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ZAŠTITU I SPAŠAVANJE



UN ECE / TEIA / IAN System

ANALYTICAL EXERCISE INDNES 2009

10 June 2009

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Ljubljana

SLOVENIA

Contact point:

Notification Centre of the
Republic of Slovenia (NCRS)

Administration for civil protection and
disaster relief



Zagreb

CROATIA

Contact point:

National Centre 112 (NC 112)

National Protection and Rescue
Directorate



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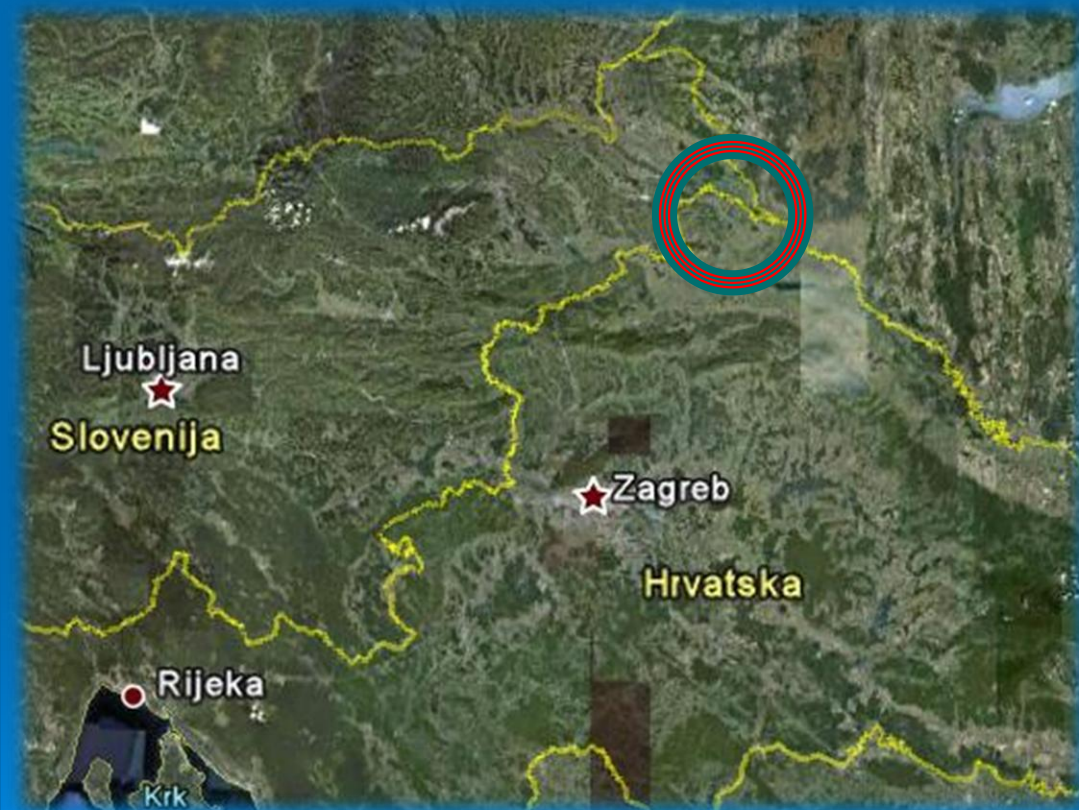
➤ SIMULATION AND COMMUNICATION EXERCISE

– 1. LEVEL ▶

➤ IN ACCORDANCE WITH:

“GUIDANCE FOR ANALYTICAL RESPONSE EXERCISES”,
UNECE guidelines, 2008

➤ A FICTITIOUS EVENT IN A FICTITIOUS PLACE





GOALS:

- Practicing the implementation of IAN System
- Effectiveness of communication between Slovenian and Croatian points of contact
- Effectiveness of the use of web-based application
- Testing of notification procedures on the national level
- Training duty operating team of NC 112



