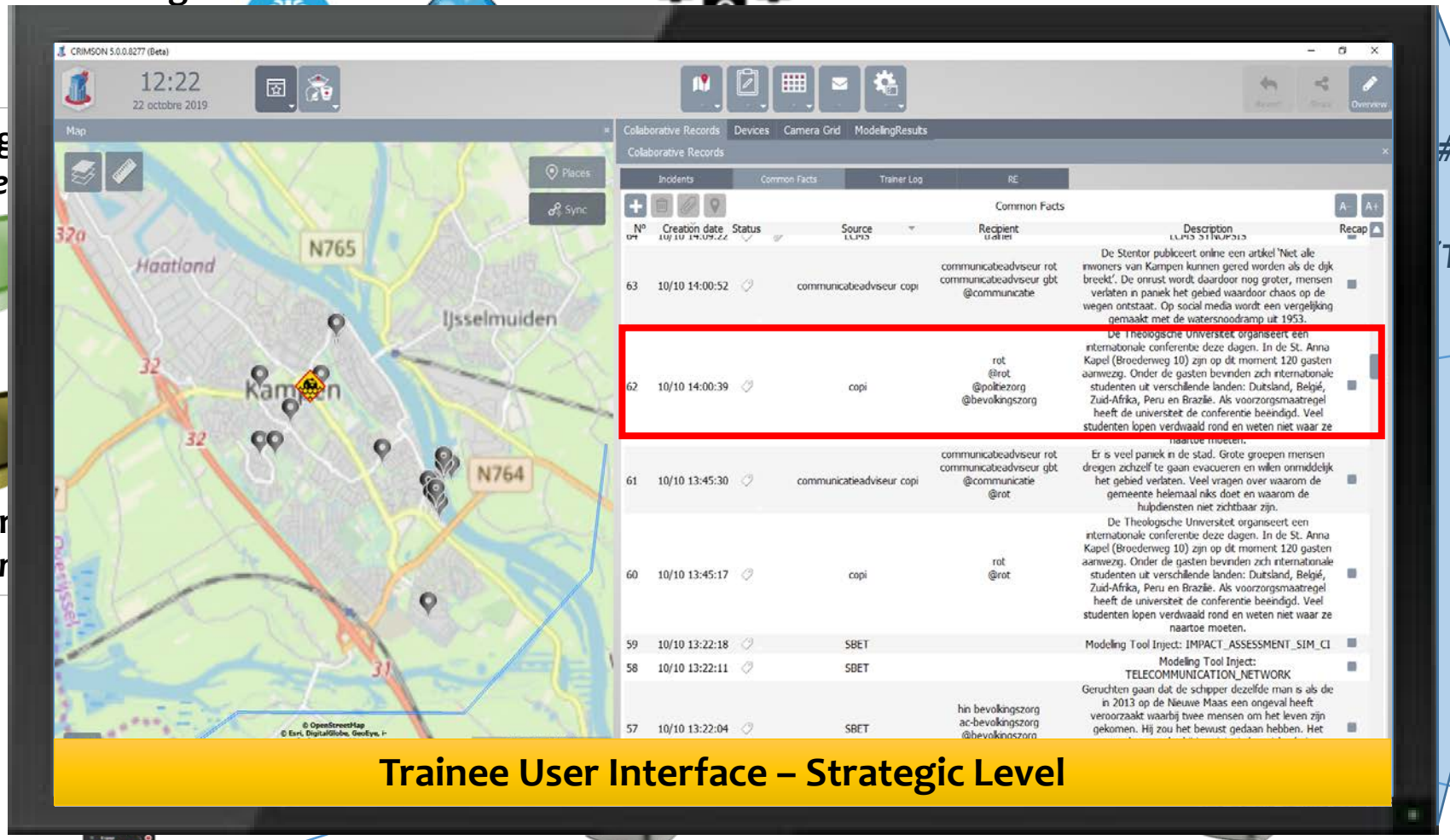


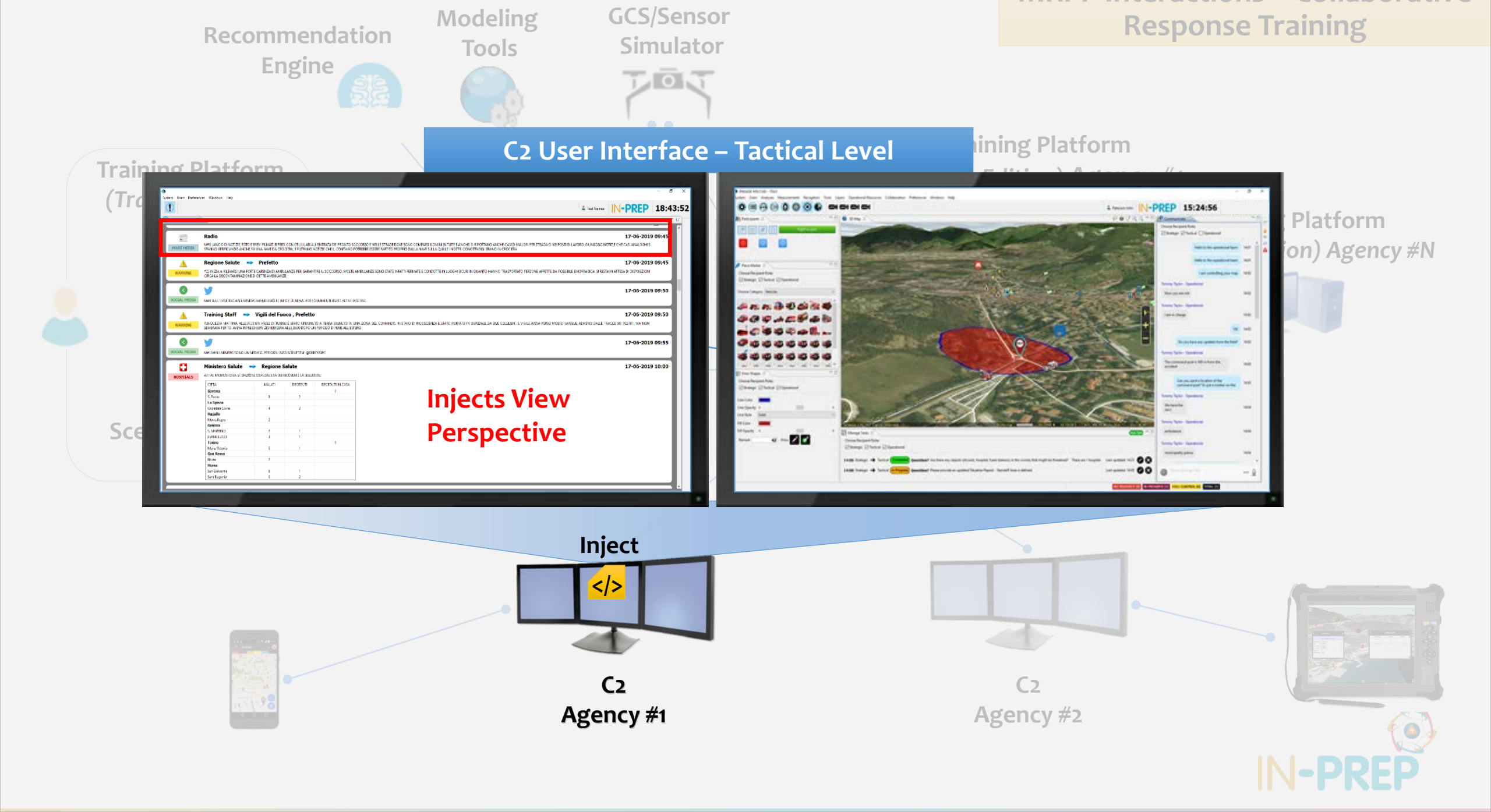
Trainee User Interface – Strategic Level

C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

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Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Execution

Scenario Execution in progress

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Started	May 10, 2019 11:30:01 AM
Scenario	MM1
Trainer	Gordon James
Trainees	Todd Jason

Inject Event

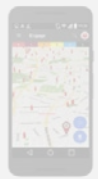
Terminate

Χάρτης | Δορυφόρος

Scenario Step Execution of Modeling Tool

Montenotte Superiore, Alpicella, Faie, Sciarborasca, San Giovanni, Pero, Riserva Naturale Regionale, Invrea, Cadibona, Marmorassi, Albisola Superiore, Pecorile, Albissola Marina, Altare, Montemoro, Conca Verde, Priamar Fortress, Savona, Roviasca, Quiliano, Zinola, Montagna, Valleggia