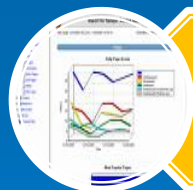
STRUCTURE OF PARTICIPANTS



Source of data & information



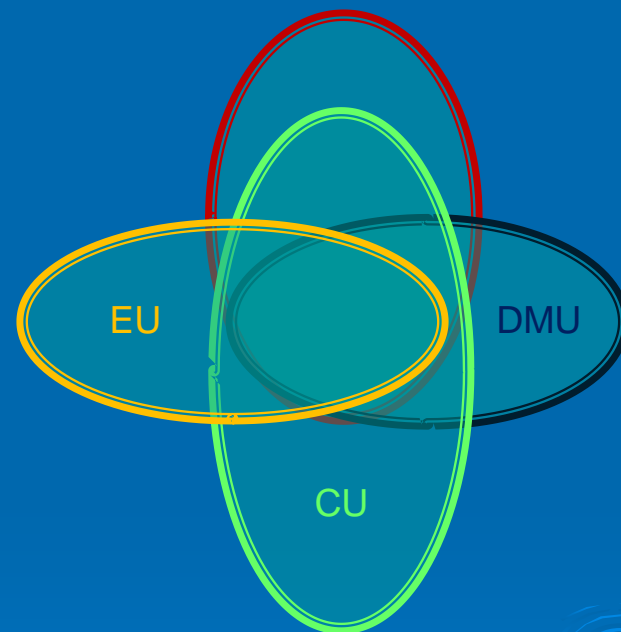
Communication unit



Expert unit



Decision making unit



OUTSIDE IMPACTS



PARTICIPANTS IN CROATIA – ACTIVE:

- Ministry of Environmental Protection, Physical Planning and Construction
 - Inspection of environmental protection of Čakovec County
 - Department for risk instalations and recoveries
- Čakovec County centre 112 ⇒ NC 112 ⇒ NCRS
- Croatian Institute for Toxicology
- Croatian Meteorological and Hydrological Service
- NPRD – International Cooperation Department – National coordination centre for mutual assistance
- NPRD – Firefighting Operations Centre



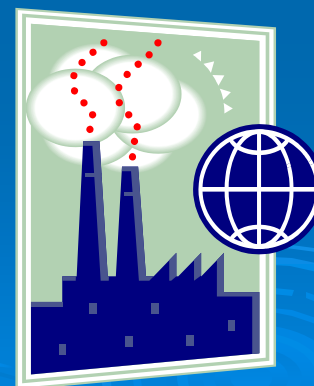
PARTICIPANTS IN CROATIA – SIMULATED ACTIONS:

- Director of the NPRD
- Protection & Rescue Headquarters of the Republic of Croatia
- Crisis Headquarters of the Ministry of Health and Social Welfare
- Operational and Communications Centre of the Ministry of the Interior
- Custom Administration
- Operational Command Centre of the Croatian Armed forces' General Staff



BACKGROUND OF THE ACCIDENT:

- Terminal of company “*Chemodistribution*” located near border
- Tank with 400 tons of Isocyanic acid, methylenedi – p phenylene ester” or 4,4'-Methylenediphenyldiisocyanate (MDI)
($C_{15}H_{10}N_2O_2$ / $CNC_6H_4CH_2C_6H_4NCO$)
- Symbol: Xn
R: 20-36/37/38-42/43
S: (1/2-)23-36/37-45