Google



C2 Agency #1

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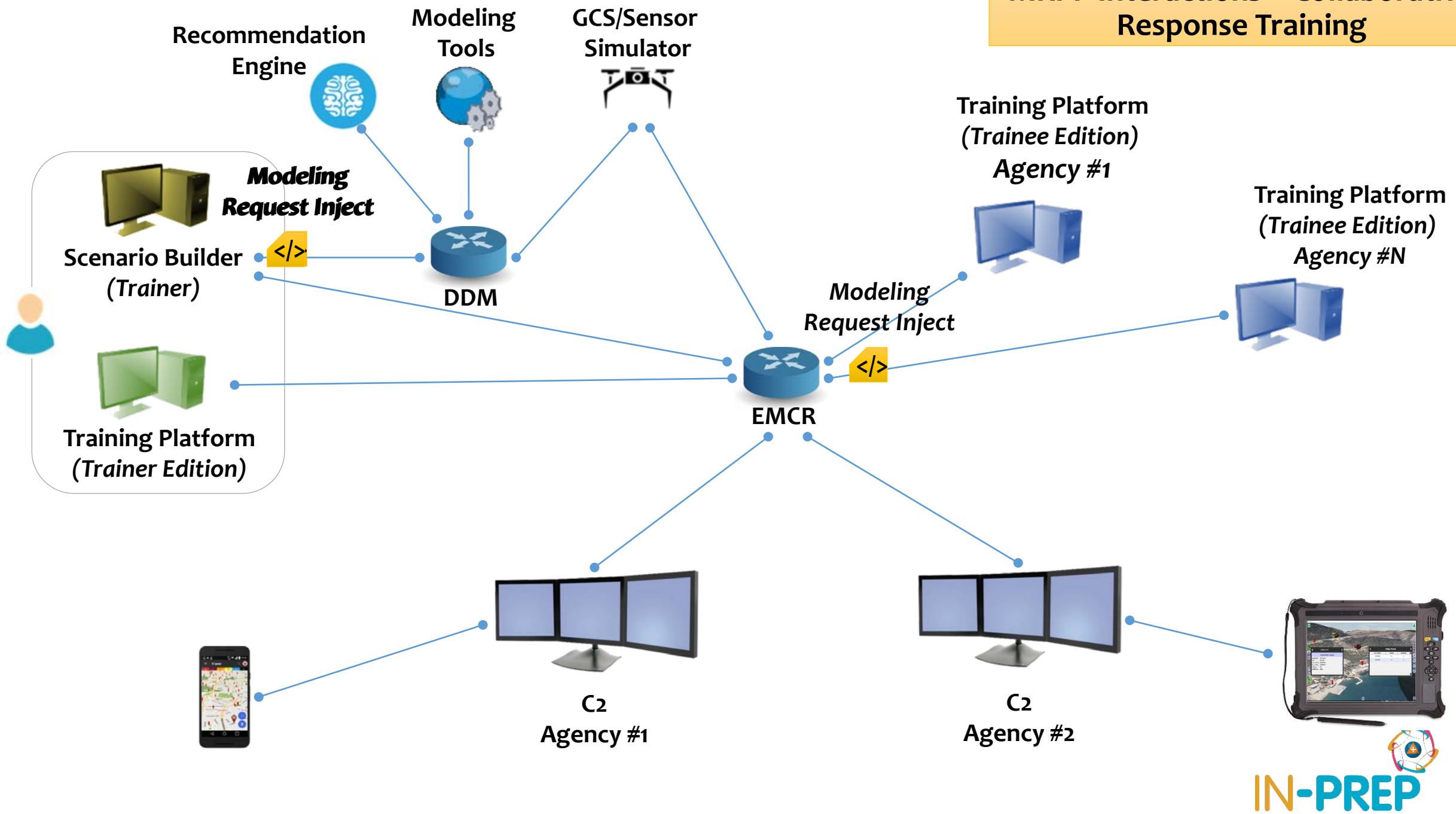
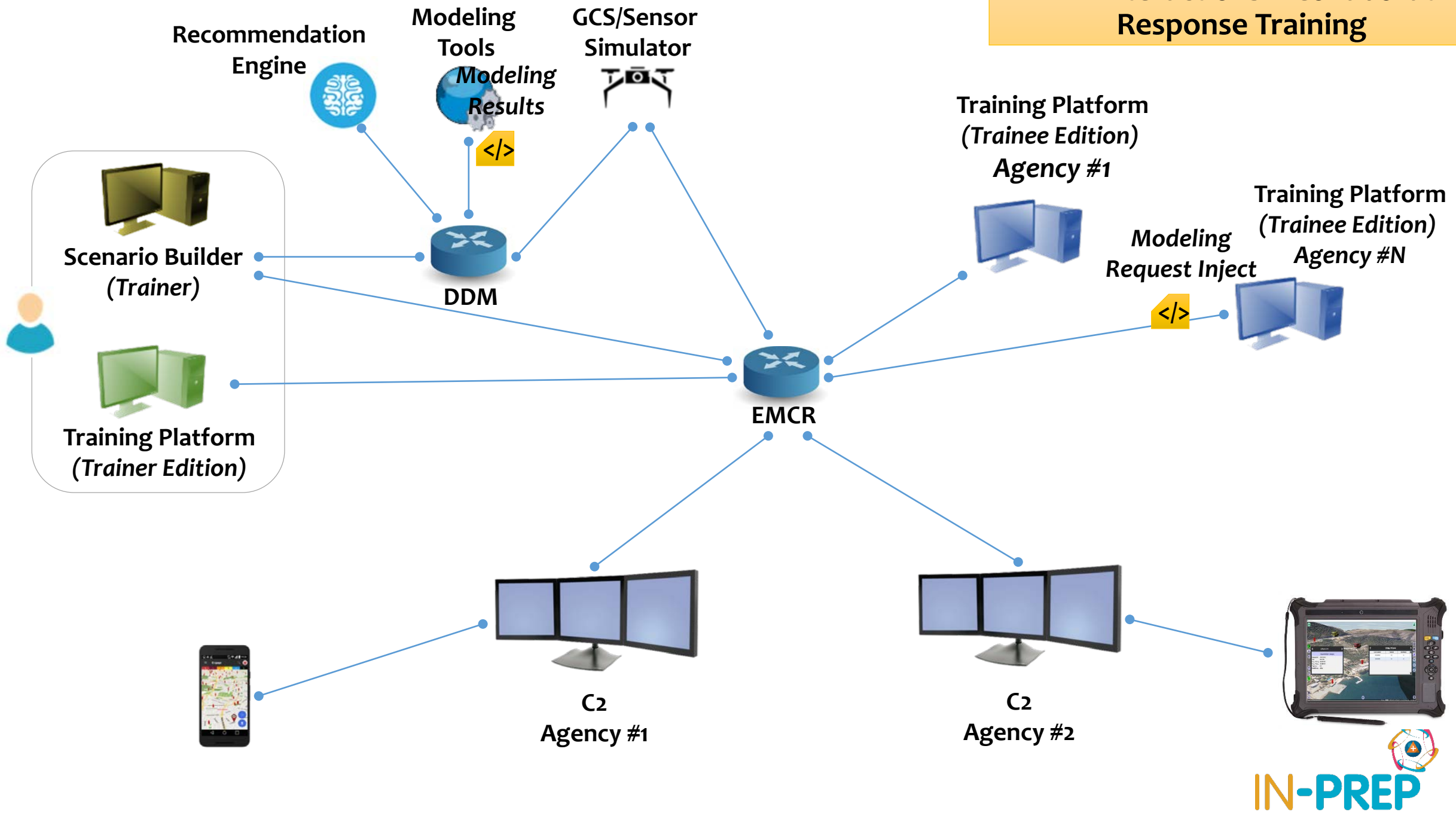
IN-PREP

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

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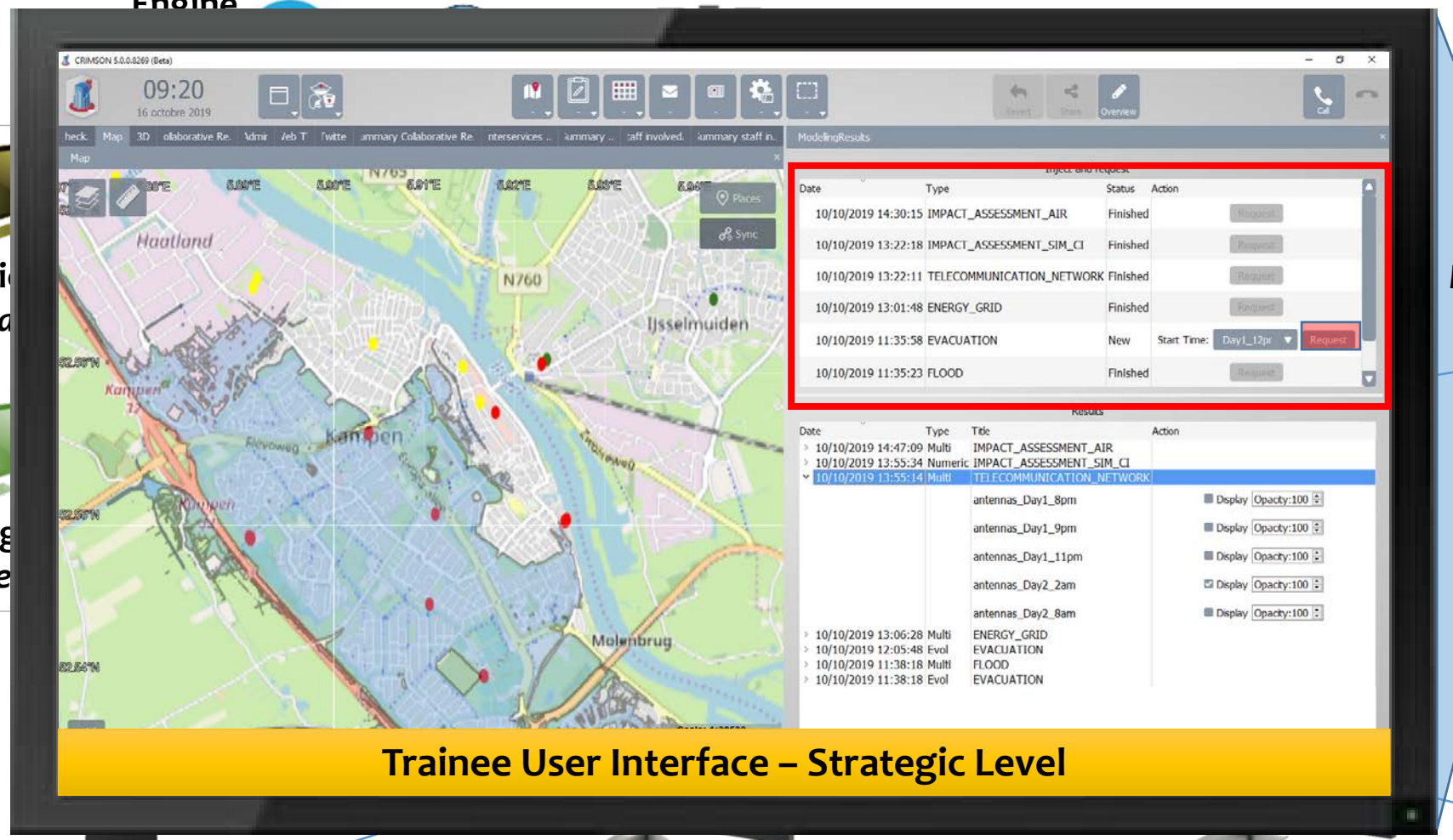

Training Platform
(Trainee Edition)
Agency #N

Modeling Request Inject

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Agency #1

C2
Agency #2

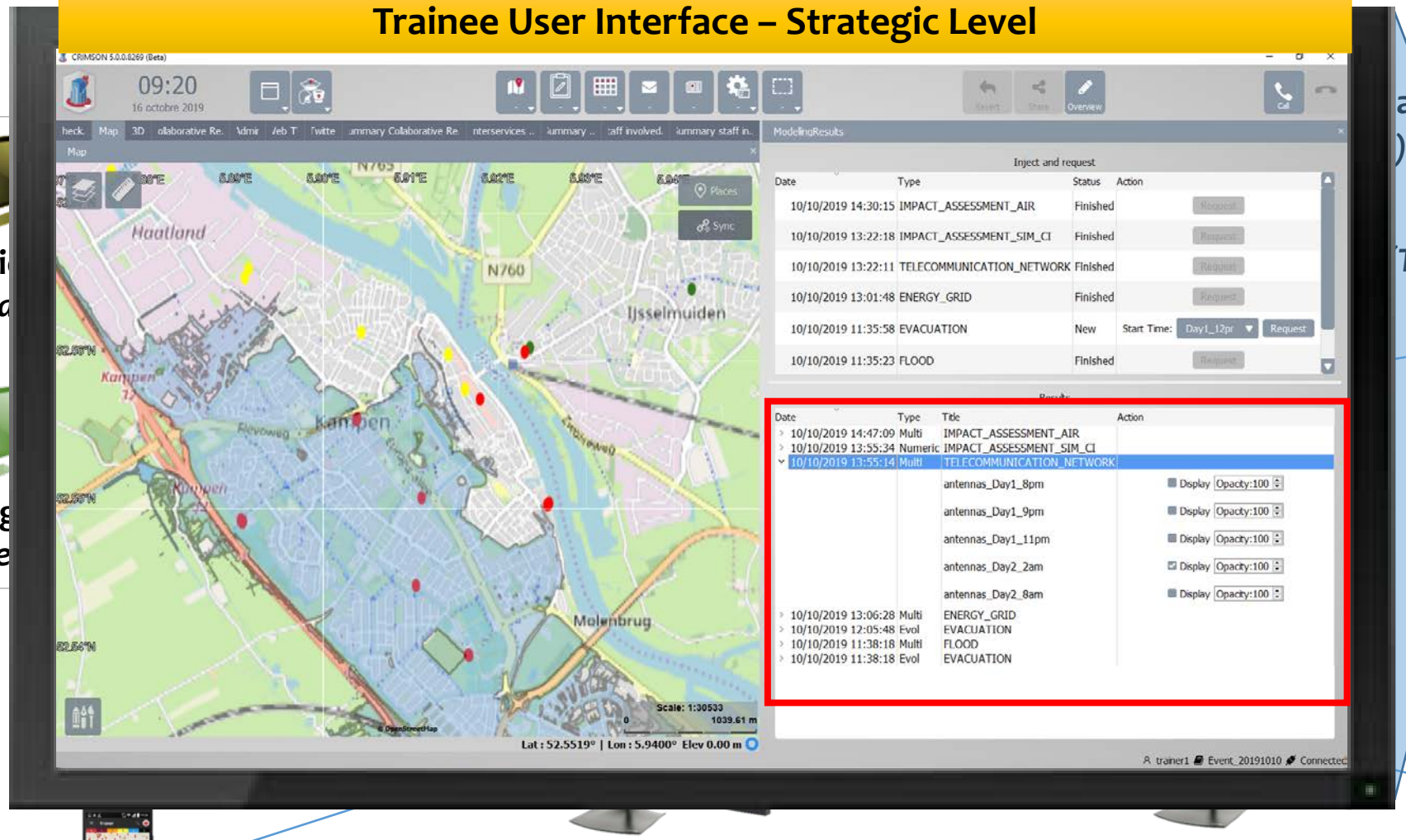
IN-PREP

MRPP Interactions – Collaborative Response Training

Modeling Tools

GCS/Sensor Simulator

Trainee User Interface – Strategic Level



Scenari… (Tra…

Training… (Traine…

…atform …) Agency #1

Training Platform (Trainee Edition) Agency #N

C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training

Recommendation Engine

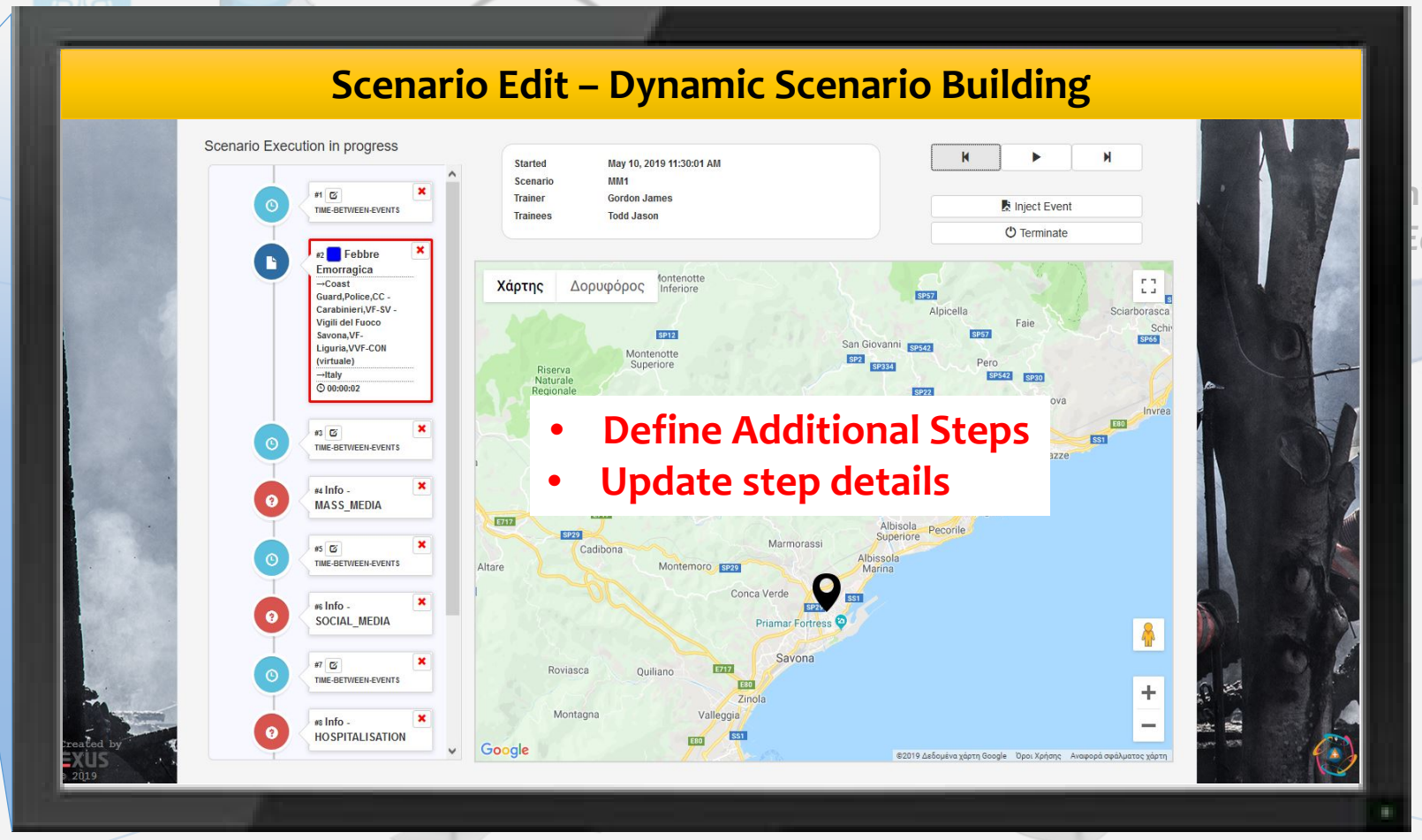
Modeling Tools

GCS/Sensor Simulator

Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Scenario Edit – Dynamic Scenario Building