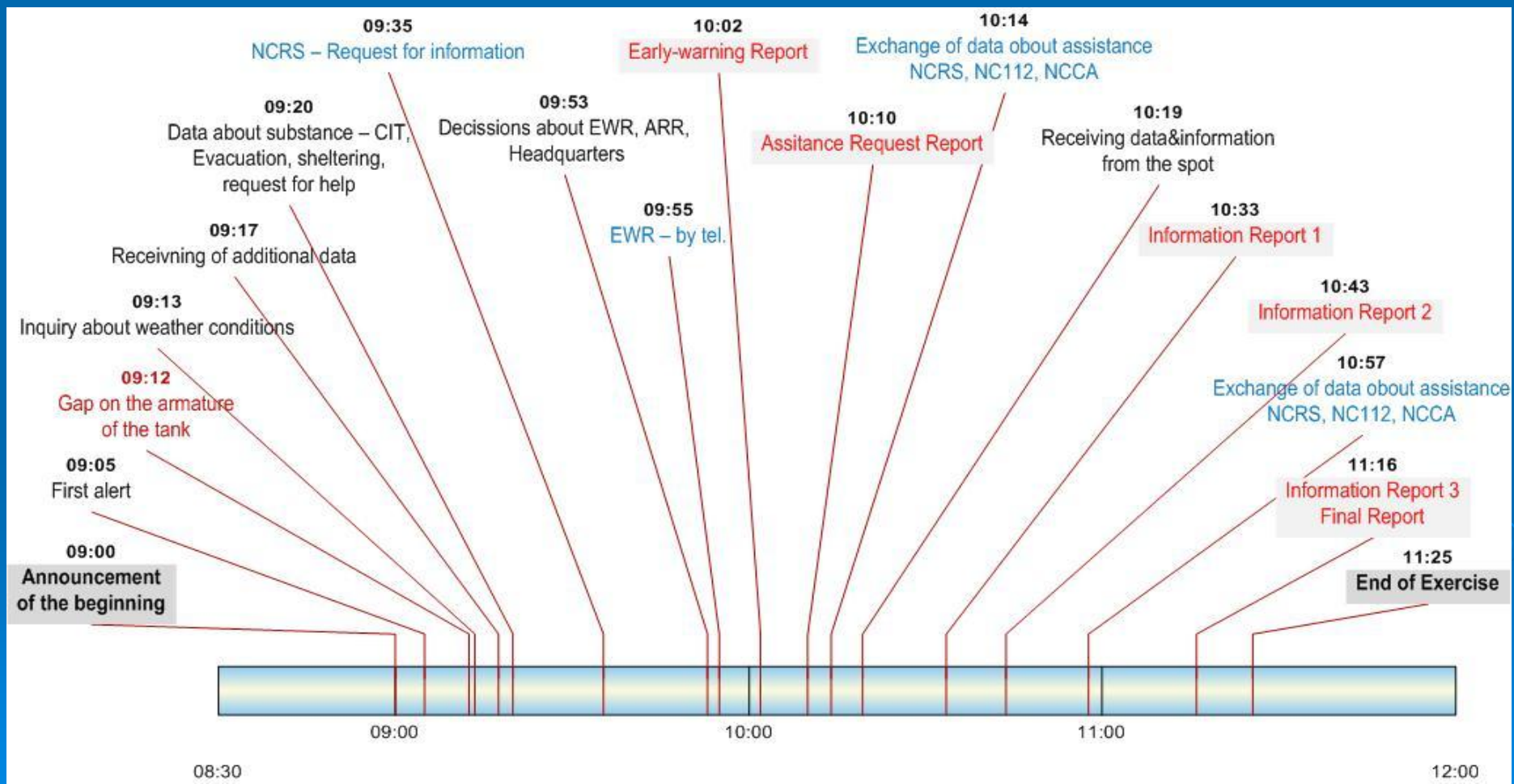
WHAT HAPPENED?



- 1500 liters of water was poured into the tank by mistake
- Chemical reaction causes toxic and corrosive fumes
- Increasing pressure in the tank with potential risk of explosion
- A gap on the armature of the tank of 25 cm²



Timeline of communication procedures





DEVELOPMENT OF THE ACCIDENT:

Croatian Institute for Toxicology:

- model of development
- impact
- evacuation and sheltering
- recovery

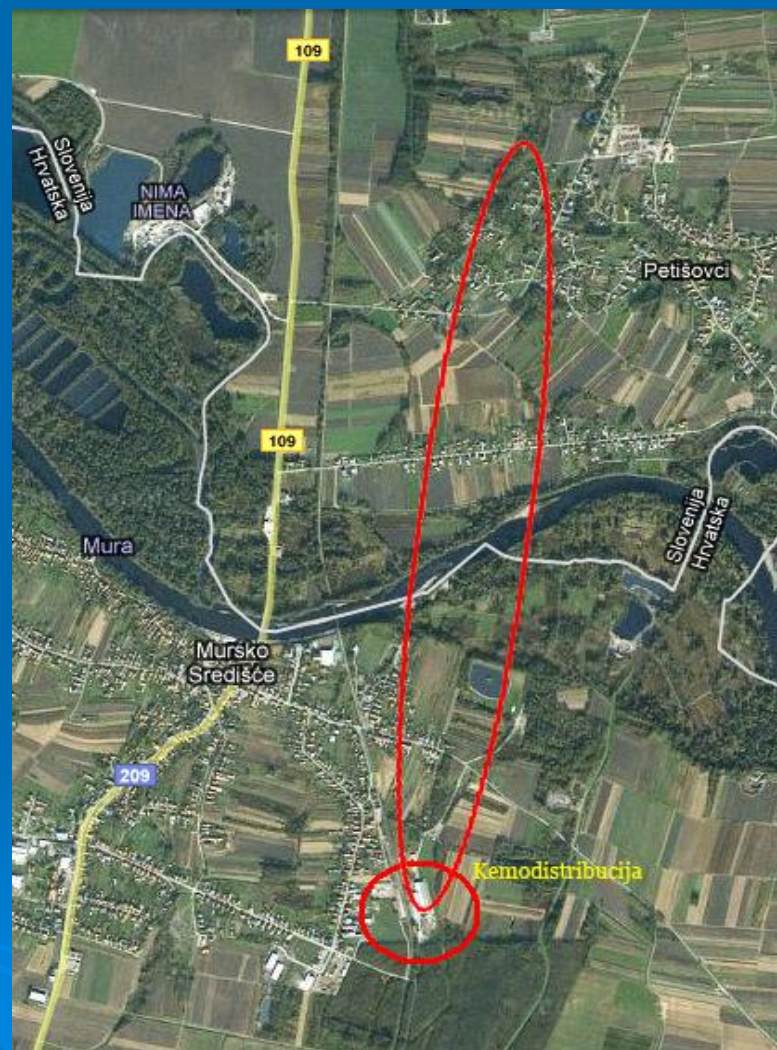
- evaporation of hydrogen cyanide
- in accordance with the weather conditions on that day the cloud with noxious fumes would extend up to 1 km after 25 minutes, and up to 2,3 km after 60 minutes in the north-north-east direction