- Define Additional Steps
- Update step details

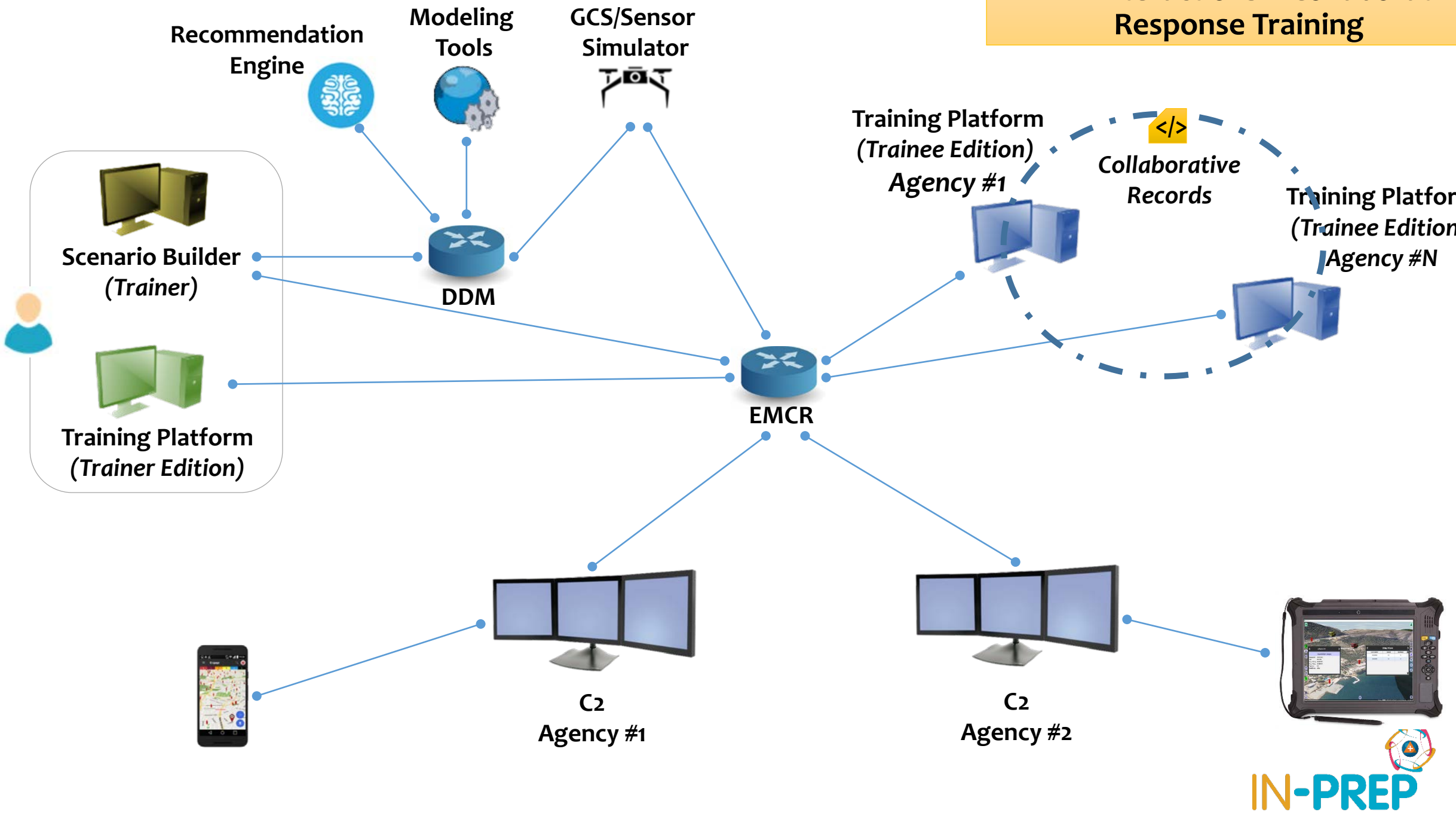
Training Platform (*Trainer Edition*) Agency #N

C2 Agency #1

C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training



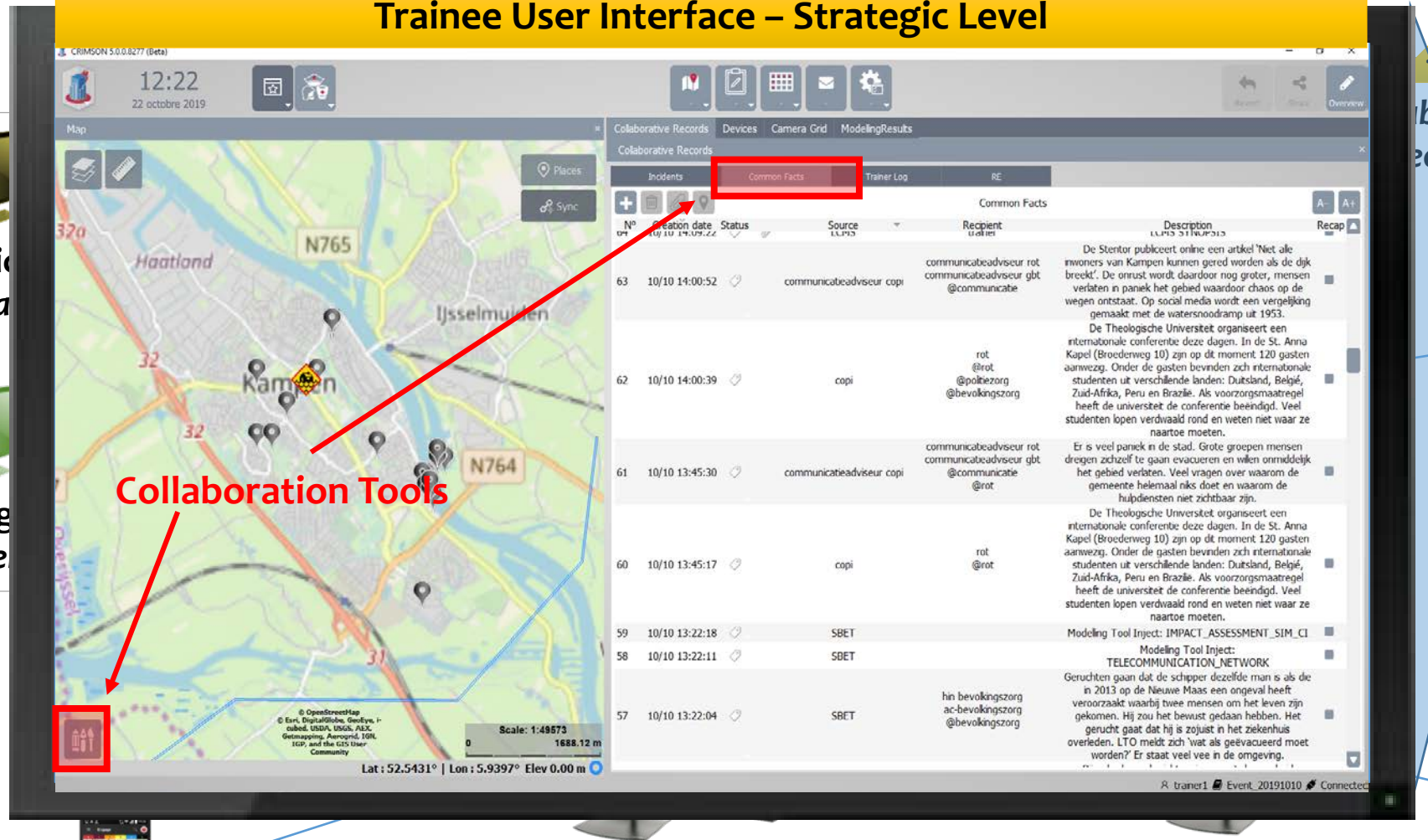
MRPP Interactions – Collaborative Response Training

Recommendation

Modeling Tools

GCS/Sensor Simulator

Trainee User Interface – Strategic Level



N°	Creation date	Status	Source	Recipient	Description	Recap
63	10/10 14:00:52		communicatieadviseur copi	communicatieadviseur rot communicatieadviseur gbt @communicatie	De Stentor publiceert online een artikel 'Niet alle inwoners van Kampen kunnen gered worden als de dijk breekt'. De onrust wordt daardoor nog groter, mensen verlaten in paniek het gebied waardoor chaos op de wegen ontstaat. Op social media wordt een vergelijking gemaakt met de watersnoodramp uit 1953.	
62	10/10 14:00:39		copi	rot @rot @politiezorg @bevolkingszorg	De Theologische Universiteit organiseert een internationale conferentie deze dagen. In de St. Anna Kapel (Broederweg 10) zijn op dit moment 120 gasten aanwezig. Onder de gasten bevinden zich internationale studenten uit verschillende landen: Duitsland, België, Zuid-Afrika, Peru en Brazilië. Als voorzorgsmaatregel heeft de universiteit de conferentie beëindigd. Veel studenten lopen verdwaald rond en weten niet waar ze naartoe moeten.	
61	10/10 13:45:30		communicatieadviseur copi	communicatieadviseur rot communicatieadviseur gbt @communicatie @rot	Er is veel paniek in de stad. Grote groepen mensen dreigen zichzelf te gaan evacueren en willen onmiddelijk het gebied verlaten. Veel vragen over waarom de gemeente helemaal niks doet en waarom de hulpdiensten niet zichtbaar zijn.	
60	10/10 13:45:17		copi	rot @rot	De Theologische Universiteit organiseert een internationale conferentie deze dagen. In de St. Anna Kapel (Broederweg 10) zijn op dit moment 120 gasten aanwezig. Onder de gasten bevinden zich internationale studenten uit verschillende landen: Duitsland, België, Zuid-Afrika, Peru en Brazilië. Als voorzorgsmaatregel heeft de universiteit de conferentie beëindigd. Veel studenten lopen verdwaald rond en weten niet waar ze naartoe moeten.	
59	10/10 13:22:18		SBET		Modeling Tool Inject: IMPACT_ASSESSMENT_SIM_CI	
58	10/10 13:22:11		SBET		Modeling Tool Inject: TELECOMMUNICATION_NETWORK	
57	10/10 13:22:04		SBET	hin bevolkingszorg ac-bevolkingszorg @bevolkingszorg	Geruchten gaan dat de schipper dezelfde man is als de in 2013 op de Nieuwe Maas een ongeval heeft veroorzaakt waarbij twee mensen om het leven zijn gekomen. Hij zou het bewust gedaan hebben. Het gerucht gaat dat hij is zojuist in het ziekenhuis overleden. LTO meldt zich 'wat als geëvacueerd moet worden?' Er staat veel vee in de omgeving.	

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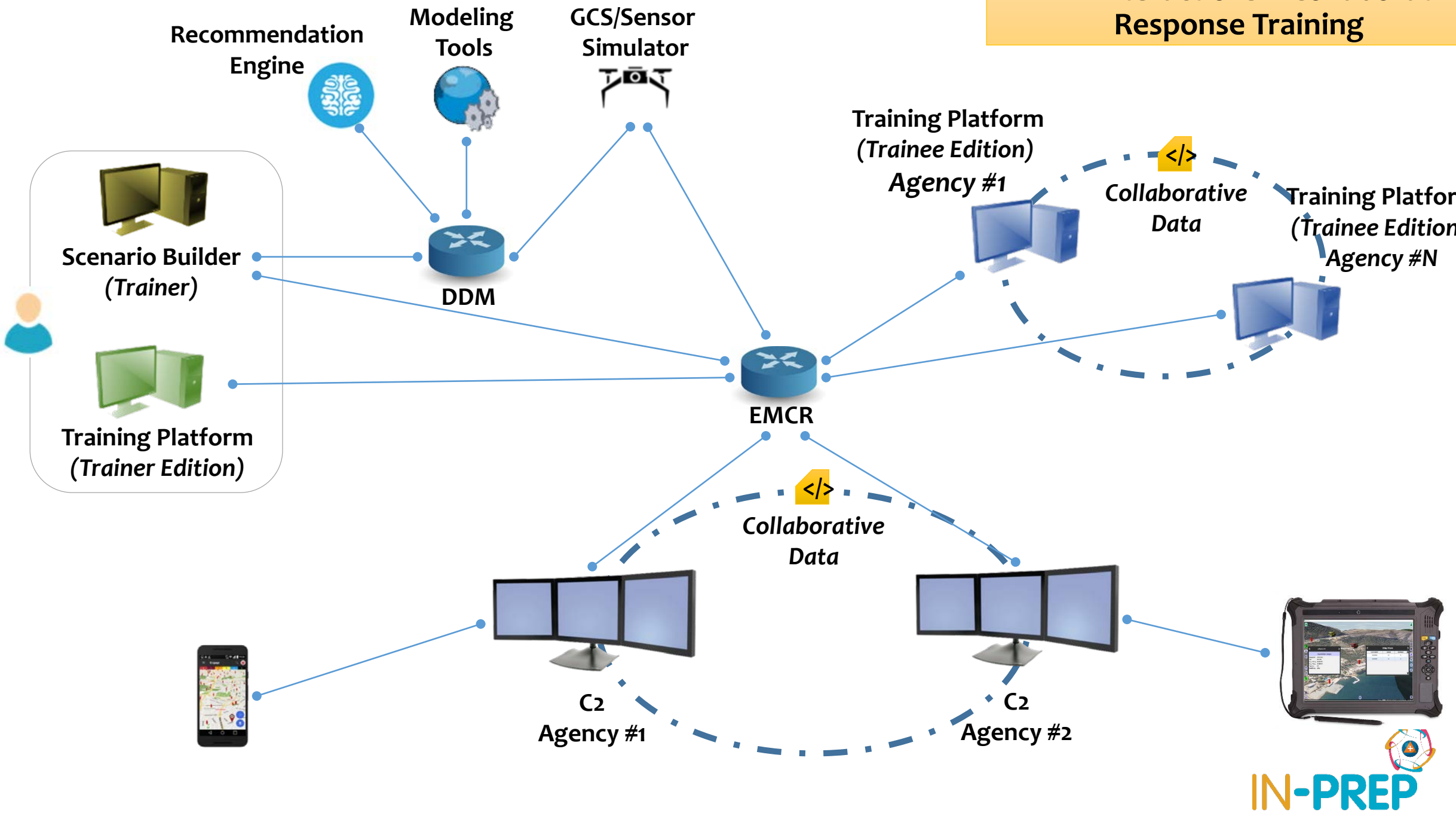
Training Platform (Trainee Edition) Agency #N

C2 Agency #1

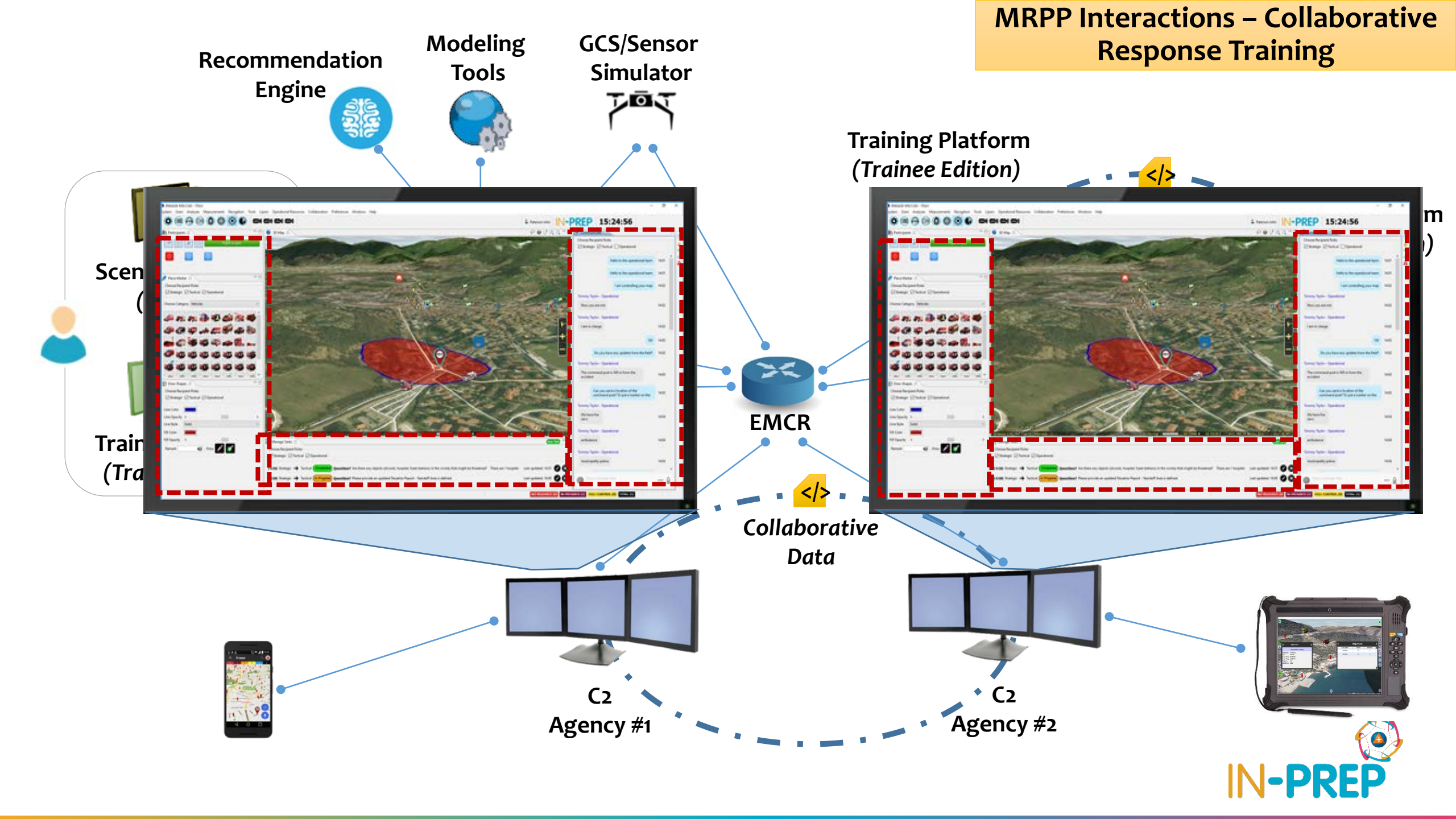
C2 Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

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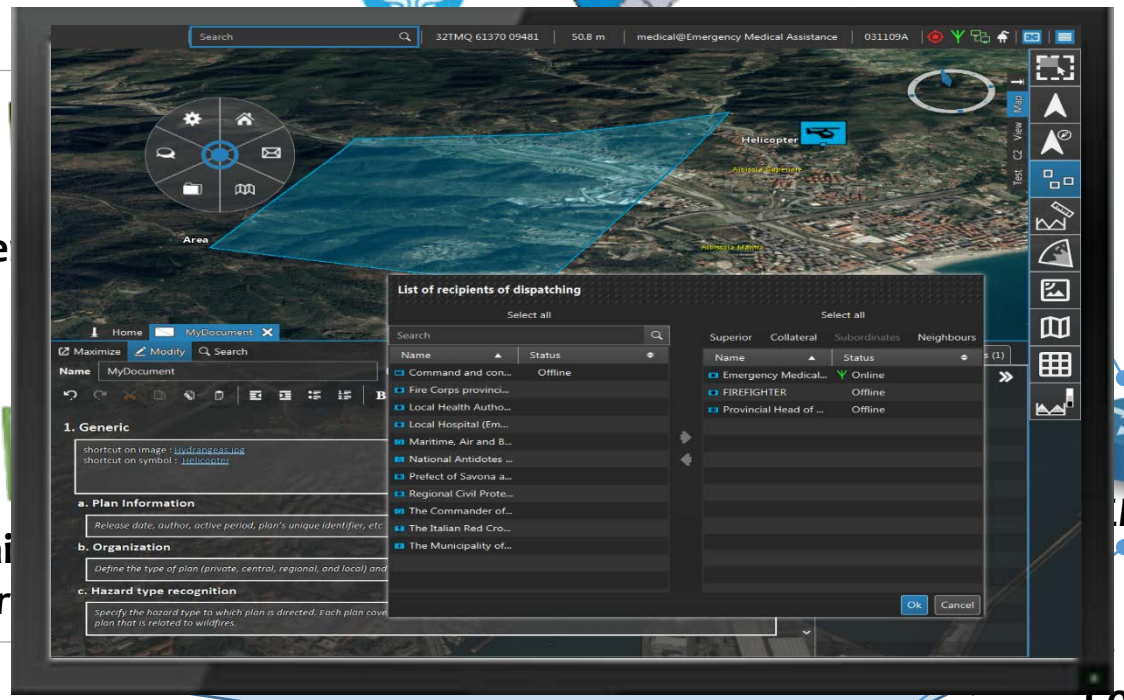