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Affected area after
approximately 60 minutes





EXERCISE COURSE ANALYSIS

TIMING

Scheduled time for the exercise
2 hours (09:00- 11:00 a.m.)

Required time for the exercise
2:25 h (09:00 – 11:25 a.m.)



SITUATION ON THE SITE

Fast development of the accident

Fast spread of the cloud with
noxious fumes



EXERCISE COURSE ANALYSIS

DEMANDING SCENARIO

A large number of communication procedures at a very short time



Difficulties in reporting - We managed with great number of accurate data & many pieces of information that should be available at a certain time in real situation

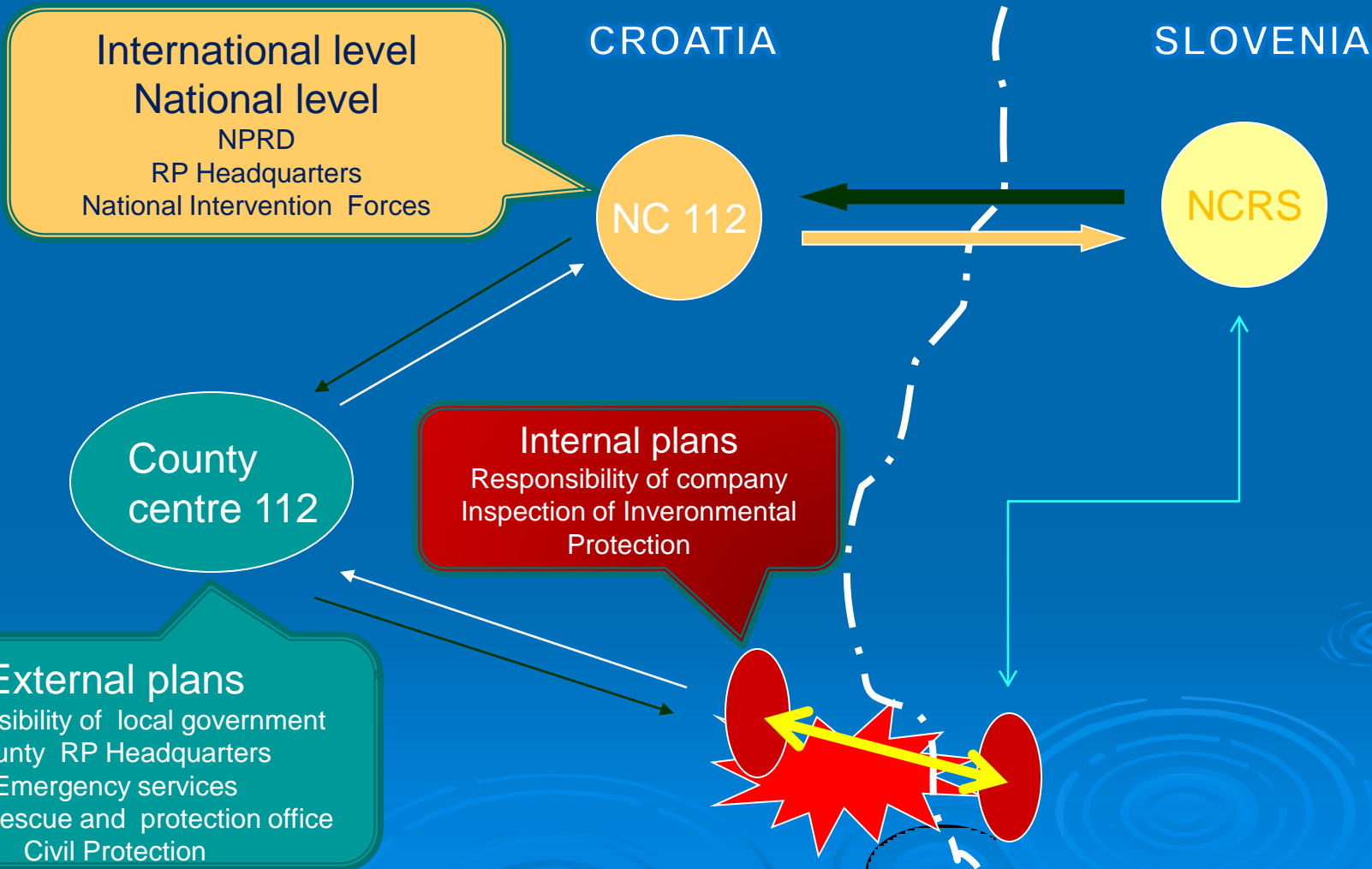


INTERFERENCE FROM OUTSIDE

Parallel accidents

Pressure of media

Malicious & unintended calls





COMMUNICATION EVALUATION BETWEEN NC 112 AND NCRS

➤ Used communication means:

- telephone,
- facsimile,
- web-based application of IAN System

➤ The exercise included:

- request for information from 'influenced country' (tel.)
- early-warning procedure (tel. & web)
- requesting and receiving international assistance (tel., web, e-mail or fax)
- providing data & information on the situation (web)



COMMUNICATION EVALUATION BETWEEN NC 112 AND NCRS

- High grade of readiness and communication possibilities
- Effectiveness depends mostly on receiving of relevant data/information from the site



- All types of forms were used:

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Early-warning Report

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Information Report
Information Report - Final

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Assistance Request Report



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Good:

- A great progress compared with the previous practice of using facsimile
- Availability & easy access
- Reliability
- Bugs not observed
- No delays in sending or receiving



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Remarks:

- changes of chemicals from form to form require a time consuming procedure,
- the box for describing the chemical substance is too small and is difficult to use for long names including formulas,
- no response possibility that could be recorded through any of the forms,
- no possibility to send short messages without completing any of the forms



Substance/chemical formula or name