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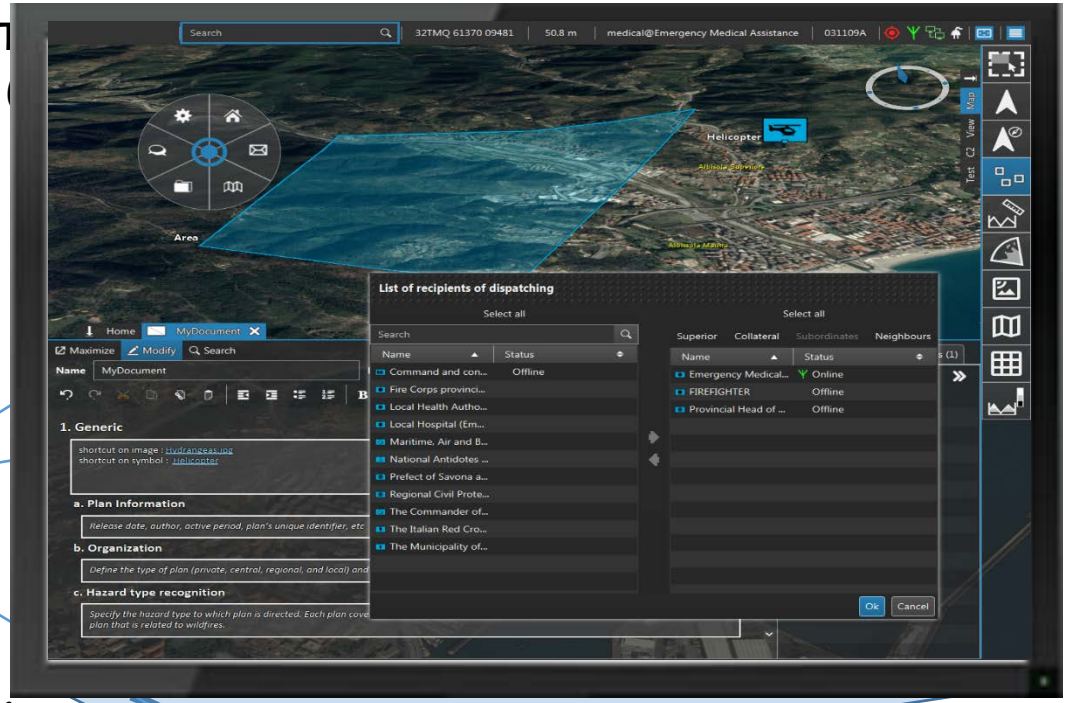

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Collaborative Data

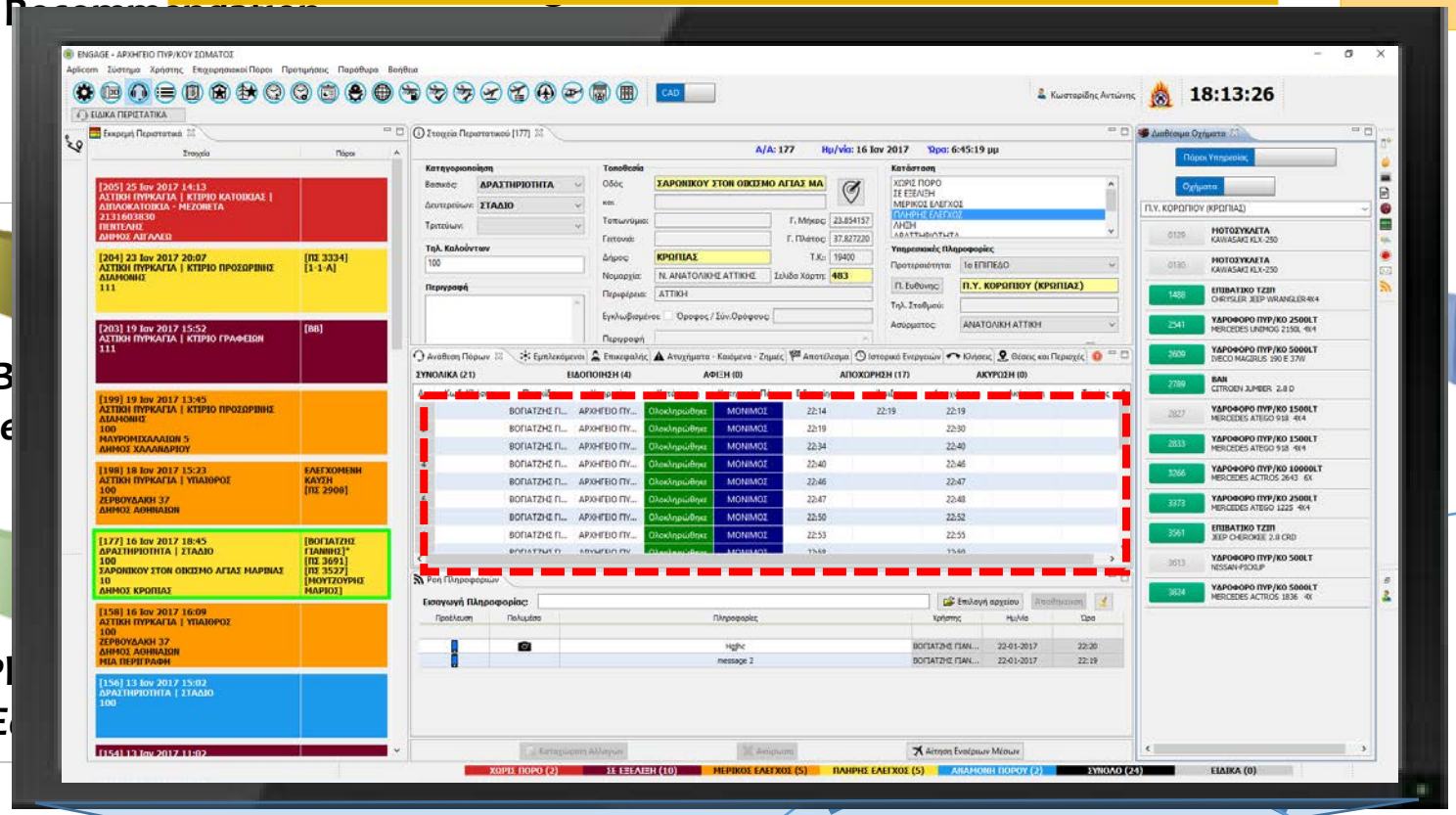
C2 Agency #1

C2 Agency #2

IN-PREP

Trainee User Interface - Tactical Level

MRPP Interactions – Collaborative Response Training



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Collaborative Data

Training Platform (Trainee Edition) Agency #N

Unit Tasking

C2 Agency #1

C2 Agency #2

Unit Tasking

IN-PREP

MRPP Interactions – Collaborative Response Training

Modeling Tools

GCS/Sensor Simulator

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Training Platform (Trainee Edition) Agency #1

Collaborative Data

Training Platform (Trainee Edition) Agency #N

Unit Tasking

C2 Agency #1

C2 Agency #2

Unit Tasking

IN-PREP

MRPP Interactions – Collaborative Response Training

Modeling Tools

GCS/Sensor Simulator

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Training Platform (*Trainee Edition*) *Agency #1*