The nature of the substance such as toxic, ecotoxic, flammable, explosive or other should be described using a chemical formula or name, as well as the UN, ADR-Kemler, IMDG Code number. The total amount of the substance present, the amount released, the release rate and its duration should be indicated.

Substance/chemical formula or name:

(Pre-defined Chemical) ▾

- Toxic
- Ecotoxic
- Flammable
- Explosive
- Other

Amount:

Add

Name	Nature	Amount	Remove
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[New Report](#)



[Received](#)



[Sent](#)



[Drafts](#)



[Public Reports](#)



[Contacts](#)

Select the type of report:

[Early-warning Report](#)

The Early-warning Report is used to give information or warning in the event of an industrial accident or imminent threat thereof. This report should be sent only once and always be followed up with at least one Information Report or be cancelled.

[Assistance Request Report](#)

Used for matters related to the provision of assistance in order to mitigate consequences including transboundary effects.



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Suggestions:

- Proper and rapid use of application requires regular training of operators and maintenance of exercises,
- Operators would need assistance of experts to complete the forms - technical terms and English/Russian/French language ,
- Consideration the possibilities and necessity of introducing new Reports in web application (Request for Information, Offer for Assistance, Acceptance of Assistance, Coordination Report, Informal Messages)



CONCLUSION

Although the exercise was of first level and based on a fictitious event in a fictitious place it enabled us:

- ❖ To achieve better understanding of possible communication problems in a real life situation
- ❖ To identify fields where improvements are possible or necessary,
- ❖ To practice how to complete web-based application forms,
- ❖ To make other participants more familiar with requirements and procedures of IAN System
- ❖ To clarify the need for further training and carrying out exercises with more responsible participants

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THNAK YOU FOR YOUR ATTENTION



LEVELS OF EXERCISES – not official suggestion

0. Communication test that includes only contact points

1. Simulation and communication exercise with fewer participants

2. Simulation and communication exercise with all competent participants

3. Comprehensive communication and in field exercise