Collaborative Data

Training Platform (*Trainee Edition*) *Agency #N*

Messaging SitReps

C2 Agency #1

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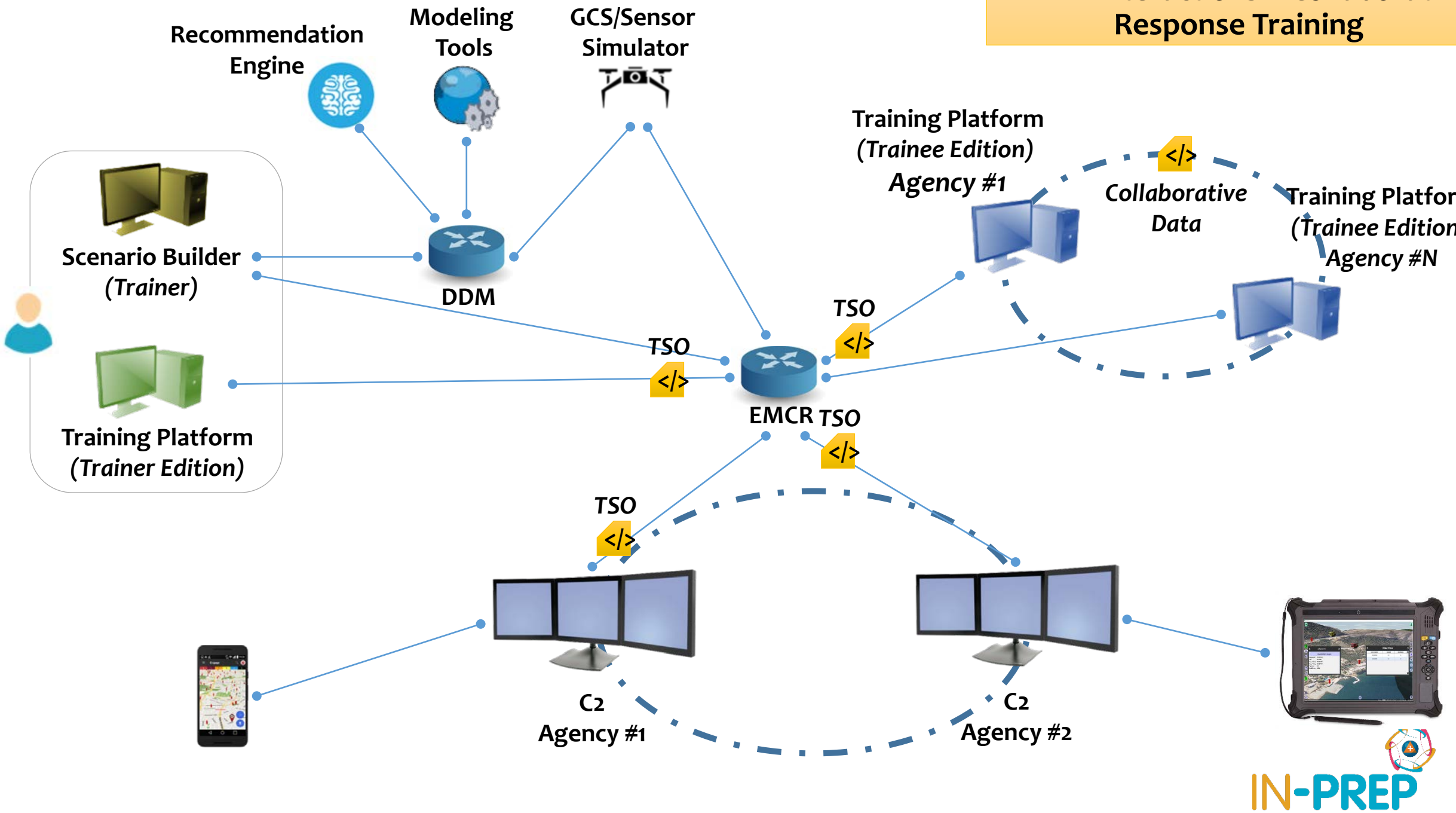
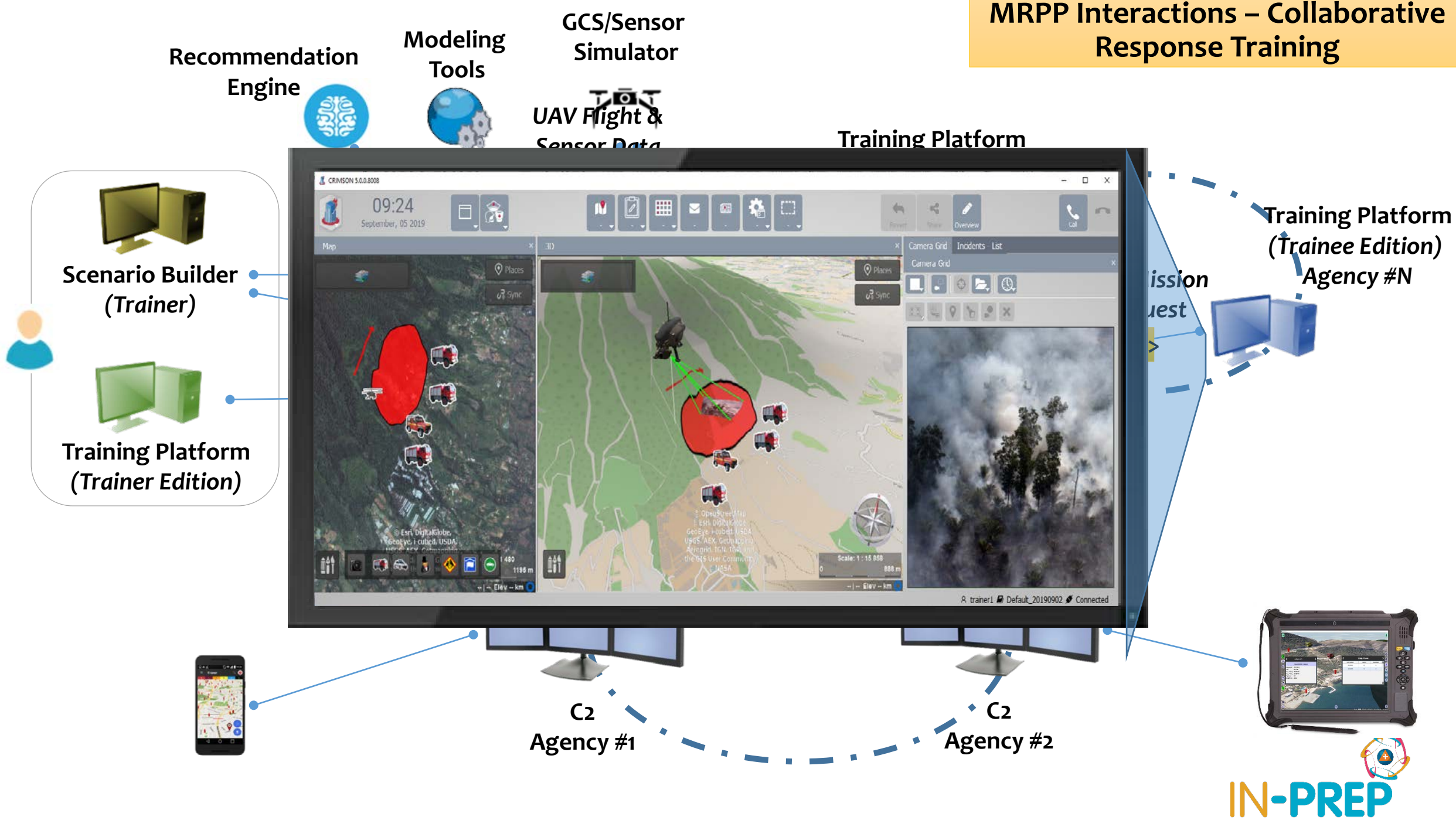
IN-PREP

MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training



MRPP Interactions – Collaborative Response Training

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

Training Platform

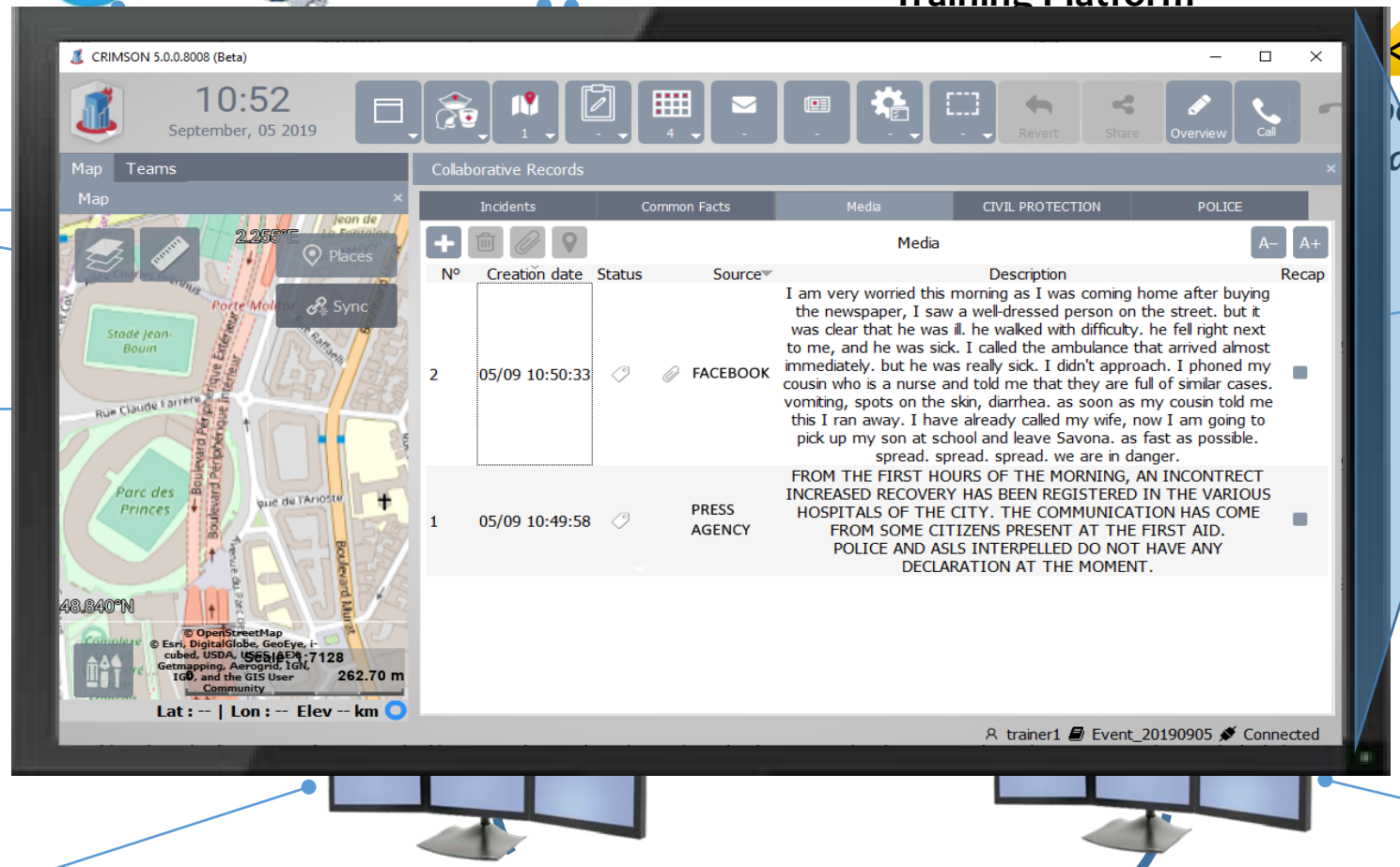
Scenario Builder (*Trainer*)

Training Platform (*Trainer Edition*)

Training Platform (*Trainee Edition*) Agency #N

C2 Agency #1

C2 Agency #2

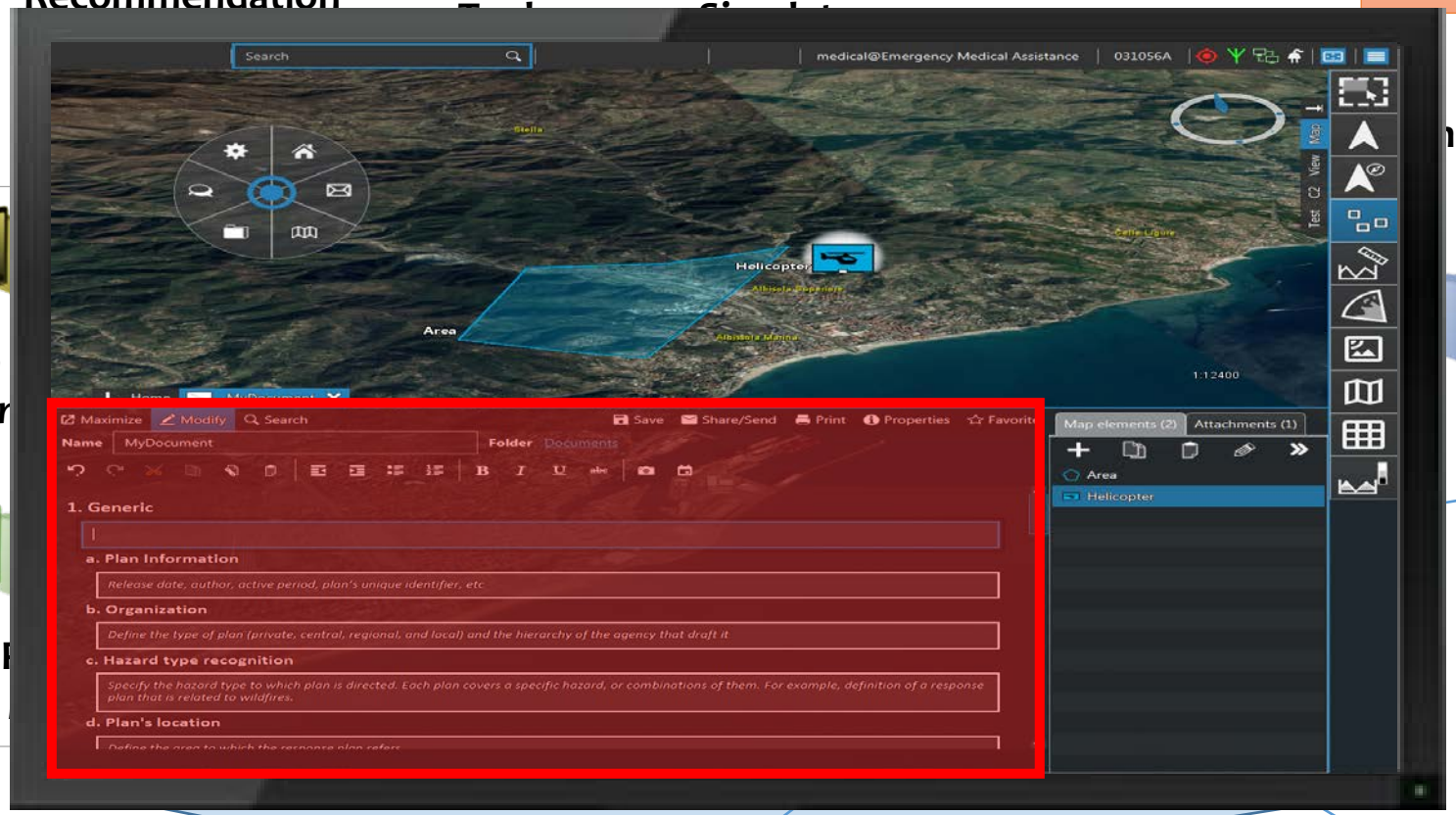


IN-PREP

MRPP Interactions

Collaborative Response Planning Mode

MRPP Interactions – Collaborative Response Planning



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(Trainee Edition)
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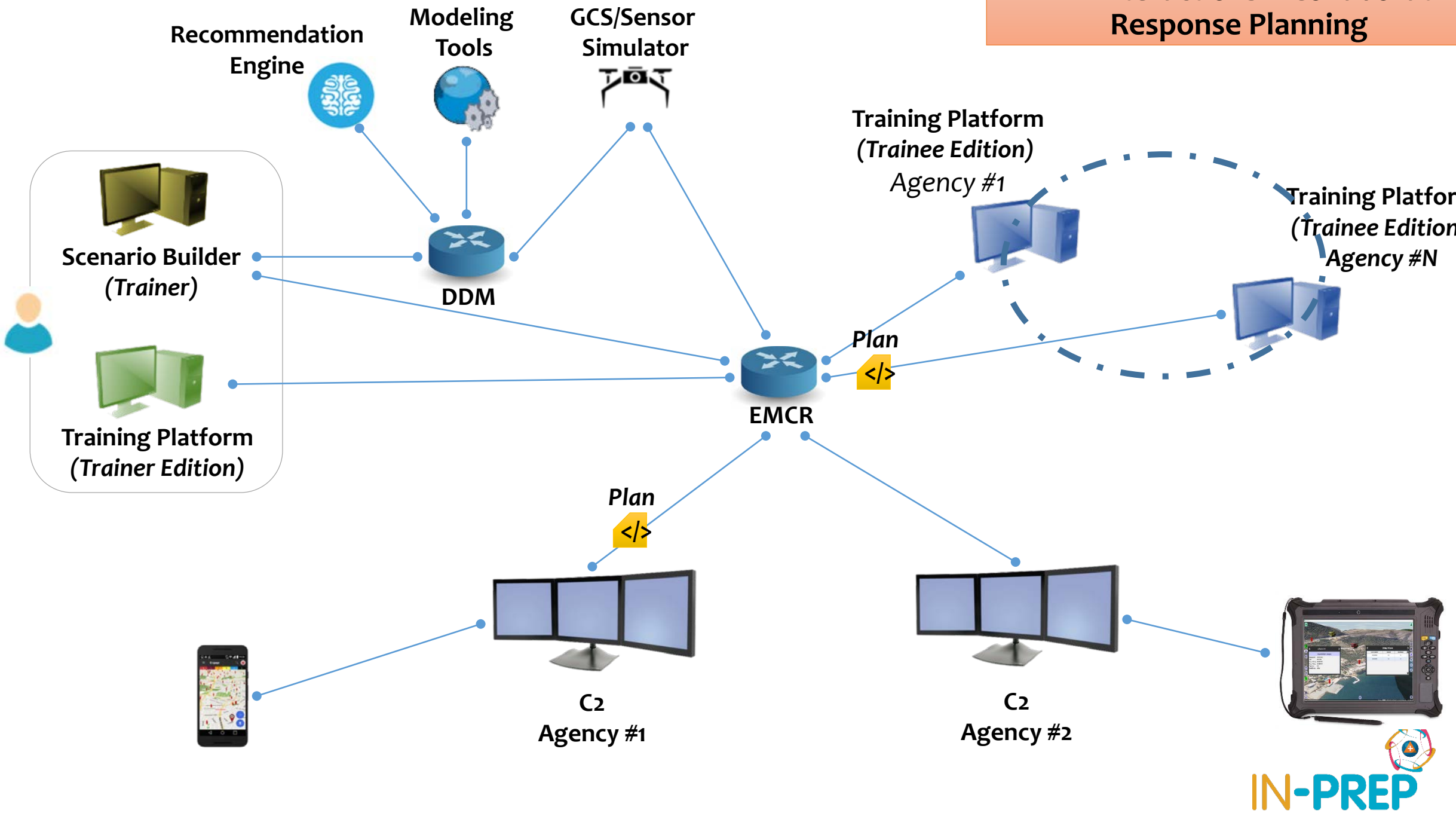
Agency #2

IN-PREP

MRPP Interactions – Collaborative Response Planning



MRPP Interactions – Collaborative Response Planning

Recommendation Engine

Modeling Tools

GCS/Sensor Simulator

Emergency Planners User Interface

Scenario Builder *(Trainer)*

Training Platform *(Trainer Edition)*

Training Platform *(Trainee Edition)* Agency #N

C2 Agency #1

C2 Agency #2

IN-PREP

IN-PREP Handbook (https://www.in-prep.eu/handbook_draft/)

Handbook

Chapter	Content
Preface	■ Online version of the handbook ■ Making use of good examples ■ Handbook principles
Introduction	■ Summary and main messages ■ Benefits of using the handbook ■ „How to read/use“ the handbook
Guidance Section	■ *putting the handbook into context:* ■ Specificities of transboundary crises ■ Existing arrangements (competences and guidelines at EU and international level) ■ Good practices (national and bi-/tri-lateral examples) ■ Existing efforts on standardising vocabulary and symbology ■ Existing tools to facilitate transboundary crisis management
Policy makers	■ Relevance of transboundary crises ■ Assessing transboundary crisis management capacity ■ Enhancing transboundary crisis management capacity

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Handbook

Chapter	Content
Operational Community	■ Assessing transboundary crisis management capacity ■ Enhancing transboundary crisis management capacity ■ Technical support to enhance collaboration (links with IN-PREP solutions)
General public	■ Why transboundary training? ■ How can I be involved?

Recommendations and Roadmap	■ Recommendations for different actors:
	  ■ Policy makers
	  ■ Operational community
	■ Recommendations beyond the scope of the project

Feedback section	■ Feedback and additions through the online platform

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Handbook content:

Operational Community

- Assessing transboundary crisis management capacity
- Enhancing transboundary crisis management capacity
- Technical support to enhance collaboration (links with IN-PREP solutions)

Remaining challenges/ open questions related to understanding current processes:

How are transboundary crisis management capacities (currently) assessed?

What are potential action points for enhancing this capacity?

Which additional guidance documents/good practices exist?

IN-PREP Training Programme

Industrial Accident – SEVESO/CBRN threat (CNVFF, all - **Nov '18**)

Municipal, Regional

Evacuation of cruise ship table-top exercise (CNVVF, all – **Jun '19**)

Municipal, Regional, National

Massive flood table-top exercise (SRIJ, all - **Oct '19**)

Cross-border terrorist attack (PSNI, all – **5th Dec '19**)

Municipal, Regional, National, Cross-border

SEVESO + Cascading crises demo (CNVVF, all – **28th of October 2020**)

Municipal, Regional, National, Cross-border, EU

Large forest fire & humanitarian crisis (RHO, all – **1st week of Dec '20**)

Municipal, Regional, National, Cross-border, EU

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Thank you for your attention

Any questions?

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